City of Winnipeg – Review and Assessment of Municipal Servicing for Water, Sewer, and Land Drainage Development

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City of Winnipeg

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Executive Summary

The City of Winnipeg's (City) Water and Waste Department (W&W) conducted a review and assessment of municipal processes for evaluating water, sewer, and land drainage servicing relative to development applications. This work included examining the City's internal development review process (internal review) and how the City provides information on current water and sewer infrastructure capacities compared with other cities (market scan).

This Report provides the background, methodology, analysis, and recommendations, along with implementation timelines and costs, to share timely information. Ten recommendations are grouped by themes, as shown in Table 1-1 below.

These recommendations are intended to be a holistic approach to improving how information requests are addressed, and application reviews are conducted. They have been broken down such that they can be implemented in a targeted way.

Table 1-1 Description, Implementation Timeline, and Cost Estimate for Recommendations

Theme 1: Streamline Processes to Save Time or Use it More Efficiently		
Recommendation 1: Consolidate Inquiry Points	Modify the existing process of project intake to reduce the number of non-file review functions for senior staff. Delegate non-file related tasks to more junior staff to allow senior staff to focus on file reviews and other complex or critical priorities.	Recommendations 1, 2, and 3 are proposed to work in combination. Four new staff to be implemented over the next two or more years. Approximate cost is $520,000/year once all staff are onboarded.
Recommendation 2: Refine Intake Processes for Development Proposals		
Recommendation 3: Project Scoping and Document Application Filing System	Documenting project scoping work will allow staff to leverage review work previously completed for future developments and inquiries.	
Recommendation 4: Application Prioritization	Regularly devote time and resources to expedite the review of simple and/or well-constructed applications. This will avoid having simple reviews delayed due to complex files and will improve the average turnaround time on all files. It will also incentivize submission of accurate and complete applications.	This recommendation can be implemented immediately. There is no cost associated with this recommendation.
Theme 2: Improving Capacity		
Recommendation 5: Enhance Staff Resources	New resources are needed to address file volumes and complexity. They will also provide resiliency for staff coverage and turnover. Senior staff should focus on the most critical and complex files. This will also provide new career succession opportunities for senior engineers within their current branches.	Nine new staff to be implemented over the next two or more years. Approximate cost is $1,218,000/year once all staff are onboarded.

Recommendation 6: Enhance Staff Training	Develop and implement a formalized training approach that includes reference documentation. This ensures consistent practices are followed and supports knowledge transfer to new staff.	The preparation of training materials should be implemented immediately and completed over the next several years. It is recommended that resources be assigned to assist the team to accelerate the development of training materials. The total cost is approximately $71,000/year to implement new staff.
Theme 3: Engage with Industry Regarding Complete and Accurate Applications		
Recommendation 7: Stakeholder Engagement – Industry Standards	Engagement of stakeholders, consultants and applicants will clarify expectations and align them with City reviewers. This will result in a lower number of incomplete applications. There is also an opportunity for engagement interactions with external parties to improve working relationship with City staff and improve their understanding of the infrastructure challenges the City faces.	The preparation of the stakeholder engagement materials should be initiated immediately and rolled out over the next 18 months. The total cost is approximately $71,000/year to implement new staff.
Recommendation 8: Update Modeling Tools for Regional Capacity Analysis	Improve infrastructure models and make the models available to qualified consultants. This will improve the quality of analysis in servicing plans for development applications.	Support from an engineering consulting firm will be needed for a minimum of 36 months. It is recommended that the City allocate $2,000,000 to complete the modeling updates to support regional development capacity planning and supporting flow monitoring. It is important to note that while the updated model will give more ready access to regional infrastructure constraints, it is not economical to create a real-time model that provides reliable information on local servicing constraints.
Recommendation 9: Serviceability Studies	Targeted serviceability studies should be completed concurrently with new policy approvals in existing areas.	Support from an engineering consulting firm will be needed for a minimum of 24 months. It is recommended that the City allocate $1,000,000/year, each year for five years to complete these studies.
Recommendation 10: Development Infrastructure Studies Repository and Open Data on District-level Infrastructure Conditions	Develop and manage publicly available infrastructure information repositories from information coming from development applications and from other studies or data sets created by the City. This will allow information on existing infrastructure to be more widely available by engineering consultants and prospective developers to do a self-serve search of conditions in an area, and reduce the time currently spent by City staff to respond to general inquiries to applicants.	Exact timeline for implementation of a Development Infrastructure Studies Repository will be dependent on timelines for creation of the information to be shared. W&W already has an existing GIS site which can be adapted for this purpose. The initial budget is $500,000 to charter the project, scope the systems, implement, and commission the product. More work is required to scope what is possible in creating an Open Data on District-level Infrastructure Conditions data set.

This Report offers a range of recommendations aimed at enhancing the existing development review process. While it is believed that implementing all the recommendations will be the most effective approach, many can be pursued individually while still offering benefit. The project team encourages the City to consider these recommendations within the context of Winnipeg's unique circumstances and objectives, and to determine the most appropriate course of action.

Abbreviations

CAO	Chief Administrative Officer
City	City of Winnipeg
CSO	Combined Sewer Overflow
FTE	Full Time Employee
LDFP	Land Drainage & Flood Protection Branch
PP&D	Planning, Property & Development Department
PW	Public Works Department
SDB	Services Development Branch
TSB	Technical Services Branch
W&W	Water and Waste Department
WPPD	Water Planning & Project Delivery Branch
WWPPD	Wastewater Planning & Project Delivery Branch

1.0 INTRODUCTION

The City of Winnipeg (City), like most major cities in Canada, is facing increasing pressure to streamline their approvals processes for greenfield and infill development. There is continued demand for residential development for housing and commercial and industrial development to enable growth in the economy. The City's Executive Policy Committee (EPC) initiated this project based on the Strategic Infrastructure Plan for Sustainable Social and Economic Development.

1.1 OBJECTIVE

To maximize the potential of these outcomes, the City's approvals process needs to be enabling and collaborative to attract development. The City has retained Stantec Consulting Ltd. (Stantec) in association with Landmark Planning & Design (Landmark) to complete a study to compare how the City provides information on current water and sewer infrastructure capacities against other cities and to identify areas for improvement.

In addition to the goal of improving the City's communication of water and sewer infrastructure capacities, the recommendations within this report will also benefit the City by providing a competitive advantage, retention of staff, and the overall improvement of operation, providing relief of current frustrations felt due to the existing process.

2.0 BACKGROUND

To complete this assignment, Stantec and Landmark reviewed several documents and data sources. The following list summarizes key information that was obtained by Stantec and Landmark in the completion of this study.

- Council Mandate;
- Planning and Development objectives from Our Winnipeg 2045;
- Complete Communities 2.0;
- Our Winnipeg Direction initiatives and local area plans;
- Wastewater Servicing Standards draft document; and
- Water Servicing Standards draft document.

3.0 METHODOLOGY

3.1 INTERNAL DEVELOPMENT PROPOSAL REVIEW

To kick off this project, an internal analysis of the development proposal review was conducted with the City to develop a baseline for the existing process, and to determine the following key objectives:



- Map the application review process;
- Understand challenges, constraints, choke points, information gaps, and process inconsistencies or inefficiencies;
- Gain insight into organizational processes;
- Receive City Staff input into the process; and
- Identify successful components, key gaps, or opportunities for improving processes.

Stantec and Landmark facilitated three workshops in Fall 2023 to assist with the above key objectives. The first workshop was held September 12th from 9:00 AM to 1:00 PM, and covered the following topics:

- Project background: population projections, policy direction, intensification targets, and development industry expectations;
- Overview of the scope of review, its relation to the workshop objectives and structure, and a proposed project timeline; and
- Overview of the origin and development of the existing processes and identify the different types of applications and the strengths, gaps, and opportunities of these processes.

The second workshop was held September 27th from 1:30 PM to 4:00 PM, and covered the following topics:

- Discussion on organizational structure; and
- Detailed discussion on application types, flowcharts, and their specific differences and nuances, including tools and resources, staff, timelines, file management, strengths, challenges, and opportunities.

The third and final workshop was held October 16th from 1:30 PM to 4:00 PM, and covered the following topics:

- Further discussion on organizational structure; and
- Further discussion on tools and resources, staff, timelines, file management, strengths, challenges, and opportunities.

In addition to the above-mentioned workshops, the City provided Stantec and Landmark with their organizational structure, which included their roles and responsibilities (Figure 3-1). Various City departments (PP&D and W&W), divisions, and branches participated in the review process of development applications, including WWPPD, WPPD, LDFP, and SDB.

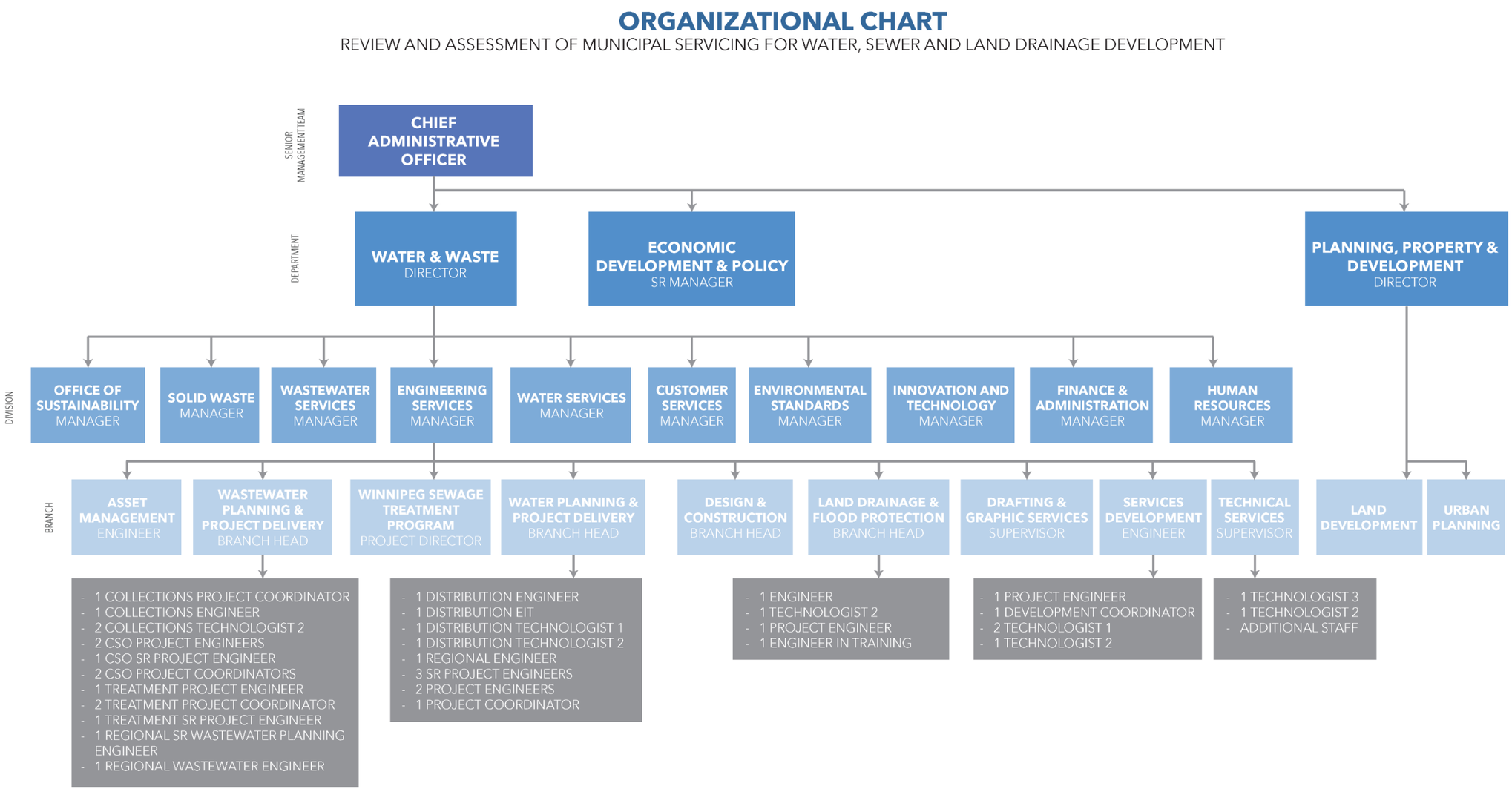


Figure 3-1 Organizational Chart

3.2 MARKET SCAN

The results of the internal development proposal review informed the next phase of this process, the market scan. The intent of the market scan was to benchmark the City's development proposal process against other Cities.

The market scan included a questionnaire that was distributed to select municipalities. The questionnaire included questions related to the following nine key topics:

- General Information;
- Annual Activity Levels;
- Resources;
- Managing Inquiries;
- Pre-application and Application Processes;
- Infrastructure Asset Management;
- Measuring Turnaround Time;
- Prioritizing and Problem Solving; and
- Training/Development.

Each of the above sections consisted of a variety of targeted questions to help inform the City on other municipalities development review processes. In total, the questionnaire consisted of 57 questions. For a full list of questions please refer to Appendix B.

Eleven municipalities were selected based on the 2022 Municipal Benchmarking Study[1], professional judgement or expertise, and diversity of cities in terms of geography and size. Refer to Table 3-1 for the rationale for each municipality. The 11 municipalities were contacted by Stantec requesting if they would be willing to take part in the market scan questionnaire. Out of the 11 municipalities, eight responses were received. Of the eight responses, four agreed to an interview. Where an interview was unable to be conducted, the municipalities submitted the questionnaire via email. The participating representative from each Municipality was typically a manager of Planning, Infrastructure, or a related department.

The interviews were conducted by Stantec personnel at a pre-arranged time with each Municipality, for a one-hour time slot. Typically, one Stantec team member was present and leading the interview, and on occasion a second team member or local contact was also present. Stantec led the interview by asking each question on the questionnaire, which was also provided to the Municipality in advance.

[1] The 2022 Municipal Benchmarking Study refers to the CHBA National Municipal Benchmarking Study, second edition, prepared by Altus Group Economic Consulting.

Those that responded via email were provided with the questionnaire and a brief summary of the project. The Municipalities took approximately two weeks to complete the questionnaire, where they gathered input from various departments as opposed to the interviews where all answers were coming from one source. In some cases, where an interview was not conducted, responses were found to be uninformative or misleading and additional follow-up was required.

Table 3-1 Rationale and Status of Responses from Municipalities

Municipality	Rationale	Status of Questionnaire
Saskatoon, SK	Ranked #2 in the Municipal Benchmarking Study.	Via email
Regina, SK	Ranked #3 in the Municipal Benchmarking Study.	Via interview
Calgary, AB	Ranked #5 in the Municipal Benchmarking Study; high growth pressure.	Via interview
Edmonton, AB	Ranked #6 in the Municipal Benchmarking Study; high focus on infill development; high growth pressure.	No response
Victoria, BC	Recommendation from Stantec as Victoria achieves significant portion of growth through infill development.	Via interview
London, ON	Ranked #7 in the Municipal Benchmarking Study.	Via email
Ottawa, ON	Ranked #9 in the Municipal Benchmarking Study; high focus on infill development; high growth pressure; dealing with combined sewers.	Via interview
Milton, ON	Recommendation from Stantec Ontario engineering staff as being very efficient and easy to work with; high growth pressure.	No response
Victoria, MN	Recommendations from Stantec US Midwest team as an example of a municipality that has done recent process reviews.	No response
Indianapolis, IN	Closest US City in terms of population size to Winnipeg	Via email
West Fargo, ND	Recommendation from Stantec US Midwest team as being a well-organized municipality that is easy to work with.	Via email

The questionnaire responses were compiled and analyzed to identify best practices, which led to two additional rounds of questions being sent to the eight participating municipalities for further clarification and to fill the gaps on their development proposal review process. The first additional round of questions sent to municipalities consisted of one (1) question regarding subdivision and rezoning applications, where responses were received from five of the eight participating municipalities. The second additional round of questions sent to municipalities consisted of nine questions regarding resourcing and processes for queries, pre-applications, and applications, as well as the availability of data to applicants. Responses were received from two of the eight participating municipalities.

The market scan analysis and results can be viewed in Section 4.2.



3.3 PROCESS IMPROVEMENT OPTIONS

Based on the analysis from the internal review and market scan, recommendations were developed for the City to improve their development review process.

Stantec and Landmark facilitated a fourth workshop February 12th from 1:30 PM to 4:30 PM 2024 to provide a summary of work completed to date with a focus on process improvement options. The workshop covered the following topics:

- Winnipeg's economic climate and its impact on development application processes
- The proposed target areas of recommendation.

Landmark also facilitated a focus group meeting on March 7th from 2:00 PM to 4:00 PM 2024 where 15 participants from various developers in Winnipeg attended. The focus group meeting covered challenges facing the development community, such as uncertainty on capacity and application process timelines, and potential solutions related to development within Winnipeg.

With the additional inputs from the City and developers, the final recommendations were formed, as described in Section 5.0.



4.0 ANALYSIS

This section provides a comprehensive analysis of Winnipeg's existing internal development proposal review process and how it compares to other municipalities across Canada and the United States.

Understanding the local economic and development context is crucial for a comprehensive analysis of the development approval framework. In Winnipeg, development industry expectations are shaped by a history of slow growth and low margins, coupled with site specific challenges which can result in higher risk projects. Given this situation, the development industry seeks support from the City administration to provide access to clear information on existing capacity and future plans, consistency between policy vision and available servicing capacity, and efficient response timeframes to make informed decisions, among other expectations.

On the other hand, municipal review and approvals processes are impacted by political pressures and risk management concerns, exacerbated by under-resourced departments and existing procedural limitations. Additionally, the local market is experiencing a significant housing crisis, driving the need for accelerated growth and infrastructure expansion. There appears to be a disconnect between planning objectives and servicing capabilities, highlighting a misalignment between strategic goals and practical implementation.

At both the micro and macro levels, fostering mutual understanding and collaboration among stakeholders is essential to address these challenges and meet development expectations effectively. This context sets the stage for the detailed analysis that follows, which will explore the different development proposal review streams, the involvement of a variety of City departments and their corresponding roles, staff capacity, available resources, and response time, among other key criteria.

4.1 INTERNAL DEVELOPMENT PROPOSAL REVIEW

4.1.1 Analysis

The first stream, Query & Special Projects, consists of a proponent reaching out directly to the inbox of W&W to inquire about servicing-related information regarding a specific property. This inbox is monitored by the Services Development Branch, which reviews the received inquiries and their supporting information, coordinates technical review with applicable W&W branches, and provides an answer back to the proponent. As shown in Figure 4-1, sometimes the Planning, Property, and Development Department (PP&D) is indirectly involved in these queries when district planners advise proponents to submit general queries to the above-mentioned inbox for W&W related matters.

The second stream, Pre-Application[2], starts with a proponent submitting a pre-application package to the Zoning and Permits branch. Zoning conducts an intake review to determine if the pre-application is complete before circulating the file to a variety of internal departments, including W&W. W&W reviews the provided information and provides preliminary comments back to Zoning. These comments are incorporated into a comprehensive report that provides preliminary and non-binding feedback from different City departments to the proponent.

The third stream, Development Applications, starts with an intake process similar to the Pre-Application stream but with a more robust review and different outcome. In this case, PP&D has a major role through its Land Development Branch (LDB) coordinating the file circulation to internal (including W&W) and external departments, as well as arranging the Hearing process and subsequent steps. After an application has been reviewed by all departments and approved through the Hearing process, LDB coordinates a more detailed review with all applicable departments, including W&W in order to draft any required Zoning and/or Servicing Agreements. Once all applicable agreements are in place and the Hearing process is completed, the proponent can move into the permits stage.

The fourth stream, Permit applications with no requirement for circulation, is related to applications where development approvals were not required (e.g., variance, conditional use, Downtown, etc.) and the proponent submits a permit application without preliminary feedback from W&W. In this case a permit application is circulated by Zoning to W&W for review for the first time. This situation can result in landowners being surprised by the lack of servicing capacity available for a specific property.

From the description of each of these application streams, it can be noted that PP&D plays a key role in the coordination with W&W throughout the development proposal review process, highlighting the following responsibilities:

- The Land Development Branch compiles and circulates comments; and
- The Zoning and Permits Branch handles the intake of applications.

Within W&W, individual branches have specific areas of responsibility as follows:

- The SDB is responsible for coordinating development application reviews;
- The WPPD, WWPPD, and LDFP branches are responsible for their respective components of development application and permit reviews; and
- The TSB is responsible for coordinating permit reviews.

[2] The Pre-Application phase stated throughout this section is in reference to the process at the time of writing this report. This phase no longer exists. WWD is developing their own pre-application process.

Water Planning and Project Delivery Branch (WPPD)

The water planning review process starts by determining if the property is already serviced and if existing services are adequate for the proposed development. If the property is not already serviced, the site is examined for the feasibility of extending services from adjacent areas. If servicing is deemed feasible, detailed requirements for the servicing extension are provided. If servicing is not feasible, alternative servicing approaches may be considered as per City policies, depending on the proposed development and location of the property. For infill projects, WPPD usually provides a list of requirements for the W&W response to the application.

Responses provided can include the following, where appropriate:

- Identification of need for on-site or off-site upgrades required to satisfy fire flow, water quality, and/or water pressure standards; and
- Detailed requirements for servicing extension.

Land Drainage and Flood Protection Branch (LDFP)

If the site is adequately serviced, LDFP provides design parameters and requests a stormwater design that corresponds to combined sewer districts, partially separated districts, or fully separated districts. If the site is not adequately serviced, there is a review on the feasibility of developing the site and the potential options available to achieve it.

A variety of information is provided to the applicant depending on the site location, such as regional drainage reports or flow control rates (or c-value). Certain areas of the city can be more challenging than others, owing to outdated or unavailable data, resulting in additional time and resources to update or calculate new data on both the City and applicant end.

Some common considerations include the following:

- Land drainage design parameters for combined sewer districts, partially separated, or fully separated districts;
- Regional drainage reports;
- Flow control requirements;
- Existing servicing plans;
- New major features or facilities design requirements;
- Flood protection level or setback to the rear property line; and
- Designated floodway fringe area regulation requirements.



Wastewater Planning and Project Delivery Branch (WWPPD)

The wastewater planning review process can vary depending on the property location within combined, partially separated, or separated sewer districts. For separated sewer districts, if the proposal exceeds existing flow capacity the proponent must determine how the increased flow could be accommodated along with any relevant infrastructure upgrades. This is presented to WWPPD for review and approval. The proponent works with engineering consultants to design the necessary upgrades. Regional infrastructure upgrades or expansions for supporting development plans is a case by case review.

For combined sewer districts, developments are assessed by referencing Clause 8 of the *Environment Act Licence No. 3042,* which limits total (wastewater and land drainage) *post development flows to* total pre-development flows to "not increase the frequency or volume of combined sewer overflows in any sewershed due to new and upgraded land development activities". WWPPD provides feedback to SDB for the recommended conditions of approval. WWPPD also works with the proponents engineering consultant on an iterative process of calculations to achieve a compliant design, so the proponent can develop a technical servicing report that demonstrates compliance with Clause 8.

For partially separated sewers in combined sewer districts, developments are also assessed by Clause 8. Where land drainage separation occurred prior to the Environment Act Licence No. 3042 was enacted, it means post development wastewater flows cannot exceed pre-development wastewater flows. WWPPD works with the proponents engineering consultant on an interactive process of calculations to achieve a compliant offsite sewer separation design (i.e. removing a catch basin connected to a combined sewer and connecting it to a land drainage sewer), so that the proponent can develop a technical servicing report that demonstrates compliance with Clause 8.

Some common considerations include the following:

- Required infrastructure upgrades to accommodate proposed flow for separated sewer districts; and
- The hydraulic model available for wastewater planning is at the regional level for CSO evaluation and reporting. Each development application requires completion of local sewer flow monitoring and calibration to support capacity analysis utilizing the hydraulic model and assessing capacity at that point in time. Otherwise, the City of Winnipeg Wastewater Servicing Guidelines are utilized to prepare development servicing applications.

Further details on each of the application streams and their relation to the previously outlined groups are provided in the following subsections.



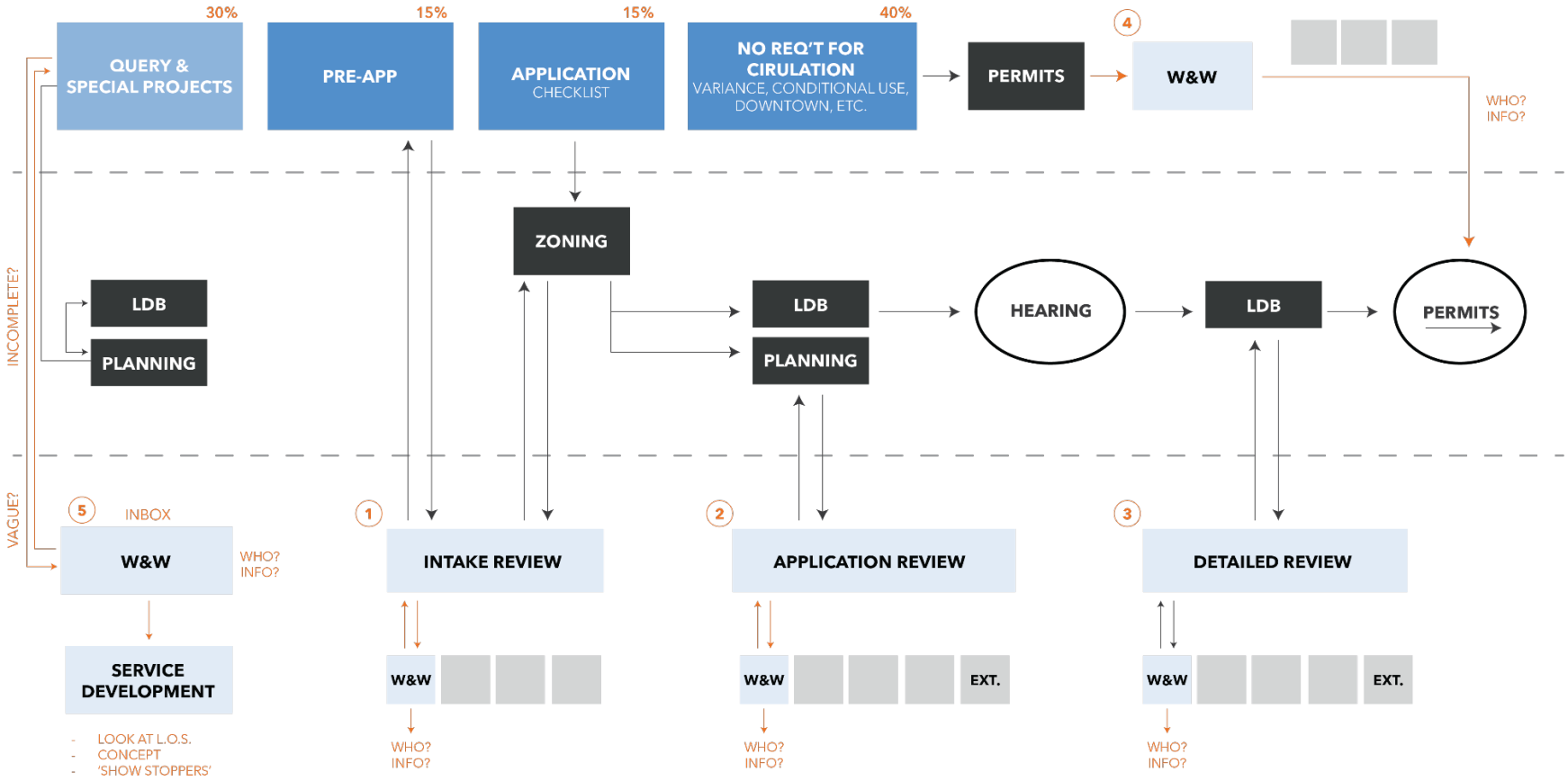


Figure 4-1 Internal Development Application Process Chart

4.1.1.2 Queries and Special Projects

Based on the internal development proposal review, the following is the existing process for queries and special projects:

- A landowner, prospective developer, or engineering professional on behalf of a landowner reaches out to W&W for servicing-related information regarding a specific property;
- Standard queries and special projects queries are informal and have no submission requirements in place;
- Queries are submitted via email to a general inquiry inbox (WWD-landdevelopmentrequests@winnipeg.ca), and sometimes by telephone;
- Due to the informal nature of these requests, proponents submit inquiries providing a diverse range of details, often resulting in a potentially long process of back and forth communication; and
- High level responses are provided, indicating if the proposal is anticipated to be adequately serviced with existing infrastructure or if any issues are identified;

The same process would apply to special projects coming from the CAO office. They follow a similar path but originate internally. They require direct correspondence and involve tighter deadlines and higher outcome expectations.

The department generally does not provide applicants with a maximum/allowed number of supported units as the applicant is encouraged to provide a proposed number of units. Effort and resources required for the baseline technical review of queries is comparable to pre-applications.

This service is provided at no cost.

4.1.1.3 Pre-Applications

Pre-applications are a tool that allows prospective developers to obtain preliminary and written input from appropriate City departments. This is a formal City process and has a response timeframe requirement in place. A list of specific documents including ownership information and detailed proposed plans of development are required. The pre-application is not circulated if it is not deemed complete.

A primary objective of pre-applications is to advise the applicant early of capacity and licence compliance related information and required actions. Pre-applications and development applications require similar amounts of time input by W&W. If a pre-application moves to the development application stage, much of the work performed at this stage can be rolled into the development application review.

The internal review identified that W&W lacks a centralized filing system, does not currently have a City-wide hydraulic wastewater and land drainage computer models to conduct reviews at a local level, and the pre-application fee is not distributed to W&W to cover costs.



4.1.1.4 Development Applications

For development applications, the submission needs to contain specific documents including ownership information and detailed proposed plans of development, in addition to any supporting engineering reports required. There is also a requirement from the City of Winnipeg Charter that the City has 20 days to identify whether an application is deemed complete.

The first step of the review is to determine if any special technical conditions and previous legal agreements apply to the area. SDB then engages with other departments such as PP&D and PW to coordinate conditions of approval. Each department and branch tracks files and timeframes in a different way.

4.1.1.5 Permit Applications with No Requirement for Circulation

On a site where development approvals were not required (variances, conditional uses, downtown projects), W&W reviews the proposal at the Development Permit stage. Since the file is only circulated to the Area Planner but not to other departments until the development permit stage, they can become problematic, potentially resulting in non-compliant designs with long iterative revision processes, and in some cases in the rejection of the application. This leaves the proponent frustrated and confused as to why these details were not addressed earlier in the application process.

4.1.1.6 Current Staff Capacity

As part of the internal review process, W&W provided estimates of time spent for each type of application they receive as it exists today. They also provided the average number of applications received by the water, wastewater, and land drainage teams for each type of application.

This information has been consolidated in Table 4-1 to summarize the average time spent annually on applications by W&W. Note that the available W&W employees are also responsible for and tasked to other work. As a result, the branches are understaffed. Percentage of FTE Hours Annually was based on a 35-hour workweek assuming 45.5 working weeks a year for a total of approximately 1,593 working hours per FTE.



Table 4-1 Annual Application Review Time

City of Winnipeg Branches	Queries	Pre-Applications	Applications	Non-Circulation	Total Hours Annually	Percentage of FTE Hours Annually
WWPPD	720	101	101	303	1,224	**77%**
WPPD	240	72	90	378	780	**49%**
LDFP	816	156	1,332	360	2,664	**167%**
SDB	1,445	394	1,769	1,301	4,908	**308%**
Total Hours Annually	3,221	723	3,292	2,341	9,576	**601%**
Percentage of FTE Hours Annually	**202%**	**45%**	**207%**	**147%**	**601%**	

*An additional 20% of FTE hours annually is spent on regional planning queries/applications, service agreements with neighbouring RMs, and large-scale industrial queries.

4.1.2 Conclusions

The following are the results determined from the analysis of the internal development review process, each directly correlating with a recommendation.

- A communication gap exists between land use planning/density expectations and engineering/infrastructure capacity. There is a perception of policy documents being developed without consideration of existing and potential infrastructure capacity. Different departments need to work together to identify where and when they want growth to happen and what they need to achieve it.
  - Correlates with recommendation 1: Consolidate Inquiry Points
  - Correlates with recommendation 2: Refine Intake Processes for Development Applications
  - Correlates with recommendation 3: Project Scoping and Document Application Filing System.

- The W&W provides analysis for queries and applications to allow for future changes but must also manage levels of risk. Decisions on servicing infrastructure must be supported with engineering analysis and adhere to local and provincial policy, but there is also a high level of development growth expectations and political pressure. The combination of these factors often results in several rounds of revisions and redundancy per file. Centralized information and reducing improper or incomplete submissions can help prevent duplication of filing operations and may reduce the overall time spent on risk evaluation.

  - Correlates with recommendation 3: Project Scoping and Document Application Filing System.

- Further to the above, staff are primarily enabled to identify constraints versus solutions. This can result in a perception of rigidity but is grounded in risk management.
  - Correlates with recommendation 6: Enhance Staff Training

- At times developers' expectations on development application approvals and processing timeframes are unreasonable. W&W staff often receive files with a varying level of detail, which adds time to the review process. There is a need to standardize applicants' submission requirements and expectations; but it is also important to improve the quality of communication in the way responses are provided to the applicant.
  - Correlates with recommendation 1: Consolidate Inquiry Points
  - Correlates with recommendation 2: Refine Intake Processes for Development Applications
  - Correlates with recommendation 3: Project Scoping and Document Application Filing System.
  - Correlates with recommendation 7: Stakeholder Engagement – Industry Standards

- There is no standardized training for new employees. Documentation on processes could save time training internal staff and answering general questions to the public at the same time. Standardized reply comments and templates were suggested during the workshops as potential strategies to address these concerns. At present, the process of analyzing development proposals and providing feedback is largely held as institutional knowledge by a small team of people. Increased cross-training amongst staff could help cover absences and provide better succession planning.
  - Correlates with recommendation 6: Enhance Staff Training

- For queries, special projects, and pre-applications the W&W can provide substantial levels of detail and perform several hours of analysis with no funding provided to offset the time requirements. Participants acknowledge that some of this work ultimately may result in future development applications and taxes being generated. However, fees could help fund more trained staff to improve turnaround times and perhaps filter out superfluous queries and/or increase the detail and quality of information provided as part of a query.
  - Correlates with recommendation 1: Consolidate Inquiry Points
  - Correlates with recommendation 2: Refine Intake Processes for Development Applications

- For the branches within W&W and between other City departments there can be silos in which information and expertise are not shared except for the established channels.
  - Correlates with recommendation 3: Project Scoping and Document Application Filing System.
  - Correlates with recommendation 6: Enhance Staff Training

- Further to above, increased sharing of information by shared databases could be improved. For example, PP&D uses "AMANDA" while W&W uses GIS, and each branch utilizes their own file



management system. Where practical, if a district planner or ZDO could easily access servicing notes on a property, the number of queries could potentially be reduced.

- Correlates with Recommendation 5: Enhance Staff Resources
- Correlates with recommendation 10: Development Infrastructure Studies Repository and Open Data on District-level Infrastructure Conditions
- Increased availability and clarity of information available to the public (via City of Winnipeg website, pamphlets etc.) can help manage expectations and understanding of processes.

4.2 MARKET SCAN

4.2.1 Analysis

Results show that the City has comparable development review responsibilities to other municipalities in most areas. The key differences identified are records management staff, self-serve data availability, how general inquiries are handled, modeling and variation standards, and processes for training and development. For a detailed list of the market scan results refer to Appendix A.

4.2.1.1 General Information

The City manages similar infrastructure systems as the municipalities that responded to the market scan in terms of managing the system directly and having systems with a mix of combined and separated sewers.

4.2.1.2 Annual Activity Levels

W&W has recently started to informally track many of the development proposals they receive, but this information is not made public. All municipalities interviewed stated that they do track the number of applications along with the time for processing, with five out of eight municipalities making this data available to the public. In terms of resources, however, the City has significantly less staff doing the work compared to other municipalities. From the market scan, the average number of subdivision and rezoning applications per specific staff is 9, with Winnipeg above the average at 25, as shown below in Table 4-2.



Table 4-2 Responses by Municipality regarding Specific Subdivision and Rezoning Applications

Municipality	Population [3]	Approximate number of staff involved in reviewing development applications	Approximate number of subdivision and rezoning applications reviewed annually	Number of applications per specific staff
Regina, SK	266,400	22	46	2.1
Ottawa, ON	1,017,449	100	280	2.8
Indianapolis, IN	887,642	150	549	3.7
London, ON	422,320	100	412	4.1
Victoria, BC	91,867	12	196	16.3
Winnipeg, MB	749,607	10	250	25.0
Average	**572,548**	**106**	**289**	**9.0**

4.2.1.3 Resources Questions

Most municipalities mention that development applications are the primary duty for a few staff, where others have additional duties and responsibilities, similar to Winnipeg. The ratios of staff to population are shown below in Table 4-3, where Winnipeg has significantly less staff per capita than the other municipalities.

[3] All Municipal populations are based on the Statistics Canada 2021 Census.

Table 4-3 Questionnaire responses by municipality regarding staffing numbers.

Municipality	Population [4]	Approximate number of staff in Municipality	Approximate number of staff in land development engineering roles	How many departments/ divisions are involved in reviewing a development application	Specific Staff vs Population (x10-3) Ratio
London, ON	422,320	2,000	100	9	0.24
Indianapolis, IN	887,640	No Response	150	2	0.17
Calgary, AB	1,310,000	17,000	200	12	0.15
Victoria, BC	91,870	No Response	12	2	0.13
West Fargo, ND	38,630	350	4	6	0.10
Ottawa, ON	1,020,000	17,000	100	4	0.10
Regina, SK	226,400	3,000	22	3	0.08
Saskatoon, SK	266,140	4,000	20	6	0.08
Winnipeg, MB	749,610	10,000	12	3	0.01
Average	**561,401**	**7,621**	**69**	**5**	**0.12**

Winnipeg mentioned that proposal review timelines were impacted this past year due to staffing concerns, such as turnover, difficulties recruiting, and lack of experience. Six municipalities mentioned that turnover has a great impact on the pace of work due to training, mentoring, and review processes. All municipalities stated that past design details of development projects are maintained in a database and, in most cases, managed and maintained by their own departmental staff as part of their duties.

4.2.1.4 Managing Inquiries

Winnipeg has a general email for inquiries and does not charge for any inquiries. Seven out of eight municipalities interviewed do not have dedicated staff to handle these inquiries, they just go to the department. Simple inquiries are answered free of charge, with more complex questions in a few cases having a fee or submitting a pre-application is encouraged.

An average of approximately 20% of staff time is spent handling inquiries, which aligns with Winnipeg's average as well.

[4] All Municipal populations are based on the Statistics Canada 2021 Census.

4.2.1.5 Pre-Application and Application Processes

For other cities, in most cases a pre-consultation meeting is required to determine which reports are needed for a specific application, along with discussing capacity impacts.

Regarding GIS information and past studies, Winnipeg and four other municipalities mentioned that developers must request the information they are looking for, and it is provided to them by the City, free of charge. Only two of the municipalities have open-source GIS/maps available to the public.

4.2.1.6 Infrastructure Asset Management

Winnipeg determines infrastructure capacity manually through use of excel calculation spreadsheets, whereas infrastructure capacity in five municipalities is determined by calibrated hydraulic models run by the City itself. Compared to other municipalities, Winnipeg does not have formal calibrated models or variation standards across branches.

Every municipality, including Winnipeg, stated that they have master servicing studies for greenfield areas, however some are not currently up to date. Only two municipalities interviewed have master servicing studies regarding infill areas. One other municipality indicated they are currently completing a City-wide water and wastewater servicing study. Seven municipalities have a shared internal database on applications.

4.2.1.7 Measuring Turnaround Time

Expected turnaround times for commenting on development applications fall within two clusters. One being between 10-20 days, and the other being around 2-3 months.

The main reason Winnipeg flagged applications for moving slow in the system is not having the right information from the applicant. Typical reasons other municipalities gave for applications moving slow include quality of submission, conflicting direction between planning and engineering, capacity constraints, or lack of response or cooperation from developer. Six out of eight municipalities have a staff person designated to monitor turnaround and intervene on delayed files, typically senior staff.

4.2.1.8 Prioritizing and Problem Solving

Every municipality stated that their submissions are dealt with on a first come first served basis. In some cases, large complex cases are given priority over others, or applications with quicker timelines. Five out of eight municipalities do not have a fast-track option, however in three cases, major applications are given priority, and in two cases affordable housing projects are given priority.

4.2.1.9 Training and Development

Winnipeg relies on hiring people with specific qualifications and learning on the job as there are no internal training courses. Five out of eight municipalities have mentoring and shadowing as a big part of



the training and development process. Through discussion with W&W, some areas of the City have not had the same staff turnover as other municipalities, providing stability and a higher level of experience.

4.2.2 Conclusions

The following are the results determined from the analysis of the market scan, each directly correlating with the key findings the City identified at the commencement of this project, and/or a recommendation.

- Winnipeg has very comparable responsibilities in development review to the other municipalities we contacted, although volume of applications varies considerably (noting that municipalities count very different things when they track application volumes). All but one of the municipalities we interviewed managed their infrastructure directly, as opposed to having it managed through a utility corporation.

- Municipalities often publish application volumes but there is not consistency in whether they publish review times.

- In terms of population and municipal staff size, Winnipeg has the smallest staff complements for processing development applications.
  - Correlates with recommendation 5: Enhance Staff Resources.

- Design criteria, for the most part, are set locally, although Winnipeg has additional provincially imposed criteria for certain drainage impacts. Winnipeg also has provincial operating licences which impose criteria for water and wastewater.

- Only one out of eight municipalities noted that they provide modeling and design of development in house. The other municipalities leave it up to a developer's consultant to conduct the analysis of existing conditions and model a development impact. Only three municipalities identified they have standard models or tools on which this is based, although some, including Winnipeg, have readily available GIS information on the location and sizes of infrastructure.
  - Correlates with recommendation 8: Update Modeling Tools for Regional Capacity Analysis.
  - Correlates with recommendation 9: Serviceability Studies.

- Winnipeg uses comparable approaches to other municipalities in terms of processing applications on a first come first served basis with some expediting of municipal projects or high priority projects.
  - Correlates with recommendation 4: Application Prioritization.

- Winnipeg has a comparable approach to managing complaints and complaints escalation to the other municipalities that were interviewed.
  - Correlates with recommendation 5: Enhance Staff Resources

- Staff turnover has a high impact on processing time in all municipalities. In our workshops with staff, we note that we heard about the relatively high level of experience (e.g., years of service) that many areas in the Winnipeg team currently have, but there is recognition that this could change over time. Some areas have also struggled to recruit experienced individuals. Other municipalities we interviewed have seen the loss of seniority with staff turnover, and there were often comments that a high number of relatively inexperienced staff does impact service levels. There are not consistent approaches to training, but the municipalities with the higher turnover levels are starting to develop more internal training programs and use mentoring.
  - Correlates with recommendation 5: Enhance Staff Resources.
  - Correlates with recommendation 6: Enhance Staff Training.

- All municipalities we interviewed struggle with the productivity impacts of managing general inquiries. Combined with relatively low staffing levels, we suspect that Winnipeg is losing more processing time and can take measures to reduce that impact through dedicated staff or more self-service deposits of information.
  - Correlates with recommendation 3: Project Scoping and Document Application Filing System.

5.0 RECOMMENDATIONS

Based on the analysis conducted on the internal review and market scan, a list of recommendations has been prepared for the City. A total of 10 recommendations have been created and divided into three themes:

1. Streamline processes to save time or use it more efficiently;

2. Improve capacity; and

3. Engage with industry regarding complete and accurate applications.

A total of 16 FTEs have been identified to implement the recommendations. A full breakdown of these staffing recommendations can be found in Table 5-1.

These recommendations are intended as one comprehensive or holistic change to addressing information inquiries and conducting application reviews but have been broken down such that they can be addressed as targeted, independent solutions as required.

5.1.1 Theme 1: Streamline Processes to Save Time or Use it More Efficiently

Steps to streamline processes make better use of existing resources and reduce the amount of time that senior staff are spending on tasks that could be addressed by junior staff, thereby allowing them more



time to focus on complex issues. Streamlining the process assists applicants by getting the right level of information at the right time in their development process to make decisions and advance the formal applications.

5.1.1.1 Recommendation #1: Consolidate applicant inquiry points

As identified in Figure 5-1, there are currently four channels through which W&W is required to review the information received and provide a response: Queries & Special Projects, Pre-Application, Development Application, and Permit Application.

These review channels are both formal and informal. Queries and Special Projects are informal in nature, whereas the remaining query types (Pre-Applications, Development Applications, and Permit Applications) are formal. The key difference between formal and informal queries is that informal queries come directly from the public or Elected Officials, often with no established timelines for response[5]. Formal channels are tied to a PP&D application fee and service timeline expectations. Special Projects are unique in that they are corporate priorities for the City often coming from senior management and require an elevated level of attention and responsiveness. They are less predictable in workload planning and priorities can change quickly.

Informal channels can create uncertainty or unpredictability for W&W staff and inconsistent or misaligned expectations for applicants. While seen by the public as a desired source of quick and easy information on a property, Queries require substantial time commitment from W&W and often do not provide the level of detail and analysis expected by the applicant. For example, W&W may indicate there is insufficient servicing capacity but does not currently provide an indication of how many units may be serviced. Additionally, departmental time and resources are expended without application fees being received. This creates no established service standards. Informal channels are inefficient since the documentation and results are tracked independently between the various branches.

It is recommended that the City restructure how it receives requests by eliminating informal queries. Informal queries should be directed to a new formal channel to accommodate project scoping queries. As shown in Figure 5-1, the Project Scoping channel could work independently or in combination with the Pre-Application channel. The applicant would have the option to request a Project Scoping, with a form and a fee, directly from W&W when no planning analysis is involved in the query. Alternatively, Project Scoping can be integrated into a Pre-Application report for an additional fee if the applicant is looking to obtain a more detailed analysis and direction on matters related to water, wastewater, and land drainage servicing considerations.

[5] The timelines referred to within this recommendation are in reference to the provided timelines at the time of writing this report. The City has since established targeted timelines.

Each of these key areas and the corresponding recommendations are discussed in further detail throughout the following subsections.

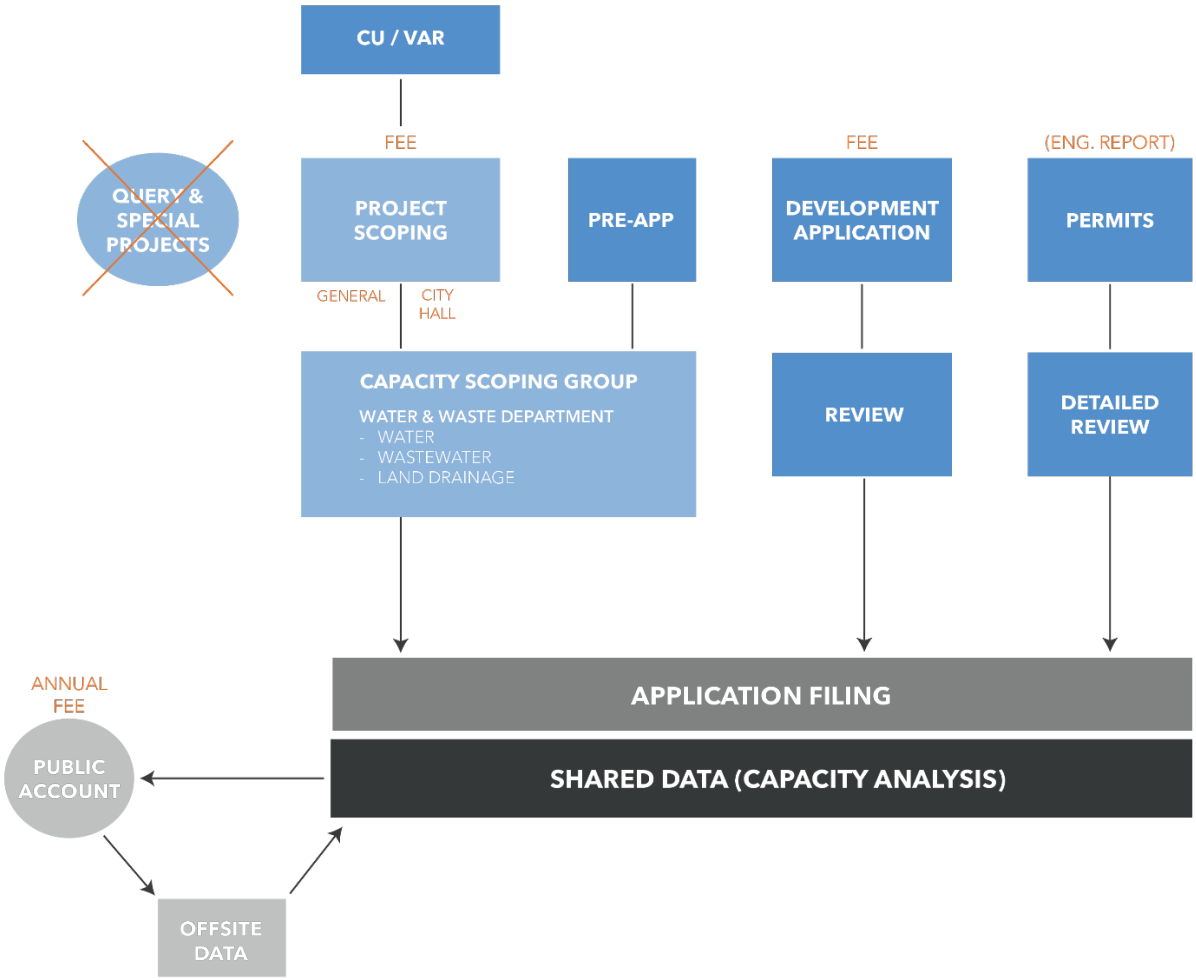


Figure 5-1 Recommended Application Review Channels Approach

The Project Scoping channel would require payment of a flat fee to formalize the process and to help offset the costs of the service. This channel would include a preliminary review by the respective water, wastewater, and land drainage team members, a short internal meeting of these three team members, and a formal response within an established timeframe (e.g., 10-14 business days). The Project Scoping team would consist of staff from each service area (water, wastewater, and land drainage). This team and review channel would include supporting employees, who will, among other tasks, coordinate and file the associated documents, (see Recommendation #3: Project Scoping and Application Filing System). The preliminary review would be intended to identify critical information specific to the request. The level of

detail provided by the Public Service will be proportional to the level of detail on the proposed development provided by the applicant. Any information provided in this stage would be considered preliminary and not binding.

Capacity Scoping Group

To create a successful Capacity Scoping Group, W&W will need to provide quality information within the published review timelines. To do this effectively it is recommended that W&W dedicate three new FTEs to this group:

- One water FTE;
- One wastewater FTE (priority); and
- One land drainage FTE.

The Project Scoping channel is intended to track both informal queries and divert queries that precede a formal application away from senior staff whose time is better invested managing actual applications. Combined with additional information described in our later recommendations, this will provide the industry with an efficient way of evaluating the feasibility of development projects and complete their due diligence.

5.1.1.2 Recommendation #2: Refine Intake Processes for Development Applications

There is a concern that Variance and Conditional Use applications are not currently being circulated to W&W. It is recommended to leverage this new Project Scoping channel as a mandatory step in the approval process when applications could have servicing implications. Criteria should be established and provided on the application form for Variances and Conditional Uses, in collaboration with PP&D, to identify the types of applications that should be reviewed by W&W.

5.1.1.3 Recommendation #3: Project Scoping and Application Filing System

An internal Application Filing system that can be accessed and shared between all involved departments in the development application review process is required. It will assist in other engineering projects undertaken by the City or general information inquiries not specific to an application or a project. It will capture and share the information and analysis prepared between W&W internal branches and across departments.

The application filing system would operate as follows:

- The applicant would reach out directly to W&W to file a Project Scoping request.
- The scoping technologist files the request within the system and circulates the file to the Capacity Scoping Group, for analysis and comments.



- Following the group meeting, the scoping clerk consolidates the comments into a report and returns it to the applicant within the established timeframe. A qualified staff will check the work and ensure comments from various sources are coordinated.
- The scoping clerk uploads the data into the City's information sharing portal, where the file is automatically shared with other City departments and all branches within W&W.
- This application filing database should be part of a new Shared Data System leveraging GIS technology and be available to all W&W's development proposal reviewers.
- There could be a future opportunity to allow for public access to the shared data via subscription fee. Users who conduct a servicing study as part of a Development Application could be required to upload off-site content to the shared data system. A system open to applicants will enable the industry to have access to previous work and reduce the need for City staff to provide details to industry on this previous work.
- Applicant prepared reports, once approved, may be available for industry wide information.
- The contribution of new data by applicants into the shared system would help to expand the database and enhance the available information for various parts of the City. This is described in detail below.
- At least one FTE should be assigned to manage this system (i.e., scoping clerk), but assigning two FTEs is recommended to ensure there is adequate coverage.

According to the municipal scan, some municipalities (e.g., Saskatoon, Regina, and Calgary) share application data within their administrations (across departments) while others (e.g., Victoria, London, and Ottawa) also share this information publicly.

5.1.1.4 Recommendation #4: Application Prioritization

In circumstances where there are limited resources available, the municipality should prioritize applications with a high public interest or benefit. Several municipalities are expediting affordable housing projects to address the current housing crisis. Similarly, there may be projects that have high economic development or community benefit that should be expedited. In addition to being expedited, these files should be dealt with by the most experienced staff. The various department heads and members of the City's executive leadership team should identify the types of files to prioritize.

There is a concern that the quality of applications being submitted are resulting in additional review time. It is recommended to designate a certain number of days a month for staff to focus on files that are in excellent condition and deserving of expedited approval, regardless of the order in which the application came in. These would be the files where the applications have all the required studies that are up to date, and which include recent analysis. Staff would have to use some discretion to identify these files. Although there may be some initial pushback from applicants, it will create a time saving reward and incentivize them to prepare well-formulated applications, further reducing City review time.



5.1.2 Theme 2: Improving Capacity

Winnipeg has significantly lower staffing levels in development review of engineering compared to other municipalities. It is necessary to add more capacity to the department by increasing the staff complement to improve the response time for all application types.

5.1.2.1 Recommendation #5: Enhance Staff Resources

Winnipeg has significantly lower staffing levels compared to other municipalities when comparing approximate number of staff in land development engineering roles against overall population. This results in each engineer having a high number of files they are responsible for and limits the most experienced staff from specializing on complex files since they are needed to share the volume of incoming applications. Resourcing should be established by utility or on a functional basis, and it needs to be monitored every few years against the volume of applications the City is processing.

A lean staff complement does not allow for adequate coverage during staff absences or when turnover occurs. Additional resources will help reduce the file load per engineer, improving both resiliency and flexibility within the group.

In the Market Scan, we found a wide variety of municipal staffing models. Currently the City of Winnipeg only has intermediate positions that largely do all the reviews for developments (WAPSO 4 level). Other municipalities integrate more junior engineering staff and technologists in review teams that work together on multiple files and share tasks. In addition to creating adequate coverage, it also creates better career progression for staff within the Department.

Application Filing and Shared Data

It is recommended that W&W dedicate two new FTEs for succession planning, workload management, and to address the additional responsibilities to support the corporate IT group with respect to application filing and shared data.

Development Agreement

Cost sharing obligations are an important aspect for applicants to understand as part of their feasibility for new development projects. As such, we recommend additional staff resources be provided to enhance the documentation and tracking of industry cost sharing. Additional staff devoted to oversight of development agreements will allow a proactive understanding and tracking of cost sharing between developers. We recommend three new FTEs devoted to administering the development agreement program.



Refine Staff Roles and Responsibilities

In circumstances where limited senior expertise is available within the municipality, it is important to focus senior positions on strategic level work. This is especially important when the overall resources are constrained. The recommended structure used in other jurisdictions would be to have a functional team with junior and intermediate engineers and technologists being overseen by senior positions. In addition to leveraging the limited capacity of senior expertise, this approach also ensures that the lowest possible salary level is performing the various tasks within the team. The final benefit of this approach is to create a career succession path for the staff. It is recommended that each of the four branches (water, wastewater, land drainage, and services development) should implement this approach in the coming years.

Experienced staff retention is at high risk since there are no senior positions available in the current structure. Experienced intermediate engineers may seek career advancement in other branches. This creates a knowledge gap that can be difficult to fill.

It is also important to ensure there is senior technical expertise in each service area with the appropriate job classification level to resolve issues on complex files where there are competing objectives within the City. Senior technical staff can work together to create a steering team that will create a unified and comprehensive perspective across the branches.

Other municipalities leverage senior staff to monitor turnaround times and directly support complex or delayed files.

5.1.2.2 Recommendation #6: Enhanced Staff Training

In organizations where resources and senior expertise are constrained, there must be additional focus on training, development, and support for staff. This includes clearly documented processes, extensive onboarding, and ongoing mentoring. Clearly documented processes, roles and responsibilities assist team members to focus on their own responsibilities while also understanding how other team members work is inter-related. This will help to avoid duplication of effort or gaps in responsibilities that delay deliverables.

Detailed orientation for new team members will enhance engagement and help them understand how their work impacts the overall growth objectives for the City. In other jurisdictions where this is leveraged, enhanced quality of service is experienced by applicants.

It was reported by larger municipalities in the Market Scan that formalized training of staff assists when there is staff turnover and ensures there is a knowledge transfer amongst staff. Five of eight municipalities interviewed responded that both formal and informal mentoring and shadowing is an important part of the training and development process. This includes employees who are new to their



roles shadowing senior staff, previous position holders, and positions they support. Formalized training ensures that there is standardization on knowledge transfer.

It was also noted in the Market Scan that many other jurisdictions leverage learning and experience through professional societies or through internal/external courses.

Internal Training (Onboarding)

It is important to have standard training in place to ensure all staff clearly understand the City's growth objectives, policies, design guidelines, standards, and specifications. Knowledge of the structure of the City of Winnipeg, some of the history of its build out, and the objectives of other branches will help staff understand the context around their deliverables.

For all staff to understand the development review process, it is recommended to establish clarity of the approvals process, including:

- Roles and responsibilities of each stakeholder;
- Define what success looks like for each approvals process;
- Map each City approval process;
- Identify which groups are responsible for each aspect of the process; and
- Provide clarity and the rationale for each application submission requirement.

This can be done as hands-on training which can be developed for use as onboarding.

The training should also focus on the roles of reviewers at various stages of the process, including how comments are handed off between scoping, pre-application, formal submission, and resubmission. There should be best practices about how issues and comments are to be handed from one stage to another and closed off, and consideration for direction given to applicants during previous steps in the process.

There is also a place for training of the soft skills required for staff involved in working directly with applicants and the public. These skills include, but are not limited to, conflict resolution, crucial conversations, negotiating, leading meetings, and formal communication.

Training does not substitute for on-the-job learning. City staff noted it takes new staff approximately a year and a half to become fully versed in their roles. A concerted effort is required to develop and document the orientation and training materials outlined above.

Internal Training (Cross-Training)

Broader cross-training and resources are recommended to address the issues that currently arise during staff absences or when staff turnover occurs. Industry has expressed their concern with a lack of coverage and resulting delays in deliverables.



Internal Training (Senior Administrative Training)

Land development has the potential to be highly political due to the costs and implications faced by developers when looking to advance new projects. This leads to inquiries that are escalated to elected officials and senior administration. It is important that these stakeholders hold a broad understanding of the City's processes and practices and an understanding of expected timelines for different parts of the review process. It is recommended to create internal orientation and training for senior administrative staff and elected officials. This training can cover implications, challenges, City outcomes, industry business imperatives, and more. This training should be developed in conjunction with PP&D. This can be done as hands-on training which can be developed for use as onboarding.

5.1.3 Theme 3: Engage with Industry Regarding Complete and Accurate Applications

It is a common frustration across all jurisdictions that an inordinate amount of time is spent working with applicants who do not understand the City's processes and standards. There are experienced developers and consultants who submit well-conceived applications, but there are many in the system that are not of that same caliber. It is time consuming to guide individual applications to a level where there is sufficient information to make a decision. Many jurisdictions have invested in steps to improve the quality of applications that come in during intake to help reduce time spent on application reviews. Better quality applications help with faster decision making.

5.1.3.1 Recommendation #7: Stakeholder Engagement – Industry Standards

In all jurisdictions surveyed, it is noted that there is a diverse range of the capabilities of consultants involved in land development. Some understand the processes and demonstrate a mastery of the guidelines and standards, while others use the City staff and application process to perform quality control on their work. The latter puts a significant burden on City staff.

It is important for applicants to understand the approvals process, including roles and responsibilities of each stakeholder, and to have a thorough understanding of what needs to be submitted for different review types. Stakeholder Engagement can be broken down into various topics and both delivered in person but also recorded so it can be available online. This will allow staff to refer new applicants to it for future reference. Ongoing collaboration between staff and industry is encouraged to identify emerging areas or topics where additional guidance and support is needed to better align applicants with the process. This approach is taken in other jurisdictions where process or standard changes are introduced.

Although consultants and other applicants typically understand their responsibilities in the application process, there are still some issues that arise which inevitably extend the process unnecessarily. For example, the City of Ottawa runs a series of Planning Primer sessions to help stakeholders and industry consultants understand the approval processes. Over time, they have expanded the series to include



more technical topics in response to suggestions from the users. This, combined with published terms of reference for various technical studies, would decrease the involvement needed by staff to answer application process related questions, as well as alleviate the issues currently faced with lack of developer, consultant, and engineer knowledge.

The initial focus of the stakeholder engagement should be on consultants working for applicants to help them understand the guidelines and standards for the application process. As the stakeholder engagement matures, it could be extended to developers.

5.1.3.2 Recommendation #8: Update Modeling Tools for Regional Capacity Analysis

One of the major challenges identified by W&W was the time required to review applications with respect to capacity within the wastewater and land drainage systems. While the water team uses EPANET to analyze the City's water distribution system, review of wastewater and land drainage systems are primarily completed through use of calculation spreadsheets and GIS queries. While use of calculation spreadsheets and GIS is both cost-effective and easy to use, it is difficult to capture complex or large-scale systems adequately.

The following was noted with respect to how the hydraulic models are used in the application review process:

- Water provides flow/pressure curves at connection points but does not provide the City-wide model to outside consultants.
- Land drainage currently uses models in certain discrete areas typically to review flood protection requirements. However, a City-wide land drainage model does not exist.
- Wastewater's current hydraulic models are sufficient for regional level CSO planning but would need further refinement to the sub catchment areas along with flow monitoring and modeling calibration work for better resolution if they are to be utilized for development planning and capacity analysis on a regional sewer level. To utilize the City Wastewater hydraulic model for local infrastructure capacity analysis, flow monitoring would be needed in nearly every sewer district along with detailed calibration exercises for the model.

Specific benefits of implementing the use of hydraulic models in application reviews include:

- Resourcing – once a reliable hydraulic model is developed, there will be a reduction in the level of effort per review.
- Complex simulations – better understanding of the impact development will have on existing infrastructure, particularly within the existing sewers servicing large areas of the City of Winnipeg.
- Communication – provides a graphical representation of results that can be shared with the applicant, improving understanding/communication of the system.



- Reduced risk – built-in calculations reduce manual data entry, reducing opportunity for errors and creating more consistent results.

Through discussions with W&W, it appears that wastewater capacity is the primary constraint for most infill development. It is recommended at minimum that the City update the existing wastewater model to an appropriate level of detail to better understand all of the City's regional wastewater infrastructure and allow for City staff to conduct analysis of potential future demands on current capacity. If possible, the regional model update work, should then include a consultant-led comprehensive analysis of current capacity, potential future demands, and any critical areas that may require immediate attention or upgrades. By doing so, the City will better understand what its wastewater infrastructure is capable of supporting, making the application review process more efficient.

The intent of this recommendation is not to create a real-time model suitable for local capacity analysis, but rather to provide a detailed and accurate representation of the current and projected state of the wastewater infrastructure such that long term bottlenecks within the wastewater regional sewer network can be proactively identified and monitored.

Real-Time Wastewater Model Considerations

Maintaining a real-time model suitable for local capacity analysis would be significantly more expensive than the proposed Recommendation #8 and would not yield a comparable increase in efficiency relative to the increase in costs. Local wastewater infrastructure represents much of the overall wastewater infrastructure and due to its smaller size and smaller catchment areas, is more sensitive to changing flows year to year from individual development applications.

Specific challenges with implementing a model for real-time capacity analysis for the entire wastewater collection system include:

- Prior to implementing a real-time model, the existing hydraulic model would need to be updated to reflect local infrastructure. This would require studies of existing lift stations and sewer upgrades, flow monitoring in every sewer district, and detailed calibration exercises for the model to refine the level of accuracy such that flow in each smaller local pipe can be confidently modeled.

- Once the existing hydraulic model is updated to reflect the local infrastructure, dedicated resources would be required to update the model on a continuous basis to reflect ongoing development, capital works, and operations and maintenance items. Comparatively, the ongoing updates to maintain the wastewater model for regional wastewater capacity assessments would only be required approximately every five to ten years.

- Continuous flow monitoring and calibration would be required to ensure accuracy of the model. While changes in development trends can be suitably projected based on the City's design standards, this is typically only applicable to regional/large diameter sewer systems. Flow monitoring and calibration



is needed to confirm actual flows within the local collection system to confirm and maintain the City's understanding of local sewer capacity.

- The number of resources and technical expertise, both internal to the City, and from external Consultants, to review and analyze the data and complete continuous model updates, flow monitoring, and re-calibration would ultimately be unsustainable.
- Implementation of a real-time hydraulic model for development reviews may result in added risk to the City. Local systems are more sensitive to the impacts of development. Therefore, the margin for error is much smaller on local systems than regional systems.
- With continuous updates to the modeling file, the City will require tighter control of the modeling files to ensure people are working in the most recent copy. This can become challenging with timelines for development sometimes extending over multiple years.

Based on the above rationale, implementation of a real-time local hydraulic model to support the development application review process is not recommended.

5.1.3.3 Recommendation #9: Serviceability Studies

As part of the internal application process review, the W&W team noted that there is a significant difference in the level of effort required to review greenfield applications versus infill applications.

Greenfield development:

- Is typically connecting to newer infrastructure with known capacities and recent servicing reports that provide the parameters that the underground infrastructure was designed to.
- Is often larger programs led by Developer's and their consultants who understand the infrastructure and development requirements.

Infill development:

- Is typically connecting to older infrastructure where design criteria is unknown, leading to ambiguity about pipe capacity. It is also likely that older areas were not designed to accommodate higher densities of today, or current understanding of the impacts of wet weather flow.
- Can be a variety of sizes.
- Is typically led by landowners, so understanding of infrastructure and development requirements varies drastically.

PP&D has a mandate to study and recommend areas of the City for intensification in order to promote sustainable development patterns for population growth and to make the best use of existing amenities. However, the level of information available on localized servicing constraints does not currently keep up



with the pace of planning decisions. This creates frustration for landowners when firstly, policy does not align with system constraints, and secondly, when they wish to follow new planning goals but cannot readily quantify the cost of servicing improvements. Council has specifically asked if there could be improved and timely modeling of utility constraints to address this. Long range servicing studies should be proactively advanced concurrently with new strategic policy areas. This will position Council to understand the infrastructure costs and implications when approving new policy direction.

Therefore, it is recommended that the City identify the highest priority infill and intensification areas in the City and commission water, wastewater, and land drainage serviceability studies in coordination with PP&D. This can be completed as one big project or by dividing the City into smaller catchments and completing studies based on priority. The studies would typically be limited to regional infrastructure only but can include local infrastructure if warranted.

The recommended serviceability studies are not intended to replace developer led studies for specific development. The intent of the serviceability study is to mirror the future demand for a given area to the future planning densities identified in the City's approved planning documents. This will allow W&W to better understand the regional and local infrastructure required in a certain area to support the City's infill objectives. This then allows W&W to communicate with developers regarding the necessary infrastructure improvements required and associated timelines of the improvements to unlock development within a certain area.

The serviceability studies are not intended to be a living document, rather a snapshot of the future infrastructure plan required to support increased density in each area. The serviceability study would only need to be updated if there is a substantial change within the area that differs from the planning documents.

5.1.3.4 Recommendation #10: Development Infrastructure Studies Repository and Open Data on District-level Infrastructure Conditions

Industry has identified that information on existing infrastructure is not well known or available. This report proposes two tools to provide shared data: a Development Infrastructure Studies Repository and an Open Data set on District-Level Infrastructure Conditions. Shared data refers to information that is made accessible and available for use by multiple individuals, systems, or entities. In the context of this project, shared data refers to infrastructure maps, infrastructure studies, capital plans, project updates, or infrastructure or planning figures that are updated from time to time. It can also refer to approval status of ongoing development proposals or other internal works led by the City.

Sharing data involves allowing authorized users (applicants) to access and utilize the same set of data. The intent of the shared data is to allow applicants to access information they currently do not have access to, such as infrastructure record information, to reduce the number of touchpoints required under the current system.



Development Infrastructure Studies Repository

Several municipalities make all technical studies associated with development applications publicly available through some form of web portal. In some instances, this is geo-referenced on some GIS-based map tool. This allows anyone the ability to look up an area and see the on-going or recently completed technical studies.

This information is currently accessible through requests under the Section 263 of The Municipal Act or under the Freedom of Information and Protection of Privacy Act. By making the information available in a portal such as this, the information becomes self-serve by any interested party. The City's role is to maintain the database, but then it does not have to respond to individual requests for information.

Sharing technical studies and information on the utility systems allows for consultants and applicants to be more aware of existing problems.

There are limitations to the use of this information. Capacity within the infrastructure is not allocated until a permit is taken out. So, these studies cannot reflect in real time the commitments the City has made for infrastructure allocation.

The City should reach out directly to other jurisdictions to gain an understanding of how their systems are implemented and managed.

Open Data on District-level Infrastructure Conditions

It is understood that the City has been requested to develop a system in which they can share real-time information on the condition and capacity of infrastructure to support development. As noted above, maintaining real-time information is cost prohibitive. Infrastructure conditions can vary from segment to segment and are constantly changing through yearly maintenance programs, upgrades, and new development.

Building an open data set could be another option in sharing information that supports this request. While this type of open data set would not be considered real-time information, there is merit in sharing as much information as possible on known or predicted infrastructure constraints to help applicants make informed decisions related to their developments.

Open data in the context of municipal government refers to the practice of making data collected and maintained by local government entities freely available to the public. This data is typically provided in a format that is easily accessible, machine-readable, and free of restrictions on usage. The goal of open data is to promote transparency, accountability, and civic engagement by allowing citizens, researchers, and businesses to access and utilize government data for various purposes, such as improving public services, fostering innovation, and enabling informed decision-making.



As per Figure 5-1, the Open data would become a foundation of the process. Open data, developed and maintained by W&W, would be shared through a GIS site or similar tool. Access to the Open data would be through a public account, managed as a subscription service to cover the cost and ensure the data can be managed.

The intent of the open data set is to create a library of studies, reports, and designs completed by or on behalf of the City and by third parties on behalf of the development proponents for reference by potential applicants. The data provided would include the various documents and form part of the public domain. In addition to existing infrastructure information provided by the City, it is recommended that infrastructure information relating to City-led infrastructure improvement projects be also publicly available for applicants to reference.

The intent is that an open data set will allow self-serve access, and it would reduce the amount of time and effort spent by City staff to respond to applicant inquiries. It would not eliminate City staff time entirely since staff would need to be assigned to maintain the Open data repository.

More work is required to scope what is possible in creating an Open Data on District-level Infrastructure Conditions data set. It is important to note that while these new sources of information will give more ready access to infrastructure constraints, it is not possible to create a real-time model that provides reliable information on servicing constraints.



Table 5-1 Summary of Resource Requirements to Implement Recommendations

	Recommendation	Water Planning & Project Delivery Branch	Wastewater Planning & Project Delivery Branch	Land Drainage & Flood Protection Branch	Engineering Generalists (to be assigned by W&W)	Services Development Branch
1.	Consolidate Inquiry points	1 FTE Project Engineer (WAPSO Grade 4)	1 FTE Project Engineer (WAPSO Grade 4)	1 FTE Project Engineer (WAPSO Grade 4)		1 FTE Development Engineer (WAPSO Grade 4)
2.	Refine Intake Processes					
3.	Project Scoping					
4.	Application Prioritization	No additional resources are required.				
5.	Enhance Staff Resources	1 FTE Senior Project Engineer (WAPSO Grade 5) If a current staff member is identified at a high enough level of job classification to resolve issues on complex files, there is no cost expected.	1 FTE Senior Project Engineer (WAPSO Grade 5) If a current staff member is identified at a high enough level of job classification to resolve issues on complex files, there is no cost expected.	1 FTE Senior Project Engineer (WAPSO Grade 5) If a current staff member is identified at a high enough level of job classification to resolve issues on complex files, there is no cost expected.	2 FTE's Project Engineer (WAPSO Grade 4) positions to coordinate project scoping who can be cross trained to work in multiple roles to allow for them to fill in as staff leave over time.	3 FTE's Project Engineer (WAPSO Grade 4) 1 FTE Senior Project Engineer (WAPSO Grade 5)
6.	Enhanced Staff Training					0.5 FTE Senior Project Engineer (WAPSO Grade 5) Time shown here is assumed to be split between Services Development Branch, Water, Wastewater, and Land Drainage.
7.	Stakeholder Engagement					0.5 FTE Senior Project Engineer (WAPSO Grade 5) Time shown here is assumed to be split between Services Development Branch, Water, Wastewater, and Land Drainage.
8.	Update Modelling Tools for Regional Capacity Analysis		1 FTE Senior Project Engineer (WAPSO Grade 5)			
9.	Serviceability Studies		1 FTE Project Coordinator to manage the projects.			
10.	Development Infrastructure Studies Repository and Open Data on District-level Infrastructure Conditions				See row 5.	
	Subtotal of New Staff	**2 FTEs**	**4 FTEs**	**2 FTEs**	**2 FTEs**	**6 FTEs**

	Additional Items	Water Planning & Project Delivery Branch	Wastewater Planning & Project Delivery Branch	Land Drainage Flood Protection Branch	Engineering Generalists	Development Agreement Administrators
	Estimated Non-W&W staff costs		Update Modeling for Regional Capacity Analysis - $2,000,000 to complete the modeling updates for the model to be sufficient for regional capacity planning, conduct flow monitoring and revisit the long-term program and funding after the City sees the impact of the initial update. Serviceability Studies - $1,000,000 a year each year for five years (to complete maximum 5 studies and revisit the long-term program and funding after the City sees the impact of the first studies. This budget would cover internal staff to project manage these studies along with consultants to complete them.		Allowance of $50,000 for support to internal and external engagement on recommendations 1, 2, and 3. If external resources are needed to develop training materials, then there will be a cost of approximately $35,000. $500,000 initial budget for the development infrastructure studies repository and open data on district-level infrastructure conditions management system.	
	Funding Source	Utility rate funded,	Utility rate funded,	Utility rate funded,	Application fee funded,	Utility rate funded,
	Roles of staff	Implementation of recommendations noted in this report, Long term system forecasting, planning, Responsible for the City's 10-25 year Utility Plan, (updated every 10y) Responsible for capital infrastructure plans and prioritization, Existing system capacity, Asset management and lifecycle analysis, Input on budget and utility rate recommendations,	Implementation of recommendations noted in this report, Long term system forecasting, planning, Responsible for the City's 10-25 year Utility Plan, (updated every 10y) Responsible for capital infrastructure plans and prioritization, Existing system capacity, Asset management and lifecycle analysis, Input on budget and utility rate recommendations,	Implementation of recommendations noted in this report, Long term system forecasting, planning, Responsible for the City's 10-25 year Utility Plan, (updated every 10y) Responsible for capital infrastructure plans and prioritization, Existing system capacity, Asset management and lifecycle analysis, Input on budget and utility rate recommendations, Oversight of applicant reports and studies,	Implementation of recommendations noted in this report, This position will lead on engineering review of active applications, Policy, land use amendments, subdivisions, engineering drawings, development permits, site servicing plans, Liaison with Network Planning for offsite capital infrastructure impacts of new applications, Responsible for public infrastructure construction permissions, Lead internal and industry input for engineering design guidelines, specifications and standards,	Liaison with the Utility Generalists to ensure the scope of work is documented in the development agreement, Administer development cost charges, utility oversize coordination, Preparing general and special clauses for the development agreement, Coordinate cost sharing between developers, Determine and manage public infrastructure performance security, Oversee and administer infrastructure inspection and certification process,

6.0 TIMELINE AND COST ESTIMATE

The above recommendations have all been allocated timelines and cost for implementation, which is outlined in Table 6-1 below. These timelines were considered based on application timelines, staffing capacity, and overall complexity of the recommendation. The cost estimates are based on the City of Winnipeg salary estimates for the level of staff[6] required as well as the length of time needed to fulfill the implementation.

[6] The salary estimates and level of staff are based on WAPSO Agreement 2020 to 2023 and CUPE Local 500 Agreement 2021 to 2025. The listed salaries do not account for inflation and/or escalation.

Table 6-1 Summary of Resource Requirements, Timeline, and Cost to Implement Recommendations

	Recommendation	New Staff	Timeline to Implement	Cost to Implement
1.	Consolidate Inquiry points	3 FTE Project Engineer (WAPSO Grade 4) 1 FTE Development Engineer (WAPSO Grade 4)	2 Years	FTE Cost: $520,000/year
2.	Refine Intake Processes			
3.	Project Scoping			
4.	Application Prioritization	No additional resources are required.	0 Years	$0
5.	Enhanced Staff Resources	5 FTE Project Engineer (WAPSO Grade 4) 4 FTE Senior Project Engineer (WAPSO Grade 5)	2 Years 2 Years	FTE Cost: $1,218,000/year
6.	Enhanced Staff Training	0.5 FTE Senior Project Engineer (WAPSO Grade 5)	18 Months	FTE Cost: $71,000/year
7.	Stakeholder Engagement	0.5 FTE Senior Project Engineer (WAPSO Grade 5)	18 Months	FTE Cost: $71,000/year
8.	Update Modelling Tools for Regional Capacity Analysis	1 FTE Senior Project Engineer (WAPSO Grade 5) to manage the project.	36 Months	FTE Cost; $142,000/year Additional Cost: $2,000,000
9.	Serviceability Studies	1 FTE Project Coordinator to manage the projects.	5 Years	FTE Cost: $126,000/year Additional Cost: $5,000,000
10.	Development Infrastructure Studies Repository and Open Data on District-level Infrastructure Conditions	FTEs outlined in Recommendation 5	Variable	Additional Cost: $500,000
	Subtotal	**16 FTE**		**FTE Cost: $2,148,000/year** **Additional Cost: 7,500,000**

7.0 NEXT STEPS

The Review and Assessment of Municipal Servicing for Water, Sewer, and Land Drainage Development provides recommendations for the City to build upon their current development proposal review and approval processes with the goal of providing potential developers meaningful data, at an appropriate level, in a timely manner. See Table 7-1 for a summary of next steps.

Table 7-1 Next Steps Summary

Theme 1: Streamline Processes to Save Time or Use it More Efficiently	
Recommendation 1: Consolidate Inquiry Points	Establish project scoping channel.
Recommendation 2: Refine Intake Processes for Development Proposals	
Recommendation 3: Project Scoping and Document Application Filing System	
Recommendation 4: Application Prioritization	This recommendation can be implemented to realize the benefits immediately. There is also no cost associated with this recommendation.
Theme 2: Improving Capacity	
Recommendation 5: Enhance Staff Resources	New staff to be implemented over the course of the next two budget cycles. Create, approve, and hire new senior position(s).
Recommendation 6: Enhance Staff Training	The preparation of training materials should be implemented immediately to ensure that there is immediate benefit realized. It is recommended that resources be assigned to assist the team to accelerate the development of training materials.
Theme 3: Improve Industry Ability to Submit Better Applications	
Recommendation 7: Stakeholder Engagement – Industry Standards	The preparation of engagement materials should be implemented immediately to ensure that there is immediate benefit realized. It is recommended that resources be assigned to assist the team to accelerate the development of engagement materials.
Recommendation 8: Update Modeling Tools for Regional Capacity Analysis	Complete internal review of model to understand existing condition. Engage an engineering consulting firm to update and calibrate/validate the model.
Recommendation 9: Serviceability Studies	Complete internal review of previously completed serviceability studies. Engage an engineering consulting firm to complete serviceability studies in priority locations.
Recommendation 10: Development Infrastructure Studies Repository and Open Data on District-level Infrastructure Conditions	Complete internal review to confirm City's current GIS capabilities and associated costs with managing the information.

November 7, 2024

APPENDIX A - INTERNAL DEVELOPMENT APPLICATION PROCESS REVIEW TECHNICAL MEMORANDUM

Stantec Landmark Planning & Design Inc.

Memo

To:	Ho Lau, C.E.T. City of Winnipeg	From:	Jeff Blyth, P.Eng. Stantec Consulting Ltd.
File:	111220808 City of Winnipeg City of Winnipeg Review & Assessment of Municipal Services for Water, Wastewater, & Land Drainage	Date:	November 16, 2023

Technical Memorandum #1 - Existing Internal Development Proposal Review Process

EXECUTIVE SUMMARY

The City of Winnipeg's (City) Water and Waste Department (W&W) is conducting an assessment of land development reviews as to water, sewer, and land drainage servicing. The review includes a comparison of how the City provides information on current water and sewer infrastructure capacities against other cities and to identify areas of improvement.

As part of the initial phase of the project, a series of workshops were conducted with members of the City's Public Service to document the existing internal development application process and development proposal reviews. This Technical Memorandum summarizes the workshop findings which provide an understanding on how information is shared with the public by the W&W. This was achieved by gaining a thorough understanding of the application process, staff requirements for processing, and identifying gaps, inefficiencies, and other related matters to improve the process. This information will be compared to other municipalities through a market scan during the next phase of the project.

Mapping of organizational structure, application review processes, time requirements, and related matters are contained herein. Findings from the workshop can be summarized as follows:

Type of Request	Response Time	Request Origin	Hours per Request	Response Format	Fee per Request	Circulation Scope
Query	Varies – no commitment	Direct	11.5	Informal email/phone call	No Fee	Internal to W&W
Pre-Application	Three weeks	PPD-Land Development Branch (LDB) Circulation	18.5	Email	No fee	Internal to City
Development Application	Three weeks	PPD-LDB Circulation	18.5	Email, Administrative Coordinating Group report contribution	No fee	Internal to City
Permit applications with no requirement for circulation	Mandated Circulation Period	Direct	9.5	Servicing Requirements conveyed to Permits Branch	Application Fee	Internal to City

INTRODUCTION

The City of Winnipeg's (City) Water and Waste Department (W&W) is conducting an assessment of land development reviews as to water, sewer, and land drainage servicing. The review includes a comparison of how the City provides information on current water and sewer infrastructure capacities against other cities and to identify areas of improvement. The purpose of this memo is to create a baseline of the existing approaches and issues from which to base process change recommendations later in the process.

As part of the assessment an internal review of City processes for providing information was conducted. A key part of this assessment included workshops with representatives from the City's Public Service. This Technical Memorandum provides a summary and analysis of the workshop findings.

This workshop and supplemental review of data was used to draft this Technical Memorandum which:

- Identifies what water and sewer infrastructure capacity information is conveyed to the public, including what and when for various application types;
- Confirms the roles and responsibilities of members of the Public Service involved in the development application process;
- Details the number of staff involved in the water, wastewater, land drainage and flood protection review process;
- Confirms Developer's submission requirements throughout various phases of the development application process; and
- Creates a flow chart of roles and responsibilities from development proposal submission, proposal review process, and final response.

OBJECTIVE

To achieve the above-noted tasks, a series of workshops were conducted with key representatives from the City's Public Service, including Planning, Property & Development (PP&D) and W&W. The workshops had the following objectives:

- Map the application review process;
- Understand challenges, constraints, choke points, information gaps and process inconsistencies or inefficiencies;
- Gain insight into organizational processes;
- Hear City staff input into the process;
- Identify successful components, key gaps, or opportunities for improving processes; and
- Identify the role of City development policies in servicing considerations.

WORKSHOP SUMMARY

The Project Team of Stantec Consulting (Stantec) and Landmark Planning & Design (Landmark) conducted three (3) workshops in Fall 2023. The three sessions were professionally facilitated. They were iterative and built off each other to fully achieve the above-noted objectives. This section provides an overview of these workshop sessions.

Workshop #1 – Tuesday, September 12th from 9:00 AM to 1:00 PM

Location: Public Works Training Rooms (1155 Pacific Avenue)
Attendance: 22 Participants from the W&W, PP&D, Stantec, and Landmark.
Topics discussed: Application types, department coordination, relation to planning objectives, and policy direction.

The workshop started with a brief introduction of the project by the City and the Project Team. Participants from different City departments had the opportunity to introduce themselves and share their background and interest in the project.

In the first part of the workshop, the Project Team provided a description of the project background, including population projections, policy direction, intensification targets, and development industry expectations. This information was followed by an overview of the scope of review, its relation to the workshop objectives and structure, and a proposed project timeline.

The second part of the workshop focused on a development application process overview to better understand the origin and development of the existing processes and identify the different types of applications. The result of the process overview was a comprehensive and engaging discussion organized around a series of key topics such as strengths, gaps, and opportunities.



Figure 1: Workshop 1

Workshop #2 – Wednesday, September 27th from 1:30 to 4:00 PM

Location: W&W-Pacific Meeting Room #5 (1199 Pacific Avenue)
Attendance: 12 Participants from the W&W, Stantec, and Landmark.
Topics discussed: Organizational structure and flow chart per application type (homework).

In preparation for Workshop #2, the Project Team reached out to the W&W to ask the participants to draft a flow chart of each Branch's process for each of the discussed application types and to identify their role within these processes. See **Appendix A** for a compilation of the provided flow chart diagrams.

The workshop started with a brief introduction by the City and the Project Team. The Project Team provided an overview of the objectives and the information discussed during the previous workshop, including a diagram that summarized the four different types of applications or external requests referred to as queries

that were previously identified and their overall processes. As displayed in **Figure 2**, there are four key streams from which the W&W may receive information requests:

- **Queries**: A landowner, prospective developer or engineering professional on behalf of a landowner reaches out to the W&W for servicing-related information regarding a specific property;
- **Pre-Applications**: A landowner or prospective developer submits a formal pre-application regarding a potential development proposal[1]. These are circulated to City Departments, including W&W, for comment;
- **Development Applications**: A landowner or prospective developer submits a formal development application. These are circulated to City Departments, including W&W, for comment; and
- **Permit applications with no requirement for circulation**: On a site where development approvals were not required, a landowner or prospective developer submits a Development or Building Permit for a specific property which comes to W&W for review.

A more detailed discussion of these four streams and their specific differences and nuances is located later in this memo. Of the above-noted streams for information, the "Permit applications with no requirement for circulation" most often results in instances of landowners being surprised by lack of servicing capacity being available for a specific property.

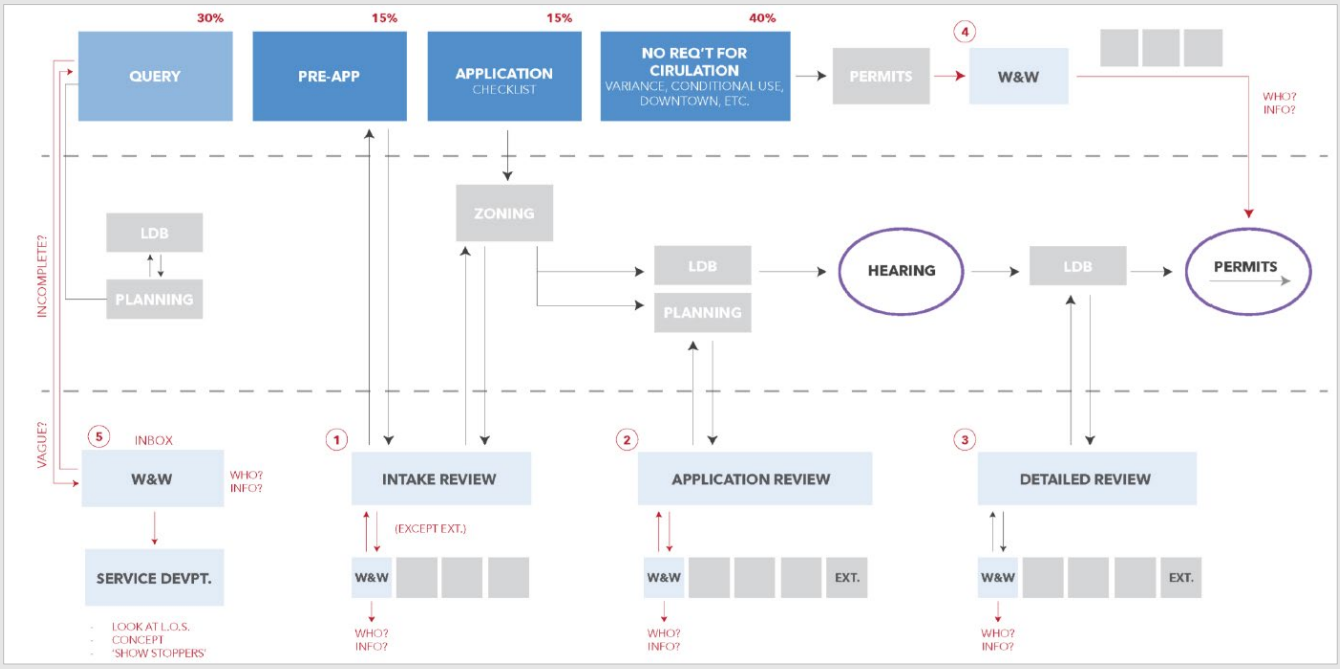


Figure 2: Development Application Process Chart – Summary from Workshop 1

The second part of the workshop focused on discussing the organizational structure of the W&W at a high level, and the different types of applications and their processes in more detail. Participants had the

- *[1] Development Pre-Application are administered by the Land Development Branch and can only be applied for regarding specific development types including re-zonings, subdivisions, variances and conditional uses and a select few other applications,*

opportunity to explain their pre-application flow charts from the perspective of different branches within the Department. A comprehensive and engaging discussion was developed around these diagrams, touching on topics such as tools and resources, staff, timelines, file management, strengths, challenges, and opportunities.

Workshop #3 – Monday, October 16th from 1:30 to 4:00 PM

Location: W&W-Pacific Meeting Room #4 (1199 Pacific Avenue)
Attendance: 12 Participants from the W&W, Stantec, and Landmark.
Topics discussed: Flow charts, staff, timelines, tools.

In preparation for Workshop #3, the Project Team asked the W&W to draft an organizational chart as a baseline for discussion during the workshop. See **Appendix B** for organizational chart provided by the Department.

The workshop started with a brief introduction by the City. The Project Team provided a recap of the objectives and the information discussed during the previous workshops, including an updated and simplified diagram that summarized the four different types of applications previously identified and their overall processes (see **Figure 2**). There was also the addition of a fifth stream of inquiries being "Special Projects." These are similar to queries, but relate to specific, usually high-profile, development opportunities. These typically originated from the Mayor's Office, the Chief Administrative Officer's (CAO) Office, or another entity such as Economic Development Winnipeg (see **Figure 3**).

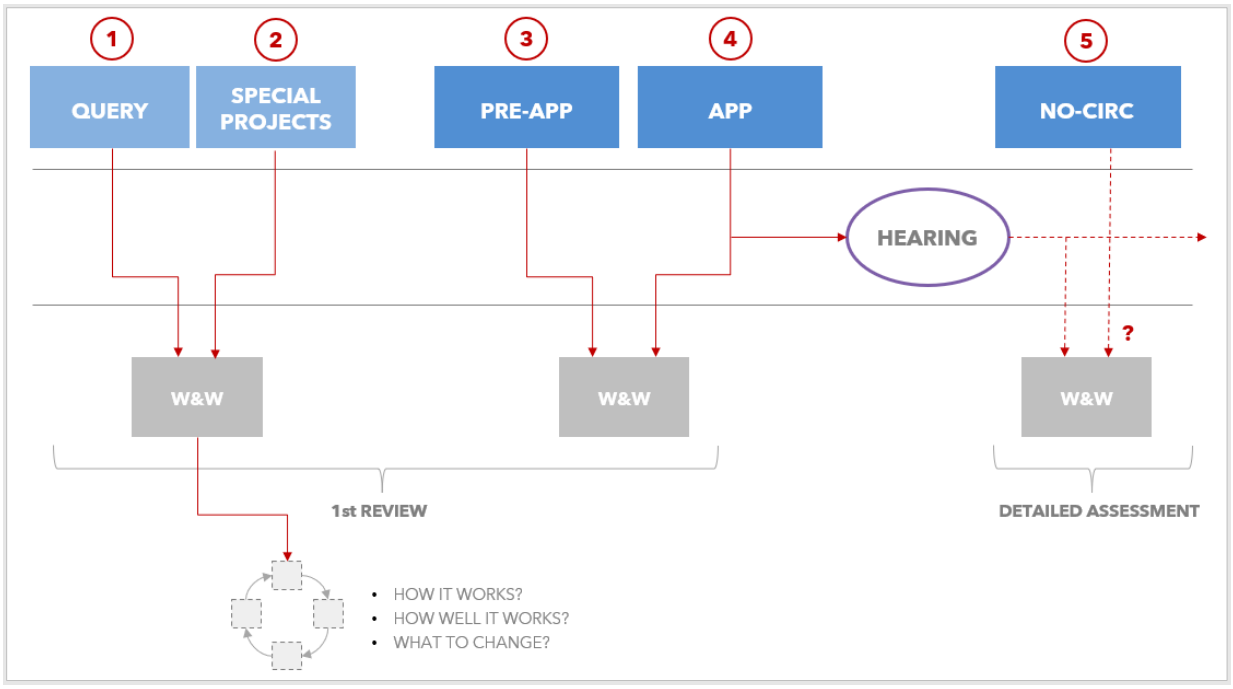


Figure 3: Development Application Process Chart – Summary from Workshop 2

The second part of the workshop included discussion of the provided organizational structure chart in more detail, followed by the remaining application flow charts from Workshop 2. A comprehensive and engaging

discussion was developed around these diagrams, touching on topics such as tools and resources, staff, timelines, file management, strengths, challenges, and opportunities.

ORGANIZATIONAL STRUCTURE

This section provides an overview of the City's organizational structure, with a focus on how development applications and queries fit within the structure. The development application process is complex and involves the participation of a variety of City departments, divisions, and branches. **Figure 4** below provides an overview of the City's organizational structure in relation to water, wastewater, land drainage and flood protection reviews within the development application process. See **Appendix B** for a full-size figure.

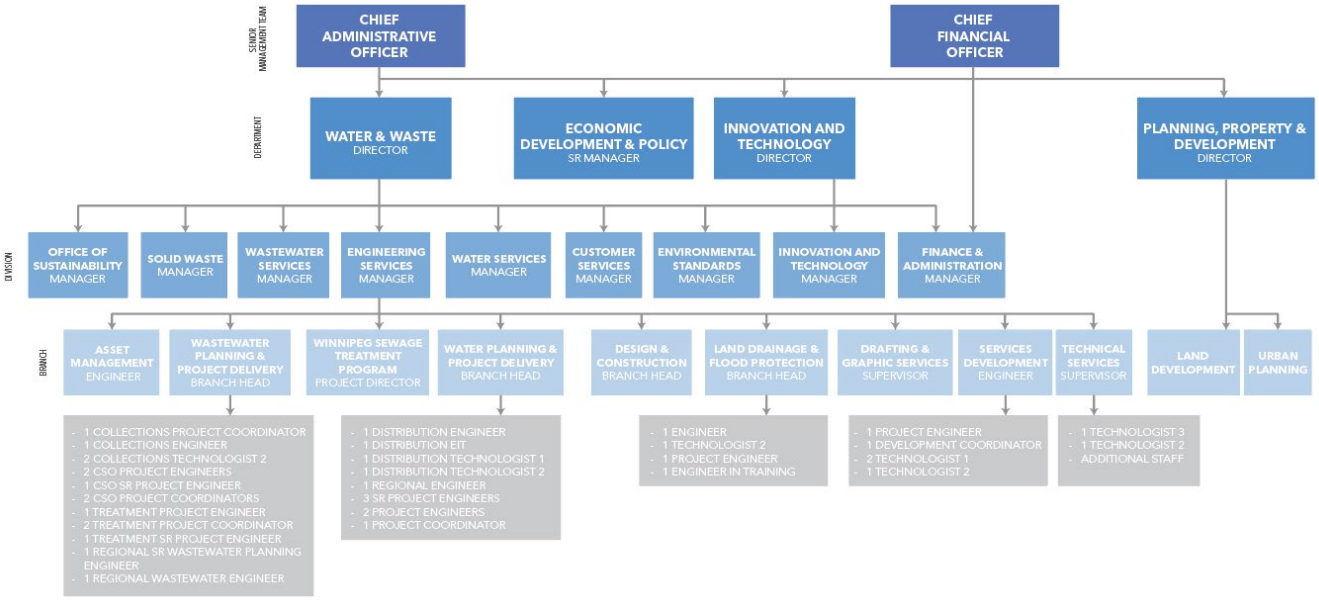


*Figure 4: Organizational Structure Overview [see **Appendix B** for full size diagram]*

As outlined in **Figure 4**, the W&W is formed by nine individual Divisions, of which the Engineering Services Division is most relevant to the development application and query process.

The *Engineering Services* division is divided into nine branches, with the *Wastewater Planning & Project Delivery (WWPPD)*, *Water Planning & Project Delivery (WPPD)*, and *Land Drainage & Flood Protection (LDFP)* branches playing a major role within the development application process in coordination with the *Services Development (SDB)* and *Technical Services (TSB)* branches.

See **Appendix B** for a more detailed organizational chart.

ROLES AND RESPONSIBILITIES

This section provides a description of roles and responsibilities of the various City groups involved in the development application process as outlined in the previous section (Organizational Structure) and their participation within the different types of development applications.

While the scope of this project focuses on the W&W, the PP&D plays a key role in the Pre-Application and Development Application processes. Within PP&D, the Land Development Branch and, Zoning and Permits Branch both play key roles, with the latter serving as the intake for applications and the former compiling all circulation comments (including from the W&W) and distributing them to the applicant. Within the W&W, individual branches have specific areas of responsibility as follows:

- The SDB is responsible for issuing development application reviews;
- The WPPD, WWPPD, and LDFP branches are responsible for their respective components of development application and permit reviews; and
- The TSB is responsible for issuing permit reviews.

EXISTING PROCESS

This sub-section details the role and responsibilities of the previously outlined groups through the existing development application (and query) process, from development submission, proposal review process, and final response. An assessment of the number of full-time employees (FTEs) involved in the water and sewer development application process is included per branch for each of the application types.

Queries and Special Projects

Standard queries and special projects queries (e.g., major redevelopments) are informal and have no submission requirements in place. For general inquiries related to W&W matters, proponents (e.g., developers, consultants, etc.) are usually advised by zoning officers or district planners to submit requests via email to a general inquiry inbox (W&W-landdevelopmentrequests@winnipeg.ca). This inbox is monitored and screened by staff from the SDB, usually three FTEs (i.e., Project Engineer (PE), incumbent of the Development Engineer position (DE) and Technologist 1 (Tech 1)) involved in review of the request. Generally, one of the SDB's engineers responds to the proponent after any required coordination of the reviewers' feedback has been finished.

Due to the informal nature of these requests, proponents submit inquiries providing a diverse range of details, often resulting in a potentially long process of back and forth with the proponent to request additional information that may be available for W&W to provide a more detailed response about capacity. Information provided by the proponent is usually limited and conceptual, including only general information such as property address, proposed land use, and approximate number of units. An example of a common query would be someone performing due diligence on a specific property and inquiring about the number of units that could be supported with existing water/wastewater capacity.

As shown in **Figure 5**, once sufficient proposal details have been provided by the proponents, SDB reviews infrastructure surrounding the proposed development and determines if WWPPD and LDFP review are applicable to the proposal. Applicable branches review the proposal and SDB coordinates the information and provides a response to the proponent. Responses typically are provided at a high level, indicating if the proposal is anticipated to be adequately serviced with existing infrastructure or if any issues are identified.

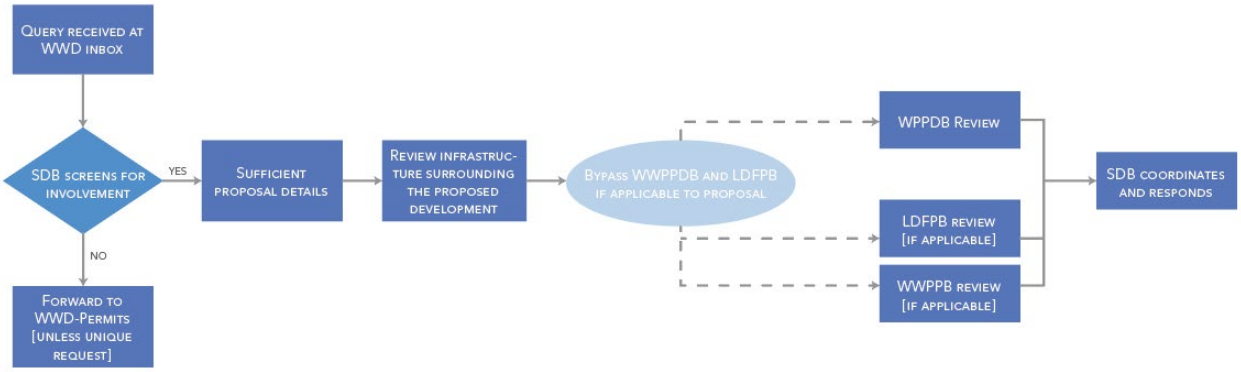


Figure 5: Query Flow Chart

Queries related to special projects such as a potential major employer looking to establish in the City, large-scale projects or major redevelopments follow a similar path but originate internally (e.g., from the CAO office or from the Economic Development & Policy Department) and require direct correspondence. These queries usually involve tighter deadlines and higher outcome expectations due to additional political pressure. The way W&W responds to these requests tends to vary and is not necessarily directly to the proponent; this can depend on the source of the request and method of circulation to Departments including W&W.

Workload Assessment has been estimated by each branch below (see Appendix D for further details). Queries	**Services Development (SDB)**	**Water Planning (WPPD)**	**Wastewater Planning (WWPPD)**	**Land Drainage & Flood Protection (LDFP)**
Average Hours	3	2	1.5	1 to 10
Percentage	% split amongst branch:PE/DE - 80%, Tech 1 - 20%	WDPE - avg 33% to peak 75%	WWCPE - 70%	LDPE - 100%
Avg Apps/Month	23	7.5	25	4
C-Value Inquiries				
Requests/month				15
Hours/C-Value request				1-4

On average, each query takes approximately 11.5 hours to process between the four branches.

Pre-Application

Pre-applications are a tool that allows prospective developers to obtain preliminary and written input from appropriate City departments, including the W&W in advance of filing a formal development application. In some cases, the City requires a potential applicant to submit a pre-application if it has been determined that the development is particularly large or complex. Pre-applications are circulated to all relevant internal departments for comment with a maximum desired timeframe for response.

Pre-applications, unlike queries, are a formal City process but without granting approval. A list of specific documents including ownership information and detailed proposed plans of development as detailed in **Appendix C** are required to make a pre-application. Supporting engineering reports may also be required. An application fee payment, administered by PP&D but not involving W&W, is required for the City to process this type of application. However, even though more details are provided for this type of application, the proposed development is still at a conceptual level and no engineering submissions are required to accompany a pre-application review. The Zoning Development Officer (ZDO) will only send the pre-application for processing when all documentation has been submitted and the application has been deemed complete.

A primary objective of pre-applications is to advise the applicant of capacity and/or license compliance related information and required actions, for their consideration whether or not to proceed with development, rather than completing an exhaustive review.

Pre-applications are submitted by the applicant to Zoning and Permits (PP&D), once they are reviewed and deemed complete, SDB receives circulation letters from the Land Development Branch (PP&D-LDB). Files are reviewed by one SDB FTEs (engineer) and may involve other FTEs (for example, a more senior engineer) depending on the complexity of the file. As shown in **Figure 6** below, once it is deemed that the file provides sufficient details, SDB reviews for specific questions outlined by the applicant in the pre-application.

Similar to the query process, SDB reviews infrastructure surrounding the proposed development, conveys the file to WPPD for review, and determines if WWPPD and LDFP review are applicable to the proposal based on various factors such as development plans, availability and type of nearby infrastructure and established practices that may simplify the review process in certain situations. One or two FTEs per branch are assigned to this review, usually just one. Applicable branches review the proposal and SDB coordinates the information for an emailed preliminary response back to the Land Development Branch (LDB).

The financial stream is not involved in the process unless the applicant requests servicing costs. SDB reviews if a development benefits from a specific nearby pipe, engaging with WPPD, WWPPDB and LDDP as applicable to determine if the cost share payment would apply in a future development application. SDB also identifies if any joint servicing is applicable and will advise the proponent if a related agreement will be needed. Joint servicing is applicable when multiple lots or developers are serviced by the same pipe.

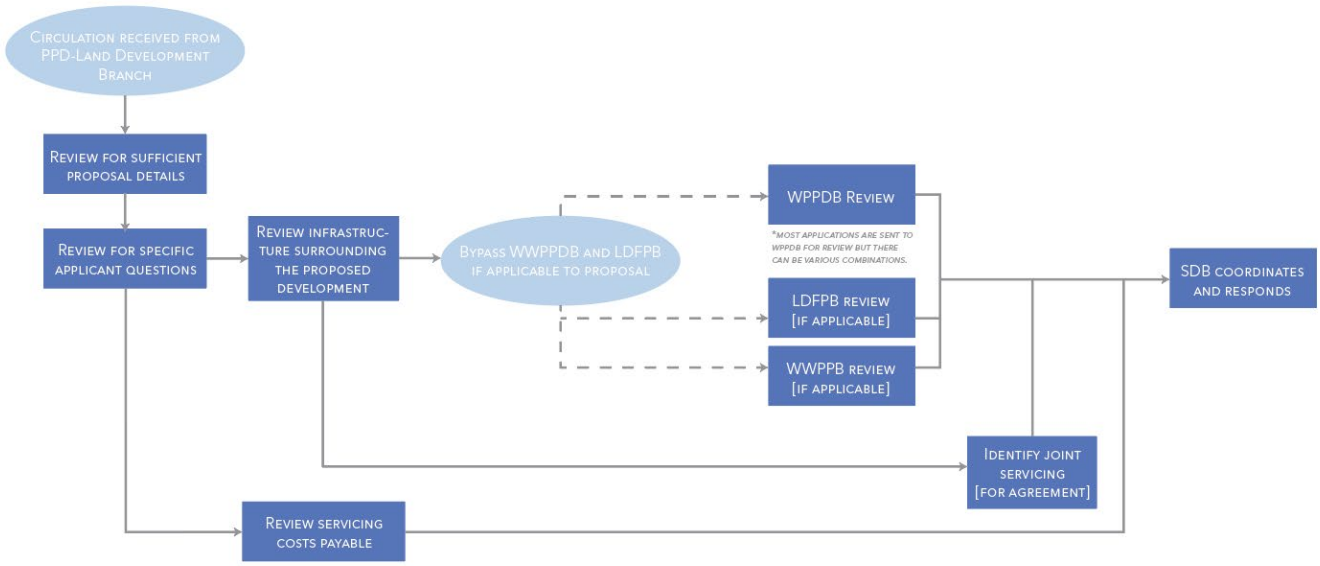


Figure 6: Pre-App Flow Chart

According to comments provided by workshop participants, pre-applications are helpful to determine if a file should be changed to a different type of application and to identify if any supporting applications are necessary. It is worth noting that pre-applications and development applications require similar amounts of time input by the W&W. However, they do not receive any of the pre-application fees to account for their time effort.

Workload Assessment has been estimated by each branch below (see Appendix D for further details). Pre-Applications	**Services Development (SDB)**	**Water Planning (WPPD)**	**Wastewater Planning (WWPPD)**	**Land Drainage & Flood Protection (LDFP)**
Average Hours	10.5	1.5	1.5	5 (1 to 10)
Percentage	% split amongst three: SDE - 5%, DE/PE - 90%, Tech 1 - 5%	WDPE - avg 33% to peak 75%	WWCPE - 70%	LDPE - 100%
Avg Apps/Month	2.9	2	3	4

On average, each pre-application takes approximately 18.5 hours to process between the four branches. If the proponent continues to the development application stage, much of the work performed at this stage can be rolled into the development application review.

Development Applications

Development Applications (e.g., rezoning, subdivision) are submitted by the applicant to Zoning and Permits within PP&D. LDB meets twice a week to review intake applications and determine if they are complete or if

more information is needed. Zoning Development Officers (ZDOs) host these intake meetings and typically one engineer from W&W-SDB is involved. The submission needs to contain specific documents including ownership information and detailed proposed plans of development as detailed in **Appendix C**. Supporting engineering reports may also be required. An application fee payment is required to process this type of application, which is administered by PPD without W&W involvement or sharing of revenue. The ZDO will only send the application for processing when all documentation has been submitted and deemed complete.

As required by the City of Winnipeg Charter, the City has 20 days to determine whether an application is complete. Once a file is deemed complete, it is circulated to internal and external departments. One of these internal departments is W&W. Similar to pre-applications, files are reviewed by one SDB FTE (engineer) and may involve other FTEs (for example, a more senior engineer) depending on the complexity of the file. As shown in **Figure 7** below, once a file provides sufficient details, it is reviewed through two different streams - the technical stream, and the financial stream.

The first step of the technical stream is to determine if any special technical conditions and previous legal agreements apply to the area. As with queries and pre-applications, SDB reviews infrastructure surrounding the proposed development, typically passes the file to WPPD for review, and determines if WWPPD and LDFP review are applicable to the proposal. One or two FTEs per branch are assigned to this review.

Once applicable branches review the proposal, SDB engages with other departments such as PP&D and PW to coordinate the recommended conditions of approval from W&W with the other Departments' requirements. During coordination of the recommended conditions, SDB also determines if additional special technical conditions (e.g., maintenance obligations, easements) apply to the site. An example of this type of coordination between departments is the Administrative Coordinating Group (ACG) meeting, for which one FTE (engineer) from SDB is in attendance. Preparation for this meeting and potentially several engagement sessions for proper coordination of the inter-Departmental recommendations can vary from one hour to one day depending on the complexity of the file and if a pre-application was filed.

It should be noted that the average number of staff and amount of time spent reviewing applications tends to be similar to what's required for pre-applications. However, if a file already went through a pre-application process, application review time and effort significantly decrease.

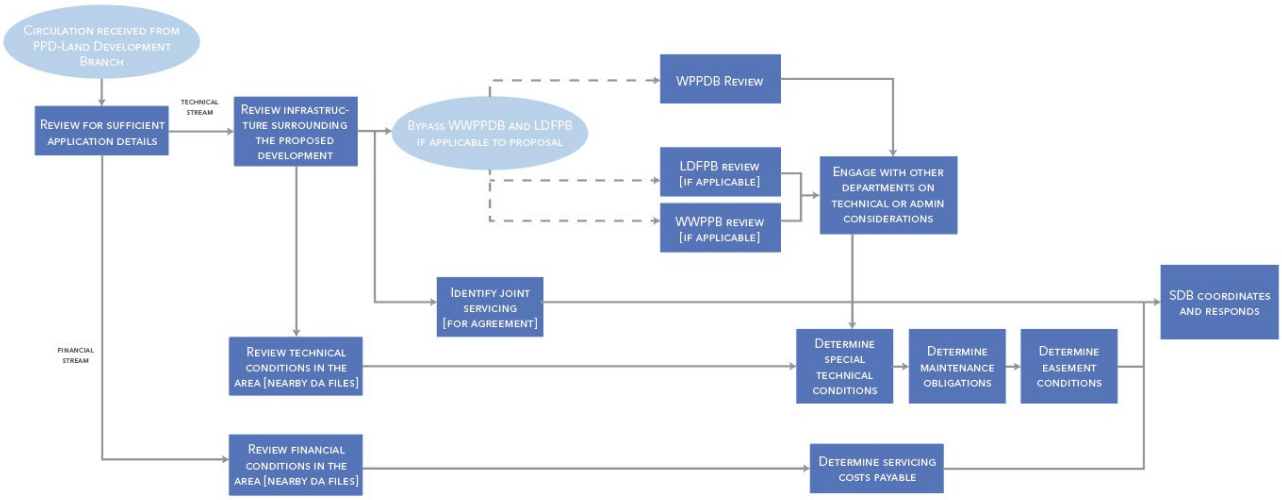


*Figure 7: Application Flow Chart [see **Appendix A** for full size diagram]*

The following subsections of the document provide a more detailed description of the role and responsibilities of each of the three most involved branches (i.e., WPPD, LDFP, and WWPP) within the overall W&W application review process.

Water Planning and Project Delivery Branch (WPPD)

As shown in **Figure 8,** the water planning review process starts by determining if the property is already serviced and if existing services are adequate for the proposed development's density and size. Fire flow, water quality, and water pressure are reviewed as part of this analysis. It has been noted by some workshop participants that fire flow issues are uncommon and occur approximately 10% of the time.

If the property is not already serviced, the site is examined for the feasibility of extending services from adjacent areas. If servicing is deemed feasible, detailed requirements for servicing extension are provided. If servicing is not feasible, alternative servicing approaches may be considered as per City policies, depending on the proposed development and location of the property.

For complicated cases, the Branch works on a preliminary design, which is proposed only as an option/suggestion to the applicant, who is required to provide a servicing report. This proposed design is provided from a technical perspective, and it does not include costing.

For infill projects, the Branch usually provides a list of requirements for the W&W response to the application, which are supported by policy (e.g., *Complete Communities 2.0*) and incorporated into the file as recommended conditions of approval.

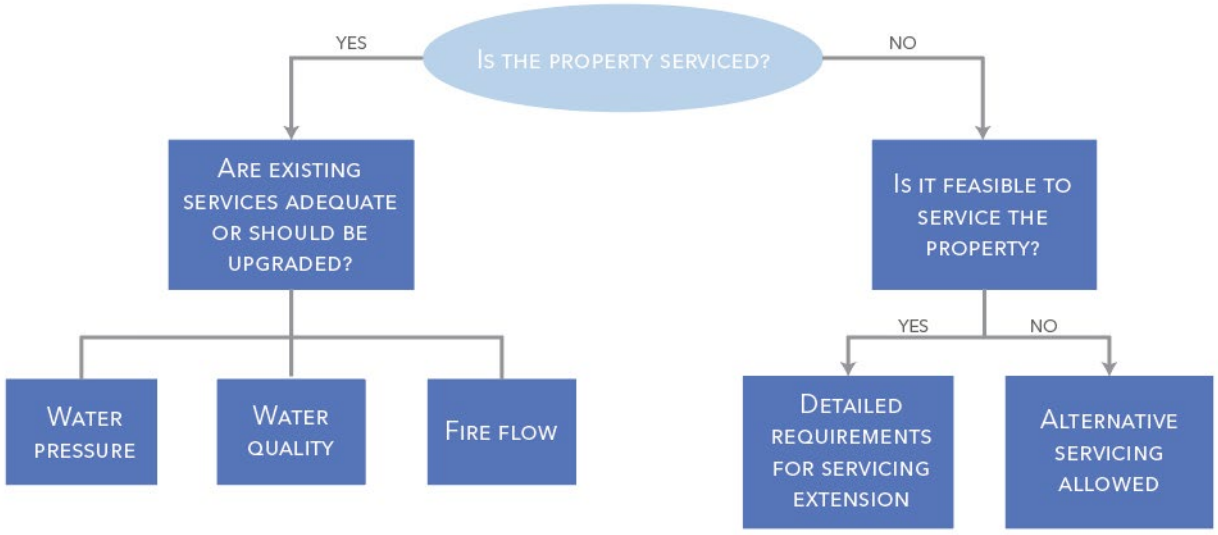


*Figure 8: Water Planning Review Process [see **Appendix A** for detailed diagram]*

Land Drainage and Flood Protection Branch (LDFP)

As shown in **Figure 9,** the land drainage review process starts by determining if the existing land drainage sewer system is adequate to service the proposed development. If the site is adequately serviced, LDFP provides design parameters and requests stormwater design that corresponds to combined sewer districts, partially separated systems, or fully separated systems, as applicable.

If the site is not adequately serviced, there is a review on the feasibility of developing the site and the potential options available to achieve it. A land drainage sewer is not necessarily present along a property or in the vicinity for servicing the land. A variety of calculation tools are provided to the applicant depending on the site location, such as regional drainage reports, flow control rates (or c-value), and site servicing plans. However, new drainage features or facilities and infrastructure, such as land drainage sewer extension, with their corresponding servicing plan can be required in accordance with City servicing policies if there are no options readily available on site. The servicing plan may be a technical memorandum or portion of a comprehensive servicing report that provides the analysis and/or design of the required infrastructure. This type of requirement is usually put forward as a recommended condition of approval, coordinated with SDB, into the response to the development application.

According to workshop participants, certain areas of the city can be more challenging than others, owing to outdated or unavailable data, resulting in additional time and resources to update or calculate new data.

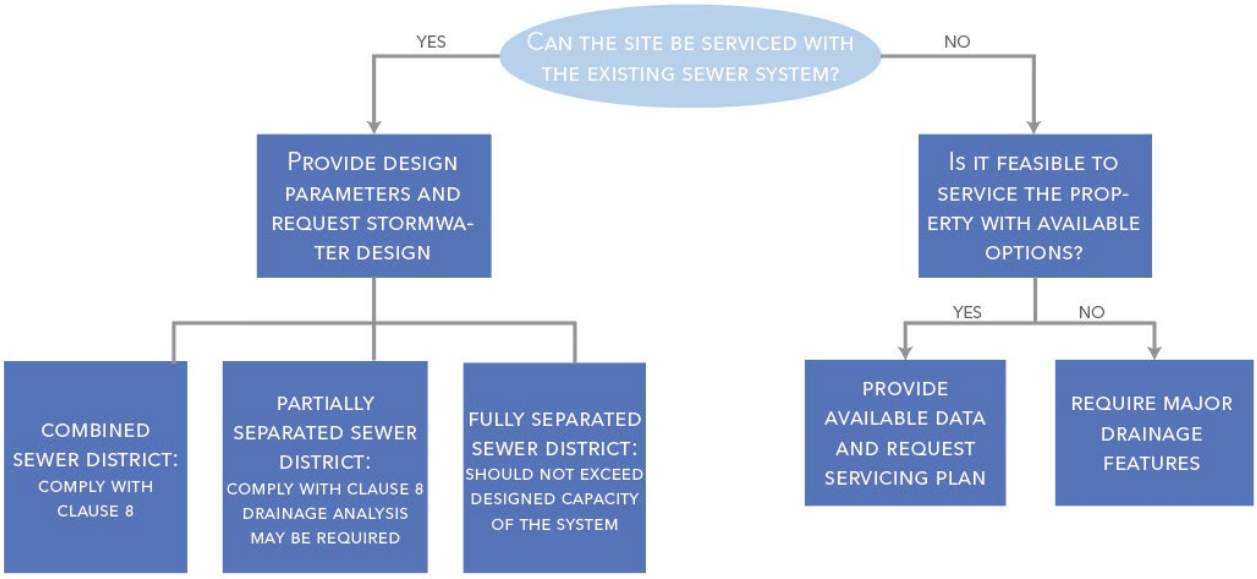


*Figure 9: Land Drainage Review Process [see **Appendix A** for detailed diagram]*

Figure 10 below provides an overview of the flood protection review process. The LDFP determines if flood protection is required based on whether the subject site is backing on a creek, drain, stream, stormwater retention basin (SRB), or river. If the site is backing on a creek, drain, stream, or SRB, the Branch provides a Flood Protection Level (FPL) or setback to the rear property line.

If the site is backing onto a river but located on the dry side of the City's Primary Dike within the Primary Line of Defense (PLD), there are likely no flood protection requirements. However, if the site is located on the wet side of the PLD, designated floodway fringe area regulations may be applicable.

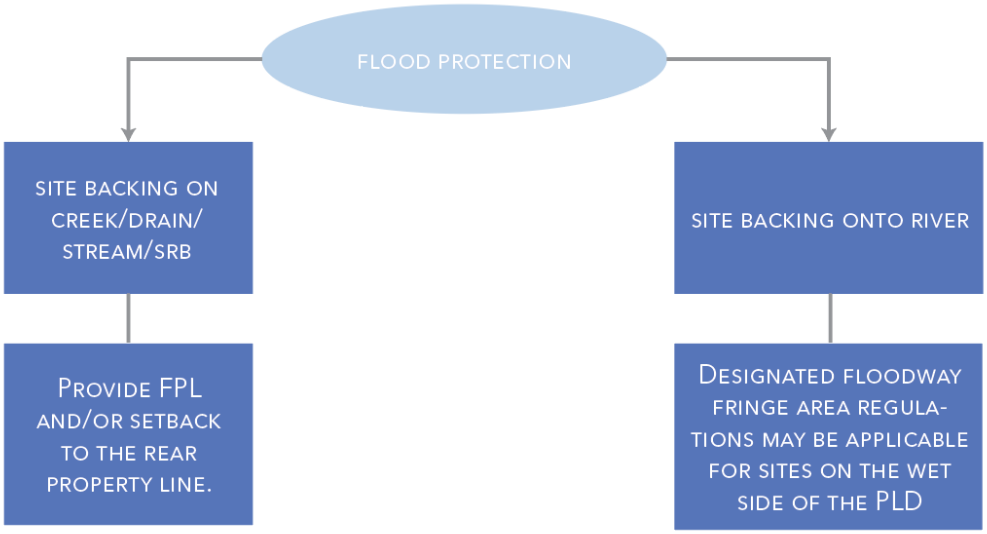


*Figure 10: Flood Protection Review Process [see **Appendix A** for detailed diagram]*

Wastewater Planning and Project Delivery Branch (WWPPD)

As shown in **Figure 11,** the wastewater planning review process can vary depending on the property location within combined or separated sewer districts.

For separated sewer districts, the review process is focused on identifying how the proposal would impact existing servicing. In any case, if the proposal exceeds existing flow capacity, the Branch must determine how the increased flow would be accommodated along with any infrastructure upgrades. For the development application phase, WWPPD provides feedback to SDB regarding capacity limits, which is incorporated into the recommended conditions of approval. Later in the land development process, the WWPPD works with the proponent's engineering consultants to design any necessary upgrades. This process results in the revision or creation of a technical memo/report to be approved and securities to be posted.

According to workshop participants, new servicing reports, which may sometimes be referred to as servicing studies, typically are at a conceptual servicing level unless certain aspects need further investigation and are usually submitted by developers for the creation of new secondary plans. Comprehensive design of wastewater infrastructure upgrades and obligations to construct the required works become conditions of approval during the rezoning and subdivision processes. It was also noted that typically, developers are responsible for sewer upgrades up to the regional infrastructure level (i.e. interceptors, lift stations). Responsibility for regional infrastructure upgrades or expansions for supporting development plans is a case by case review.

For combined sewer districts, developments are assessed by referencing Clause 8 of the *Environment Act License No. 3042*. The review process is developed around the comparison of the total (wastewater + land drainage) post-development flow against the total pre-development flow and the feasibility of accommodating peak dry weather flow (wastewater). At the development application stage, WWPPD provides feedback to SDB for the recommended conditions of approval. This may include a high-level screening of possible off-site infrastructure solutions in the sewer district that will inform the recommended conditions for the proponent to comply with EAL No. 3042. Similar to separated sewer districts, later in the land development process, WWPPD would work with the proponents engineering consultant on an iterative process of calculations to

achieve a compliant offsite sewer separation design. This process also results in the creation of a technical memo/report to be approved and securities to be posted.

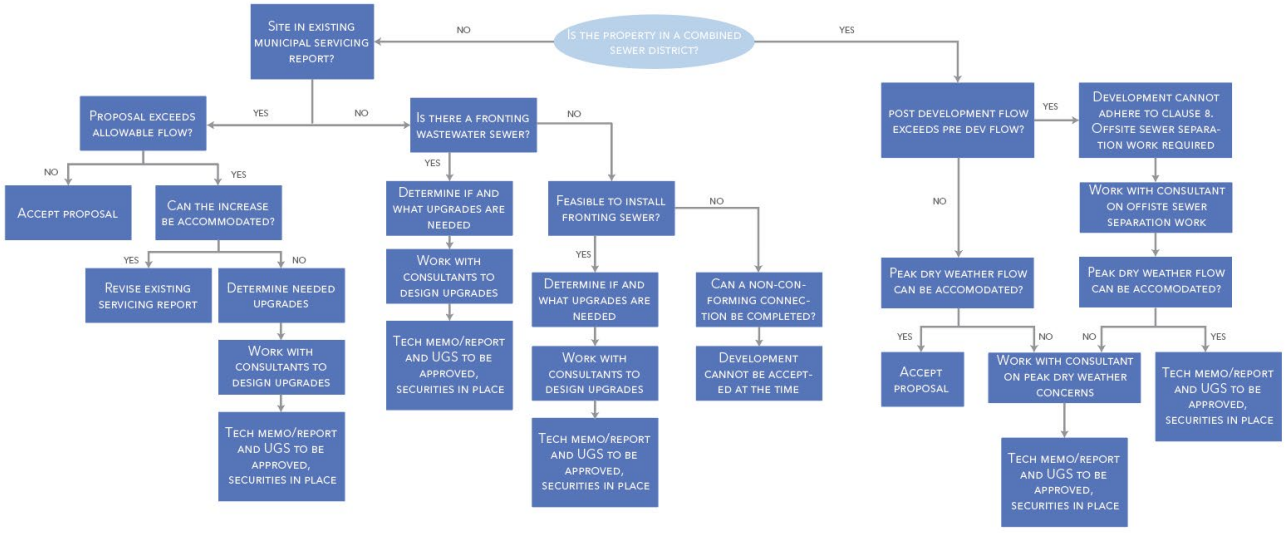


*Figure 11: Wastewater Planning Process [see **Appendix A** for detailed diagram]*

Workload Assessment for the review of development applications has been estimated by each branch below (see **Appendix D** for further details).

Applications	Services Development (SDB)	Water Planning (WPPD)	Wastewater Planning (WWPPD)	Land Drainage & Flood Protection (LDFP)
Average Hours	10.5	1.5	1.5	5 (2 to 10)
Percentage	% split amongst branch: SDE - 10%, DE/PE - 85%, Tech 1 - 5%	WDPE - avg 33% to peak 75%	WWCPE - 70%	LDPE - 100%
Avg Apps/Month	12.5	2.5	3	3

The overall average review timeframe of development applications is 18.5 hours, but the range can vary depending on specific locations or surrounding conditions. If a pre-application was previously submitted for the same proposed development, the processing time for the development application is reduced substantially because the previous work can be re-used.

Permit applications with no requirement for circulation

This section refers to a variety of application types that do not require circulation outside the PP&D Department such as variances, conditional uses, and downtown projects. Once the application is submitted to Zoning and Permits and the applicable fees have been paid, the file is circulated to the Area Planner but not to other departments until the development permit stage. Submission requirements are similar to applications that are circulated to other departments. The Planner will review the application and prepare a report outlining

their recommendation. This section also includes proponents who proceed to permit application directly due to available zoning rights, and who have not contacted W&W through the query process.

Workshop participants noted that files that are not circulated at the development application stage can become problematic, particularly for flood protection review. Landscape design and considerations are typically delayed until the end of the process, potentially resulting in non-compliant designs with long iterative revision processes, and in some cases in the rejection of the application.

Workload Assessment for non-circulated applications has been estimated by each branch below (see **Appendix D** for further details).

Non-Circulation	Services Development (SDB)	Water Planning (WPPD)	Wastewater Planning (WWPPD)	Land Drainage & Flood Protection (LDFP)
Average Hours	3.5	1.5	1.5	3 (2 to 6)
Percentage	% split amongst branch: SDE - 65%, DE/PE - 25%, Tech 1 - 10%	WDPE - avg 33% to peak 75%	WWCPE - 70%	LDPE - 100%
Avg Apps/Month	Included with queries	10.5	14	25

On average, each permit review takes approximately 6 hours to process between the three branches. When the four branches need to be involved, average review time increases to over 9.5 hours.

TOOLS AND RESOURCES

This section provides a description of how and what water, wastewater and land drainage infrastructure capacity information is conveyed to the public for each application type, as well as the tools and resources supporting this process.

Queries and Special Projects

As discussed in the Existing Process section above, queries are typically processed via email, or in the case of special projects, through direct internal correspondence. Infrastructure capacity feedback conveyed to the public is in the form of a reply email providing high-level information to advise if a proposal (development type and number of units) might be achievable. The department generally does not provide applicants with a maximum/allowed number of supported units, the applicant is encouraged to provide a proposed number of units.

According to workshop participants, the amount of effort and resources required for the baseline technical review of queries is comparable to pre-applications and applications but with no recovery cost as there are no fees associated with this process.

The W&W has discussed the possibility of developing a framework (e.g., matrix, explanatory video) for public guidance. The expectation would be for this tool to reduce the number of queries and focus resources on other application types.

Workshop participants indicated that a queries process is most effective if an experienced SDB FTE is available to filter out queries that lack adequate information, communicating to proponents that more development proposal information is needed to provide capacity feedback.

Pre-Applications

The average amount of work required to review a pre-application is similar to a development application. One of the main differences between these two review processes is the flood protection review, which could add extra steps and time to the overall timeline. In general, the same technical review process and calculations must be conducted, but pre-applications do not result in conditions of approval as they are limited to preliminary feedback in the form of written comments. Feedback to the applicant can be provided at a very technical level, but the primary objective is to communicate to the applicant the steps they need to take to resolve capacity limitations and/or achieve license compliance.

The W&W lacks a centralized filing system for all records related to a particular development review. Individual Branches have their own filing system and use certain other tools. For example, Wastewater planning uses GIS and Site Records folder as tools to review and document files. These tools are helpful because they allow the staff to easily resume the review process of the file when the pre-application moves forward to the application stage and beyond.

The W&W does not currently have a City-wide wastewater model nor a City-wide land drainage model to conduct reviews at a local level. While having City-wide models was identified as being potentially helpful, it was noted by workshop participants that if models existed, it could be challenging to keep them up to date. The department has developed wastewater models for regional calculations. However, the models are typically not calibrated and only apply to specific areas. These models can be made available to applicants/developers upon request, but usually local applicants do not ask for this tool as it does not provide the required level of detail.

An application fee must be paid before the pre-application is circulated to internal departments. However, the fee is not distributed to W&W to cover costs. Furthermore, it is relatively modest and would not account for the number of hours spent on the review process by all City departments.

Development Applications

Water, wastewater and land drainage infrastructure capacity information, flood protection, EAL 3042 license or other regulatory requirements conveyed to the public at the development application stage can vary depending on the type of project and the location of the subject site. The following list provides common considerations for typical applications:

Water Planning and Project Delivery (WPPD)

- Upgrades required to satisfy fire flow, water quality, and/or water pressure standards;
- Detailed requirements for servicing extension; and
- For complicated cases, preliminary design suggestion, no cost included.

Land Drainage and Flood Protection (LDFP)

- Land drainage design parameters for combined sewer districts, partially separated or fully separated districts;
- Regional drainage reports or models;
- Flow control requirements;
- Existing servicing plans;
- New major features or facilities design requirements;
- Flood protection level or setback to the rear property line; and
- Designated floodway fringe area regulation requirements.

Wastewater Planning and Project Delivery (WWPPD)

- Required infrastructure upgrades to accommodate proposed flow for separated sewer districts;
- Required infrastructure upgrades to accommodate post-development flow (if bigger than pre-development flow) and peak dry weather flow in combined sewer districts; and

Note: W&W requirements can be established in the form of conditions of approval or incorporated into zoning agreements.

Policy documents such as secondary plans are used as tools to organize and keep track of servicing infrastructure priorities, but they can also provide misplaced expectations on density if and when existing or planned/budgeted infrastructure capacity is not adequately considered during their creation.

Regional infrastructure plans are also tools to identify infrastructure needs and plan for infrastructure investment. However, according to workshop participants, growth has been increasing at an accelerated pace in the city and the region, resulting in easily outdated regional plans that do not match market trends.

In relation to management tools, each department and branch tracks files and timeframes in a different way, depending on their staff capacity and rotation. The W&W and PP&D department follow a consistent file numbering criteria for formal applications, such as the development application file numbers, but have independent database and communication systems. The PP&D Department uses the Amanda software for data management, but Technical Services is the only branch within the W&W with access to it.

The only model available for wastewater planning are at the regional level. Each development application requires creating a local model unless an existing one is available from a previous application. Other tools used for tracking and documenting information include GIS, a Master Drainage Plan, and an internal filing system.

Permit applications with no requirement for circulation

Non-circulation applications (variances, conditional uses, etc.) generally do not receive feedback on W&W matters until a development permit is applied for, unless the City planner involved in the file engages SDB on behalf of W&W. Some high-level servicing feedback may be provided in the form of high-level comments as part of the Planner's report if it is known from engagement with W&W. Detailed information, similar to what is provided for circulated applications, is conveyed to the public at the development permit stage, which in some cases may include substantial constraints on the ability of a property to (re)develop. Workshop participants indicated such instances represent W&W being perceived as the department that prevented a development from occurring.

OBSERVATIONS

Based on commentary compiled from the three workshops the Project Team was able to identify the following observations on the overall development application process in relation to water, wastewater, land drainage and flood protection infrastructure:

- A communication gap may exist between land use planning/density expectations and engineering/infrastructure capacity. There is a perception of policy documents being developed without feasible expectations on existing and potential infrastructure capacity. Different departments need to work together to identify where and when do they want growth to happen and what do they need to achieve it.
- The W&W provides analysis for queries and applications to allow for future changes but must also manage levels of risk. Decisions on servicing infrastructure must be supported with engineering analysis and adhere to local and provincial policy, but there is also a high level of development growth

expectations and political pressure. The combination of these factors often results in several rounds of revisions and redundancy per file.

- Further to the above, staff are primarily enabled to identify constraints versus solutions. This can result in a perception of rigidity but is grounded in risk management.
- At times developers' expectations on development application approvals and processing timeframes are unreasonable. W&W staff often receive files with a varying level of detail, which adds time to the review process. There is a need to standardize applicants' submission requirements and expectations; but it is also important to improve the quality of communication in the way responses are provided to the applicant.
- There is no standardized training for new employees. Documentation on processes could be a tool to save time training internal staff and answering general questions to the public at the same time. Standardized reply comments and templates were suggested during the workshops as potential strategies to address these concerns. At present the process of analyzing development proposals and providing feedback is largely held as institutional knowledge, held by a small team of people. Increased cross-training amongst staff could help cover absences and provide better succession planning.
- For queries, special projects, and pre-applications the W&W can provide substantial levels of detail and perform several hours of analysis with no funding provided to offset the time requirements. Participants acknowledge that some of this work ultimately may result in future development applications and taxes being generated. However, fees could help fund more trained staff to improve turnaround times and perhaps filter out superfluous queries and/or increase the detail and quality of information provided as part of a query.
- For the Branches within W&W and between other City departments there can be "silos" in which information and expertise are not shared except for the established channels as detailed in Appendices A and B.
- Further to above, increased sharing of information by shared databases could be improved. For example, PP&D uses "AMANDA" while W&W uses GIS, and each branch utilizes their own file management system. If a district planner or ZDO could easily access servicing notes on a property, the number of queries could potentially be reduced.
- Increased availability and clarity of information available to the public (via City of Winnipeg website, pamphlets etc.) can help manage expectations and understanding of processes.

NEXT STEPS

Information and comments compiled from the conducted workshops and presented in this Technical Memorandum have informed the development of a Market Scan Questionnaire to be used during the municipal market scan in the next stage of this project.

As required in the Scope of Services for this project, next steps include:

- Market Scan Analysis in accordance with D13;
- Development of Process Improvement Options in accordance D14; and
- Final Report in accordance with D15

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Practice Lead, Water
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Jeff.Blyth@stantec.com

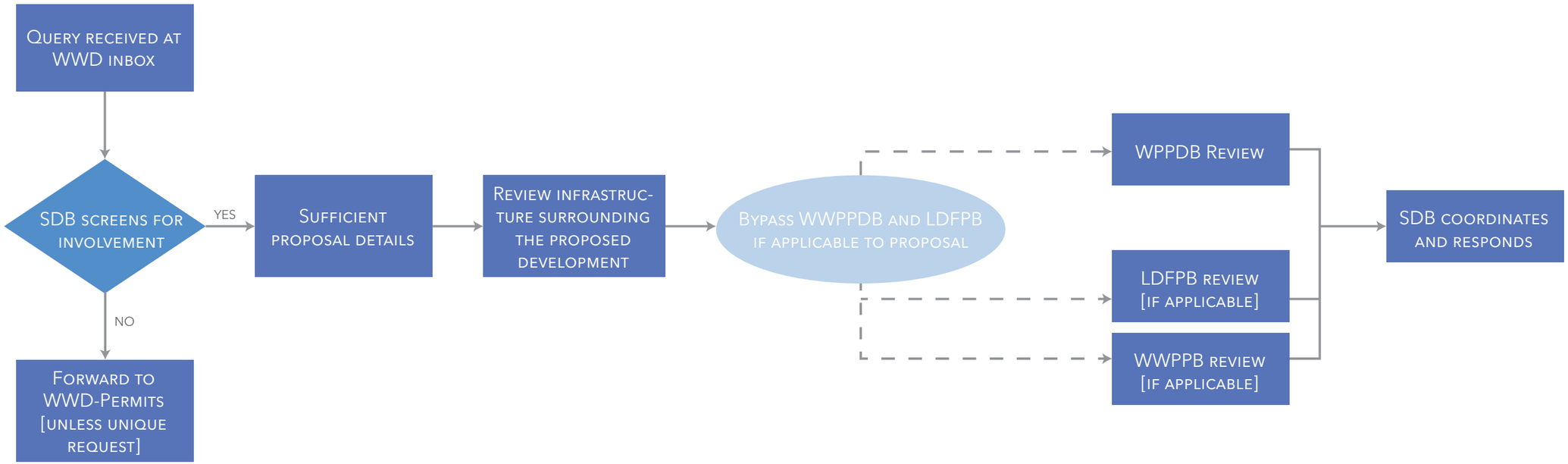
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Appendix A: Development Proposal Process - Flow Charts
Appendix B: Organizational Structure Chart
Appendix C: Development Application Requirements - Checklists
Appendix D: Workload Assessment

APPENDIX “A”

DEVELOPMENT PROPOSAL PROCESS - FLOW CHARTS

QUERY FLOW CHART [FIGURE 5]

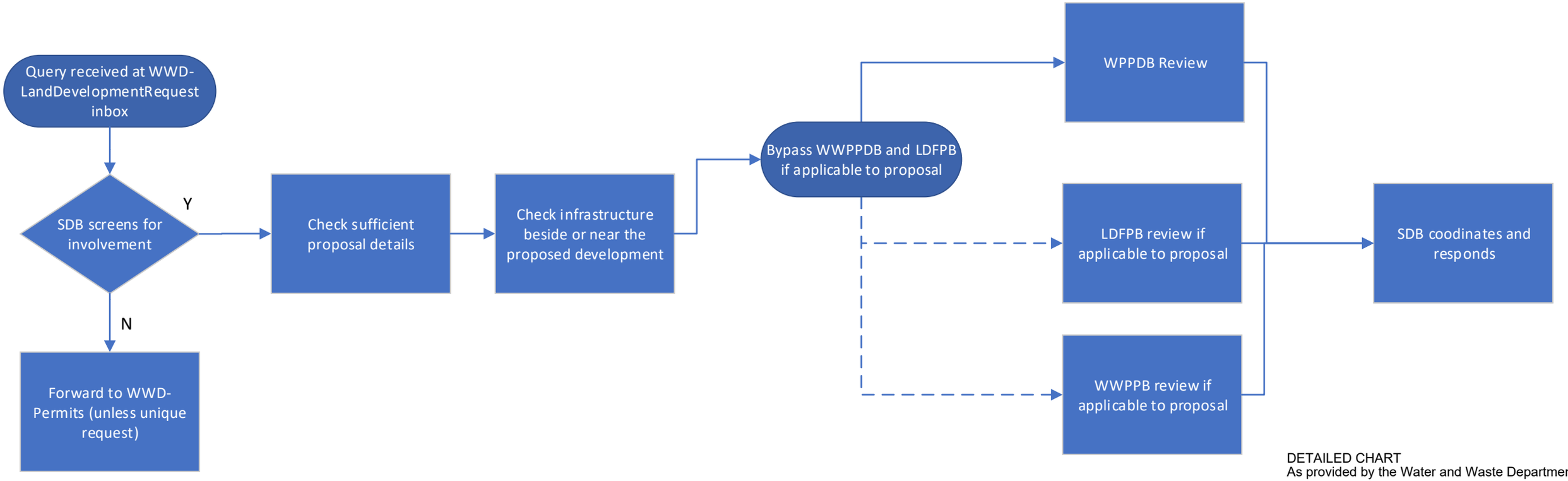
REVIEW AND ASSESSMENT OF MUNICIPAL SERVICING FOR WATER, SEWER AND LAND DRAINAGE DEVELOPMENT



WWD QUERY REVIEW FLOWCHART

This workflow represents a technical review most frequently queried.

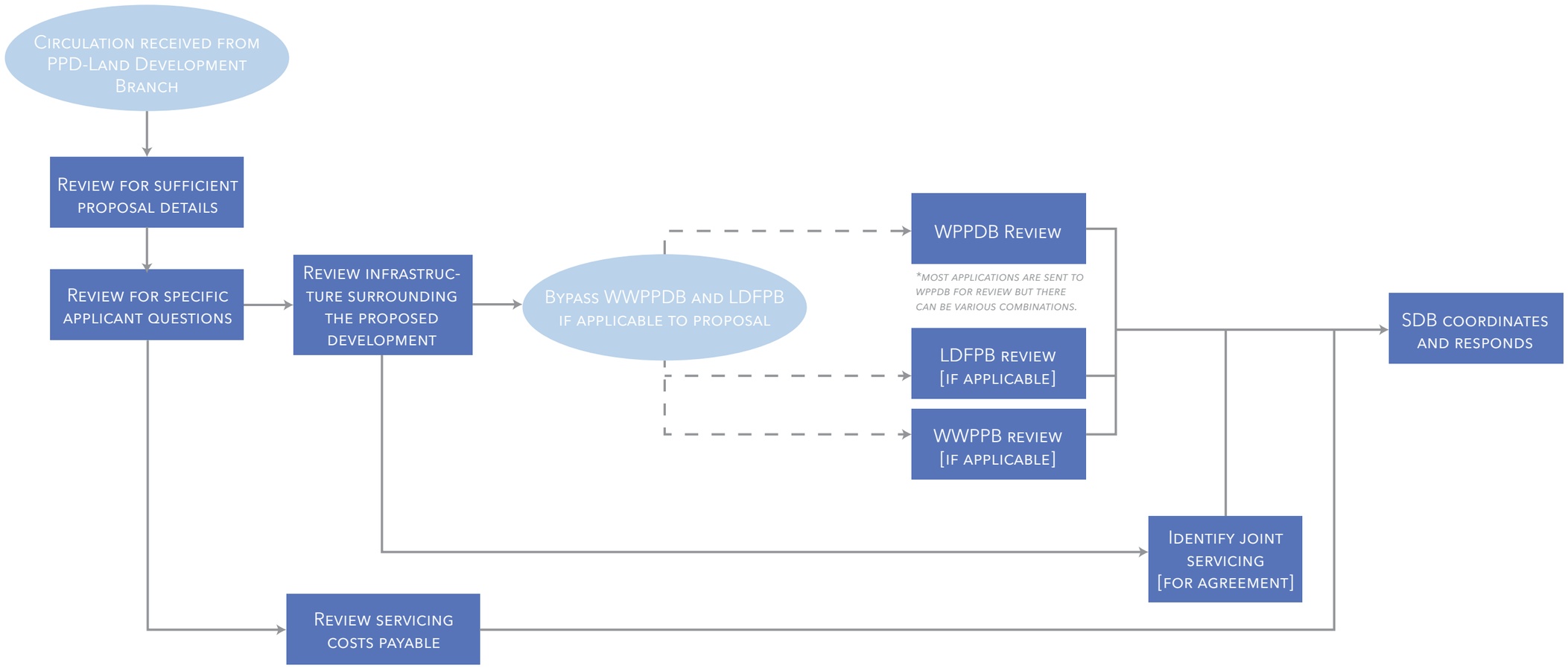
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DETAILED CHART
As provided by the Water and Waste Department

PRE-APP FLOW CHART [FIGURE 6]

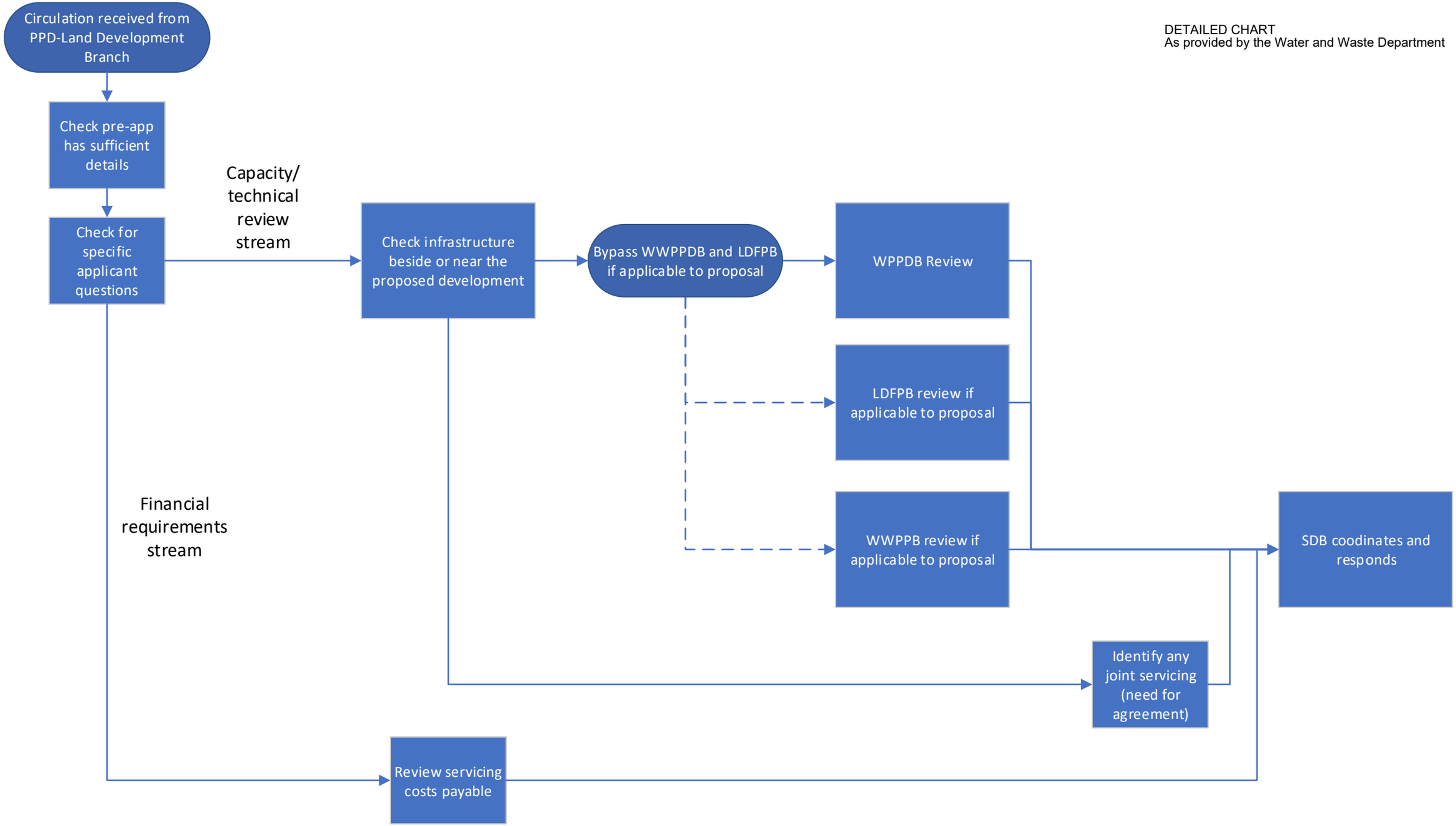
REVIEW AND ASSESSMENT OF MUNICIPAL SERVICING FOR WATER, SEWER AND LAND DRAINAGE DEVELOPMENT



WWD PRE-APP REVIEW FLOWCHART

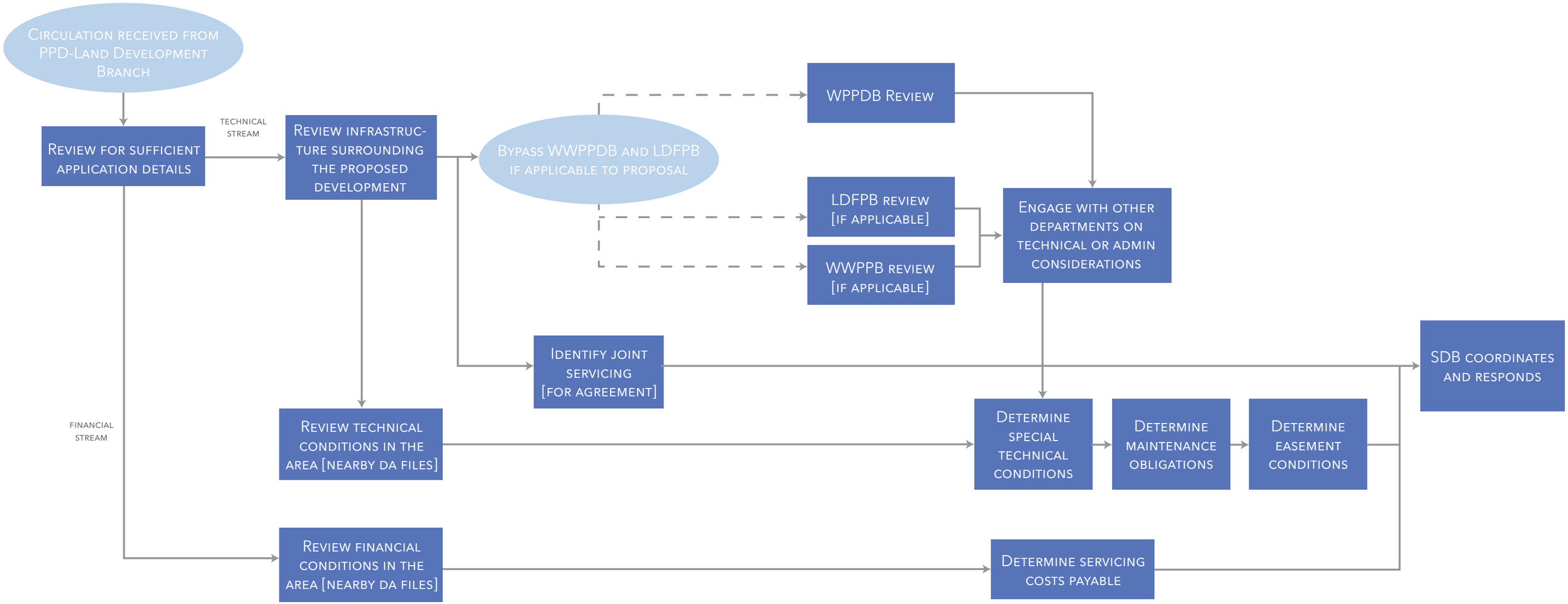
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DETAILED CHART
As provided by the Water and Waste Department



APPLICATION FLOW CHART [FIGURE 7]

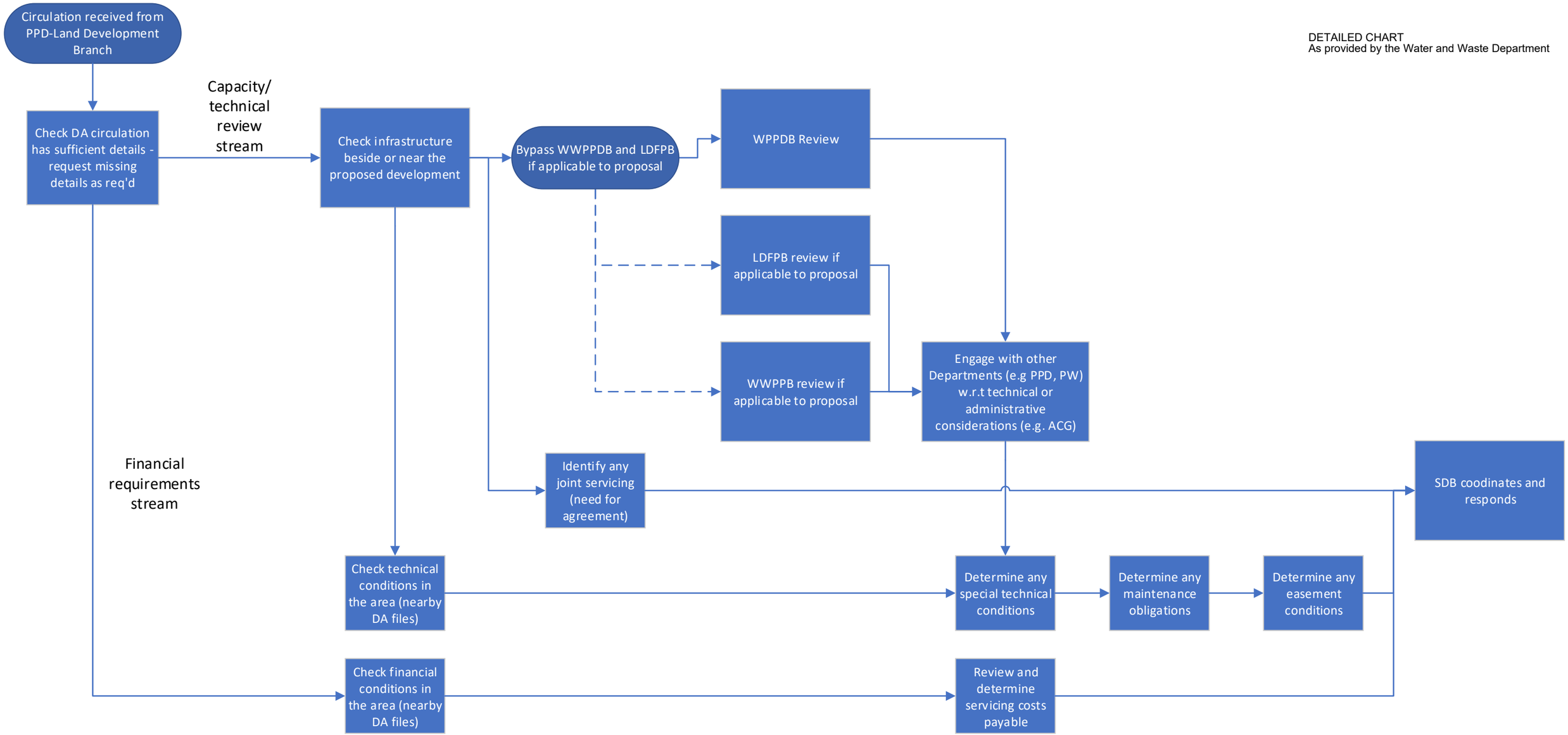
REVIEW AND ASSESSMENT OF MUNICIPAL SERVICING FOR WATER, SEWER AND LAND DRAINAGE DEVELOPMENT



WWD SELECT DEVELOPMENT APPLICATION REVIEW FLOWCHART

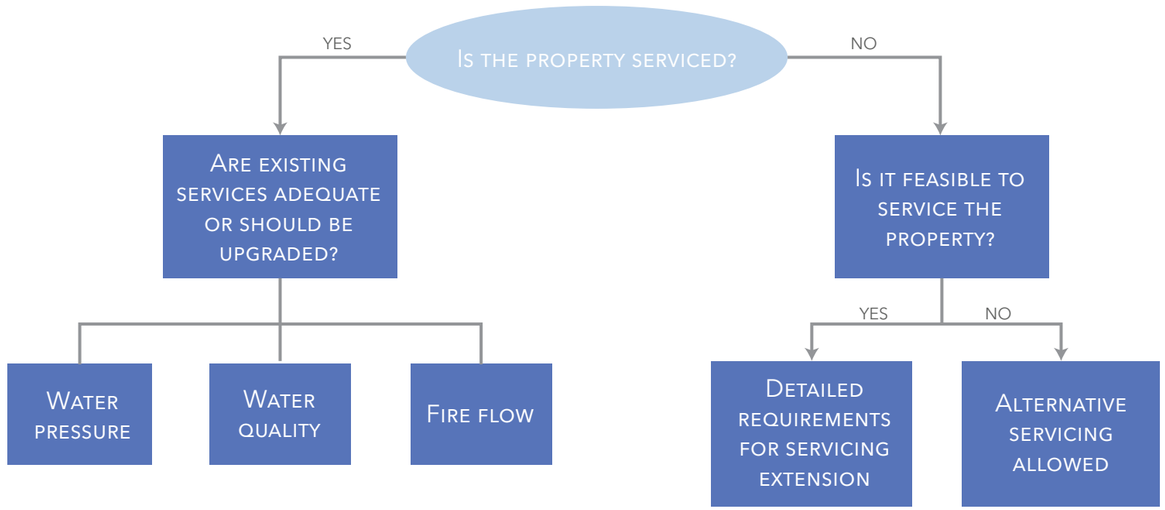
20230927

DETAILED CHART
As provided by the Water and Waste Department



WATER PLANNING REVIEW PROCESS [FIGURE 8]

REVIEW AND ASSESSMENT OF MUNICIPAL SERVICING FOR WATER, SEWER AND LAND DRAINAGE DEVELOPMENT



DETAILED CHART
As provided by the Water and Waste Department

Is the Property Serviced?

No

Is it Technically Feasible to Service the Property? i.e. can service be extended to the property with adequate pressure/ flow/quality?

No (or Rural/Agricultural Area with No Secondary Plan)

Allow for Alternative Servicing (ex. Wells and Fire Water Tanks If Fire Protection Is Required By MBC)

Yes

Detail Requirements for Servicing Extension

Yes

Are Existing Services Adequate?

Is Water Pressure a concern (ex. Industrial Development in System Extremity)?

Yes

Request Water Demand Estimations and Site Servicing Plan

Water Pressure Not Sufficient

Provde Upgrade Options as Applicable

No Concerns

No

Approve Application

Is Water Quality a Concern (ex. long water services)?

Yes

Request Water Demand Estimations and Site Servicing Plan

Water Quality Inadequate

Provide Upgrade Options as Applicable

No Concerns

No

Approve Application

Fire Flow

What Level of Detail was Provided?

No plans or building details (i.e 6 unit MF). Typical for Queries.

Site plans and Limited Building Details (i.e. footprint and number of stories. Typical for apps and pre-apps.

Using NBCC, Determine the Likely Construction Classification, Occupancy Classification, and Sprinkler Requirements. State Assumptions and Calculate Required Fire Flow

Full Site and Building Details Provided

Calculate Fire Flow Requirement

Determine Available Fire Flow

State available fire flow with respect to our targets for zoning type in new development areas. Indicate full details required for complete review

Available Fire Flow > Required

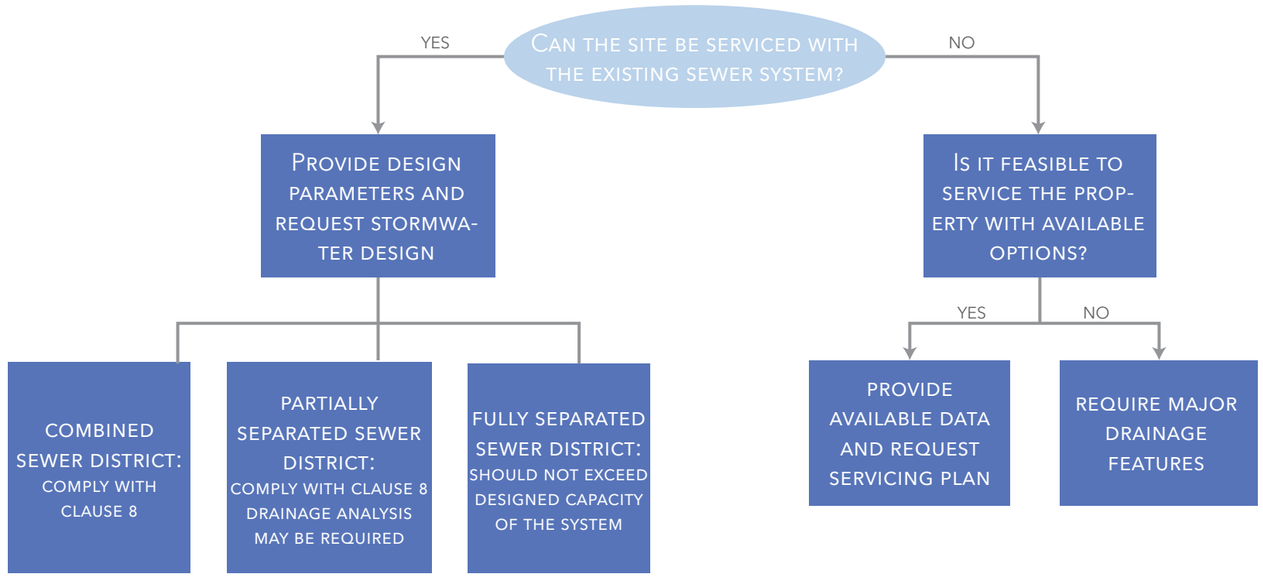
Approve Application – State Assumptions as Necessary

Available Fire Flow < Required

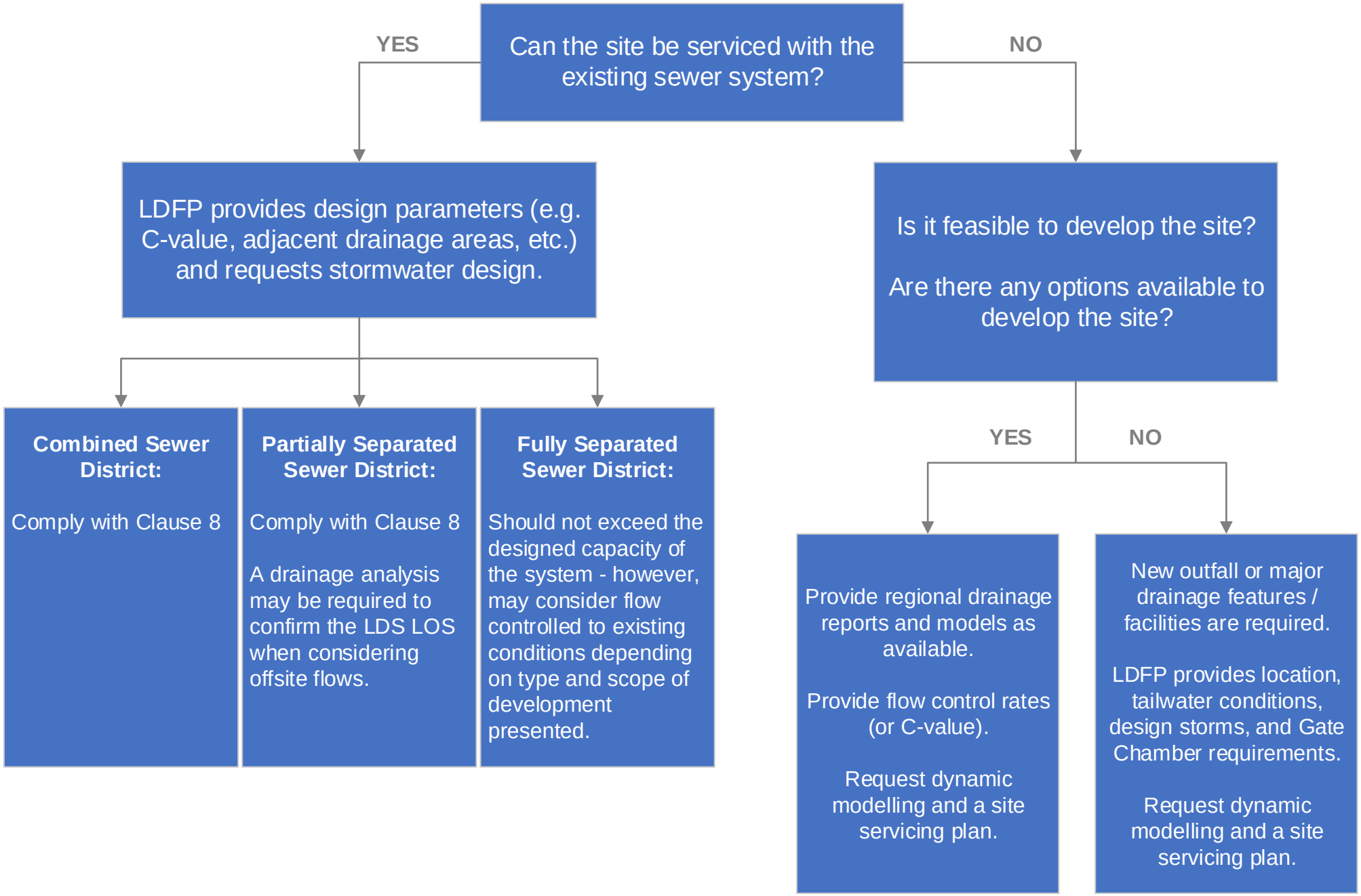
Provide Upgrade Options as Applicable – State Assumptions as Necessary

LAND DRAINAGE REVIEW PROCESS [FIGURE 9]

REVIEW AND ASSESSMENT OF MUNICIPAL SERVICING FOR WATER, SEWER AND LAND DRAINAGE DEVELOPMENT

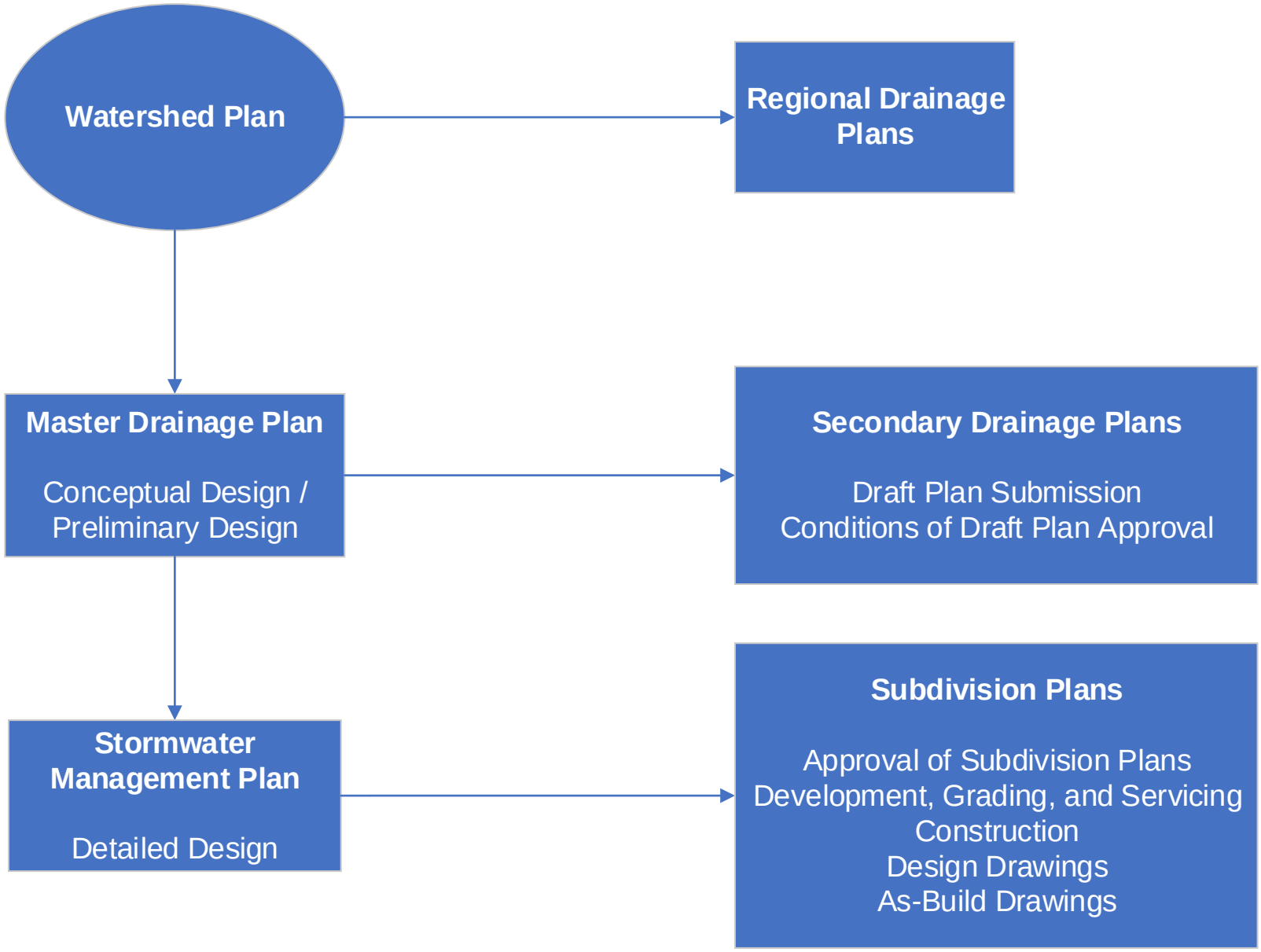


Land Drainage



DETAILED CHART
As provided by the Water and Waste Department

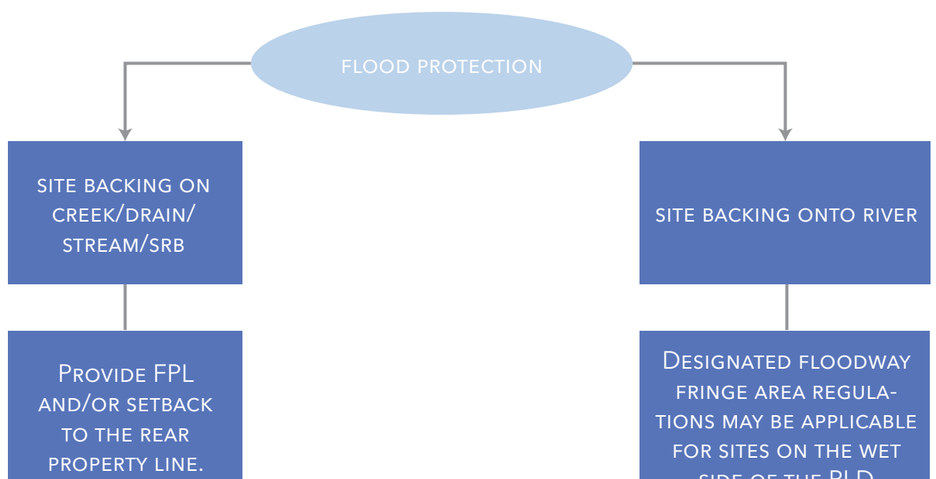
Major Drainage Studies



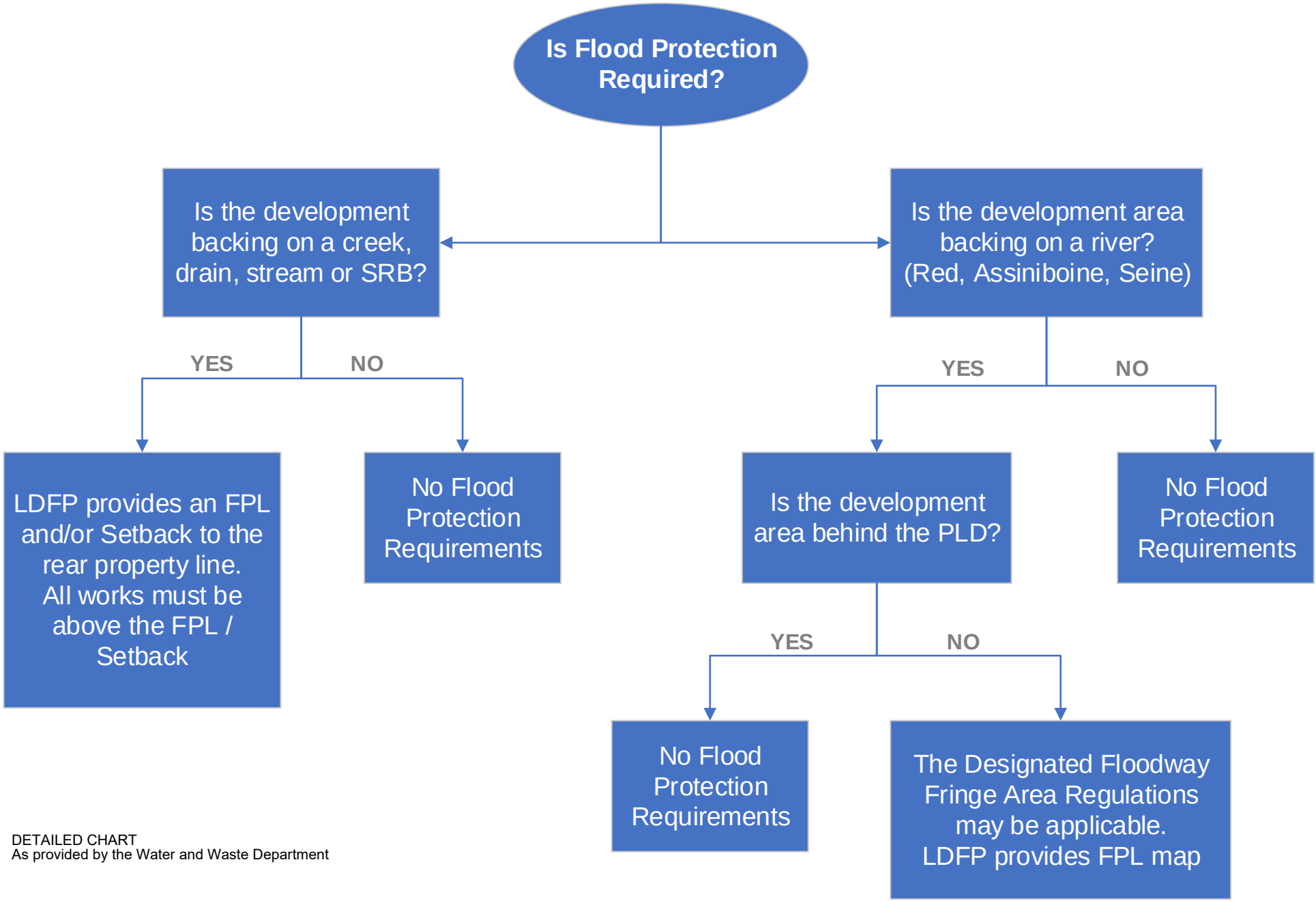
DETAILED CHART
As provided by the Water and Waste Department

FLOOD PROTECTION REVIEW PROCESS [FIGURE 10]

REVIEW AND ASSESSMENT OF MUNICIPAL SERVICING FOR WATER, SEWER AND LAND DRAINAGE DEVELOPMENT



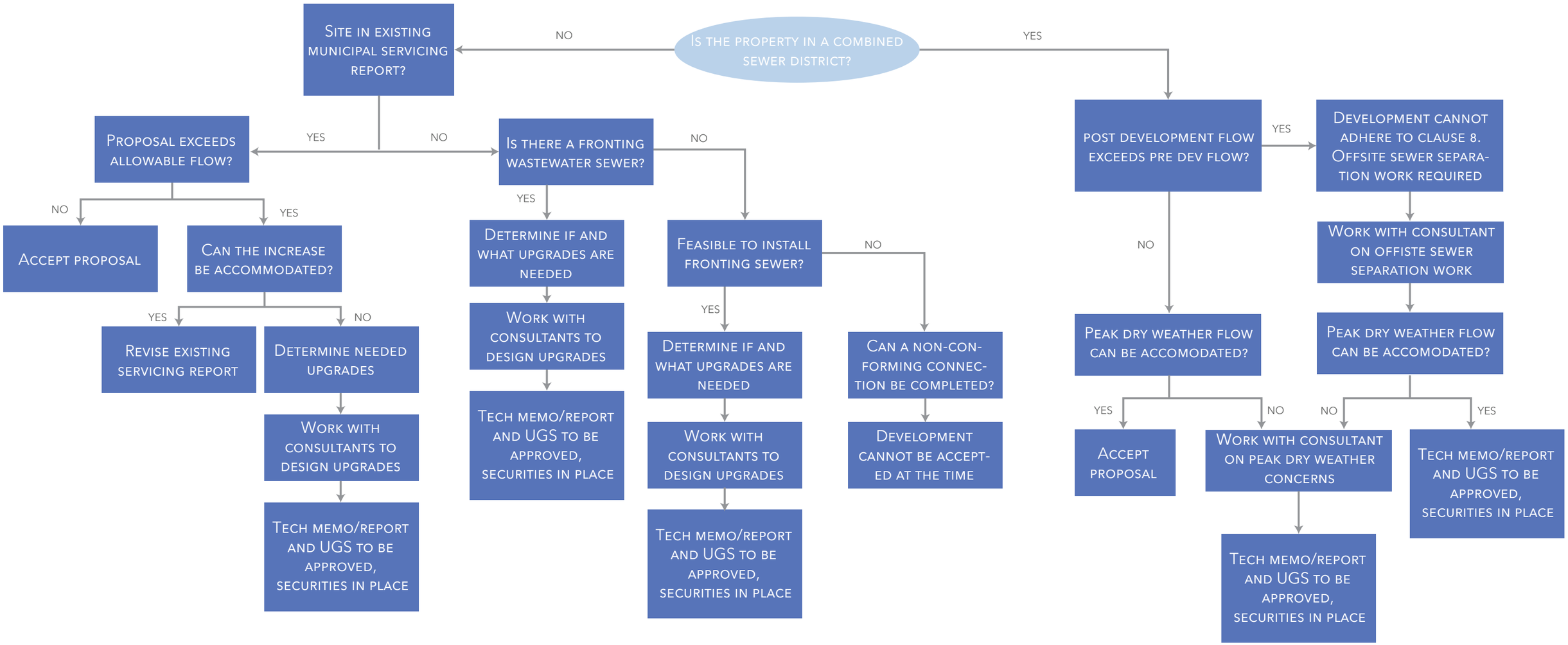
Flood Protection

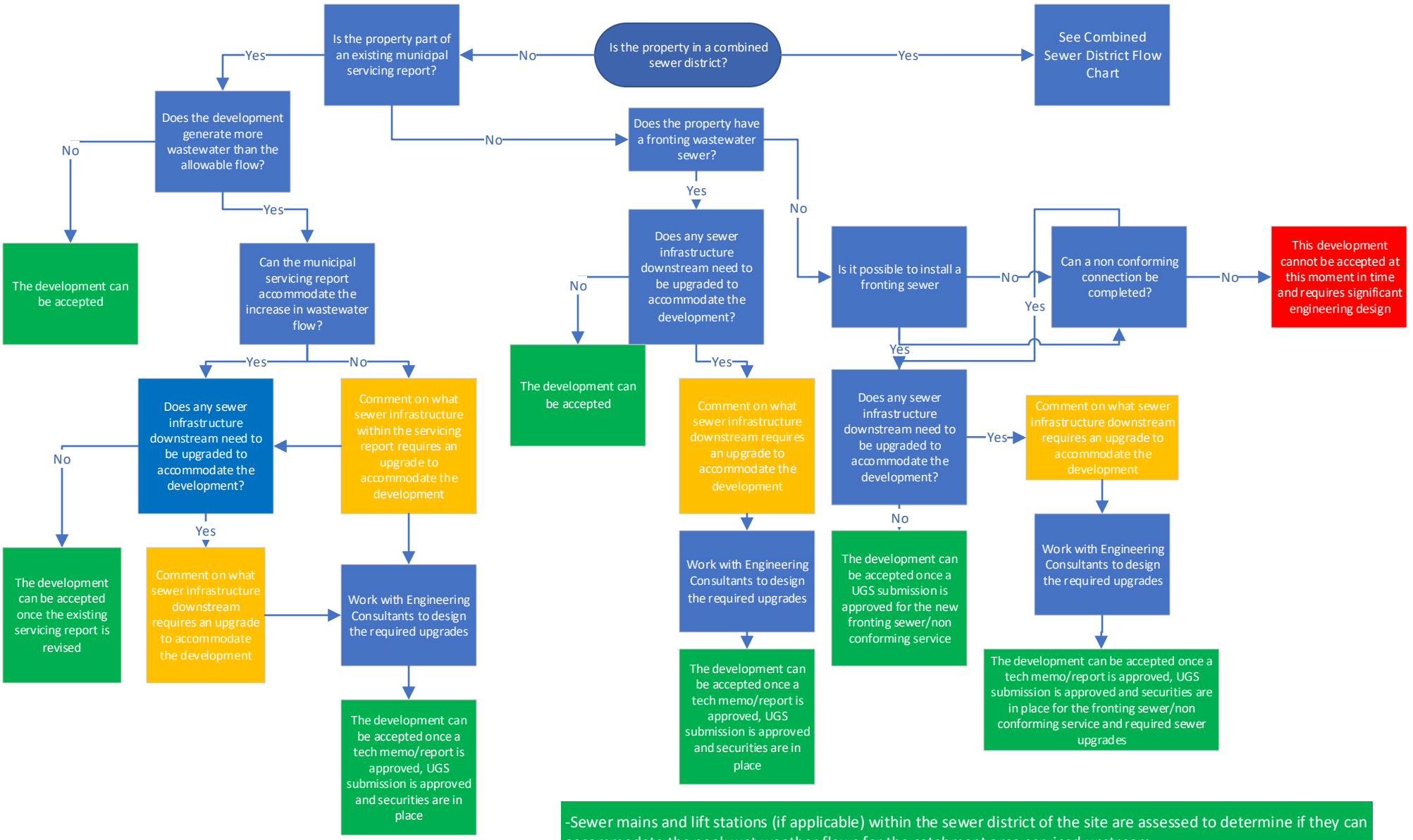


DETAILED CHART
As provided by the Water and Waste Department

WASTEWATER PLANNING PROCESS [FIGURE 11]

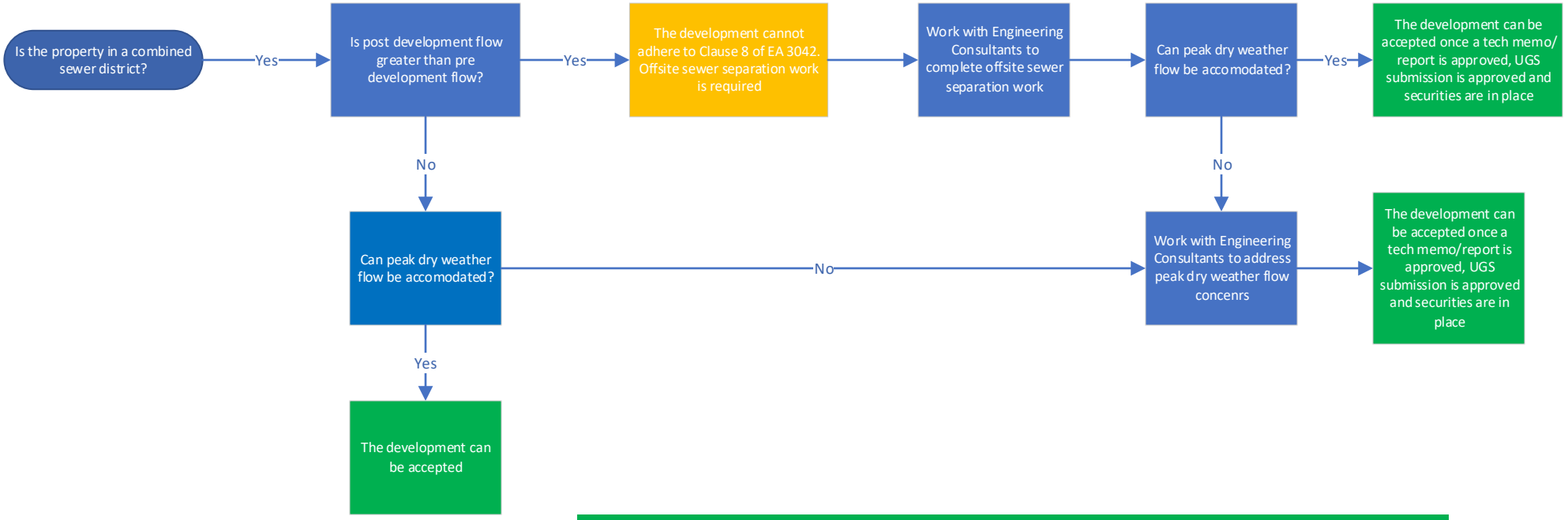
REVIEW AND ASSESSMENT OF MUNICIPAL SERVICING FOR WATER, SEWER AND LAND DRAINAGE DEVELOPMENT





-Sewer mains and lift stations (if applicable) within the sewer district of the site are assessed to determine if they can accommodate the peak wet weather flows for the catchment area serviced upstream.
-Wastewater Planning reviews As-built drawings for pipe capacity (confirmation of size and slope), lift station pump records to gain an understanding of pump performance and completes a wastewater estimation for the catchment area serviced.
-If it is determined the existing infrastructure cannot accommodate the proposed development, a map of the catchment area of concern is provided to the Consultant to complete their own review.
-The Consultant can identify gaps in the City's analysis or provide a solution to address the issue.
-The most common solution is upsizing sewer(s) of concern which requires an approved wastewater report and approved drawing(s) submitted to Underground Structures.

DETAILED CHART
As provided by the Water and Waste Department



-Combined sewer district developments are assessed by referencing Clause 8 of Environment Act Licence No. 3042.
-Clause 8 requires the total post development flow (wastewater + land drainage) to the combined sewer system from the site must be less than or equal to the pre-development flow (wastewater + land drainage) to the combined sewer system. Ultimately, meaning that the flow into a combined sewer cannot increase and thus the frequency and volume of combined sewer overflows to the river does not increase.
-Pre-development flow can include land drainage, wastewater, a combination of both or neither (0 L/s). Pre-development flow is based on the year 2013. When the pre-development flow from the site is not adequate to adhere to Clause 8 the private owner may have the opportunity to complete offsite separation work on City property at their own expense in order to satisfy Clause 8.
-The pre-development flow and post development flow are based on City standards/guidelines and are submitted by Consultant's for City review. This review typically is an iterative process.

-In addition, combined sewer mains and lift stations (if applicable) within the district of the site are assessed to determine if they can accommodate the peak dry weather flow for the catchment area serviced upstream.
-Wastewater Planning reviews As-built drawings for pipe capacity (confirmation of size and slope), lift station pump records to gain an understanding of pump performance and completes a wastewater estimation for the catchment area serviced.
-Currently, this is not an issue for the majority of developments as combined sewers and lift stations within combined sewer districts have a large capacity due to their design accommodating land drainage.

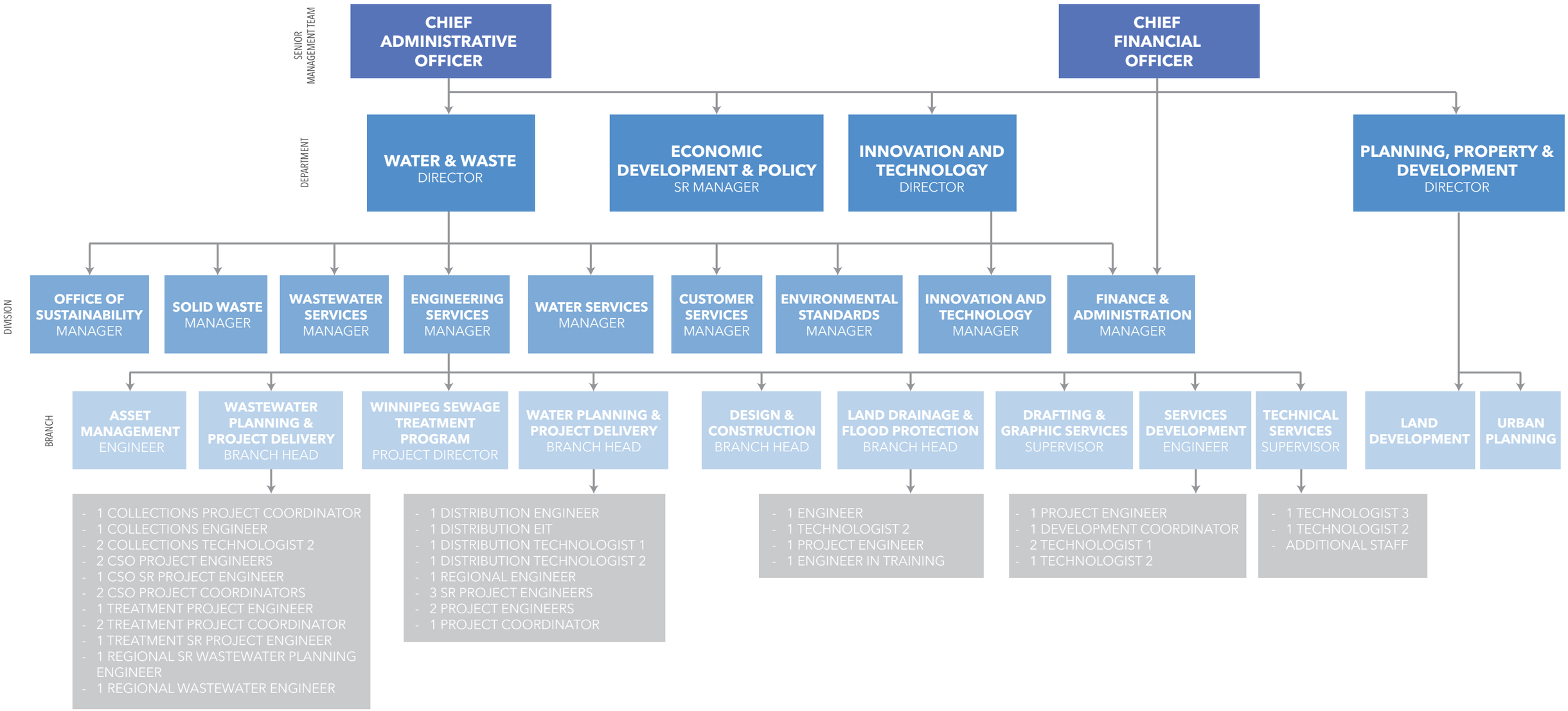
DETAILED CHART
As provided by the Water and Waste Department

APPENDIX “B”

ORGANIZATIONAL STRUCTURE CHART

ORGANIZATIONAL CHART [FIGURE 4]

REVIEW AND ASSESSMENT OF MUNICIPAL SERVICING FOR WATER, SEWER AND LAND DRAINAGE DEVELOPMENT



Senior Management Team includes Department Heads

Department

Division

Branch

Michael Jack
Chief Admin Officer

Catherine Kloepfer
Chief Financial Officer

Tim Shanks - Director
Water & Waste

Matt Dryburgh - Sr Manager
Economic Development & Policy

Tyler Gooch - Director
Innovation and Technology

Hazel Borys - Director
Planning, Property & Development

Large Scale Industrial Queries

Becky Raddatz - Manager
Office of Sustainability

Michael Gordichuk - Manager
Solid Waste (SWD)

Chris Carroll - Manager
Wastewater Services (WWSD)

Cynthia Wiebe - Manager
Engineering Services (ESD)

Michael Szmon - Manager
Water Services (WSD)

Yvette Cenerini - Manager
Customer Services (CSD)

Renee Grosselle - Manager
Environmental Standards (ESD)

Quyen Nguyen - Manager
Innovation and Technology (IT)

Lucy Szkwarek - Manager
Finance & Adminstration (F&A)

Bronwyn Jones - Asset Management Engineer
Asset Management

Jon Goodbrandson - Branch Head
Wastewater Planning & Project Delivery (WWPPD)

Linda McCusker - A/ Project Director
Winnipeg Sewage Treatment Program (WSTP)

Alison Weiss - Branch Head
Water Planning & Project Delivery (WPPD)

Stacy Cournoyer - Branch Head
Design & Construction (D&C)

Jeremy Greshuk - Branch Head
Land Drainage & Flood Protection (LDFP)

Patrick Closen - A/ Supervisor
Drafting & Graphic Services (DGS)

Marek Gajda - Services Development Engineer
Services Development (SDB)

David Shaw - Supervisor
Technical Services (TSB)

Kevin Kowalyk, Angie Savage
Land Development Branch

James Platt, Mike Lennon
Urban Planning

Regional Planning Queries/Applications

Development Applications

Greg Kulczycki - Wastewater Collections Planning Engineer
(Collections)
Development reviews, system shutdown times, queries

Ho Lau - Project Coordinator
(Collections)
Development reviews, projects, procurement

Matt Nikkel - Water Distribution Planning Engineer
(Distribution)
Development reviews, queries, modeling

Dimitri Eckhardt - EIT
(Distribution)
Development reviews

Swarna Jayakody - Land Drainage Planning Engineer
Development reviews, Regional/Subdivision planning

Cory Nault - Tech 2
c-value, rain gauge network, flood protection level maps

Andrew Ziegler - Project Engineer
Flood protection, projects

Brody Hucl - Engineer in Training
Permit reviews, small projects

Robert Glowacki - Project Engineer
Development applications, Land Development Request email

Jagjit Dhillon - Development Coordinator
Development applications, Land Development Request email

Vacant - Tech 1
Land Development Request email, securities, etc.

Brian Weiss - Tech 2
Securities, etc.

Michelle Kube - Tech 1
Securities, etc.

Jeff Anderson - Tech 3
Permits, Queries

Eric Beaudin - Tech 2
Permits, 311 requests

Additional staff not shown
Survey, residential permits, inspections, etc.

Depending on the situation and questions posed, SDB could correspond with DCB, AMB, TSB, WPPDB, WWPPDB, LDFPB, WSD, WWSD, ESD or F&A

Mahya Sangab - Tech 2
(Collections)
UGS review, WW Generations

Ricardo Patiu - Tech 2
(Collections)
Flow monitoring, modeling

Vacant - Project Engineer
(CSO/Collections)

Patrick Coote - Sr Project Engineer
(CSO)

Florence Lee - Project Engineer
(CSO)

Ian Neil - Project Coordinator
(CSO)

Selina Leung - Project Coordinator
(CSO)

Vacant - Project Engineer
(CSO)

Brian Station - Sr Project Engineer
(Treatment)

Arash Kiayee - Project Engineer
(Treatment)

Brent Soloway - Project Coordinator
(Treatment)

Erica Campbell - Project Coordinator
(Treatment)

Michelle Paetkau - Sr Wastewater Planning Engineer
(Regional Infrastructure)
Budgeting, Regional Infrastructure

Sean Gordon - Wastewater Planning Engineer
(Regional Infrastructure)
Growth planning, modeling, projects

McKenzie Backhouse - Tech 2
(Distribution)
UGS reviews, permits

Vacant - Tech 1
(Distribution)
Modeling

Rob Carroll - Water Planning Engineer
(Regional)
Water trends/pumping, UGS reviews, permits, etc. in close proximity to the aqueduct, Branch aqueducts or feeder mains

Permits

Matt Skinner - Sr Project Engineer
(Projects)
Projects, UGS reviews, permits, etc. in close proximity to the aqueduct, Branch aqueducts or feeder mains

Jessica McCombe - Sr Project Engineer
(Projects)

Ken Dyck - Sr Project Engineer
(Projects)

Braedon Borschawa - Project Engineer
(Projects)

Connor Fedorchuk - Project Engineer
(Projects)

Nick Smolinski - Project Coordinator
(Projects)

LEGEND

- Chain of command
- Staff mainly responsible for Development Application/Permit reviews
- Branch responsible for issuing development application reviews
- Branch responsible for issuing permit reviews
- Development applications (Most Frequent Requests)
- Permits
- Regional planning queries/applications
- Large scale industrial queries
- ALL reviews may require additional inputs from other Divisions and/or Branches

APPENDIX “C”

DEVELOPMENT APPLICATION REQUIREMENTS - CHECKLISTS

Pre-Application

In advance of making a formal development application, a prospective applicant may submit a "Pre-Application", which is a draft form of a potential development application whereby preliminary, written input can be obtained from appropriate City departments as well as the Ward Councillor about the opportunities and constraints of a specific development proposal. A Pre-Application may be submitted by:

- The owner or owners of the site; or
- Any person on behalf of the owner or owners of the site with each owner's signed permission.

In accordance with *the Development Procedures By-law No. 104/2020*, an applicant may submit a Pre-Application for the following application types:

- A rezoning
- A subdivision
- A variance
- A conditional use
- A secondary plan
- An amendment to an existing agreement imposed as a condition of approval of a previous development application
- An amendment to the Development Plan or Complete Communities
- Or any combination of the above.

The City is authorized to require that a potential applicant submit a Pre-Application with respect to a proposed development if the City has determined that the development is particularly large or complex. This must be submitted before a formal development application.

The outcome of a Pre-Application review does not imply or suggest a commitment or decision by City administration to either approve or refuse a proposal. Undertaking the complete formal development application process is the only way an applicant/developer will be provided with a decision by the City and/or Council.

How to reach us:

Address: Zoning and Permits Unit 31- 30 Fort St. Winnipeg, MB R3C 4X7 **Phone:** 204-986-5140 **Email:** ppd-zdo@winnipeg.ca	**Hours of operation:** Tuesday to Friday 8:30 a.m. to 4:30 p.m. Please note the office is closed to customers on Mondays. However, staff are available for telephone and email inquiries, and completed applications may be dropped off in-person.

How to apply:

By appointment (recommended option):
We recommend arranging an appointment with a Zoning Development Officer to discuss your application. To schedule a meeting, please call Permits Direct Line at 204-986-5140 or email ppd-permitappointments@winnipeg.ca.

By mail, courier or drop off:
You can mail, courier or drop off your application package to Zoning and Permits (Unit 31 – 30 Fort Street, Winnipeg, MB, R3C 4X7). Free customer parking is located in the surface parking lot off Assiniboine Avenue at Garry Street and designated customer parking stalls are available (see ➲Customer Parking map). Please register your vehicle license number with the front desk clerk at the Zoning and Permits office.

By email:
You can submit digital copies of your application documents to ppd-zdo@winnipeg.ca. Please note that the Zoning Development Officer will request paper copies in order to process the application.

Fees:

Draft/Pre-Application Fee	Fees will be assessed at the time of application. Refer to the Planning, Development and Building Fees and Charges schedule for more information.
Note: Fees paid on the Draft/Pre-Application will be credited toward the future development application fees imposed under the *Planning, Development and Building Fees By-law*.	
Payments can be made in-person, by mail or by calling Permits Direct Line at 204-986-5140 and following the prompts to speak to the cashier. Please note that individual invoices of more than $10,000 must be paid by cheque or bank draft, which can be made payable to the "City of Winnipeg". **Application fees must be paid before the application can be circulated to City departments for review. Please refer to the checklists under "Application Submission Requirements" to ensure you have supplied the required documentation and plans in order to avoid delays in processing.**	

Application Submission Requirements

Date: _____

Address Information:

Project Address	Street Number:	Street Name:	
Legal Description	Lot Number:	Block Number:	Plan Number:

Applicant Information:

Applicant Information	Applicant Name: (print)		
	Mailing Address:	City & Province:	Postal Code:
	Daytime Phone Number:	Email Address:	

Notes about the Checklists of Items:

- Items indicated "may be required" are items that may be requested by the City of Winnipeg as part of the review of the development application. These items may be requested at the time the application is submitted or after the application has been circulated to the other City departments.
- Items indicated "if applicable" are items that will be required if they apply to the context of the proposed development application.
- Please organize your submission to ensure that each individual set contains one copy of each required document. For example, the first set should contain one copy of the status of title, letters and plans, the second set should also contain one copy of the status of title, letters and plans, and so on.

Your personal information is being collected consistent with the requirements and limitations set out under *The Freedom of Information and Protection of Privacy Act (FIPPA)*. This collection of personal information is authorized by section 36(1)(b) of The FIPPA for the administration of *Development Procedures By-law No. 104/2020.* Your information is protected by FIPPA's privacy provisions and will not be used or disclosed for any other purpose, except as authorized by law. Contact the City of Winnipeg's Corporate Access and Privacy Officer by mail (City Clerk's Department, Susan A. Thompson Building, 510 Main Street, Winnipeg MB, R3B 1B9) or by telephone (311) if you have questions about this collection of your personal information.

Checklist of Required Items

Key Documents		
Number of Copies Required	**Type of Document**	**Explanations & Notes**
2	Current Status of Title	A Status of Title is a document that identifies property ownership and is available from the Winnipeg Land Titles Office. The copy provided must be dated within three months of the application date to verify current ownership, etc. For further information, please visit ➲Teranet Manitoba
2	City of Winnipeg caveats (if applicable)	Listed on the status of title as active instruments. Available from the Winnipeg Land Titles Office. For further information, please visit ➲Teranet Manitoba
2	Letter of Intent (including project vision, use(s), project statistics, number of employees, hours of operation, etc.)	This letter should provide a description of the proposal, planning rationale, such as how the proposal addresses Council policy, how it is compatible with its surrounding context, and a description of proposed measures to mitigate expected on- and off-site impacts. This letter should also provide a development summary, such as total gross land area, proposed area (in acres) of each land use category and zoning district, anticipated number of lots and units per land use category, proposed use of land and structures, etc.
2	Letter of Authorization	Written authorization by all registered owner(s) of the land whose name(s) appear on the Status of Title. If the owner on the title is a company name or number, the person signing the letter must state the company name or number as shown on the title and that they are authorized to sign for that company. Please see template at the end of this document.
2	Building Location Certificate (if applicable) Maximum size of 11 in. x 17 in.	A Building Location Certificate (also known as a surveyor's certificate) is a document prepared by a Manitoba Land Surveyor illustrating the location of buildings or structures on the land with dimensions. An application may be accepted without a Building Location Certificate for use of vacant land if the applicant can demonstrate that the proposed use is in accordance with the Zoning By-Law. Visit the ➲Association of Manitoba Land Surveyors website for more information. Under certain circumstances, a detailed, well-drawn, fully dimensioned site plan may be substituted at the City's discretion.
2	Title Plot (if applicable) Maximum size of 11 in. x 17 in.	When there is more than one title affecting the property, the title numbers are plotted on a map to ensure that all lands described on the titles have been received.

Checklist of Required Items, continued

Plans of Development					
Number of Copies Required	**Type of Document**	**Explanations & Notes**			
2	Site Plan Maximum size of 11 in. x 17 in.	Detailed, fully dimensioned, drawn to scale site plan, including the following:			
		☐	Project name	☐	Proposed use
		☐	Municipal address	☐	Scale
		☐	North arrow	☐	Dimensioned property lines
		☐	Land parcel area (if applicable)	☐	Streets labeled
		☐	Pedestrian connections	☐	Exterior lighting
		☐	Dimensioned setbacks	☐	Floodway and flood fringe levels (if applicable)
		☐	Existing and proposed structures (number, location and height - if applicable)	☐	Features adjacent to parcel (City streets, sidewalks, curb cuts, median breaks - if applicable)
		☐	Boundary survey (total acreage, zoning, date, north arrow and vicinity map - if applicable)	☐	Easements and utility rights of way (depth, width, location, type and registration number - if applicable)
		☐	Vehicular circulation (parking spaces, drive aisles, driveways, accessible parking, ingress / egress, loading etc.)	☐	Nearby transit stops (if applicable)
		☐	Screening or treatment of any natural features	☐	Garbage enclosures (if applicable)
		☐	Proposed buffers or landscaped yards	☐	Free standing and accessible parking signs (if applicable)
		☐	Mechanical equipment (if applicable)	☐	Bicycle parking (if applicable)

Checklist of Items that may be required

Number of Copies Required	Type of Document	Explanations & Notes
2	Letter of Support (if applicable)	Written support or signatures of support from adjoining property owners who may be adversely affected by the proposed development.
2	Proposed Phasing (if applicable) Maximum size of 11 in. x 17 in.	Number of phases and anticipated time of completion.
2	Plan of Subdivision Maximum size of 11 in. x 17 in.	Plan outlining the dimensions and labels of the parcels or lots that are being created or amalgamated.
2	Floor Plans (if applicable) Maximum size of 11 in. x 17 in.	Detailed, fully dimensioned, drawn to scale floor plans showing the interior layout of the building, including labels and dimensions of all rooms.
2	Building Elevations (if applicable) Maximum size of 11 in. x 17 in.	Detailed, fully dimensioned, drawn to scale building elevations outlining the exterior appearance of the building. Learn more about ➲building elevation requirements.
2	Colour Renderings (if applicable) Maximum size of 11 in. x 17 in.	Learn more about ➲colour renderings requirements
2	Landscaping Plan (if applicable) Maximum size of 11 in. x 17 in.	Detailed, fully dimensioned, drawn to scale landscape plan, including the following: ☐ Plant list (number, size and species) ☐ Open space ☐ Planting to be removed or kept (number, size and species) ☐ Ground cover ☐ New planting (number, location and species) ☐ Screening ☐ Fencing

Rezoning (DAZ)
Application Form

"DAZ" means a development application for the rezoning of land or for a zoning text amendment.

How to reach us:

Address: Zoning and Permits Unit 31- 30 Fort St. Winnipeg, MB R3C 4X7 **Phone:** 204-986-5140 **Email:** ppd-zdo@winnipeg.ca	**Hours of operation:** Tuesday to Friday 8:30 a.m. to 4:30 p.m. Please note the office is closed to customers on Mondays. However, staff are available for telephone and email inquiries, and completed applications may be dropped off in-person.

How to apply:

By appointment (recommended option):
We recommend arranging an appointment with a Zoning Development Officer to discuss your application. To schedule a meeting, please call Permits Direct Line at 204-986-5140 or email ppd-permitappointments@winnipeg.ca.

By mail, courier or drop off:
You can mail, courier or drop off your application package to Zoning and Permits (Unit 31 – 30 Fort Street, Winnipeg, MB, R3C 4X7). Free customer parking is located in the surface parking lot off Assiniboine Avenue at Garry Street and designated customer parking stalls are available (see ➲Customer Parking map). Please register your vehicle license number with the front desk clerk at the Zoning and Permits office.

By email:
You can submit digital copies of your application documents to ppd-zdo@winnipeg.ca. Please note that the Zoning Development Officer will request paper copies in order to process the application.

Before you submit your application, please ensure that you contact the Area/District Planner to confirm whether they will support your proposal. Please view the planning assignments map at winnipeg.ca/PlanningAssignments to determine the Planner for your area.

Fees:

DAZ Base Application Fee (Not including dedication or advertising fees, etc. See below for more information. *)	Fees will be assessed at the time of application. Refer to the Planning, Development and Building Fees and Charges schedule for more information.
DAZ Per Acre Fee (in addition to base fee)	

Payments can be made in-person, by mail or by calling Permits Direct Line at 204-986-5140 and following the prompts to speak to the cashier. Please note that individual invoices of more than $10,000 must be paid by cheque or bank draft, which can be made payable to the "City of Winnipeg".

Application fees must be paid before the application can be circulated to City departments for review. Please refer to the checklists under "Application Submission Requirements" to ensure you have supplied the required documentation and plans in order to avoid delays in processing.

***Note:** Once the City of Winnipeg has determined that the application is complete for circulation, it will be sent to the Land Development Branch to process and review. Depending on the application type, please be advised that Land Development may require payment of **additional fees**. The fees can only be determined **after** the application has been circulated to various departments for review and could include the following:

- Advertising fees (on Public Hearing application types as determined by the local newspapers)
- Mylar signing/lot/parcel fees (per lot/parcel created on plan)
- Consent certificate fees
- 10% dedication fees (in lieu of dedicating land)
- Agreement fees
- Legal document preparation fees
- Administrative fees associated with a Development or Servicing Agreement
- Deposits for survey monuments, sod and/or tree planting
- Oiling & graveling fees where applicable
- Levies such as Charleswood Transportation Levy, Seine River Acquisition Charges
- Trunk service rates
- Securities/letter of credits associated with Development or Servicing Agreements
- Extensions of time
- Spatial separation review

How long does the application process take?

The time required to obtain final approval of your application may vary considerably, depending on the scope of your proposal and the number and type of conditions. Your application can take six to 18 months to complete depending on the nature of your application. Therefore, you should be cautious in scheduling any planned development on the land, as well as determining realistic possession dates with respect to the sale of your rezoned lot. The time required to complete a rezoning varies because:

- Some applications are more complex than others.
- There are different types of agreement(s) the developer may be required to have with the City of Winnipeg.
- A Draft / Pre-Application may be required and must be submitted if requested.

Learn more information about the ➲development application process.

Application Submission Requirements

Date: _____

Address information:

Project Address	Street Number:	Street Name:	
Legal Description	Lot Number:	Block Number:	Plan Number:

Applicant Information:

Applicant Information	Applicant Name: (print)		
	Mailing Address:	City & Province:	Postal Code:
	Daytime Phone Number:	Email Address:	

Notes about the checklists of items:

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Number of Copies Required	**Type of Document**	**Explanations & Notes**
4	Current Status of Title	A Status of Title is a document that identifies property ownership and is available from the Winnipeg Land Titles Office. The copy provided must be dated within three months of the application date to verify current ownership, etc. For further information, please visit ➲Teranet Manitoba
4	City of Winnipeg caveats (if applicable)	Listed on the status of title as active instruments. Available from the Winnipeg Land Titles Office. For further information, please visit ➲Teranet Manitoba
4	Letter of Intent (including project vision, use(s), project statistics, number of employees, hours of operation, etc.)	This letter should provide a description of the proposal, planning rationale such as how the proposal addresses Council policy, how it is compatible with its surrounding context, and a description of proposed measures to mitigate expected on- and off-site impacts. This letter should also provide a development summary, such as total gross land area, proposed area (in acres) of each land use category and zoning district, anticipated number of lots and units per land use category, proposed use of land and structures, etc.
4	Letter of Authorization	Written authorization by all registered owner(s) of the land whose name(s) appear on the Status of Title. If the owner on the title is a company name or number, the person signing the letter must state the company name or number as shown on the title and that they are authorized to sign for that company. Please see template at the end of this document.
4	Building Location Certificate (if applicable) Maximum size of 11 in. x 17 in.	A Building Location Certificate (also known as a surveyor's certificate) is a document prepared by a Manitoba Land Surveyor illustrating the location of buildings or structures on the land with dimensions. An application may be accepted without a Building Location Certificate for use of vacant land if the applicant can demonstrate that the proposed use is in accordance with the Zoning By-law. Visit the ➲Association of Manitoba Land Surveyors website for more information. Under certain circumstances, a detailed, well-drawn, fully dimensioned site plan may be substituted at the City's discretion.
4	Title Plot (if applicable) Maximum size of 11 in. x 17 in.	When there is more than one title affecting the property, the title numbers are plotted on a map to ensure that all lands described on the titles have been received.
4	Plan of Rezoning Maximum size of 11 in. x 17 in.	Plan outlining the dimensions and labels of the parcels or lots with information on the existing and/or proposed zoning district(s).

Checklist of Required Items, continued

Plans of Development					
Number of Copies Required	**Type of Document**	**Explanations & Notes**			
4	Site Plan Maximum size of 11 in. x 17 in.	Detailed, fully dimensioned, drawn to scale site plan including the following:			
		☐	Project name	☐	Proposed use
		☐	Municipal address	☐	Scale
		☐	North arrow	☐	Dimensioned property lines
		☐	Land parcel area (if applicable)	☐	Streets labeled
		☐	Pedestrian connections within the site between all buildings as well as from the site to the public sidewalks / AT paths	☐	Exterior lighting
		☐	Dimensioned setbacks	☐	Floodway and flood fringe levels (if applicable)
		☐	Existing and proposed structures (number, location and height - if applicable)	☐	Features adjacent to parcel (City streets, sidewalks, curb cuts, median breaks - if applicable)
		☐	Boundary survey (total acreage, zoning, date, north arrow and vicinity map - if applicable)	☐	Easements and utility rights of way (depth, width, location, type and registration number - if applicable)
		☐	Vehicular circulation (parking spaces, drive aisles, driveways, accessible parking, ingress / egress, loading etc.)	☐	Nearby transit stops (if applicable)
		☐	Screening or treatment of any natural features	☐	Garbage enclosures (if applicable)
		☐	Proposed buffers or landscaped yards	☐	Free standing and accessible parking signs (if applicable)
		☐	Mechanical equipment (if applicable)	☐	Bicycle parking
4	Floor Plans (if applicable) Maximum size of 11 in. x 17 in.	Detailed, fully dimensioned, drawn to scale floor plans showing the interior layout of the building including labels and dimensions of all rooms.			

4	Building Elevations (if applicable) Maximum size of 11 in. x 17 in.	Detailed, fully dimensioned, drawn to scale building elevations outlining the exterior appearance of the building. Learn more about ➲building elevation requirements.

Checklist of Items that may be required

Number of Copies Required	Type of Document	Explanations & Notes			
2	Pre-Application (if applicable)	A Pre-Application may be required and must be submitted, if requested. For further information, please visit ➲Subdivisions, Rezonings and the Development Application Process.			
4	Letter of Support (if applicable)	Written support or signatures of support from adjoining property owners who may be adversely affected by the proposed development.			
4	Proposed Phasing (if applicable) Maximum size of 11 in. x 17 in.	Number of phases and anticipated time of completion.			
4	Landscaping Plan (if applicable) Maximum size of 11 in. x 17 in.	Detailed, fully dimensioned, drawn to scale landscape plan including the following:			
		☐	plant list (number, size and species)	☐	open space
		☐	planting to be removed or kept (number, size and species)	☐	ground cover
		☐	new planting (number, location and species)	☐	screening
		☐	fencing		
1	Digital Graphic	Learn more about ➲digital graphic requirements.			

Checklist of Items that may be required, continued

	Planning and Design (if applicable) Maximum size of 11 in. x 17 in. Number of copies required to be determined
☐	➲Parking Study
☐	➲Colour Renderings
☐	➲Sun / Shadow Study
☐	➲Street Level Visualization of Proposed Development
☐	➲Public Consultation Program
☐	➲Arborist Report
☐	Context Photos
☐	Financial Impact Assessment
☐	Cultural Heritage Impact Statement (Historical Resources)
☐	Commercial Land Supply Study
☐	Employment Land Supply Study
☐	Residential Land Supply Study
☐	Archeological Resource Assessment

	Engineering Studies (if applicable) Maximum size of 11 in. x 17 in. Number of copies required to be determined
☐	Community Transportation Study and / or Transportation Impact Study
☐	Assessment of Adequacy of Public Services / Site Servicing Study
☐	Servicing Options Report
☐	Stormwater Management Report
☐	Geotechnical Study / Slope Stability Study
☐	Groundwater Impact Study
☐	Wind Study
☐	Photometric Plans
☐	➲Noise / Vibration Study
☐	Parking Functionality Analysis (Vehicle Access Checks, Clearances, Swept Path Analysis - e.g. Auto Turn)

Plan of Subdivision and Rezoning (DASZ) Application Form

"DASZ" means a development application for the approval of a plan of subdivision and the rezoning of the land contained therein. This type of application is for a proposed plan of subdivision that creates new lots and requires a zoning change. This application requires a public hearing at Community Committee and Council approval.

How to reach us:

Address: Zoning and Permits Unit 31- 30 Fort St. Winnipeg, MB R3C 4X7 **Phone:** 204-986-5140 **Email:** ppd-zdo@winnipeg.ca	**Hours of operation:** Tuesday to Friday 8:30 a.m. to 4:30 p.m. Please note the office is closed to customers on Mondays. However, staff are available for telephone and email inquiries, and completed applications may be dropped off in-person.

How to apply:

By appointment (recommended option):
We recommend arranging an appointment with a Zoning Development Officer to discuss your application. To schedule a meeting, please call Permits Direct Line at 204-986-5140 or email ppd-permitappointments@winnipeg.ca.

By mail, courier or drop off:
You can mail, courier or drop off your application package to Zoning and Permits (Unit 31 – 30 Fort Street, Winnipeg, MB, R3C 4X7). Free customer parking is located in the surface parking lot off Assiniboine Avenue at Garry Street and designated customer parking stalls are available (see ➲Customer Parking map). Please register your vehicle license number with the front desk clerk at the Zoning and Permits office.

By email:
You can submit digital copies of your application documents to ppd-zdo@winnipeg.ca. Please note that the Zoning Development Officer will request paper copies in order to process the application.

Before you submit your application, please ensure that you contact the Area/District Planner to confirm whether they will support your proposal. Please view the planning assignments map at winnipeg.ca/PlanningAssignments to determine the Planner for your area.

Fees:

DASZ Base Application Fee (not including dedication or advertising fees, etc. See below for more information. *)	Fees will be assessed at the time of application. Refer to the Planning, Development and Building Fees and Charges schedule for more information.
DASZ Per Acre Fee (in addition to base fee) (GST will be applicable to half of the per acre fee)	
DASZ Mylar Signing Fee (minimum lot/parcel fee for each plan)	

Payments can be made in-person, by mail or by calling Permits Direct Line at 204-986-5140 and following the prompts to speak to the cashier. Please note that individual invoices of more than $10,000 must be paid by cheque or bank draft, which can be made payable to the "City of Winnipeg".

Application fees must be paid before the application can be circulated to City departments for review. Please refer to the checklists under "Application Submission Requirements" to ensure you have supplied the required documentation and plans in order to avoid delays in processing.

***Note:** Once the City of Winnipeg has determined that the application is complete for circulation, it will be sent to the Land Development Branch to process and review. Depending on the application type, please be advised that Land Development may require payment of **additional fees**. The fees can only be determined **after** the application has been circulated to various departments for review and could include the following:

- Advertising fees (on Public Hearing application types as determined by the local newspapers)
- Mylar signing/lot/parcel fees (per lot/parcel created on plan)
- Consent certificate fees
- 10% dedication fees (in lieu of dedicating land)
- Agreement fees
- Legal document preparation fees
- Administrative fees associated with a Development or Servicing Agreement
- Deposits for survey monuments, sod and/or tree planting
- Oiling & graveling fees where applicable
- Levies such as Charleswood Transportation Levy, Seine River Acquisition Charges
- Trunk service rates
- Securities/letter of credits associated with Development or Servicing Agreements
- Extensions of time
- Spatial separation review

How long does the application process take?

A Draft / Pre-Application may be required and must be submitted if requested. The time required to obtain final approval of your application may vary considerably, depending on the scope of your proposal and the number and type of conditions. Your application can take six to 18 months to complete depending on the nature of your application. Therefore, you should be cautious in scheduling any planned development on the land, as well as determining realistic possession dates with respect to the sale of your lot(s). Learn more information about the ➲development application process.

Application Submission Requirements

Date: _____

Address Information:

Project Address	Street Number:	Street Name:	
Legal Description	Lot Number:	Block Number:	Plan Number:

Applicant Information:

Applicant Information	Applicant Name: (print)		
	Mailing Address:	City & Province:	Postal Code:
	Daytime Phone Number:	Email Address:	

Notes about the Checklists of Items:

- Items indicated "may be required" are items that may be requested by the City of Winnipeg as part of the review of the development application. These items may be requested at the time the application is submitted or after the application has been circulated to the other City departments.
- Items indicated "if applicable" are items that will be required if they apply to the context of the proposed development application.
- Please organize your submission to ensure that each individual set contains one copy of each required document. For example, the first set should contain one copy of the status of title, letters and plans, the second set should also contain one copy of the status of title, letters and plans, and so on.

Your personal information is being collected consistent with the requirements and limitations set out under *The Freedom of Information and Protection of Privacy Act (FIPPA)*. This collection of personal information is authorized by section 36(1)(b) of The FIPPA for the administration of *Development Procedures By-law No. 104/2020*. Your information is protected by FIPPA's privacy provisions and will not be used or disclosed for any other purpose, except as authorized by law. Contact the City of Winnipeg's Corporate Access and Privacy Officer by mail (City Clerk's Department, Susan A. Thompson Building, 510 Main Street, Winnipeg MB, R3B 1B9) or by telephone (311) if you have questions about this collection of your personal information.

Checklist of Required Items

Key Documents		
Number of Copies Required	**Type of Document**	**Explanations & Notes**
5	Current Status of Title	A Status of Title is a document that identifies property ownership and is available from the Winnipeg Land Titles Office. The copy provided must be dated within three months of the application date to verify current ownership, etc. For further information, please visit ➲Teranet Manitoba
5	City of Winnipeg caveats (if applicable)	Listed on the status of title as active instruments. Available from the Winnipeg Land Titles Office. For further information, please visit ➲Teranet Manitoba
5	Letter of Intent (including project vision, use(s), project statistics, number of employees, hours of operation, etc.)	This letter should provide a description of the proposal, planning rationale such as how the proposal addresses Council policy, how it is compatible with its surrounding context, and a description of proposed measures to mitigate expected on- and off-site impacts. This letter should also provide a development summary, such as total gross land area, proposed area (in acres) of each land use category and zoning district, anticipated number of lots and units per land use category, proposed use of land and structures, etc.
5	Letter of Authorization	Written authorization by all registered owner(s) of the land whose name(s) appear on the Status of Title. If the owner on the title is a company name or number, the person signing the letter must state the company name or number as shown on the title and that they are authorized to sign for that company. Please see template at the end of this document.
5	Building Location Certificate (if applicable) Maximum size of 11 in. x 17 in.	A Building Location Certificate (also known as a surveyor's certificate) is a document prepared by a Manitoba Land Surveyor illustrating the location of buildings or structures on the land with dimensions. An application may be accepted without a Building Location Certificate for use of vacant land if the applicant can demonstrate that the proposed use is in accordance with the Zoning By-law. Visit the ➲Association of Manitoba Land Surveyors website for more information. Under certain circumstances, a detailed, well-drawn, fully dimensioned site plan may be substituted at the City's discretion.
5	Title Plot (if applicable) Maximum size of 11 in. x 17 in.	When there is more than one title affecting the property, the title numbers are plotted on a map to ensure that all lands described on the titles have been received.
5	Plan of Subdivision Maximum size of 11 in. x 17 in.	Plan outlining the dimensions and labels of the parcels or lots that are being created or amalgamated. Information on the existing and/or proposed zoning district(s) should be included.

Checklist of Required Items, continued

Plans of Development					
Number of Copies Required	**Type of Document**	**Explanations & Notes**			
5	Site Plan Maximum size of 11 in. x 17 in.	Detailed, fully dimensioned, drawn to scale site plan including the following:			
		☐	Project name	☐	Proposed use
		☐	Municipal address	☐	Scale
		☐	North arrow	☐	Dimensioned property lines
		☐	Land parcel area (if applicable)	☐	Streets labeled
		☐	Pedestrian connections within the site between all buildings as well as from the site to the public sidewalks / AT paths	☐	Exterior lighting
		☐	Dimensioned setbacks	☐	Floodway and flood fringe levels (if applicable)
		☐	Existing and proposed structures (number, location and height - if applicable)	☐	Features adjacent to parcel (City streets, sidewalks, curb cuts, median breaks - if applicable)
		☐	Boundary survey (total acreage, zoning, date, north arrow and vicinity map - if applicable)	☐	Easements and utility rights of way (depth, width, location, type and registration number - if applicable)
		☐	Vehicular circulation (parking spaces, drive aisles, driveways, accessible parking, ingress / egress, loading etc.)	☐	Nearby transit stops (if applicable)
		☐	Screening or treatment of any natural features	☐	Garbage enclosures (if applicable)
		☐	Proposed buffers or landscaped yards	☐	Free standing and accessible parking signs (if applicable)
		☐	Mechanical equipment (if applicable)	☐	Bicycle parking
5	Building Elevations (if applicable) Maximum size of 11 in. x 17 in.	Detailed, fully dimensioned, drawn to scale building elevations outlining the exterior appearance of the building. Learn more about ➲building elevation requirements.			

Checklist of Items that may be required

Number of Copies Required	Type of Document	Explanations & Notes
2	Pre-Application (if applicable)	A Pre-Application may be required and must be submitted, if requested. For further information, please visit ➲Subdivisions, Rezonings and the Development Application Process.
5	Letter of Support (if applicable)	Written support or signatures of support from adjoining property owners who may be adversely affected by the proposed development.
5	Proposed Phasing (if applicable) Maximum size of 11 in. x 17 in.	Number of phases and anticipated time of completion.
5	Floor Plans (if applicable) Maximum size of 11 in. x 17 in.	Detailed, fully dimensioned, drawn to scale floor plans showing the interior layout of the building including labels and dimensions of all rooms.
5	Landscaping Plan (if applicable) Maximum size of 11 in. x 17 in.	Detailed, fully dimensioned, drawn to scale landscape plan including the following: ☐ plant list (number, size and species) ☐ open space ☐ planting to be removed or kept (number, size and species) ☐ ground cover ☐ new planting (number, location and species) ☐ screening ☐ fencing
1	Digital Graphic	Learn more about ➲digital graphic requirements.

Checklist of Items that may be required, continued

	Planning and Design (if applicable) Maximum size of 11 in. x 17 in. Number of copies required to be determined
☐	➲Parking Study
☐	➲Colour Renderings
☐	➲Sun / Shadow Study
☐	➲Street Level Visualization of Proposed Development
☐	➲Public Consultation Program
☐	➲Arborist Report
☐	Context Photos
☐	Financial Impact Assessment
☐	Cultural Heritage Impact Statement (Historical Resources)
☐	Commercial Land Supply Study
☐	Employment Land Supply Study
☐	Residential Land Supply Study
☐	Archeological Resource Assessment

	Engineering Studies (if applicable) Maximum size of 11 in. x 17 in. Number of copies required to be determined
☐	Community Transportation Study and / or Transportation Impact Study
☐	Assessment of Adequacy of Public Services / Site Servicing Study
☐	Servicing Options Report
☐	Stormwater Management Report
☐	Geotechnical Study / Slope Stability Study
☐	Groundwater Impact Study
☐	Wind Study
☐	Photometric Plans
☐	➲Noise / Vibration Study
☐	Parking Functionality Analysis (Vehicle Access Checks, Clearances, Swept Path Analysis - e.g., Auto Turn)

Residential Variance (DAV "B")
Single Family Dwelling or Two-Family Dwelling
Application Form

What is a variance?

A variance is a request to modify the dimensional standards or requirements of the Zoning By-Law that apply to a specific property. This may include yards/ building setbacks, height requirements, and/or lot coverage. When these requirements cannot be met due to unique circumstances related to a property, a variance is an option to ensure that a property owner is not deprived of normal rights to use their property. A variance allows an exemption to one of more of the zoning requirements under certain circumstances but it does not change the zoning designation of the property.

How long does the variance process take?

The length of time to process depends on the complexity of the variance application and the completeness of the required documentation and information (refer to the checklist under "Application Submission Requirements"). This includes, but is not limited to, a detailed letter of intent describing why the Zoning By-law requirements for the proposal cannot be met and plans that are legible and drawn to scale. The process takes approximately six to eight weeks from the date of the application submission to complete. Complicated applications may take longer.

What happens during the variance process?

Once the application is submitted to a Zoning Development Officer and the applicable fees have been paid, the file is circulated to the Development Planning Officer. The Development Planning Officer will review the application and prepare a report to support the variance with conditions, request for changes in order to approve the variance, or reject the variance altogether.

The criteria to approve a variance application are based on Subsection 247(3) of *The City of Winnipeg Charter* which includes the following:

(a) is consistent with Plan Winnipeg and any applicable secondary plan
(b) does not create a substantial adverse effect on the amenities, use, safety and convenience of the adjoining property and adjacent area, including an area separated from the property by a street or waterway
(c) is the minimum modification of a zoning by-law required to relieve the injurious effect of the zoning by-law on the applicant's property
(d) is compatible with the area in which the property to be affected is situated.

In the letter of intent, please explain how each criterion is met. This is an opportunity to address all issues and reduce the possibility of an important factor being overlooked.

If the Development Planning Officer approves the variance, the variance clerk will create the public notices and will contact the applicant to pick up the notices from Zoning and Permits office. The applicant must post the notices on the subject property for a period of 14 days in a visible location facing the street(s) and/or lane(s). The applicant is responsible for maintaining the notices during the required 14-day posting period (as per Subsection 118 of *The City of Winnipeg Charter*). The public notices inform the neighbourhood of the purpose of the variance and any conditions that are deemed necessary for approval. Should the notices be removed or damaged during the posting period, the applicant must contact the Zoning and Permits office for replacement notices.

What happens if the Development Planning Officer supports the variance, but the application is appealed by neighbours?

- Any neighbouring property owner(s) who oppose the variance granted by the order may appeal the decision by submitting a written notice to the City Clerk's Department prior to the end of the 14-day posting period as specified on the public notice.
- The applicant shall be notified by registered mail of any appeals.
- If there are appeals, the property is posted for a second 14-day period informing the neighbourhood of the appeal hearing date. The matter is heard before the Appeal Committee at City Hall, 510 Main Street.
- The Appeal Committee may **dismiss the appeal** (allow the original variance order to be confirmed), **grant the appeal** (dismiss the original order), or **allow the appeal in part** placing conditions on an Appeal Order.
- If the original order is **dismissed** (the variance is **rejected**), the applicant cannot re-apply for the same variance within one year from the date of the Appeal Order and a building or development permit cannot be issued for the proposed work.

What happens if the Development Planning Officer rejects the variance, but the application is appealed by the applicant?

Please note: The Development Planning Officer will contact the applicant prior to formally rejecting a variance application. The applicant may appeal a rejected order as per the procedure below.

- If the Director of Planning Property and Development (or designate) **rejects** the variance application, the applicant shall be notified of the decision by registered mail.
- The applicant may appeal the rejected order by submitting a written notice to the City Clerk's Department prior to the conclusion of the appeal period as specified on the variance order.
- The subject property is posted for a 14-day period informing the neighbourhood of the appeal and hearing date. The matter is heard before the Appeal Committee at City Hall, 510 Main Street.
- The Appeal Committee may **dismiss the appeal** (allow the rejected order to be confirmed) or **grant the appeal** (dismiss the rejected order).
- If the **appeal is dismissed** (the variance is **rejected**), the applicant cannot re-apply for the same variance within one year from the date of the Appeal Order and a building or development permit cannot be issued for the proposed work.

How to reach us:

Address: Zoning and Permits Office Unit 31- 30 Fort St. Winnipeg, MB R3C 4X7 **Phone:** 204-986-5140 **Email:** ppd-zdo@winnipeg.ca	**Hours of Operation:** Tuesday to Friday 8:30 a.m. to 4:30 p.m. Please note the office is closed to customers on Mondays. However, staff are available for telephone and email inquiries, and completed applications may be dropped off in-person.

How to apply:

By appointment (recommended option):
We recommend arranging an appointment with a Zoning Development Officer to discuss your application. To schedule a meeting, please call Permits Direct Line at 204-986-5140 or email ppd-permitappointments@winnipeg.ca.

By mail, courier or drop off:
You can mail, courier or drop off your application package to Zoning and Permits (Unit 31 – 30 Fort Street, Winnipeg, MB, R3C 4X7). Free customer parking is located in the surface parking lot off Assiniboine Avenue at Garry Street and designated customer parking stalls are available (see ➲Customer Parking map) . Please register your vehicle license number with the front desk clerk at the Zoning and Permits office.

By email:
You can submit digital copies of your application documents to ppd-zdo@winnipeg.ca. Please note that the Zoning Development Officer will request paper copies in order to process the application.

Fees:

Please refer to the Planning, Development and Building Fees and Charges schedule for more information about fees referenced in this document. Fees will be assessed at the time of application.

New Single Family or Two-Family Dwellings (New Construction or Additions)
Before Construction or Post-Construction (work without an approved permit)
• 1st Variance • Each Additional Variance (same lot)
Accessory Structures
Before Construction or Post-Construction (work without an approved permit)
• 1st variance • Each Additional Variance (same lot)

Payments can be made in-person, by mail or by calling Permits Direct Line at 204-986-5140 and following the prompts to speak to the cashier. Please note that individual invoices of more than $10,000 must be paid by cheque or bank draft, which can be made payable to the "City of Winnipeg".

Application fees must be paid before the application can be circulated to City departments for review. Please refer to the checklists under "Application Submission Requirements" to ensure you have supplied the required documentation and plans in order to avoid delays in processing.

Refunds

A residential variance application withdrawn prior to administrative approval or public posting may receive a partial refund that is 25% of the total application fee. A residential variance application withdrawn **after** administrative approval and public posting is **not refundable**. Refunds are administered under the City of Winnipeg Planning, Development and Building Fees and Charges schedule.

Application Submission Requirements

Date: _____

Address Information:

Project Address	Street No.:	Street Name:	
Legal Description	Lot No.:	Block No.:	Plan No.:

Applicant Information:

Applicant info	Applicant Name: (print)		
	Mailing Address:	City & Province:	Postal Code:
	Daytime Phone No.:	Email Address:	

Notes about the Checklist of Items:

- Items indicated "may be required" are items that may be requested by the City of Winnipeg as part of the review of the development application. These items may be requested at the time the application is submitted or after the application has been circulated to the other City departments.
- Items indicated "if applicable" are items that will be required if they apply to the context of the proposed development application.
- Please organize your submission to ensure that each individual set contains one copy of each required document. For example, the first set should contain one copy of the status of title, letters and plans, the second set should also contain one copy of the status of title, letters and plans, and so on.

Your personal information is being collected consistent with the requirements and limitations set out under *The Freedom of Information and Protection of Privacy Act (FIPPA)*. This collection of personal information is authorized by section 36(1)(b) of The FIPPA for the administration of *Winnipeg Zoning By-law No. 200/2006*. Your information is protected by FIPPA's privacy provisions and will not be used or disclosed for any other purpose, except as authorized by law. Contact the City of Winnipeg's Corporate Access and Privacy Officer by mail (City Clerk's Department, Susan A. Thompson Building, 510 Main Street, Winnipeg MB, R3B 1B9) or by telephone (311) if you have questions about this collection of your personal information.

Checklist of Required Items

Number of Copies Required	Type of Document	Explanations & Notes
1	Current Status of Title	A Status of Title is a document that identifies property ownership and is available from the Winnipeg Land Titles Office. The copy provided must be dated within three months of the application date to verify current ownership, etc. For further information, please visit ➲Teranet Manitoba
1	City of Winnipeg caveats (if applicable)	Listed on the status of title as active instruments. Available from the Winnipeg Land Titles Office. For further information, please visit ➲Teranet Manitoba
1	Letter of Intent	A Letter of Intent is a written statement describing the scope of the proposed development (e.g. proposed building, structure, land use) including the reason(s) for the request to modify the provisions of the Zoning By-Law. This letter should provide a description of why the development proposal cannot comply with the Zoning By-Law requirements, proposed use, etc. Please see template at the end of this document.
1	Letter of Authorization	Written authorization by all registered owner(s) of the land whose name(s) appear on the Status of Title. If the owner on the title is a company name or number, the person signing the letter must state the company name or number as shown on the title and that they are authorized to sign for that company. Please see template at the end of this document.
1	Letter of Support	Written support or signatures of support from adjoining property owners who may be adversely affected by the proposed development. Please see template at the end of this document.
1	Building Location Certificate (if applicable) Maximum size of 11 in. x 17 in.	A Building Location Certificate (also known as a surveyor's certificate) is a document prepared by a Manitoba Land Surveyor illustrating the location of buildings or structures on the land with dimensions. An application may be accepted without a Building Location Certificate for use of vacant land if the applicant can demonstrate that the proposed use is in accordance with the Zoning By-Law. Visit the ➲Association of Manitoba Land Surveyors website for more information. Under certain circumstances, a detailed, well-drawn, fully dimensioned site plan may be substituted at the City's discretion. A Building Location Certificate is required for all post construction when development/construction has started without prior approval or permits.

Checklist of Required Items, continued

Number of Copies Required	Type of Document	Explanations & Notes			
1	Site Plan Maximum size of 11 in. x 17 in.	Detailed, fully dimensioned, drawn to scale site plan, including the following:			
		☐	Project name	☐	Scale
		☐	Municipal address	☐	North arrow
		☐	Dimensioned property lines	☐	Streets labeled
		☐	Dimensioned setbacks	☐	Floodway and flood fringe levels (if applicable)
		☐	Existing and proposed structures (number, location and height)	☐	Proposed buffers or landscaped yards
		☐	Parking spaces		
1	Floor Plans (if applicable) Maximum size of 11 in. x 17 in.	Detailed, fully dimensioned, drawn to scale floor plans showing the interior layout of the building, including labels and dimensions of all rooms.			
1	Building Elevations (if applicable) Maximum size of 11 in. x 17 in.	Detailed, fully dimensioned, drawn to scale building elevations outlining the exterior appearance of the building, the locations of any windows and doors, roof slope and overhangs, guard rail height/picket spacing for any landings, and building heights. Learn more about ➲building elevation requirements.			

Conditional Use (DCU "C" or "D")
Other Residential & Commercial Uses/Buildings
Application Form

What is a conditional use?

A conditional use means a building or land use that may be unique in its characteristics or operation, which could have an impact on adjoining properties. A conditional use is a use of land listed as "conditional" under the use tables in the Zoning By-law.

How long does the conditional use process take?

The length of time to process depends on the complexity of the application proposal and the completeness of the required documentation and information (refer to the checklist under "Application Submission Requirements"). In general, the process takes approximately six to eight weeks from the date of the application submission to complete. Complicated applications may take longer.

What happens during the conditional use process?

Once the application is submitted to a Zoning Development Officer and the applicable fees have been paid, the file is circulated to the Area Planner. The Planner will review the application and prepare a report outlining their recommendation to support the conditional use with conditions, request for changes in order to approve the conditional use, or reject the conditional use altogether.

The criteria to approve a conditional use application are based on Subsection 247(3) of *The City of Winnipeg Charter*, which includes the following:

(a) is consistent with Plan Winnipeg and any applicable secondary plan
(b) does not create a substantial adverse effect on the amenities, use, safety and convenience of the adjoining property and adjacent area, including an area separated from the property by a street or waterway
(c) is the minimum modification of a zoning by-law required to relieve the injurious effect of the zoning by-law on the applicant's property
(d) is compatible with the area in which the property to be affected is situated.

In the letter of intent, please explain how each criterion is met. This is an opportunity to address all issues and reduce the possibility of an important factor being overlooked.

Once the Area Planner approves the conditional use for posting, the variance clerk will create the public notices and contact the applicant to pick up the notices from the Zoning and Permits office. The applicant must post the notices on the subject property for a period of 14 days in a visible location facing the street(s) and/or lane(s). The applicant is responsible for maintaining the notices during the required 14-day posting period (as per Subsection 118 of *The City of Winnipeg Charter*). Should the notices be removed or damaged during the posting period, the applicant must contact the Zoning and Permits office for replacement notices.

The public notices inform the neighbourhood of the purpose of the conditional use and the date, time and location of the public hearing. On the day of the hearing, the decision maker (i.e. Community Committee

[CC]) will decide whether to support the conditional use with conditions, request for changes in order to approve the conditional use, or reject the conditional use altogether.

After the hearing, the City Clerk's Department generates a conditional use order which outlines the decision made by the CC, any conditions that the conditional use must abide by, and instructions on how to appeal the decision. If no appeals are received by the deadline specified on the order, the decision made on the conditional use order is deemed to be in effect.

What happens if the Community Committee supports the conditional use, but the application is appealed by neighbours?

- Any neighbouring property owner(s) who oppose the conditional use granted by the order may appeal the decision by submitting a written notice to the City Clerk's Department prior to the end of the 14-day appeal period as specified on the conditional use order.
- The applicant shall be notified by registered mail of any appeals.
- If there are appeals, the property is posted for a second 14-day period informing the neighbourhood of the appeal hearing date. The matter is heard before the Appeal Committee at City Hall, 510 Main Street.
- The Appeal Committee may **dismiss the appeal** (allow the original conditional use order to be confirmed), **grant the appeal** (dismiss the original order), or **allow the appeal in part** placing conditions on an Appeal Order.
- If the original order is **dismissed** (the conditional use is **rejected**), the applicant cannot re-apply for the same conditional use within one year from the date of the Appeal Order and a building or development permit cannot be issued for the proposed work.

What happens if the Community Committee rejects the conditional use, but the application is appealed by the applicant?

- The applicant may appeal the rejected order by submitting a written notice to the City Clerk's Department prior to the end of the 14-day appeal period as specified on the conditional use order.
- The subject property is posted for a second 14-day period informing the neighbourhood of the appeal hearing date. The matter is heard before the Appeal Committee at City Hall, 510 Main Street.
- The Appeal Committee may **dismiss the appeal** (allow the rejected order to be confirmed) or **grant the appeal** (dismiss the rejected order).
- If the **appeal is dismissed** (the conditional use is **rejected**), the applicant cannot re-apply for the same conditional use or conditional use within one year from the date of the Appeal Order and a building or development permit cannot be issued for the proposed work.

How to reach us:

Address: Zoning and Permits Unit 31- 30 Fort St. Winnipeg, MB R3C 4X7 **Phone:** 204-986-5140 **Email:** ppd-zdo@winnipeg.ca	**Hours of Operation:** Tuesday to Friday 8:30 a.m. to 4:30 p.m. Please note the office is closed to customers on Mondays. However, staff are available for telephone and email inquiries, and completed applications may be dropped off in-person.

How to apply:

By appointment (recommended option):
We recommend arranging an appointment with a Zoning Development Officer to discuss your application. To schedule a meeting, please call Permits Direct Line at 204-986-5140 or email ppd-permitappointments@winnipeg.ca.

By mail, courier or drop off:
You can mail, courier or drop off your application package to Zoning and Permits (Unit 31 – 30 Fort Street, Winnipeg, MB, R3C 4X7). Free customer parking is located in the surface parking lot off Assiniboine Avenue at Garry Street and designated customer parking stalls are available (see ➲Customer Parking map). Please register your vehicle license number with the front desk clerk at the Zoning and Permits office.

By email:
You can submit digital copies of your application documents to ppd-zdo@winnipeg.ca. Please note that the Zoning Development Officer will request paper copies in order to process the application.

Before you submit your application, please ensure that you contact the Area/District Planner to confirm whether they will support your proposal. Please view the planning assignments map at winnipeg.ca/PlanningAssignments to determine the Planner for your area. A Draft / Pre-Application may be required and must be submitted if requested. For further information, please visit ➲ Subdivisions, Rezonings and the Development Application Process

Fees:

Conditional Use Application Fee	Fees will be assessed at the time of application. Refer to the Planning, Development and Building Fees and Charges schedule for more information.
Conditional Use Post-Use Application Fee (established without an approved permit)	

Payments can be made in-person, by mail, or by calling Permits Direct Line at 204-986-5140 and following the prompts to speak to the cashier.. Please note that the individual invoices of more than $10,000 must be paid by cheque or bank draft, which can be made payable to the “City of Winnipeg”.

Application fees must be paid before the application can be circulated to City departments for review. Please refer to the checklists under “Application Submission Requirements” to ensure you have supplied the required documentation and plans in order to avoid delays in processing.

Application Submission Requirements

Date: _____

Address Information:

Project Address	Street Number:	Street Name:	
Legal Description	Lot Number:	Block Number:	Plan Number:

Applicant Information:

Applicant Information	Applicant Name: (print)		
	Mailing Address:	City & Province:	Postal Code:
	Daytime Phone Number:	Email Address:	

Notes about the Checklists of Items:

- Items indicated "may be required" are items that may be requested by the City of Winnipeg as part of the review of the development application. These items may be requested at the time the application is submitted or after the application has been circulated to the other City departments.
- Items indicated "if applicable" are items that will be required if they apply to the context of the proposed development application.
- Please organize your submission to ensure that each individual set contains one copy of each required document. For example, the first set should contain one copy of the status of title, letters and plans, the second set should also contain one copy of the status of title, letters and plans, and so on.

Your personal information is being collected consistent with the requirements and limitations set out under *The Freedom of Information and Protection of Privacy Act (FIPPA)*. This collection of personal information is authorized by section 36(1)(b) of The FIPPA for the administration of *Winnipeg Zoning By-law No. 200/2006*. Your information is protected by FIPPA's privacy provisions and will not be used or disclosed for any other purpose, except as authorized by law. Contact the City of Winnipeg's Corporate Access and Privacy Officer by mail (City Clerk's Department, Susan A. Thompson Building, 510 Main Street, Winnipeg MB, R3B 1B9) or by telephone (311) if you have questions about this collection of your personal information.

Checklist of Required Items

Key Documents		
Number of Copies Required	**Type of Document**	**Explanations & Notes**
2	Current Status of Title	A Status of Title is a document that identifies property ownership and is available from the Winnipeg Land Titles Office. The copy provided must be dated within three months of the application date to verify current ownership, etc. For further information, please visit ➲Teranet Manitoba
2	City of Winnipeg caveats (if applicable)	Listed on the status of title as active instruments. Available from the Winnipeg Land Titles Office. For further information, please visit ➲Teranet Manitoba
2	Letter of Intent (including project vision, use(s), project statistics, number of employees, hours of operation, etc.)	This letter should provide a description of the proposal, planning rationale such as how the proposal addresses Council policy, how it is compatible with its surrounding context, and a description of proposed measures to mitigate expected on- and off-site impacts. This letter should also provide a development summary, such as total gross land area, proposed area (in acres) of each land use category and zoning district, anticipated number of lots and units per land use category, proposed use of land and structures, etc. Please see template at the end of this document.
2	Letter of Authorization	Written authorization by all registered owner(s) of the land whose name(s) appear on the Status of Title. If the owner on the title is a company name or number, the person signing the letter must state the company name or number as shown on the title and that they are authorized to sign for that company. Please see template at the end of this document.
2	Building Location Certificate (if applicable) Maximum size of 11 in. x 17 in.	A Building Location Certificate (also known as a surveyor's certificate) is a document prepared by a Manitoba Land Surveyor illustrating the location of buildings or structures on the land with dimensions. An application may be accepted without a Building Location Certificate for use of vacant land if the applicant can demonstrate that the proposed use is in accordance with the Zoning By-law. Visit the ➲Association of Manitoba Land Surveyors website for more information. Under certain circumstances, a detailed, well-drawn, fully dimensioned site plan may be substituted at the City's discretion. A Building Location Certificate may be determined to be mandatory in cases where development/construction has started without prior approval or permits.
2	Title Plot (if applicable) Maximum size of 11 in. x 17 in.	When there is more than one title affecting the property, the title numbers are plotted on a map to ensure that all lands described on the titles have been received.

Checklist of Required Items, continued

Plans of Development					
Number of Copies Required	**Type of Document**	**Explanations & Notes**			
2	Site Plan Maximum size of 11 in. x 17 in.	Detailed, fully dimensioned, drawn to scale site plan including the following:			
		☐	Project name	☐	Proposed use
		☐	Municipal address	☐	Scale
		☐	North arrow	☐	Dimensioned property lines
		☐	Land parcel area (if applicable)	☐	Streets labelled
		☐	Pedestrian connections	☐	Exterior lighting
		☐	Dimensioned setbacks	☐	Floodway and flood fringe levels (if applicable)
		☐	Existing and proposed structures (number, location and height - if applicable)	☐	Features adjacent to parcel (City streets, sidewalks, curb cuts, median breaks - if applicable)
		☐	Boundary survey (total acreage, zoning, date, north arrow and vicinity map - if applicable)	☐	Easements and utility rights of way (depth, width, location, type and registration number - if applicable)
		☐	Vehicular circulation (parking spaces, drive aisles, driveways, accessible parking, ingress / egress, loading etc.)	☐	Nearby transit stops (if applicable)
		☐	Screening or treatment of any natural features	☐	Garbage enclosures (if applicable)
		☐	Proposed buffers or landscaped yards	☐	Free standing and accessible parking signs (if applicable)
		☐	Mechanical equipment (if applicable)	☐	Bicycle parking
2	Floor Plans (if applicable) Maximum size of 11 in. x 17 in.	Detailed, fully dimensioned, drawn to scale floor plans showing the interior layout of the building including labels and dimensions of all rooms.			
2	Building Elevations (if applicable) Maximum size of 11 in. x 17 in.	Detailed, fully dimensioned, drawn to scale building elevations outlining the exterior appearance of the building. Learn more about ➲building elevation requirements.			

Checklist of Items that may be required

Number of Copies Required	Type of Document	Explanations & Notes
2	Pre-Application (if applicable)	A Pre-Application may be required and must be submitted, if requested. For further information, please visit ➲Subdivisions, Rezonings and the Development Application Process.
2	Plan of Subdivision Maximum size of 11 in. x 17 in.	Plan outlining the dimensions and labels of the parcels or lots that are being created or amalgamated. Information on the existing and/or proposed zoning district(s) should be included.
2	Letter of Support (if applicable)	Written support or signatures of support from adjoining property owners who may be adversely affected by the proposed development. Please see template at the end of this document.
2	Proposed Phasing (if applicable) Maximum size of 11 in. x 17 in.	Number of phases and anticipated time of completion.
2	Landscaping Plan (if applicable) Maximum size of 11 in. x 17 in.	Detailed, fully dimensioned, drawn to scale landscape plan including the following: ☐ plant list (number, size and species) ☐ open space ☐ planting to be removed or kept (number, size and species) ☐ ground cover ☐ new planting (number, location and species) ☐ screening ☐ fencing
1	Digital Graphic	Learn more about ➲digital graphic requirements.

Checklist of Items that may be required, continued

	Planning and Design (if applicable) Maximum size of 11 in. x 17 in. Number of copies required to be determined
☐	➲Parking Study
☐	➲Colour Renderings
☐	➲Sun / Shadow Study
☐	➲Street Level Visualization of Proposed Development
☐	➲Public Consultation Program
☐	➲Arborist Report
☐	Context Photos
☐	Financial Impact Assessment
☐	Cultural Heritage Impact Statement (Historical Resources)
☐	Commercial Land Supply Study
☐	Employment Land Supply Study
☐	Residential Land Supply Study
☐	Archeological Resource Assessment

	Engineering Studies (if applicable) Maximum size of 11 in. x 17 in. Number of copies required to be determined
☐	Community Transportation Study and / or Transportation Impact Study
☐	Assessment of Adequacy of Public Services / Site Servicing Study
☐	Servicing Options Report
☐	Stormwater Management Report
☐	Geotechnical Study / Slope Stability Study
☐	Groundwater Impact Study
☐	Wind Study
☐	Photometric Plans
☐	➲Noise / Vibration Study
☐	Parking Functionality Analysis (Vehicle Access Checks, Clearances, Swept Path Analysis - e.g. Auto Turn)

APPENDIX “D”
WORKLOAD ASSESSMENT

		Workload Assessment							
		Queries	Pre-Applications	Applications	Non-Circulation		Regional Planning Queries/Applications	Service Agreements with Neighbouring RMs	Large Scale Industrial Queries
Wastewater Planning	Avg Hours	1.5	1.5	1.5	1.5		3	2	2
	Percentage	WWCPE - 70%							
	Avg No. of Apps/month	25	3	3	14		3	2	1
Water Planning	Avg Hours	2	1.5	1.5	1.5				
	Percentage	WDPE - avg 33% to peak 75%							
	Avg No. of Apps/month	7.5	2	2.5	10.5		2 per year		3 per year
	2022 (total)	124	28	18	126				
	2023 (total)	43	20	34	123				
Land Drainage and Flood Protection	Avg Hours (range)	2 (1 to 4 hours)	5 (1 to 10 hours)	5 (2 to 10 hours)	3 (2 to 6 hours)				
	Percentage	LDPE - 100%							
	Avg No. of Apps/month	4	4	3	5		1-2 per year	1-2 per year	1 per year
Services Development Branch	Avg Hours	3	10.5	10.5	3.5				
	Percentage	% split amongst three: SDE - 26%, PE - 89%, Tech 1 - 10%							
	No. of Apps/ year	276.7	34.5	150.2	included with queries		19.3		2.5
	2014		21	204					
	2015		20	196					
	2016		36	152					
	2017		26	151			15		
	2018		40	124			10		
	2019		31	142			15		
	2020		51	117			9		
	2021	215	46	148			37		
	2022	410	44	155			26		
	2023	205	30	113			23		

November 7, 2024

APPENDIX B - MARKET SCAN ANALYSIS TECHNICAL MEMORANDUM

Stantec Landmark Planning & Design Inc.

Memo

To:	Ho Lau, C.E.T. City of Winnipeg	From:	Stephen Willis, RPP, MCIP Rachel Haggith, MPL, Candidate MCIP, RPP Stantec Consulting Ltd.
Project/File:	111220808 City of Winnipeg City of Winnipeg Review & Assessment of Municipal Services for Water, Wastewater, & Land Drainage	Date:	April 8, 2024

Reference: Technical Memorandum #2 - Market Scan Questionnaire Results

EXECUTIVE SUMMARY

The City of Winnipeg's (City) Water and Waste Department (W&W) is conducting a review and assessment of municipal servicing for water, sewer, and land drainage development. This includes a review of the City's internal development application review process and a comparison of how the City provides information on current water and sewer infrastructure capacities. The work will also compare Winnipeg with other cities (e.g. market scan) and provide recommendations to improve the City's development application process.

As part of the market scan phase of this project, eleven municipalities were contacted to answer a questionnaire. The questionnaire collects information regarding each city's development application review process. Eight responses were received from these municipalities, and an analysis was conducted comparing the City's current process to other municipalities. This technical memorandum presents an overview on how the questionnaire was formed, how municipalities were selected, and a summary of the market scan results in both a quantitative and qualitative manner.

Results show that the City is very comparable to other municipalities in most areas, having comparable results with lean resources. The key differences noted are regarding records management staff, self-serve data availability, how general inquiries are handled, modeling and variation standards, and processes for training and development.

QUESTIONNAIRE

The objective of the Market Scan Questionnaire is to compare existing Winnipeg practices with those of comparable municipalities in Canada and the U.S. The City proposed several topics that they want covered in the questionnaire both in the RFP and throughout workshops, which were expanded on to create the final Market Scan Questionnaire.

The questionnaire was divided into the following nine sections:

1. General Information;
2. Annual Activity Levels;

3. Resources;
4. Managing Inquiries;
5. Pre-application and Application Processes;
6. Infrastructure Asset Management;
7. Measuring Turnaround Time;
8. Prioritizing and Problem Solving;
9. Training/Development.

These sections covered a wide range of questions all related to development processes for municipal services for water, wastewater, and land drainage.

The finalized questionnaire can be found as an attachment to this technical memorandum.

MARKET SCAN CITIES

A list of candidate municipalities to consult for the market scan was recommended in the technical memorandum provided to the City on October 30, 2023. It was initially proposed in Technical Memorandum #1 to conduct a Market Scan in ten different municipalities shown below in Table 1. To develop our list of recommended municipalities, the following three inputs were used:

- The Canadian Home Builders Association produces an annual *Municipal Benchmarking Study*, the latest being 2022. We chose cities that ranked well in that study;
- We consulted engineering leads in our company in Canada and the U.S. to find recommendations for municipalities that were “best in class” for managing engineering submissions. This is professional judgement from our own internal experts from different regions.
- We tried to have a geographic diversity of cities in terms of geography and size of the municipality.

Table 1 Recommended cities for the Market Scan Questionnaire

Municipality	Rationale
Saskatoon, SK	Ranked #2 in the Municipal Benchmarking Study.
Regina, SK	Ranked #3 in the Municipal Benchmarking Study.
Calgary, AB	Ranked #5 in the Municipal Benchmarking Study; high growth pressure.
Edmonton, AB	Ranked #6 in the Municipal Benchmarking Study; high focus on infill development; high growth pressure.
London, ON	Ranked #7 in the Municipal Benchmarking Study.
Ottawa, ON	Ranked #9 in the Municipal Benchmarking Study; high focus on infill development; high growth pressure; dealing with combined sewers.

Milton, ON	Recommendation from Stantec Ontario engineering staff as being very efficient and easy to work with; high growth pressure.
Victoria, MN	Recommendations from Stantec US Midwest team as an example of a municipality that has done recent process reviews.
Indianapolis, IN	Closest US City in terms of population size to Winnipeg
West Fargo, MN	Recommendation from Stantec US Midwest team as being a well-organized municipality that is easy to work with.

After the commencement of the interviews, the study team had the opportunity speak with staff at Victoria, British Columbia. Since they were willing to contribute, the team added them to the original list of ten.

Each of the above listed municipalities, as well as Victoria, BC, were contacted and provided with a letter detailing information about the project and what we were requesting from them, along with the questionnaire. Once a response was received from the municipalities, an interview was scheduled to go over the questionnaire with them. A total of eight questionnaires were completed out of the eleven municipalities that were contacted, with four interviews being conducted, and the remaining four questionnaires received via email, as outlined below in Table 2.

Table 2 Status of responses from municipalities for Market Scan Questionnaire

Municipality	Status of Questionnaire
Saskatoon, SK	Via email
Regina, SK	Via interview
Calgary, AB	Via interview
Edmonton, AB	No response
Victoria, BC	Via interview
London, ON	Via email
Ottawa, ON	Via interview
Milton, ON	No response
Victoria, MN	No response
Indianapolis, IN	Via email
West Fargo, MN	Via email

In addition to the above municipalities, an interview was conducted with the City to gather responses to the Market Scan Questionnaire to provide a baseline for comparison with other municipalities development processes.

RESULTS

Based on answers received from the eight completed questionnaires, both qualitative and quantitative analysis has been done to inform the City on best practices. The results below are divided by questionnaire section, and each section includes the baseline responses received from Winnipeg.

The raw data can be found as an attachment to this technical memorandum for further review into other municipalities development processes.

General Information

This section of the Questionnaire covers the information of the person we were interviewing, along with general questions about how their Municipality's water, wastewater, and land drainage are managed. Winnipeg stated that the Municipality manages its own water/wastewater, and that combined sewer systems only exist in part of the City. Based on the eight responses received, it was found that the majority of municipalities manage their water/wastewater and land drainage systems directly (Table 3).

Table 3 Questionnaire responses to "Is water/wastewater managed directly by the municipality or by a separate utility corporation?"

Response	Count
Directly by the Municipality	6 (Includes Winnipeg)
Other Municipality/Region	2
Separate Utility Corporation	1

Winnipeg stated that they have combined sewers in approximately 33% of the City. Table 4 outlines that it is approximately an even split between municipalities having combined sewers in part of their communities and having no combined sewers at all. It was also found that the majority of municipalities do not have a combined sewer overflow system (Table 5).

Table 4 Questionnaire responses to "Does your municipality have combined sewers for all or part of the community?"

Response	Count
Partly combined sewers	5 (Includes Winnipeg)
No combined sewers	4

Table 5 Questionnaire responses to "Does the municipality have a combined sewer overflow system?" of municipalities who responded "Partly Combined Sewers" in Table 4.

Response	Count
Yes	4 (Includes Winnipeg)
No	1

For the first three questions, the City manages similar infrastructure systems as the municipalities that responded to the Market Scan in terms of managing the system directly and having systems with a mix of combined and separated sewers.

Annual Activity Levels

This section of the questionnaire focuses mainly on quantitative data for development applications that are received by the municipalities and their processing time. It is also paired with some information about the types of application that are received.

Winnipeg has recently started to informally track the number of applications they receive, but it is not made public. All municipalities interviewed stated that they do track the number of applications along with the time for processing, with the majority making this data available to the public, mainly within their annual report (Table 6 and 7).

Table 6 Questionnaire responses to "Do you make the number of applications information public?"

Response	Count
Yes	6
No	3 (Includes Winnipeg)

Table 7 Questionnaire responses to "Do you make the time of processing information public?"

Response	Count
Yes	5
No	4 (Includes Winnipeg)

Like most municipalities, Winnipeg tracks the number of development applications and makes them public. However, there is less consistency about whether cities make processing times public, so Winnipeg is not alone in not publishing that data.

Regarding development applications, the range that municipalities review is quite large, ranging from 150 to 3,500 annually, with Winnipeg at approximately 250. The average number of development applications reviewed is 1,736, with the median being 1,100. This reflects significant differences in what is being tracked. Some cities include a larger list of requests than others. Of these applications reviewed, the major categories are the following:

- Development Projects;
- Public Infrastructure Improvements;
- Street Construction;
- Greenfield Subdivisions;
- Official Plan and Zoning Amendments;
- Draft Plans of Condominium and Subdivision;
- Site Servicing Plans;
- Easement Encroachments;
- Site Plans;
- Minor Variances; and
- Consents.

All municipalities break down the number of applications by approval type, such as rezoning versus site plan approval. It is important to note that these numbers may not be directly comparable, as additional application types may have been included by other municipalities but not by Winnipeg. For example, Winnipeg's application numbers above do not include underground structure drawings.

As a follow-up to the initial Market Scan, we contacted the participating municipalities to specify the number of subdivision and rezoning applications their municipality receives annually. This additional data received by a portion of the participating municipalities provides an accurate representation of development

applications per staff, as shown below in Table 8. The average number of subdivision and rezoning applications per specific staff is 4, with Winnipeg being above the average at 7.1.

Table 8 Responses by Municipality regarding specific subdivision and rezoning applications

Municipality	Population	Approximate number of staff involved in reviewing development applications	Approximate number of subdivision and rezoning applications reviewed annually	Number of applications per specific staff
Regina, SK	266,400	122	46	0.4
Ottawa, ON	1,017,449	200	280	1.4
London, ON	422,320	115	412	3.6
Indianapolis, IN	887,642	150	549	3.7
Winnipeg, MB	749,607	35	250	7.1
Victoria, BC	91,867	12	196	16.3
Average	572,548	106	289	4

Regarding infill versus greenfield applications, in line with Winnipeg, it was found that the majority of municipalities do not track these applications separately (Table 9), and that the same team reviews both (Table 10).

Table 9 Questionnaire responses to "Do you track infill applications separately from greenfield applications?"

Response	Count
Yes	2
No	7 (Includes Winnipeg)

Table 10 Questionnaire responses to "Does the same team look at greenfield that looks at infill, or are these different staff?"

Response	Count
Yes	6 (Includes Winnipeg)
No	2
No Response	1

Resources Questions

This section of the questionnaire focuses on questions related to staffing departments and duties, and how different aspects may impact development application work.

As shown in Table 11, each municipality varied with the approximate number of staff within their municipality, as well as the number of staff who work in development engineering. When asked about primary job function, most municipalities mention that development applications are the primary duty for a few staff, where others have additional duties and responsibilities, similar to Winnipeg.

Table 11 Questionnaire responses by Municipality regarding staffing numbers.

Municipality	Population	Approximate number of staff in Municipality	Approximate number of staff in land development engineering roles	How many departments/ divisions are involved in reviewing a development application	How many people does this involve	Specific Staff vs Population ($x10^{-3}$) Ratio
Regina, SK	226,400	3,000	22	3	100	0.54
West Fargo, ND	38,626	350	4	6	12	0.41
London, ON	422,320	2,000	100	9	15	0.27
Ottawa, ON	1,017,449	17,000	100	4	100	0.20
Calgary, AB	1,306,784	17,000	200	12	20	0.17
Indianapolis, IN	887,642	No Response	150	2	No Response	0.17
Saskatoon, SK	266,141	4,000	20	6	15	0.13
Victoria, BC	91,867	No Response	12	2	n/a	0.13
Winnipeg, MB	749,607	10,000	10	3	25	0.05
Average	556,315	7,225	76	6	44	0.21

When discussing staff turnover, Winnipeg mentioned that it had a high impact this past year due to lack of experience causing inefficiencies. In the questionnaire, six municipalities mentioned that turnover has a great impact on the pace of work due to training, mentoring, and review processes.

Winnipeg stated that past design details on development projects are maintained differently between Branches, including the use of GIS and Excel. All municipalities stated that past design details of the development projects are maintained in a database, and in most cases, this is managed by their own department, such as land development or engineering. One municipality stated that they have an in-house records group, where all documents are scanned and uploaded to the system and managed by that group.

Managing Inquiries

This section of the questionnaire focuses strictly on how inquires are handled at each municipality.

Winnipeg has a general email in place for inquiries to go with no dedicated staff to manage this inbox. Winnipeg does not charge for any inquiries. The majority of municipalities interviewed stated that they do not have dedicated staff to handle general inquiries regarding municipal servicing capacity, the inquiries just go to the department. Simple inquiries are answered free of charge, with more complex questions in a few cases having a fee, or the applicant is encouraged to submit a pre-application. It is estimated that an average of approximately 20% of staff time is spent handling inquiries that are not related to a formal application, which aligns with Winnipeg's average as well.

When discussing the process differences and similarities between informal queries, pre-applications, and applications, Winnipeg stated that it varies between Branches, with some having no difference, some being based on complexity, and some having a separate application process from pre-application and queries. In the questionnaire, three municipalities mentioned that there are no differences between processes, with the others stating that there is no formal process for queries, but pre-applications and applications follow the same process.

All municipalities interviewed spend more time than we would have expected managing general inquiries. Since Winnipeg has relatively low staffing levels, these queries are going to occupy a significant amount of time for some staff and take away from other tasks. As part of the overall process review recommendations at the end of this study, we will be making recommendations on new approaches to managing inquiries, such as dedicated staff to manage inquiries, fees for certain types of inquiries, and making more information available through GIS or similar tools so that consultants can retrieve the information on a self-serve basis.

Pre-Application and Application Processes

This section of the questionnaire focuses on details relating to the application process and what is required from the applicant or agent.

When making an application for development, each municipality varies greatly with what the steps are, and which reports are required. In most cases a pre-consultation meeting is required, which would determine which reports would be required for that specific application, along with discussing what capacity impacts may arise. Some require engineering calculations and reports, including:

- Servicing Brief;
- Traffic Impact Assessment;
- Planning Justification Report;
- Drainage Calculations;
- Feasibility Study;
- Stormwater Management Report;
- Hydraulic Models;
- Grading Plans;
- Hydrogeological Study; or
- Design Elevations.

Most municipalities stated that these reports are needed before the application can be considered complete to move forward with review.

For fire flow reviews, Winnipeg along with four other municipalities said that all building types and sizes require a review and that in some cases, applicants are required to submit the calculations themselves. Winnipeg does not currently require applicants to submit their calculations. Two municipalities have the fire flow calculations as part of their development review process. Each municipality requires these calculations be complete at different stages of the process. Most municipalities provide guidelines to applicants to help with the calculations, including Winnipeg.

When asked about private hydrants, Winnipeg stated that they review that the available flow/pressure is available at the main, but do not review the design of the privately owned pipes. Five additional municipalities stated that the hydrants are reviewed in some capacity for proper flow. Winnipeg and four

other municipalities require or may require on a case-by-case basis, a water age analysis, with two municipalities not requiring one at all.

Regarding GIS information and past studies, Winnipeg and four other municipalities mentioned that developers must request the information they are looking for, and it is provided to them by the City, typically free of charge. Winnipeg does not have open-source GIS available for public use, and only two of the municipalities stated that they do have open-source GIS/maps available to the public. This is generally the location of municipal services and information on infrastructure sizes (e.g., size of a watermain).

Regarding software, Winnipeg mentioned that they use Hexagon GeoMedia (GIS), Excel, ICM Hydraulic Model, and EPAnet. Each municipality uses various software, including the following: PCSWMM; XPSWMM; WaterCAD; excel; InfoWorks ICM; POSSE; Bluebeam; Adobe; and Civil 3D. Responses from municipalities did not include names of any GIS software in use.

In most municipalities, including Winnipeg, the developer is responsible for hiring an engineer to prepare the designs to meet minimum design standards, and then the Municipality reviews their work to ensure the minimum standards are met. Most municipalities also have the same submission requirements for infill and greenfield development projects. The design criteria in most cases are set locally, either by the municipality or region, with provincial requirements being adhered to. For stormwater quantity and quality in design, six municipalities stated that there are requirements for both, with Winnipeg and only two other municipalities having requirements for only quantity and not quality.

Consultants in each municipality, including Winnipeg, typically understand their responsibilities in the process, with some exceptions where municipal staff are readily available to answer questions. For these development applications, the main point of contact with the municipality is typically the engineer, but in some cases, it is the developer or property owner if they feel their engineer is not making progress.

Infrastructure Asset Management Questions

This section of the questionnaire focuses on what the servicing requirements are for applications, and how the municipality approaches this as well as other infrastructure requirements.

Winnipeg determines infrastructure capacity on a site-by-site basis, based on experience, and does allow for variances if there will be no additional harm. Infrastructure capacity for water, waste, and land drainage in five municipalities is determined by capacity models run by the City itself. When there are capacity limitations, one municipality does allow variances from the standard but only for modeling errors not for deviations from design standards. All other municipalities require system upgrades with studies being adhered to along with a detailed analysis. Compared to other municipalities, Winnipeg does not have formal calibrated models or variation standards across branches. However, water modelling is generally well established for development proposal review while wastewater modelling is set up for certain purposes, rather than being established for development proposal review at any location. Land drainage modelling, if available, is very localized to a specific set of infrastructure, which generally was studied in a specific City project.

The questionnaire did not delve into how municipalities maintain a calibrated model and the budget that they allocate for that. The final report will recommend further consultation with municipal counterparts on how they finance, maintain and calibrate models (e.g., using instrumentation).

As shown in Table 12 below, cost sharing is mainly handled by the same department that handles development applications, similar to Winnipeg. There was not a question in the survey dealing with which part of the municipality did the negotiations on developer financial obligations. However, based on our knowledge of practices amongst the various municipalities, we know this is a complex process often involving multiple groups from planning and engineering roles.

Table 12 Questionnaire responses to "Which part of your organization communicates with developers regarding cost sharing of infrastructure benefitting multiple property owners?"

Response	Count
Land Development / Engineering Department	5 (Includes Winnipeg)
Different Department	3
Property Owners responsible for handling it themselves	1

Every municipality, including Winnipeg, stated that they have master servicing studies for greenfield areas, however some are not currently up to date. A report itself is not updated when there are changes to municipal design standards, but it is flagged that there may be additional limitations. Winnipeg updates these servicing plans through engineering reports required in the development application process (i.e., when design progresses to the next stage).

Only two municipalities interviewed have master servicing studies regarding infill areas. Both noted the studies are not updated when there are changes to municipality design standard requirements. One other municipality indicated they are completing a City-wide water and wastewater servicing study. Winnipeg stated that some portions of the intensification target areas have secondary plans, which can be found on the Long range planning - Planning, Property and Development webpage, but they vary whether there is supporting engineering documentation. Any available engineering reports are typically not updated for the servicing infrastructure plans to match current density or planning assumptions. Major Redevelopment Site areas' servicing plans are reviewed during secondary plan preparation. Point Douglas is an area that currently lacks one, however the work on this secondary plan is currently underway.

Unlike Winnipeg, each municipality stated that they have water, wastewater, and land drainage models at some capacity that are available to applicants for their analysis. In terms of a shared internal database on applications, seven municipalities have these shared, either just within the municipality or region, but not necessarily with external utility companies. Winnipeg mentioned that some City goals are incorporated into the development application process, such as affordable housing. Similar City goals and others are incorporated in five of the other municipalities, but they are not necessarily related to engineering.

Measuring Turnaround Time Questions

This section of the questionnaire focuses on turnaround time for applications and process efficiencies.

The expected turnaround times for commenting on development applications varies by municipality but falls within two clusters. One being between 10-20 days, and the other being around 2-3 months. Most of these municipalities also track how they are doing against these targets (Table 13).

Winnipeg follows Provincial Guidelines for development application timelines of three weeks to not hinder development projects, but do not have any timelines set internally. Water and Waste Department (WWD)

has a timeline to respond to Planning and Project Delivery (PPD) for Development Applications (three weeks) based on meeting Charter requirements. For pre-applications, there is a PPD requested response time (not legislated). After this project's initial set of workshops, WWD internal general response time for queries (non-complex) was added.

Table 13 Questionnaire responses to "Does the municipality keep statistics on how they are doing against [turnaround time] targets?"

Response	Count
Yes	6 (Includes Winnipeg)
No	3

Similar to Winnipeg, the average number of engineering submissions per application is around 3-4, with only three municipalities making this information public. The main reason Winnipeg flagged for applications moving slow in the system is not having the right information from the consultant. Typical reasons for applications moving slow in the system include the following: quality of submission; conflicting direction between planning and engineering; capacity constraints; or lack of response or cooperation from developer. Unlike Winnipeg, most municipalities have a staff person designated to monitor turnaround and intervene on delayed files, which is typically senior staff (Table 14).

Table 14 Questionnaire responses to "Do you have a staff person designated with monitoring turnaround and intervening on delayed files?"

Response	Count
Yes	5
No	3 (Includes Winnipeg)
No Response	1

A total of five municipalities have done a recent business process review, covering various topics such as roles and responsibilities of team members, timeframes, first time approval rates, and streamlined business practices. The process improvements that have made the biggest difference recently include concurrent review of applications by various departments, focus on level of involvement to only things that need team expertise, Zoning By-law Amendment (ZBA) and Official Plan Amendment (OPA) processes to meet provincial mandated timelines, and increase in staffing levels.

Prioritizing and Problem Solving

This section of the questionnaire focuses on how feedback, such as complaints and troubleshooting, are handled by the municipalities, as well as if or how submissions are prioritized.

In line with Winnipeg, every municipality stated that their submissions are dealt with on a first come first served basis. In some cases, large complex cases are given a priority over others, or applications with quicker timelines. Winnipeg does their best to accommodate deadlines and give priority to formal applications over queries. Most municipalities do not have a fast-track option for different applications, however in three cases, major applications are given priority, and in two cases affordable housing projects are given priority.

When discussing complaints, Winnipeg mentioned that the Services Development Branch or councillors receive them, where most other municipalities mentioned that each department handles them, and in most cases the leader is the one receiving the complaints. There is also an escalation process where it can go as high as City Commissioner or City Manager/CAO within some municipalities. In a few cases, leaders will handle complaints directly with the engineer involved, whereas other cases the complaint will lead to a team discussion to determine how to move forward.

Training/Development

This section of the questionnaire focuses on if there are processes in place to improve efficiency throughout the entirety of the application process.

Regarding processes for improvement of people, Winnipeg relies on hiring people with specific qualifications and learning on the job as there are no internal training courses. Most other municipalities responded that mentoring and shadowing is a big part of the training and development process. This includes employees who are new to their roles shadowing senior staff, previous position holders, and positions they support. Another key aspect of training and development that was identified is employees learning and gaining experience through professional societies, or through internal/external courses.

When asked about processes in place for improving the process itself, Winnipeg stated there is innovation at the high level for corporate, three municipalities stated that they have a specific community improvements team assigned to support the municipality, where some other municipalities mentioned that continuous improvement is incorporated or used as a lens in evaluating processes.

Based on the results, it appears that Winnipeg has not yet had the same staff turnover as other municipalities, having stability and a high level of experience. It is recommended that the City prepare in advance and develop a formal training plan so when the time comes, they are prepared, and the transition period is as smooth as possible.

MAJOR OBSERVATIONS

The following are our observations from the Market Scan, in no particular order of priority:

- Winnipeg has very comparable responsibilities in development review to the other municipalities we contacted, although volume of applications vary considerably (noting that municipalities count very different things when they track application volumes). All but one of the municipalities we interviewed managed their infrastructure directly, as opposed to having it managed through a utility corporation.
- Municipalities often publish application volumes but there is not consistency in whether they publish review times.
- In terms of population and municipal staff size, Winnipeg has the smallest staff complements for processing development applications.
- Design criteria, for the most part, are set locally, although Winnipeg has additional provincially-imposed criteria for certain drainage impacts.

- Generally, speaking, it is up to a developer's consultant to conduct the analysis of existing conditions and model a development impact. Few municipalities have standard models or tools on which this is based, although some have readily available GIS information on the location and sizes of infrastructure.

- Winnipeg does use comparable approaches to other municipalities in terms of processing applications on a first come first served basis with some expediting of municipal projects or high priority projects.

- Winnipeg has a comparable approach to managing complaints and complaints escalation to the other municipalities that were interviewed.

- Staff turnover has had a high impact on processing time in all municipalities. In our workshops with staff, we note that we heard about the relatively high level of experience (e.g., years of service) the Winnipeg team currently has, but there is recognition that this could change over time. Other municipalities we interviewed have seen the loss of seniority with staff turnover, and there were often comments that a high number of relatively inexperienced staff does impact service levels. There are not consistent approaches to training, but the municipalities with the higher turnover levels are starting to beef up their internal training programs and using mentoring.

- All municipalities we interviewed struggle with the productivity impacts of managing general inquiries. Combined with relatively low staffing levels, we suspect that Winnipeg is losing more processing time and can take measures to reduce that impact through dedicated staff or more self-service deposits of information.

NEXT STEPS

The questionnaire responses compiled from the market scan and presented in this Technical Memorandum will be used to develop recommendations for the development of process improvement options in the next stage of this project. Results show that the City is very comparable to other municipalities in most areas, having comparable results with lean resources. The key differences initially noted are regarding records management staff, self-serve data availability, how general inquiries are handled, modeling and variation standards, and processes for training and development.

As required in the Scope of Services for this project, next steps include:

- Development of Process Improvement Options in accordance D14; and
- Final Report in accordance with D15

To form our final recommendations, we will need to combine the results from the Market Scan, with the Development of Process Improvement options, so the conclusions in this memo will be refined through that work leading to the Final Report.

Reference: Technical Memorandum - Market Scan Results

Best regards,

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Attachment: Appendix A: Market Scan Questionnaire
Appendix B: Market Scan Raw Data Spreadsheet

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General information:

1) Name of Municipality:

2) Name of contact person at the Municipality:

3) Title/Role of contact person:

4) Is water/wastewater managed directly by the municipality or by a separate utility corporation?

5) Does the municipality have a combined sewer overflow system? Is it regulated? Are there different rules for development in CSDs?

Annual Activity Levels

6) Does the municipality track the number of applications, and do you make that information public?

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7) Approximate number of development applications reviewed each year? Can you describe the major categories of applications?

8) Do you track the time for processing? If so, is that information made public?

9) Do you break down the number of applications by type of application? If so, is it by approval type (e.g., rezoning vs. site plan approval)?

10) Do you track infill applications separately from greenfield applications?

11) How are development applications processed for infill and greenfield developments? Does the same team look at greenfield that looks at infill, or are these different staff?

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Resources Questions

12) Approximate number of staff in the municipality?

13) Approximate number of staff in land development engineering review roles?

14) How many departments/divisions are involved in reviewing a development application?

a. How many people does this involve?

b. Is this their primary job function or do they do other duties as well?

15) How much do you think staff turnover impacts pace of work?

16) How are the past design details of the development projects maintained? Do you have separate staff maintaining these records?

Managing Inquiries

17) Do you have dedicated staff to handle general inquiries regarding municipal servicing capacity (not part of an application)? Do you charge for these types of inquiries?

18) How much staff time as a percentage do you estimate your team spends on inquires that are not related to a formal application?

19) Do you have a different process for informal queries, pre-applications, and applications?

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Pre-Application and Application Processes

20) What steps are required for a developer to make an application for development (e.g., rezoning, pre-application for capacity, etc.)? What do you require from them in terms of engineering reports for an application?

21) What level of engineering designs are required for submission (i.e., servicing reports, detriment analysis to the system, etc.)? At what stage are engineering designs required in the review process and is it the same for all planning branches involved?

Additional questions if appropriate:

a. What building types/sizes require a fire flow review?

b. Do you require applicants to submit fire flow requirement calculations?

i. If yes, what stage do you require these (i.e. query, dev. app, permit submission)?

ii. Do you provide a template or spreadsheet for calculations?

iii. How do you handle submissions where an engineer has not yet been retained? Do you calculate fire flow requirements yourself based on provided building details?

iv. If you do calculations yourselves, do you provide options to reduce fire flow requirement/increase available fire flow if needed?

c. When a development will rely on private hydrants, do you review private on-site hydraulic design to ensure required fire flow is provided? Or do you confirm the required flow is available at the City main at a minimum acceptable pressure?

d. Do you review private service design to ensure acceptable water age (quality) is maintained in the service? Do you require the engineer of record to perform this analysis?

22) Do you provide open-source models / GIS information / past studies? Or does the developer have to request all information from the City? Is that information online or must it be requested? (To what degree of engineering analysis does the Utility provide to the Developer/Consultant e.g., district, region, local, pipe by pipe, etc.)

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23) At what level of application do you establish if there is sewer capacity? Do you do it at a community plan level, site-specific zoning, or detailed site plan level or another point in time?

24) What software/applications are they using?

25) Does the municipality charge for any background information?

26) What are the developer submission requirements for development approvals in infill and greenfield developments?

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27) Does the municipality or utility do the engineering for the developer or does the developer have to have a qualified engineer prepare the designs? Would an engineering consultant be required to analyze the infrastructure network that services multiple developers, larger areas and possibly across planning districts/areas (e.g., regional infrastructure) or only the lower-scale infrastructure servicing a developer's land and perhaps only a modest additional area beyond that developer's area (e.g. local infrastructure)?

28) Do you have any different engineering submission requirements between greenfield versus infill development projects?

29) Are your design criteria set by the municipality, or by the Province/State? Are there any special criteria for Combined Sewer areas (and are they local or provincial/state?)

30) What are the requirements for meeting water quality in a design? Does it require meeting both water quantity and quality in a design?

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31) Do majority of consultants understand their responsibilities in the process?

32) Is your primary point of contact with the developer or their representative professional (e.g. engineer or planner)?

Infrastructure Asset Management Questions

33) How do the various Water and Waste equivalent branches (Utility) determine infrastructure capacity for water and sewer (wastewater, land drainage, or combined);

34) When there are capacity limitations, does the municipality allow for a variance from the standard to allow for exceedance of the required capacity and what is the process for addressing the system upgrades?

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35) Which part of your organization communicates with developers regarding cost sharing of infrastructure benefitting multiple property owners?

36) Does your municipality have combined sewers for all or part of the community?

37) Do you have master servicing studies for greenfield areas? Is it up to date reflecting current planning assumptions on density of development?

38) Do you have master servicing studies for infill areas? Is it up to date reflecting current planning assumptions on density of development?

a. Are master servicing studies updated when there are changes to municipality design standard requirements? If so, how?

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39) Do you have water, wastewater or stormwater models that you make available to applicant's engineers/consultants for their analysis?

40) Is there a shared database on applications and/or a shared GIS system between municipal infrastructure and utilities?

41) Do you incorporate other City goals (e.g., downtown revitalization, rapid and/or affordable housing) into the development application process? If so, how?

Measuring Turnaround time Questions

42) What are the expected turnaround times for commenting on development applications?

43) Does the municipality keep statistics on how they are doing against those targets?

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44) What are the typical number of engineering submissions per application?

45) Do you make this information public?

46) When applications move slowly in the system, what are the typical reasons? (workload, poor quality of submissions, lack of critical information)

47) Do you have a staff person designated with monitoring turnaround and intervening on delayed files?

48) Have they done any recent business process reviews, and if so, what did it focus on?

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49) Have you made any recent improvements to your processes and if so, which ones made the most difference to turnaround times?

Prioritizing and Problem Solving

50) How do you prioritize submissions?

51) Do you have any fast-track options for different types of applications? Do you have a special process for big projects/major redevelopments? Affordable housing, infill, greenfield, etc.?

52) Where do complaints go?

53) What is the follow up with those originally involved?

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54) How much has politics/troubleshooting of external/internal items influenced the process? Do you have any examples?

Training/development

55) Are there processes in place for improvement of people? Is mentoring actively pursued? Are there specific training courses or task instruction or is this a duty undertaken by colleagues who encourage informal job shadowing?

56) Are there processes in place for improvement of the process itself? Finding efficiencies through implementing new technologies or tools, reduction in labour, removing overlapping tasks, provision of timely information, etc.

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57) Do you feel that you have a good organizational structure with different levels of experience/seniority to review files with different levels of complexity? If not, where are your gaps?

Number	Questions	Winnipeg, MB	Saskatoon, SK	Regina, SK	Calgary, AB	Victoria, BC	London, ON	Ottawa, ON	Indianapolis, IN	West Fargo, ND
20	What steps are required for a developer to make an application for development (e.g., rezoning, pre-application for capacity, etc.)? What do you require from them in terms of engineering reports for an application	Reference previous document from workshop	On the engineering side we want a plan of the development, type of land use, expected flows. What is the expected impact on our systems. Sometimes geotech reports are requested Engineering & Planning evaluate water and sewer system capacity using hydraulic models and flow monitoring data. Water: Developer-consultant needs to perform fire flow test and prepare fire flow sufficiency report by a qualified engineer. Sanitary: Developer-consultant needs to calculate the expected peak flow rate. Storm: Developer-consultant needs to calculate onsite storage and runoff flow rate based on given design runoff coefficient by the city.	concept-zoning-subdivision-permits, zoning-subdivision-permit	Development details, proposed intensity, volumes and flows.	Pre-application meetings are scheduled in advance of formal application submission. Developer and City work together to determine the system impacts.	Very broad question. Depends on application type; will need servicing brief, some times traffic impact assessment, planning justification report and the list could go on. If the application is more complex there are other reports. Often subdivisions will have more reports than rezonings for site plan.	Pre application - understanding of the proposed uses so they can send inquiry internally about capacity. Information as opposed to design work	At submittal, they must submit the application, plans, project narrative and drainage calculations. Upon further review, the engineer may request more info based on the project. We contract our commercial reviews out to engineering firms on the commercial submittals.	Engineering involvement is typically minimal in the rezoning process and driven on information provided by the applicant. Once future end use goals are submitted Public Works and Engineering will conduct base level analysis for capacity. If further modeling or analysis is needed, the applicant or City may request services of an outside consultant for these items. Depending on the size of the project, a feasibility study or report may be commissioned. For development entitlement applications (e.g., subdivision, rezone, conditional use permit), a pre-application meeting is required for major subdivisions and encouraged for everything else. Otherwise, submittal of a complete application is the only thing required to initiate the entitlement application process.
21	What level of engineering designs are required for submission (i.e., servicing reports, detriment analysis to the system, etc.)? At what stage are engineering designs required in the review process and is it the same for all planning branches involved	spoke about in the workshop	Engineering studies are required at the concept plan submission stage. These include servicing reports, hydraulic models, grading plans, hydrogeological study, design spreadsheets, design elevations, catchments and cut/fills	greenfield - serviceability at concept plan - detailed design at subdivision - check at permit, infill - City can run model / check - yes or no - if no capacity developer needs to engage engineer	Formal servicing reports are required with applications and ust be approved before the application is approved.	Water servicing report, sanitary servicing report, stormwater management report are required with each application submission. Close attention is paid to capacity in the system since the system is shared across numerous municipalities in a pre-defined proportion.	Engineering design is completed after draft approval or as part of site plan design.	Final document should comply with standards and guidelines for provincial and local. Phase 3 - has to approve with changes required if needed. Has to be as final as possible before completing the submission		Differs by department. Engineering is involved in review of plans and agreements over the life-cycle of the application process. Typically final plans are not necessary until submittal to the City Commission for final approvals. Earlier submittal are always encouraged as it is typically the timing of applicant submittals that controls the speed of the project development process.
a)	What building types/sizes require a fire flow review	any development looks at fire requirements vs available. If it is in a greenfield area with a servicing report it is already known. Compare to knowledge and do calculations themselves. Sometimes they have to make assumptions, others they will require more info from applicant.	Fire flow sufficiency reports are typically requested for infill development where hydrant flows may be less than those of greenfield areas	All	All MF residential of 4 units or more, Commercial, Industrial,	All developments.		Required for all applications, part of the design guidelines to demonstrate capacity		Fire department review, no significant engineering or building inspections contributions. Depends on use, generally over 12,000 ft. sq.
b)	Do you require applicants to submit fire flow requirement calculations	Do calculations themselves	Yes as mentioned above	Yes	Yes	Yes		Part of the standard engineering review		General process: Building may require sprinkling per code. Designed by engineer, installed by a licensed sprinkler contractor. City keeps record of what was installed and fire flow on file. No template is available. Requests for reduced flow are considered on a case by case basis.
i.	If yes, what stage do you require these (i.e. query, dev. app, permit submission)	will do it at various times throughout the process, sometimes with assumptions, or later on with all details	These are usually flagged at the subdivision or rezoning stage, to be submitted with a building permit application	permit submission	Site servicing stage.	Development application		Up to each consultant to present their information how they seem fit		
ii.	Do you provide a template or spreadsheet for calculations	no, done themselves	We direct to our standards including AWWA and Fire Underwriters Survey	No	Performance requirements and share inputs and outputs from the water servicing model	Details are provided by the City to the developer		Ottawa has a model engineering report online to guide applicants	No, the engineer would provide his calculations but based on our requirements	
iii.	How do you handle submissions where an engineer has not yet been retained? Do you calculate fire flow requirements yourself based on provided building details	N/a	These calculations are done by an engineer and not the city. We provide hydraulic info from our city wide model and a hydrant flow test can be scheduled with our system modeling team. A stamped report is submitted by the developers engineer.	No	Require an Engineer be involved.	Engineer must be employed on the project		N/A	We do not accept commercial submittals without an engineer of record	
iv.	If you do calculations yourselves, do you provide options to reduce fire flow requirement/increase available fire flow if needed	they do provide options, onsite or off site, provide everything they think they will work, no pricing or ranking and up to consultant to decide what to do	We don't do the calculations ourselves but often note that multiple connections for a site may be required or that introducing sprinkler systems will lower the required fire flow.		Sometime provide support on the calculations	n/a		Ottawa does not do the calculations, applicant is responsible for them		
c)	When a development will rely on private hydrants, do you review private on-site hydraulic design to ensure required fire flow is provided? Or do you confirm the required flow is available at the City main at a minimum acceptable pressure	provided to the private system, wont review rates	A hydrant flow test is required by the fire department to ensure adequate pressure in the case of a fire event. This is required to be tested and available to the fire department on an annual basis.	Require confirmation of fire flow to hydrants	site servicing drawings (DSSP) must be approved prior to release of the DP.	Private onsite hydrants are reviewed for proper flow.		If a new use comes on that requires a shorter distance to hydrants, a private hydrant will be required and applicants are responsible for doing the background work on it		The City confirms the available pressures at city mains. The consultant team then designs the system off of this information.It would be on a case by case basis, but staff generally will not be reviewing hydraulic design calculations.
d)	Do you review private service design to ensure acceptable water age (quality) is maintained in the service? Do you require the engineer of record to perform this analysis	provide themselves. Sometimes they will	No	No consideration for water age	Yes and Yes.	Engineer provides this detail		They do requre water age analysis		If there is concern about the length of services, the design team may be requested to demonstrate a water quality and age analysis.
22	Do you provide open-source models / GIS information / past studies? Or does the developer have to request all information from the City? Is that information online or must it be requested? (To what degree of engineering analysis does the Utility provide to the Developer/Consultant e.g., district, region, local, pipe by pipe, etc.	do not have open-source GIS. If someone is doing a project, they can request a data dump of the GIS, it is project based. They do try to provide info when they are able to. Water - do not provide model but provides flow	The developer will make a request for this information. Our in-house design and system modeling teams provide for regulatory review. We also provide engineering and designs for the internal land development branch of our city. City of Saskatoon also has an in-house design and modelling team which plans sector level servcing strategies and complete concpet plan designs for city's led new neighbourhoods..	Prefer to own / operate model themselves - challenges with providing model out as updates not directly related but impacting required by developer which results in challenges	City coordinates the sharing of previous reports. Some inputs and outputs are shared with the Engineer.	City shares previous relevant studies with the developer on request.	City will provide past studies to developers and access to our City Map which includes some information such as zoning. The sewer information is always requested and City will provide as-built design sheets as part of application process for site plan or subdivision.	GIS online, everything is available online	The engineer or developer would need to request any information they believe they need that we may have. Otherwise, it is on them to do the research and develop their own information.	The City will provide this information, generally free of charge, at the request of the developer or the design consultant.

23	At what level of application do you establish if there is sewer capacity? Do you do it at a community plan level, site-specific zoning, or detailed site plan level or another point in time	site specific, new vs existing development, look at capacity,	This is done at the sector plan and concept plan levels. For existing areas, comments related to capacity are relayed to the developer during rezoning or subdivision applications. It is typically done at the rezoning and building permit levels. However, the system capacity and required improvement at community plan level (e.g., downtown and corridors) are also performed for master planning and capacity improvement program.	concept level	All levels	Sanitary sewer capacity is established at the municipal, regional, local and site levels. Wastewater treatment is shared across 14 municipalities.	Sewer capacity at a high level is determined at zoning stage and worked through in a more detailed level as part of site plan and subdivision.	Confirm capacity for CDP(?). If there is not a study, they require the analysis to be done at the application phase		Generally this is not verified as much of the system is newer, and most areas of green field development sewer was sized accordingly. In areas of redevelopment, or high density infill, this is verified during review.
24	What software/applications are they using	Hexagon GeoMedia (GIS), excel, ICM hydrolic model, EPAnet (water)	PCSWMM, XPSWMM, WaterCAD, spreadsheets,	WaterCAD, InfoWorks ICM (ww and storm)	POSSE for application workflow and document management		Reviewers use bluebeam and adobe to review application.	Was not able to confirm		Civil 3D mainly. I believe a pipe network model exists for much of the city, but it has generally not been kept up over the past 3-4 years.
25	Does the municipality charge for any background information	No	No	No	No	Copy fees only	Currently, no.	Yess, fee is online	We do not charge for information, but if they request the documents to be printed or put on a c.d., then they must pay for those costs of the paper and c.d.'s	Generally this information is provided free of charge, but depending on the level of effort, fees may be applied.
26	What are the developer submission requirements for development approvals in infill and greenfield developments	in the other work we have	The development package includes site grading plan, flow calculations for fire, sanitary, and runoff release rate and on-site storage for storm. For site storage the associated contours and locations of storages need to be shown in the plan. At the building permit stage, the developer needs to send the internal water and sewer plan and design.	Submission requirements differ depending on stage	Water and sanitary servicing studies to show onsite and all downstream infrastructure works with the proposal. Similarly with Stromwater.		Submission requirements are laid out in the consultation notes and depending on the file it can change. Some files may require a traffic impact assessment and other wont. A big subdivision file may require a water model review at the zoning stage.	All online with the terms of reference		Private - plat, zoning, and subdivision approvals, building and site plan approval. Public - A petition requesting public improvements supported with evidence of ownership (attorney title opinion, etc...) will start the capital project process. There can be several forms of agreements needed as well.
27	Does the municipality or utility do the engineering for the developer or does the developer have to have a qualified engineer prepare the designs? Would an engineering consultant be required to analyze the infrastructure network that services multiple developers, larger areas and possibly across planning districts/areas (e.g., regional infrastructure) or only the lower-scale infrastructure servicing a developer's land and perhaps only a modest additional area beyond that developer's area (e.g. local infrastructure	they do their own engineering to check, but they do not provide anything stamped. If it is something more than baseline complexity, onus is on developer to provide	The consultant only does the neighbourhood scale design. The sector level water and sewer infrastructure planning, modeling and design are performed in house by Engineering and Planning.	Developer. Would need to review any and all required to meet minimum design standards.	Engineer must be employed on the project	Engineer must be employed on the project	Developer does design and City teams reviews the designs for site plan and subdivisions.	The City does not do any engineering, it is the applicants responsibility, Ottawa roles is only verifying, Infrastructure is the same, they contract out	The Developer or applicant must hire and pay their engineer to prepare the submittal; we receive the submittal and send out to our contract engineer to perform a review and charge the applicant the review fees for our engineer's review	The municipality is not currently staffed to prepare significant plan and design work. Depending on the size and scope of the project, a consultant may be asked to analyze large areas potentially outside of what would be considered the development project area.
28	Do you have any different engineering submission requirements between greenfield versus infill development projects	the same - depends if it is in a combined sewer or septic. Different CSO areas, infill areas may have older standards to take into consideration	They are the same. Infill developments are further reviewed for system capacity requirements.	No	No	No	It depends on complexity of the application less so on the requirements for greenfield vs infill. For greenfield we do work with developers to establish infrastructure projects for extension of infrastructure. This is timed with developers and their needs. This process is called Growth Management Implementation Strategy.	Different stoemwater standards - based on years. Depending on the area those standards may change. Water and Sewer are the same standards - may be some constrainsts in different existing areas		Capacity analysis is scrutinized more under infill development conditions.
29	Are your design criteria set by the municipality, or by the Province/State? Are there any special criteria for Combined Sewer areas (and are they local or provincial/state	they set their own, Combined sewer areas are additional provincial standards that overlay	City develops its own standards. They usually meet or exceed provincial standards.	municipality, no CSO	City requirements must be met. High level Provincial requirements must be adhered to at point of treatment or outfall.	Captial region provides water and sanitary services for the City of Victoria	Design standards set by municipality. We do rely on some design standards from Province as the province requires City's to be in compliance with ECA (Environmental Compliance Approvals) for sewers and Form 1's for watermains.	City sets the engineering standards, provincial standards are required to be achieve. Mix of standards - provincially and locally imposed standards	Design criteria for the drainage, streets, driveways, etc. is set by municipality. Floodplain is set by Federal and then by municipality; building, eletrical, plumbing are set by state and then municipality	Design criteria established by the North Dakota Dept. of Environmental Quality - typically the 10 States Standards. The municipality has further provided design specifications. The municipality does not utilize a combined sewer system.
30	What are the requirements for meeting stormwater quality in a design? Does it require meeting both stormwater quantity and quality in a design	Just quantity	There is no water quality requirement.	No quality standards	Yes, quantity and quality requirements.	Yes, quantity and quality requirements.	Yes, developer needs to follow design standards by the City	Yes, varies in different parts of the City. Both quality and quantity, different areas have different standards, was from conservation authority bt now up to the city, they have studies.	Yes, water quality is within our standards manual and they must design to meet both	see above
31	Do majority of consultants understand their responsibilities in the process	Depends, mechanical engineers don't really know but tries, and some engineers are terrible. Land drainage - larger greenfill based sites have typical players that they know. Gets mreo challenging with smaller infill developers as city has no say on who is the consultant and makes it harder with people not fully aware of the citys standards	Yes	Yes, customer questionable	Yes, local consultants are well versed in the process and their responsibilities.	Yes, local consultants are well versed in the process and their responsibilities.	Yes they do, but still try to deviate from the process. Ends up resulting in them wasting more time.	They should, majority do, some not so much	Yes, they understand their roles and responsibilities	Generally yes but to varying degrees. Staff generally try to be readily available to answer the multitude of questions that arise.
32	Is your primary point of contact with the developer or their representative professional (e.g. engineer or planner)	normally do not have to deal with them, the technical services branch does, but if they do it is the engineer. Sometimes it is both, developer will be involved in the less technical stuff	Both	dependent on developer	Engineer is point of contact.	Engineer is point of contact.	Generally the engineer, but once developer doesn't like the answer they get involved	They have practices, keeps everyone in the loop about what the conversations are	For commercial the contact is the engineer of record for the applicant. Residential will be the applicant and quite often the property owner.	The design engineer.

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33	How do the various Water and Waste equivalent branches (Utility) determine infrastructure capacity for water and sewer (wastewater, land drainage, or combined	site by site, comes with experience, following initial intent	Engineering and Planning in Saskatoon water is the section that manages and analyzes system capacity using various hydraulic models and data collected from our monitoring system.	Capacity based on model	Capacity models are maintained and run by the City.	Capacity models are maintained and run by the City.	Water has a detailed water model. Sewers unfortunately is relying on existing design sheets. Sewers is working towards a live model that will use flow monitoring throughout junction points to better understand actual capacity		You need to contact CEG	The department of Public Works monitors this primarily by observation of lift station pumping rates.
34	When there are capacity limitations, does the municipality allow for a variance from the standard to allow for exceedance of the required capacity and what is the process for addressing the system upgrades	case by case, bare minimum should do no additional harm, always a question of capacity vs environmental. If no additional harm will be done, a deal is typically made	System upgrade or alternative/modification construction/development methods are currently the ways to address the capacity limitations	Yes variances are permitted but only for modeling error. Can apply for design exemption, goes to executive director level	Cascading requirements from the studies must be adhered to.	Extensive negotiations are undertaken to find ways to reduce the sanitary and water demand for projects.	City will place a holding provision on the development until there is adequate servicing. We have a growth infrastructure program that looks right now more at greenfield development. In near term, looking to create something similar for infill development projects to release bottlenecks.	Strict, creative to comue up with a way to buffer or store onsite until off peak	You need to contact CEG	Not aware of significant capacity issues being raised. There is a rarely used variance process for approval from the City Commission, but detailed analysis would be likely be required as well as capacity upgrades entered into before recommending any new development project be completed. It would likely be recommended to conduct capacity improvements before or concurrent to development.
35	Which part of your organization communicates with developers regarding cost sharing of infrastructure benefitting multiple property owners	client property (?) development, and water/waste when technical	Land Development Section - Construction & Design	Same group, endeavor to assist, no real policy for cost sharing	A different team is responsible for managing and drafting development agremeents which include all developer charges, cost sharing and fees.	Engineering application reviewers manage both the technical requirements and the cost sharing elements of the application.	Development finance team	land owners organize themselves based on cost sharing, onus is on the applicant to start out cost sharing and bring the answer to you	The only cost sharing would possibly be sewer or water - that would be CEG	The municipality has an infrastructure funding manager that works with the engineering department to calculate and communicate these items.
36	Does your municipality have combined sewers for all or part of the community	33%	City of Saskatoon does not have combined sewers.	No	No	Only in isolated circumstances.	Some combined sewers in older neighbourhoods. Sewer Engineering team is hoping to separate these in near term.	combined sewers for part of the city, maybe a third of the urban area	We have combined for part of the community. The future plans are to separate them to avoid overflows. That information is best to obtain from CEG.	N/A
37	Do you have master servicing studies for greenfield areas? Is it up to date reflecting current planning assumptions on density of development	Yes, adapted into the servicing reports instead of updating secondary plan. Specific larger complex sites, if there is a deviation, they make the engineer make the update through their report	Yes. It gets updated every 5 year.	Yes	There are master servicing studies that are the foundation for any decisions within the municipalities.	There are master servicing studies that are the foundation for any decisions within the municipalities.	Yes we do. We review this every year and adjust timelines for developments for infrastructure projects.	Yes, if there has been a long period of time		The municipality has had these in the past, but there is currently very little greenfield area left to develop in the short term. As new areas will be looked to develop, the city will enter into these studies typically at the request of the raw land owner.We anticipate undertaking a Growth Area Master Plan within the next two years. Part of this effort will include some level of planning study for future utility servicing. Since most of our future growth area is within a rural water district, we will need to coordinate this work with that water utility provider.
38	Do you have master servicing studies for infill areas? Is it up to date reflecting current planning assumptions on density of development	Point Douglas - area that doesn't have a secondary plan right now	Yes. It is updated based on information provided by Planning & Development	No	No. Local evaluations are completed.	There are master servicing studies that are the foundation for any decisions within the municipalities.	No we don't yet. We are hoping to incorporate one. Difficult to determine which areas get priority at the moment because we don't have a great sanitary model/data to rely on.	Not for infill		The city's current priorities are in performing reconstructs in the older areas of the city, at similar density levels using more modern infrastructure standards.
a)	Are master servicing studies updated when there are changes to municipality design standard requirements? If so, how	application deals with it, may flag that there may be additional limitations, but does not update the master servicing study	Master plan document is a high level infrustructure planning for sector level analysis while, design standards are more related to detail design of finer neigbourhood scale	No	No. Local evaluations are completed.	Yes. Currently there is a 10 year review on the overall sanitary and water servicing model for the entire Capital Region		Not usually		Too early to tell, the City has just began efforts to make some minor subdivision design standards changes. Most master servicing studies have now outlived their usefulness.
39	Do you have water, wastewater or stormwater models that you make available to applicant's engineers/consultants for their analysis	Wastewater has given models out before but it is required to be updated by them, model is not refined enough , water gives flow curves for connection points but not models.	City-wide models for all three services are available and updated on a regular basis. Usually segments of the models with proper boundary conditions are provided to applicants/consultants.	Yes	Sanitary model available, water model is held internally. Engineer is responsible for the stormwater model.	Models are managed internally. Collaboration with Engineers on the inputs and outputes.	Only some consultants have access to water model. Don't have sanitary or storm models	They have models, have to confirm if they make them available, applicant provides the details	This is for CEG	The city does have a somewhat dated water model.
40	Is there a shared database on applications and/or a shared GIS system between municipal infrastructure and utilities	answered previously	The city has a couple of its own utilities, Saskatoon Light & Power and water utility, we do not share systems with outside private utilities.	City system is Cityview. It is not public.	Yes. Internally only.	Yes. Shared system for the Capital Region	Shared location on website where current applications are stored. We do have a GIS program that shows current and closed applications as well.	Shared both publically and internally in terms of utilities, GIS is shared	No, however, we do share our data with each other. We have some of the water and sewer lines on our GIS but we do not guarantee the accuracy since we are not the keeper of such records.	ArcPro and Cartograph are used for data and asset management.

41	Do you incorporate other City goals (e.g., downtown revitalization, rapid and/or affordable housing) into the development application process? If so, how	consultant takes more liability so that gets fast tracked to 5 days. Informal prioritizations, affordable housing is in policy documents to support	unknown at this time	No. Not integrated into application process.	Coordination at the application level between Planning and the Engineering Team.	Yes. It is a careful and intentional colloaboration to align the redevelopment goals with the available utility capacity.	London has various tools. Community Improvement Plans are in place for Downtown, Old East Village, Brownfields, Heritage, Affordable Housing, etc. These plans provide guidelines and also offer incentives for certain community benefits. E.g. Development Charge rebates in Downtown or for Affordable Housing units, or loan program for upgrades to building code along historic main streets in some areas. Urban Design Guidelines are also used in certain areas. The City also has Heritage Conservation Districts.	Outside their engineering realm, but included in the application	This would be for DMD to determine	Use of incentives, etc

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1	Name of Municipality	Winnipeg	City of Saskatoon	Regina	City of Calgary	City of Victoria	City of London	Ottawa	City of indianapolis; Department of Business and Neighbourhood Services	City of West Fargo, ND
2	Name of contact person at the Municipality	Ho Lau	Roger Bradley, Darryl Dawson, AJ MacCannell, Nisar Khan, Hossein Azinfar	Jen Cross	Maggie Choi	Brent Molnar	Peter Kavcic	Jeff McEwen	Dana Brill, Supervisor	
3	Title/Role of contact person		Building Standards Manager, Development Review Manager, Engineering Manager Saskatoon Water Utilities and Environment	Manager, Servicing and Infrastructure Approvals	Manager, Infrastructure Delivery	Supervisor, Land Development in the Engineering and Public Works Department	Managerm Subdivisions and Development Inspections	Manager of Planning Operations and Continuous Improvements	Supervisor for Right-of-Way and Infrastructure Permitting and Enforcement	
4	Is water/wastewater managed directly by the municipality or by a separate utility corporation?	Winnipeg manages it	Each utility is managed by the City (Saskatoon Water Department)	Regina manages it	Utilities are managed by the City of Calgary	Utilities are managed by the Capital Region on behalf of 14 local municipalities in the Victoria region	Designed and operated by City.	Ottawa manages its own water	It was sold several years ago to a utility, Citizens Energy Group - who also manages, owns, maintains the water, thermal and gas	The city does bill directly for water and sewer, however we purchase treated water and sewage treatment from the City of Fargo, & separate utility provider in Cass Rural Water.
5	Does the municipality have a combined sewer overflow system? Is it regulated? Are there different rules for development in CSDs	combined sewer system in part of the city and is provincially regulated by license, 33% capacity	Saskatoon has separate storm water and waste water systems	No	Separate systems used.	Separate sewer systems	Yes we have combined sewers and overflow systems. It is regulated	Does have a CSO system, regulated by the Province. City has envicronmental compliance certificate for how it operates	Yes, we do have combined systems but are working to eliminate or separate them.	The city does not have or allow combined sewers. The city has a lagoon system that had historically functioned as an overflow/treatment system. There are diferent rules for development in particular areas that have shared jurisdictional authority

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6	Does the municipality track the number of applications, and do you make that information public	starting to track it, but do not make it public, informal tracking, no metric	For Building and Development permit related to construction, vistit https://www.saskatoon.ca/services-residents/homebuilding-renovations-improvements/building-property-information/permit-data-reports For other zoning related applications, there is a report generated and provided to the public in a quarterly view.	Yes. Using Cityview which can provide data but isn't easily reported (no summary of results). Not currently public.	Yes. Information is reported regarly to the industry and public.	All applications are tracked. Less than 5% of the municipality is undeveloped. Most development is redevelopment. Details on the number of applications are not public.	Yes. Information made public through an Annual Development Report. More recently, the City will also track quarterly in conjunction with Provincial "pledge" tracking and Federal funding tracking.	They do track and share an annual report that is made public	All of our permits, investigations and violations can be viewed on-line using our on-line system:Accela Access Portal. There is a link on our web page: www.indy.gov/bns. We are an extremely large municipality that has several departments. Our specific department handles: the permitting, investigation and violations for enforvement, wegiths and measures and we have animal control	The city does track these applications. The numbers are not published but available upon request
7	Approximate number of development applications reviewed each year? Can you describe the major categories of applications	250	See report link above	Categorize by permits and planning. Building and development permits = 1157 (2021), 570 (2022). Planning applications 79 (2021), 46 (2022) + 110/yr of applications not fully migrated over	2000 DPs, 500 Site Servicing Plans, 100 Engineering Drawings for greenfield subdivisions,		769 Planning applications received in 2022. 825 in 2021 and 671 in 2020. Categories: Official Plan and Zoning By-law Amendment, Temporary Use, Removal of Holding Provisions, Draft Plan Subdivision, Draft Plan Condominium, Part Lot Control Exemption, Consents (Severance), Minior Variance, Site Plan, Pre-application consultations, Site Plan consultations.	1077 to 1376, closer to the lower end of range	Thousands and thousands; We are separated into groups: Infrastructure does the Residential Drainage, Residential Flood, Residential Driveway, Commercial Drainage, Commercial Flood, Commercial Driveway, Street Construction and easement encroachments; The Right-of-Way group reviews all restrictions, excavations and encroachments into the right-of-way.	West Fargo has undergone significant growth in the last 20 years. Historically the City has received as little as a few, and as many as dozens of requests for public infrastructure and improvements per year (i.e. public development projects). These have all utilized special assessment methods for funding and generally include a combination of water and sewer mains, storm sewer, and streets systems in some combination. See #9 below as well
8	Do you track the time for processing? If so, is that information made public	informally track but is not made public	We report out on average performance to the established targets with respect to \Bbuilding and Development permit https://www.saskatoon.ca/services-residents/homebuilding-renovations-improvements/getting-started/building-permit-timelines	City does track but tracked at department level. Different permits have different timeframes for review. Dedicated newsletter made public.	Yes. Information is reported regarly to the industry and public.	Processing time is tracked but not available publically.	Yes, time tracked. Public reporting in Annual Development Report identifies percentage meeting the statutory timeline for the application type (Ontario Provincial legislation stipulates timelines).	It is tracked, made public in annual report	Our permit issuance group that handles the structural, improvement location and wrecking permits do track time spent on reviews.	The City tracks time for processing of new development projects as not to cause undue burden to the applicant, however there is not a clearly defined processing time. The progression is largely governed by the time it takes the Planning and Zoning Commission as well as City Commissions to approve or deny the project
9	Do you break down the number of applications by type of application? If so, is it by approval type (e.g., rezoning vs. site plan approval)	info on different types of applications	Our permitting system distinguished between different permit types. Not sure how zoning related	Yes. Multiple permits all sorted by type.	Yes. LUA, DP, Site Servicing, SWMR, sanitary servicing studies, etc.	Yes. Applications are broken down by type.	Yes, per answer number 7, categories are by application type.	The annual report has it broken down	Zoning is reviewed under the Improvement Location Permit type.	West Fargo Planning and zoning tracks zoning changes, all plats, PUD's, CUP's dedications, vacations, variances, etc. Historically it was common to see 10-12 items per month or more presented for approvals. With the city's greenfields largely developed, this number has gone down to 2-3 per month. Planning differentiates Commission-reviewed entitlement applications (e.g., subdivisions, rezoning, CUPs, PUDs, variances), as opposed to administratively-reviewed building permit applications (building & site plan review).
10	Do you track infill applications separately from greenfield applications	no	Applications are tracked and associated with individual sites and their neighborhoods.	Have check box in system to differentiate but forms are the same.	All application tracked together but details within each community are provided.	A majority of applications are redevelopment.	City tracks and reports "intensification" (development within the Built Area Boundary) versus Greenfield in the Annual Development Report. Tracked against an intensification target identified in the London Plan (official plan).	Tracked by area, not by greenfield vs infill	Not sure of this wording; we do handle wellfield permits, but that is handled by the other group in coordination with our Development of Metropolitan Development Department (DMD).	No we do not track separately for development entitlement applications. Aside from what has been noted above, the City Building Inspections also tracks and monitors the number of residential and commercial building permits. This information is available on the Building Inspections website
11	How are development applications processed for infill and greenfield developments? Does the same team look at greenfield that looks at infill, or are these different staff?	everyone looks at the same stuff	On the engineering side both types of development are reviewed by the same staff. The applications are submitted to Planning & Development Department (PD). After registration and initial review, PD submit the application package to land development section (LD). The required off site levy is calculated and the package is submitted by PD to various reviewer groups to collect their feedback and prapare a formal response to the developer.	Same info, same team. Neighbourhood team (high level) and site team (permits/infill).	The City is broken down into 8 teams with 4 for established areas and 4 for greenfield areas.	Same team for all development types.	For the both Engineers and Planners it depends on process, not geographic location. e.g. Current Zoning and OPAs are handled by one section, Site Plan is another; Subdivisions are again a different team.	Same team works on both, broken down by geographic area. Central district is the only one specific to infill	Infill = if you are referring to fill for the purpose of raising properties, that is under the drainage permit submittal and the the floodplain development submittals.	Same staff review infill and greenfield developments. The City has a development review team that reviews all applicants that wish to meet. Members of the Planning, Engineering, Fire&EMS, Public Works, and Economic Development departments, as well as the Park District hold bi-weekly meeting to discuss development projects and answer questions of applicants (other departments as needed or requested). This is not a requirement (although it can be a recommendation), but more of a service in an attempt to provide resources to developers

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12	Approximate number of staff in the municipality	over 10000	Approximately 4000 permanent employees	3000 (employed by City)	17,000	n/a	Approximately 2000	17000 within municipality, 40% are engineers	Unsure of the total number in municipality, but we have approx 150-160 people; Our department includes enforcement, licensing and permitting.	300-350 seasonally dependent
13	Approximate number of staff in land development engineering review roles	10	Building Standards - 6, Engineering & Planning (EP) - 6, Planning and development employee Planners - 7 Transportation and Saskatoon Light and Power is unknown at this time.	22 FTE (3 sr Eng, 5 pro eng, 5 techs, 1 sr lndscp, 2 dev coor, 4 insp (1-3)	200 Engineering focused,	12 Engineering team staff who work on infrastructure reviews	Approximately 100	100 related to development review	Land Development would be our Department of Metropolitan Development (DMD)	2 technicians are tasked with review as a supplimentary role. Depending on the complexity of the project up to four engineer's of varying background may also review
14	How many departments/divisions are involved in reviewing a development application	water/wsatewater - service development, more specific department does review, org chart	It depends on the scope of the project and location in the city. For a new building within Circle Drive - approximately 6 city departments.	3 different groups - planning, building, operations (focused on reviewing), another group called partnership and permitting run the permit and are single point of contact	12 division involved	Land Development Team includes are technical inputs into applications. Planning Team is the file manager.	Planning and Development have 4 teams (current planning, subdivisions and inspections, community planning and policy team). We engage our engineering and parks internal teams and that includes typically 5 teams.		It would be based on scope of project. New development is handled typically platted at DMD, a variance has to go through DMD, then the applicants start applying for permits to our department	Typically 6 or more, depending on the scope/size. On smaller projects concurrence between Planning, Engineering, and Public Works departments has been enough
a)	How many people does this involve	25	approximately 10 - 15 people	100	Between 12 and 20 different staff on each application depending on the complexity		10-15 people	100	Multiple, depending on scope and needs	10-12 on average
b)	Is this their primary job function or do they do other duties as well?	Swarma and maybe a few others is 100%, most people is only part (big part) - will be in spreadsheet that is given	it is primary duties for 4 people, side duties for the remaining	Other duties	Development responsibilities are primary	4 Engineering team members are involved in system modelling while the rest review applications.	Planning and development teams (current planning and subdivisions) mainly focused on applications. All other teams have other duties		This is the primary job function but we also have special assignments for items that help to streamline, organize or help our department run more efficiently. It is an "open door / open minded" atmosphere for ideas to be presented, reviewed and possibly implemented to make our process more efficient and our workloads more manageable	All staff are tasked with completing other duties as well
15	How much do you think staff turnover impacts pace of work	"crushed me this year" - high impact, not having experience makes it pretty inefficient, difficulty building refundancy	Staff turnover has an impact as training on review processes takes time.	Moreso staffing moving internally. Building/planning fairly static.	Medium impact due to continual training and mentoring of new staff.	Stable staffing. Team is short-handed.	Quite a bit, especially as it is challenging to hire staff with experience. We've noticed more senior staff change positions for larger municipalities that offer more flexible work arrangements.	It impacts a lot, takes a while to fill the roles so teams are smaller than what they used to be	It has an enormous impact because of time spent on training. We spend time on training, as well as, time spent to create Standard Operating Procedures (help guides / books / processes)	Pace of work slows greatly when experiencing staff turn-over due to the nice roles played by members
16	How are the past design details of the development projects maintained? Do you have separate staff maintaining these records	everyone does their own thing, wastewater does GIS, each parcel has all sorts of info, hyperlinks to folders. Water has excel tracking sheet linked to GIS. Not centralized across department. Service and development branch has most correspondence, but not necessarily design	We have a building permit database where permits are maintained from application through to closure of the permit. Some aspects, have separate permits from the Building and Development permit process. These permits and documentation are maintained in a separate system.	All applications from 2019 onwards are in Cityview. Prior applications are on paper. Have "address" specific information	All inquiries and applications are tracked in a centralized database and workflow tool	Land Development Team keeps their own records on applications relative to addresses in their tracking system.	Teams within planning and development manage this	Sharepoint for file management for active files. Sharepoint has buisness records and that is used for closed projects. Hard copies are stored in vault, drawing information centre stores all approved drawings	We have an in-house records group. Our documents are scanned and uploaded to our system and most items are made available for the public to view using our on-line system.	The engineering department houses record for public infrastructure and subdivision development. Building inspections stores comerical and residential plan data, Other pre-construction items of the land entitlement process are stored with the Planning Department.

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17	Do you have dedicated staff to handle general inquiries regarding municipal servicing capacity (not part of an application)? Do you charge for these types of inquiries	do not charge for anything, does not have someone to take care of general inquiries, have an email to direct people to	We do not have dedicated staff for general servicing capacity inquiries. These are handled by our system modelling and monitoring team. We do not charge for these.	Needs to go through formal process. Same team reviews. No fees included.	The same staff on each of the 8 goegraphic teams also respond to inquiries. Applicants are encouraged to submit a free pre-application.	4 separate staff deal with utility capacity. No charge for these inquiries.	These questions are typically taken by our service area leads. We would only provide very high level details and suggest you put forward an application before providing specific details on capacity. Capacity can change from day to day depending what was built.	3 phase process, someone comes in to ask about capacity, pre application consultation is required and that has a charge. Questions about properties needs to start an application. Building code emplotees ask propoerty specific questions	When we had the sanitary sewers, yes we did allocation letters and we did "not" charge for them. Typically that was used as part of the submittal for the project	The Public Works and Engineering departmenrs answer sinple requests free of charge. Requests that require ststem modeling may have costs associate for modeling and analysis not available in house.
18	How much staff time as a percentage do you estimate your team spends on inquires that are not related to a formal application	in the spreadsheet	on average approximately 5%.	10-20% informal	20% of time on nonfee inquiries.	Team likely spends 25% of their time on inquiries.	10-15%	Do not track staffs time, probably significant amount of time dealing with inquiries with the 3-phase process	The time spent has been reduced tremendously by making our on-line system and website available for most of the questions, applications, checklists, etc. and the fact that the public can perform their own searches. We no longer do pre-submittal meetings or field design questions. It is up to the applicant's engineer to design based on our standards. Otherwise, they submit the submittal and then they can request a variance, but we do not provide that guidance, as we are not engineers and the applicant's engineer needs to read the standards.	Depending on the time of year, 10-50%
19	Do you have a different process for informal queries, pre-applications, and applications	water - everything is the same does not matter type of application. Depends on complexity of the site for service and development branch. During the application there is a formal process, but preapplication is not formal and generally the same	Informal queries may come directly from developers, Saskatoon land, and Planning. The response is informal via phone calls/emails. The formal applications go through Planning and Development.	All flow through same process	Similar process but with less detailed depth.	Inquiries are tracked in the formal application system and subsequently linked to formal applications.	Yes, pre-applications and applications have dedicated processes. The informal inquiries will typically go to the planner on duty that is covering resident inquiries that day	Yes	If an application is received, it is automatically charged an application fee. Then there are nonrefundable review fees for a large number of our permit types, but not all	Direct consultation with applicants. For smaller commercial and residential work, an online permitting system is in use.

Number	Questions	Winnipeg, MB	Saskatoon, SK	Regina, SK	Calgary, AB	Victoria, BC	London, ON	Ottawa, ON	Indianapolis, IN	West Fargo, ND
42	What are the expected turnaround times for commenting on development applications	development and building permits have general understanding of timeline requirements. Province has guidelines for timelines to not hinder development process. Never publically release timeline, they are external timelines, not set internally	for Building and Development Permits vist https://www.saskatoon.ca/services-residents/homebuilding-renovations-improvements/getting-started/building-permit-timelines other development applications unknown at this time.	permits - 10 days residential, 20 commercial, rereviews 5 days - planning 6 week review	3 months.	2 months on formal application for first comments. Additionally, 1 months for each further iteration	It varies greatly. Now with new planning act regulations, we are aligned with OPA and ZBA timelines in planning act. For subdivision on average it takes between 200 to 400 days for us to currently approve.	14 days for engineers to review and provide comments, 20 days circulation for the public	A comment letter is expected in five business days from submittal; that comment letter would address any questions, concerns or let the applicant know that they will be receiving an approval letter shortly.	A typical goal is less than 2 weeks. This also depends on the size and scope of the project. Separate review meetings with developer and engineer may be requested.
43	Does the municipality keep statistics on how they are doing against those targets	planning properties and development has a more formal, but water/waste is informal	yes we report out the average turn around times to industry. We are improving and reporting on targets on a continuous basis.	tracking internally through Cityview	Yes	Internally stats only.	We do keep targets in our annual development plan reporting back to council each year.	No stats on internal commenting, statistics on ability to approve within the planning timelines		Not aware of any.
44	What are the typical number of engineering submissions per application	2 or 3 - in spreadsheet		heavily dependant on consultant	2-3 submissions,	3-4 including the pre-application	For site plan it varies, to 4 to 6 submissions. For subdivisions, we typically see 4 to 5 submissions. We are in the midst of a fee review which will increase engineering review fees. We are hoping this improved quality of submissions and reduces total numbers.	More than 2, can vary, 4 or more, may change with new process		One to three iterations of plan review, comments, and requests for changes are not uncommon.
45	Do you make this information public	No	We report to our industry stakeholders on our performance.	No	Yes periodically	No.	Only current applications information on the planning application is public	Do not track		It is not published but can be made available for viewing.
46	When applications move slowly in the system, what are the typical reasons? (workload, poor quality of submissions, lack of critical information	not having the right info and having to go back and forth between city and consultants. Applications missing info	Poor quality of the applications, incomplete information. This results in waiting for the applicant to submit required information. Another issue is seasonal peak periods of applications, construction season, which results in managing workloads to match applications.	quality of submission	Lack of quality information from the Engineer, or conflicting direction between Planning and Engineering	Constrained offsite system capacity leads to changes to the onsite design to stay within offiste system capacities.	Typically because of poor quality or lack of response from developer. We are working on a portal where we can track how long an application has been with each party (City vs developer). City has defined timelines for comments back, especially on engineering side.	Usually developer does not opt to comply with staff comments, or does not understand it		Staff are generally capable of moving items through in a timely manner. Typical speed of a project is governed by the applicant's speed of applying a providing the required documents.
47	Do you have a staff person designated with monitoring turnaround and intervening on delayed files	no	Yes, clerical staff manages circulation lists to ensure applications are not stalled in any given department. Continuous improvement is forefront to improving turnaround timelines and intervening when required.	Yes	Yes. A team of 6 staff are focused on support for complex and challenging files.	2 Senior staff are assigned to complex or troublesome applications.	Currently no we don't. Leave it to the managers of those teams to coordinate.	Jeff McEwen		Departments typically have staff at varying levels that monitor projects that experience delay in the review and approval process.
48	Have they done any recent business process reviews, and if so, what did it focus on	N/A	yes, we did a continuous improvement review. This streamlined business practices and process related to Building & Development permits. We have moved to 50% online applications. We are also working on increasing first time approval rates this year.	2019	Yes. Continual business process reviews. Detail the roles and responsibilities of the team members.	New leader just started and is working on upcoming process reviews.	Yes we've been doing continuous improvement for our processes to reduce time. We've given staff more administrative duties, so council isn't being burdened by administrative tasks (ie. Part lot control by-law, subdivision agreement, subdivision minor redline revisions and subdivision draft plan and draft plan extension.	Have not done it recently, has done some in the past. After implemented new provincial targets, process iprovement team focuses on how they can improve these		Not aware of any.
49	Have you made any recent improvements to your processes and if so, which ones made the most difference to turnaround times	Minor changes - mailbox for querries, shifting staff who are working on tasks. General workflow on the chart is still the same	Within the last couple years we have moved from an in series review process to a concurrent review. Meaning all deparments have the ability to review the permit application documents at the same time. this has reduced commercial permit review times by approximately 50%	Reorg, implementation of Cityview, focus on level of involvement to only things that need teams expertise	City just finished a reorganization over the last 3 years.	n/a, new leader	Recent improvement was in ZBA and OPA. Now we are meeting 100% of targets since being legislated for refunds.	Provincial mandated timelines, different steps in pre con application, too soon to say what affect it has had		Recently increased staffing levels

Number	Questions	Winnipeg, MB	Saskatoon, SK	Regina, SK	Calgary, AB	Victoria, BC	London, ON	Ottawa, ON	Indianapolis, IN	West Fargo, ND
50	How do you prioritize submissions	If there is a deadline associated, they accommodate, but generally first come first serve. Formal submits come before querries	Permits are prioritized based on complete application dates. First in First out priority. We do experience increases in permit applications in the fall in which Planing & Development priorities phased permits to aid developers.	Don't	First come, first serve but large complex application are given priority.	First come, first serve but large complex application are given priority.	Prioritize submissions by when the come in the door and when application is complete. Try to balance staff's workload so all files can advance. Other than that, it would be size or influence of a developer unfortunately.	First in first go, with timelines, suspect pre-aps, siteplan, zoning, and then the rest		Typically as received, as well as by which are further in the approval process.
51	Do you have any fast-track options for different types of applications? Do you have a special process for big projects/major redevelopments? Affordable housing, infill, greenfield, etc	mentioned above	We do not have a fast track option however we do preliminary reviews and comments from both building and planning for major applications or complex projects in advance of their actual submission.We do priorities affordable housing project applications.	No	Major applications are given priority based on their economic impact.	Major applications are given priority based on their economic impact.	Have a fast track process for affordable housing projects	No fast teack options, same process for all		Fast tracking would be approached on a case by case basis. Staff will generally try to accommodate.
52	Where do complaints go	service development branch, councillors	Complaints are received through individual departments and coordinated with other civic departments on an as need requirement. We receive complains in writing, through webmail and from council. They are escalated as neccessary.	To branch head	Leader receives and addresses any complaints.	Leader receives and addresses any complaints.	Complaints can be sent to standard planning emails or to management team. We also have a crm portal for complaints related to development build out.	Escalation process - complain to manager, director, GM		Each department can field complaints. Can go as high as City Commissioners.
53	What is the follow up with those originally involved	escalate to other people involved. If it goes above their group, they can appeal	Complainants receive confirmation of submission and they receive contact or follow up within 48 hours of submission. We share or be as transparent to complainant as much as possible. Enforcement steps are not conveyed to them.	Typically leads to general discussion with team to find areas for improvement unless specific to individual in which case different conversations occur.	Leaders deals directly with the Engineers involved.	Leaders deals directly with the Engineers involved.	Reach out through email or phone to discuss	Trey to make sure to keep staff involved with discussions, if a decision was made against what the staff orginally said, they would inform the staff directly		Most typical delays are from requested changes or additional information not being provided by the developer in a timely fashion.
54	How much has politics/troubleshooting of external/internal items influenced the process? Do you have any examples	This was council directed	Need more clarity on this question.	Not an issue with top down influence at this time. Depends on council/administration.	Some politics where municipal capacity is exceeded and trading capacity with other municipalities is needed.	Some politics where municipal capacity is exceeded and trading capacity with other municipalities is needed.	Definitely has influenced the process in terms of what is approved for development. 50 King is a good example in the City.	Politics has an influence, has not had the affect that they wanted with projects moving forward. Councillor reaches out to manager or director, adds a layer of bureaucracy to process		N/A

Number	Questions	Winnipeg, MB	Saskatoon, SK	Regina, SK	Calgary, AB	Victoria, BC	London, ON	Ottawa, ON	Indianapolis, IN	West Fargo, ND
55	Are there processes in place for improvement of people? Is mentoring actively pursued? Are there specific training courses or task instruction or is this a duty undertaken by colleagues who encourage informal job shadowing	learning on the job, no internal courses. Job postings will have specific qualifications. Depends on who left and who is left to train. Have a few documents of general procedures, but not detailed enough for full training.	We incorporate continuous improvement in all we do. This include succession planning and movement of people to different positions. Generally staff is trained in the position they were hired for or provide support to. This is done by encouraged job shadowing.	Yes	New training regime in place for entire Engineering Team. Consists of in house mentoring with Senior staff. Some external courses are used for specific topics.	New training regime in place for entire Engineering Team. Consists of in house mentoring with Senior staff. Some external courses are used for specific topics.	City of London encourages continuous improvement. Most positions require membership to professional associations (which themselves have continuous professional development included). Junior positions include "job shadowing" during probation period (for things like "duty call" general inquiries), and actively working towards licensing/designation. City supports professional development through many "iLearn@London" courses offered through the City's HR Service Area, as well as through support for participation in courses offered through the University of Western Ontario, or the professional associations of Engineering and Planning.	Struggling with this area, long turnover - retiring, moved to other departments. Constantly bringing peaople in, try to pair people u but not necessarily the best way. Can learn from other municipalities. Training funds are very tight, internal courses and training they have to take, but not a whole lot for professional training.		Most mentoring is informal. Training is typically obtained through professional societies and experience.
56	Are there processes in place for improvement of the process itself? Finding efficiencies through implementing new technologies or tools, reduction in labour, removing overlapping tasks, provision of timely information, etc	innovation at the high high level for corporate, but does not go down to the engineering end.	We incorporate continuous improvement in all we do. We use this lens in evaluation of process and business practices to improve efficiencies throughout.	Working on focusing efforts to needed tasks and avoid duplication	Yes, Approvals Coordination team to support positive outcomes on files.	Hope to incorporate continual improvement process reviews in the near future.	Yeah we've been incorporating continuous improvement efforts for 2-3 years now. We also have a dedicated CI team that supports the entire City	Started process improvements team, what is the scope of this team and objectives - broadly here to audit process and see how they can improve, ongoing committee that meets once a month		Newer staff encourage process collaboration for improvements since most are unfamiliar with much of the procedure, as segments of the process reside within multiple departments.
57	Do you feel that you have a good organizational structure with different levels of experience/seniority to review files with different levels of complexity? If not, where are your gaps?	no junior staff to offload work off. Generally speaking, gaps all across the board, but varies by branch. General lack of redundancy. Example if someone goes away it is hard to cover those responsibilities, or turnover of staff	yes	Good team in place, tough to fill openings (could potentially work on talent acquisition)	Teams are getting used to the new structure.	Yes. Good structure. Could always use more senior Engineers.	Currently think some of our gaps are within planners and senior planners. We are having trouble finding experienced senior planners to be able to help on applications. Part of it could be the pay equity here or reduced flexibility in hybrid work.	Continuing to work on, lots of turnover, tweaking process, team approach for reviewing files. Open to many people working on 1 file to allow transfer of knowledge. Juniors and seniors in both engineering and planning, hoping to see more flexibility and improvements, but just started so no information on how that is going		The engineering department lacks the capability to conduct detailed water and sewer analysis. It typically functions in conducting less complex projects and analysis work, as well as administrating consultants and contractors.

November 7, 2024

APPENDIX C - DEVELOPMENT PROCESS IMPROVEMENT OPTIONS TECHNICAL MEMORANDUM

Stantec Landmark Planning & Design Inc.

Memo

To:	Ho Lau, C.E.T. City of Winnipeg	From:	Stephen Willis, RPP, MCIP, Stantec Consulting Ltd. Donovan Toews, Landmark Planning and Design Inc.
Project/File:	111220808 City of Winnipeg City of Winnipeg Review & Assessment of Municipal Services for Water, Wastewater, & Land Drainage	Date:	August 1, 2024

Reference: Technical Memorandum #3 – Process Improvement Options

EXECUTIVE SUMMARY

The City of Winnipeg's (City) Water and Waste Department (W&W) is conducting a review and assessment of municipal servicing for water, sewer, and land drainage development. The review and assessment includes a review of the City's internal development application review process (internal review), a comparison of how the City provides information on current water and sewer infrastructure capacities against other cities (market scan) and development of recommendations to improve the City's processes (improvement recommendations).

As part of the improvement recommendations, the project team hosted an in-person workshop with the City team. Four target areas were identified that capture the improvement recommendations: defined channels, process and response resources, training, and shared data and modeling.

A comprehensive approach was taken to address the challenges identified in the application review process. This memorandum provides a summary of the improvement recommendations to address or improve upon these challenges. Eleven recommendations are grouped by themes. There are tables at the end of the memorandum that consolidate both the recommendations and resource recommendations.

Theme 1: Streamline Processes

- Recommendation 1: Consolidate Inquiry Points
- Recommendation 2: Refine Intake Processes for Development Applications
- Recommendation 3: Comprehensive Information Management System
- Recommendation 4: Application Prioritization

Theme 2: Improve Capacity

- Recommendation 5: Enhance Staff Resources
- Recommendation 6: Refine Staff Roles and Responsibilities
- Recommendation 7: Enhance Staff Training

Theme 3: Improve Industry Ability to Submit Better Applications

- Recommendation 8: External Training – Industry Standards
- Recommendation 9: Update Modeling Tools
- Recommendation 10: Serviceability Studies
- Recommendation 11: Shared Data and Off-site Data

The project team was specifically asked to look at whether other municipalities use real-time geographic information systems (GIS) based hydraulic models to illustrate system constraints in various parts of the municipality (namely wastewater constraints). While we found that some municipalities have readily available GIS information indicating the location and sizes of infrastructure to support development, none had real-time models of wastewater capacity constraints. Information on capacity issues resided in reports, which are a snapshot in time of capacity issues. Consequently, all the municipalities we surveyed, with the exception of one (1), require the developer's consultant to conduct the analysis of existing conditions and model development impacts. Only three (3) out of eight (8) municipalities identified they have standard models or tools on which this is based, although five (5) municipalities do apply some form of modeling software to track water, wastewater, and land drainage infrastructure capacities.

1 INTRODUCTION

The City of Winnipeg, like most major cities in Canada, is facing increasing pressure to streamline approvals processes for greenfield and infill development. There is continued demand for residential development for housing and commercial and industrial development to enable growth in the economy. The City's Executive Policy Committee (EPC) initiated this project based on the Strategic Infrastructure Plan for Sustainable Social and Economic Development.

To maximize the potential of these outcomes, the City's approvals process needs to be enabling and collaborative to attract development. The City has retained Stantec Consulting Ltd. (Stantec) in association with Landmark Planning & Design (Landmark) to review the existing practices and make recommendations for improvement.

The project team has worked closely with City staff to complete the internal review (Technical Memorandum #1) and market scan (Technical Memorandum #2).

As a result of the internal review and market scan, the project team found that Winnipeg's development application process works reasonably well compared to other municipalities. Organizations such as the Canadian Home Builders Association rate Winnipeg well in their CHBA National Municipal Benchmarking Study (2022). The CHBA Study rates municipalities on several factors affecting approvals of land development projects including a statistical information on approvals and permits issued, innovations in processes, estimated timelines for approvals, fees and development charges, and use of best practices. Winnipeg ranks fourth among twenty Canadian municipalities in terms of its overall planning approvals process. It should be recognized that this project addresses the work of W&W in the City and not the entire planning approvals process involving multiple departments, which the CHBA study reviews.

The project team, through interviews and workshops with members of the W&W team, has observed that the department has considerable experience and is able to apply it appropriately to maintain consistent levels of service with respect to development and permit application reviews.

However, through the internal review and market scan, there appears to be specific challenges that could impact the level of service being provided. The purpose of this Technical Memorandum is to provide a summary of the improvement recommendations to address these challenges including the related benefits, implementation timelines, and potential cost implications.

2 EXISTING DEVELOPMENT APPLICATION REVIEW PROCESS

The initial phase of the project included a series of workshops with members of the City's Public Service to document the existing internal development application process and development proposal reviews. The objective was to gain a thorough understanding of the application review process by identifying staff requirements for processing applications, challenges and information gaps, existing successful components of the process, the role of City development policies in servicing considerations, and other related matters.

The project team facilitated three workshops in Fall 2023, discussing a variety of topics such as:

- development application types;
- department coordination and organizational structure;
- relation to planning objectives and policy direction;
- application review flow charts and timelines; and
- staff considerations, and tools.

The information compiled throughout these workshops was analysed and incorporated into a technical memorandum to create a baseline of the existing approaches and challenges from which to base process change recommendations.

As shown in Figure 1, this initial phase of the project identified the series of existing channels through which W&W receives servicing capacity queries, including:

- **General Queries & Special Projects:** A landowner, prospective developer, or engineering professional on behalf of a landowner reaches out to the W&W (either because the Planning, Property and Development Department (PP&D) has suggested it or because the landowner would like to get information) for servicing-related information regarding a specific property;
- **Pre-Applications**: A landowner or prospective developer submits a formal Pre-Application regarding a potential development proposal[1]. These are circulated to City Departments, including W&W, for comment;
- **Development Applications**: A landowner or prospective developer submits a formal Development Application. The application is circulated to City Departments, including W&W, for comment; and
- **Permit applications with no requirement for circulation**: On a site where development approvals are not required, a landowner or prospective developer may submit a Development or Building Permit for a specific property which comes to W&W for review.

[1] Development Pre-Application are administered by the Land Development Branch and can only be applied for regarding specific development types including re-zonings, subdivisions, variances and conditional uses and a select few other applications.

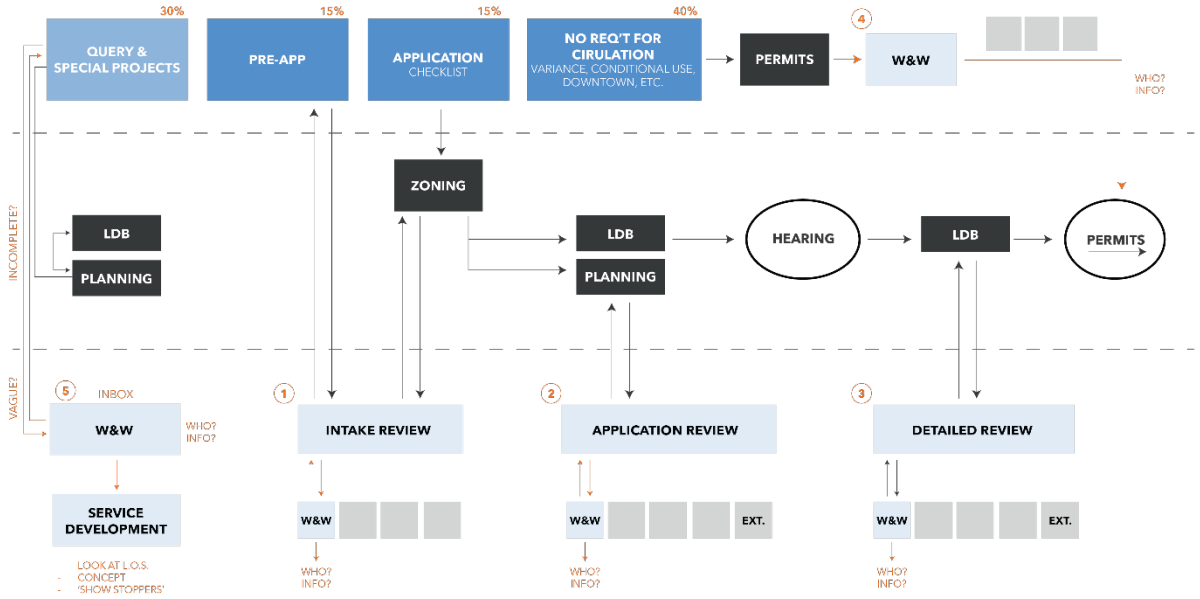


Figure 1 Internal Development Application Process Chart

Each of these inquiry channels was discussed with W&W staff and assessed in relation to resource commitments per branch.

Table 1 below summarizes response time, request origin, review hours spent per request, response format, fees collected by the W&W department, and circulation scope for each of the identified request channels.

Table 1 Development Proposal Process Review Summary

Type of Request	Response Time	Request Origin	Hours per Request	Response Format	Fee per Request	Circulation Scope
Query	Varies – no commitment	Direct	13.4	Informal email/phone call	No fee	Internal to W&W
Pre-Application	Three weeks	PPD-Land Development Branch (LDB) Circulation	25.8	Email	No fee	Internal to City
Development Application	Three weeks	PPD-LDB Circulation	26.8	Email, Administrative Coordinating Group report contribution	No fee	Internal to City
Permit applications with no requirement for circulation	Mandated Circulation Period	Direct	13.8	Servicing Requirements conveyed to Permits Branch	Permit application fee	Internal to City

From Table 1, it can be observed that the origin of requests (response format) can vary depending on the type of query or channel. Some of these requests originate from applicants contacting W&W directly, while other requests originate indirectly via circulation through the Land Development branch. In addition, it should be noted that while Queries, Pre-Applications, Development Applications, and Permit Applications require similar resources from W&W fees to account for their effort are received only from Permit Applications.

Based on commentary compiled from the three initial workshops the Project Team was able to identify the following:

- A communication gap may exist between land use planning expectations and servicing infrastructure capacity. The approved zoning may not have the underground infrastructure (e.g. sewer capacity, etc.) to support that proposed development
- Applicant expectations on approval and processing timeframes can be unreasonable under current W&W resource constraints;
- There is no existing standardized training or processing documentation;
- There can be information and expertise silos between W&W internal branches and across departments; and
- The limited amount and/or type of information available from the applicants can result at times in misunderstanding of expectations and additional review work for W&W.

Please refer to Technical Memorandum #1, Existing Internal Development Proposal Review Process for further details.

3 MARKET SCAN ANALYSIS

The second phase of the project included a market scan analysis to compare existing Winnipeg practices to other comparable municipalities in Canada and the U.S. As part of the market scan phase of this project, eleven municipalities were contacted to answer a questionnaire. Eight responses were received from these municipalities, and an analysis was conducted comparing the City's current process related to the administration of development review to departments comparable to Winnipeg's Water and Waste Department within other municipalities.

The questionnaire included a wide range of questions all related to development processes for municipal services for water, wastewater, and land drainage including general information, activity levels, resources, processes, asset management, turnaround time, prioritization, and training/development.

The key information regarding municipality size and resourcing can be found below in Table 2. The last column displays the specific staff per capita ratio. Specific staff includes all development engineering approval related staff.

Table 2 Questionnaire Responses by Municipality Regarding Staffing Numbers

Municipality	Population	Approximate number of staff in Municipality	Approximate number of staff in land development engineering roles	How many departments/ divisions are involved in reviewing a development application	Specific Staff per Capita (per 1000) Ratio
London, ON	422,320	2,000	100	9	0.24
Indianapolis, IN	887,640	No Response	150	2	0.17
Calgary, AB	1,310,000	17,000	200	12	0.15
Victoria, BC	91,870	No Response	12	2	0.13
West Fargo, ND	38,630	350	4	6	0.10
Ottawa, ON	1,020,000	17,000	100	4	0.10
Regina, SK	266,400	3,000	22	3	0.08
Saskatoon, SK	266,140	4,000	20	6	0.08
Winnipeg, MB	749,610	10,000	12	3	0.01
Average	**561,401**	**7,621**	**69**	**5**	**0.12**

There were several key items of note:

- All municipalities we interviewed, including Winnipeg, struggle with the impacts of managing general inquiries.
- Winnipeg has very comparable responsibilities in development review to the other municipalities we contacted, however Winnipeg has the smallest staff complements for processing development applications by a considerable margin, outlined in Table 2.

- Staff turnover has had a high impact on processing time in all municipalities. Winnipeg currently has a long-serving staff; however, the risk of future staff turnover should be mitigated. We discuss this matter further in subsequent sections of this memo.
- All municipalities, with the exception of one (1), require the developer's consultant to conduct the analysis of existing conditions and model development impacts. Only three (3) municipalities identified they have standard models or tools on which this is based, although five (5) municipalities do apply some form of modeling software to track water, wastewater, and land drainage infrastructure capacities.

Please refer to Technical Memorandum #2, Market Scan Analysis for further details.

Following the review of a draft of this Technical Memorandum, City staff requested that we follow up with the municipalities contacted in the Market Scan to find out what publicly available information they have on existing conditions. The following table summarizes the results of those follow up questions:

Table 3 Follow-Up Questions[2]

Municipality	**Does the Municipality have on-line information on existing systems (underground infrastructure location, size and other attributes)?**	**Does the Municipality have real-time online information on capacity constraints? If yes, is it static or updated?**
Regina, SK	Yes	No
West Fargo, ND	No response	No response
London, ON	No response	No response
Ottawa, ON	Yes	No
Calgary, AB	Yes	No
Indianapolis, IN	No response	No response
Saskatoon, SK	Yes	No
Victoria, BC	Yes	No
Winnipeg, MB	No	No

[2] This table is current to the date of submission of the memo. If additional responses come in prior to the submission of the final project report, this table will be updated.

4 PROCESS IMPROVEMENT OPTIONS WORKSHOP AND FOCUS GROUP MEETING

4.1 City Workshop

Stantec and Landmark facilitated a workshop in February 2024 to provide a summary of work completed to date with a focus on process improvement options. An overview of the workshop is provided below:

Workshop #4 – Monday, February 12th from 1:30 PM to 4:30 PM

Location: Public Works Training Rooms (1155 Pacific Avenue)
Attendance: 21 Participants from W&W, PP&D, Stantec, and Landmark

Topics discussed: Key Takeaways from Development Proposal Review and Market Scan, Target Areas for Recommendations.

In the first part of the workshop, the Project Team provided a summary of the previous steps of the project, identifying the key takeaways leading to the proposed four target areas for recommendation. Participants from different City departments had the opportunity to learn about all the information gathered and steps conducted to this stage of the project.

The second part of the workshop included a brief overview of Winnipeg's economic climate and its impact on development application processes, followed by an engaging discussion around the proposed target areas of recommendation.

The project team noted that the information presented was positively received by representatives of the City branches. At the conclusion of the meeting, a round table discussion with all representatives affirmed the direction that was presented by the project team.

4.2 Focus Group Meeting

Stantec and Landmark facilitated a focus group meeting in March 2024 to gain insight into the challenges facing the development community in Winnipeg as it relates to this project. An overview of the workshop is provided below:

Focus Group Meeting #1 – Thursday, March 7th from 2:00 PM to 4:00 PM

Location: Virtual
Attendance: 15 Participants from various developers in Winnipeg, Stantec, and Landmark

Topics discussed: Open discussion on challenges facing the development community and potential solutions related to development within Winnipeg. Focusing on housing, including single-, two-, and multi-family development in both infill and greenfield contexts.

The meeting started with a brief introduction about the purpose of the project and meeting goals. The rest of the meeting was facilitated by Landmark and conducted as a discussion around developers' expectations and experience with the application review process.

Comments and concerns raised by the participants are summarized as follows:

- There is a high level of uncertainty regarding existing and planned capacity across the city.
- There is a perceived need for more and clearer communication between the administration and the development community regarding existing capacity, future plans, and inquiries. Attendees suggested it would be helpful to receive acknowledgement when an inquiry for information has been received.
- There is a desire to see a capacity inventory and clear plans for the next 5 years as this would help developers to focus development efforts to appropriate areas of the city.
  - A first step for this inventory would be to indicate where not to develop and to include a disclaimer when information is subject to change if there is a risk concern.
- There is a desire to see more consistency between City departments and infill guidelines. There is a perception of disconnect between City of Winnipeg policy visions, especially regarding infill development and available servicing capacity. City-wide (or locally focused) infrastructure or servicing plan(s) were suggested as being helpful.
- There is perceived risk for developing infill areas due to the lack of existing information on capacity and a low expectation that this information can be obtained within a reasonable timeframe to make decisions. It would be helpful to access servicing information easily or receive accurate responses in reasonable timelines whether they are favorable or not.
- Other infill development challenges were identified noting that each neighbourhood is treated differently, and it is hard for developers to plan without inquiring to the City. There is a desire to see more consistent plans and approaches available across the infill areas.
- The application review process is perceived as being complicated and redundant. There is a lot of back and forth between applicants and administration even for simple files (e.g., easements). There is a desire to see a more efficient process, with easier access to basic information.

Overall, uncertainty and the speed of responses were the key themes of discussion. Attendees expressed a desire for process improvements that can provide basic information in a timely manner, both to benefit the planning for new development and to reduce the burden on the City of Winnipeg Administration.

5 PROCESS IMPROVEMENT OPTIONS

W&W currently responds to a large majority of the development applications within the three-week review period. However, based on the internal application review and market scan, there appears to be key themes within the development proposal review process that if addressed, could improve the effectiveness of W&W in responding to applications.

The three themes are:

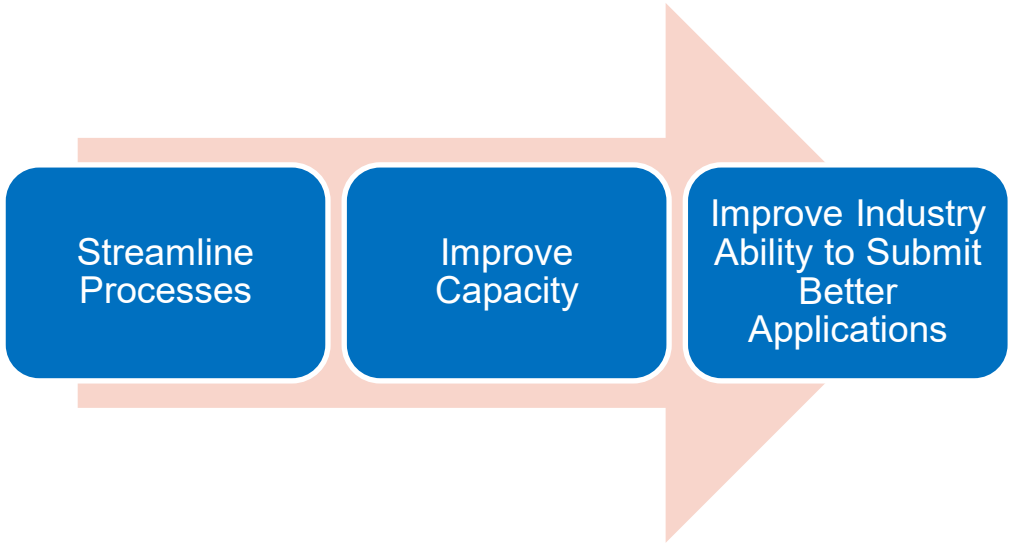


Figure 2 Themes of Recommendations

The recommendations below are intended to be viewed as one comprehensive or holistic change to the way W&W approaches and responds to information inquiries, conducts the review of applications, and resources special projects. Viewing the recommendation as one comprehensive change will allow W&W to address multiple aspects of the application review process simultaneously and create a more significant impact on development in the City of Winnipeg. However, understanding the complexities of making holistic changes to organizations, the recommendations have been broken down such that they can be addressed as targeted, independent solutions.

5.1 Theme 1: Streamline Processes

Steps to streamline processes make better use of existing resources and reduce the amount of time that senior staff are spending on tasks that could be addressed by junior staff, thereby allowing them more time to focus on complex issues. Streamlining the process assists applicants by getting the right level of information at the right time in their development process to make decisions and advance the formal applications.

5.1.1 RECOMMENDATION #1: CONSOLIDATE APPLICANT INQUIRY POINTS

As identified in Figure 1 Internal Development Application Process Chart, there are currently four channels through which W&W is required to review the information received and provide a response: Queries & Special Projects, Pre-Application, Development Application, and Permit Application.

These review channels are both formal and informal. Queries and Special Projects are informal in nature, whereas the remaining query types (Pre-Applications, Development Applications, and Permit Applications) are formal. The key difference between formal and informal queries is that informal queries are coming direct from the public or Elected Officials, often with no established timelines for response. Formal channels are tied to an application fee and service timeline expectations. Special Projects are unique in that they are corporate priorities for the City often coming from senior management and require an elevated level of attention and responsiveness. They are less predictable in workload planning and priorities can change quickly.

Informal channels can create uncertainty or unpredictability for W&W staff and inconsistent or misaligned expectations for applicants. While seen by the public as a desired source of quick and easy information on a property, Queries require substantial time commitment from W&W and often do not provide the level of detail and analysis expected by the applicant. For example, the administration may indicate there is insufficient servicing capacity, but does not currently provide an indication of how many units may be serviced. Additionally, Departmental time and resources are expended without application fees being received. This creates no established service standards. Informal channels are inefficient since the documentation and results are tracked independently between the various branches.

It is recommended that the City restructure how it receives requests by eliminating informal queries. Informal queries should be directed to a new formal channel to accommodate project scoping queries. As shown in Figure 3, the Project Scoping channel could work independently or in combination with the Pre-Application channel. The applicant would have the option to request a Project Scoping, with a form and a fee, directly from W&W when no planning analysis is involved in the query. Alternatively, Project Scoping can be integrated into a Pre-Application report for an additional fee if the applicant is looking to obtain a more detailed analysis and direction on matters related to water, wastewater, and land drainage servicing considerations.

Each of these key areas and the corresponding recommendations are discussed in further detail throughout the following subsections of the memorandum.

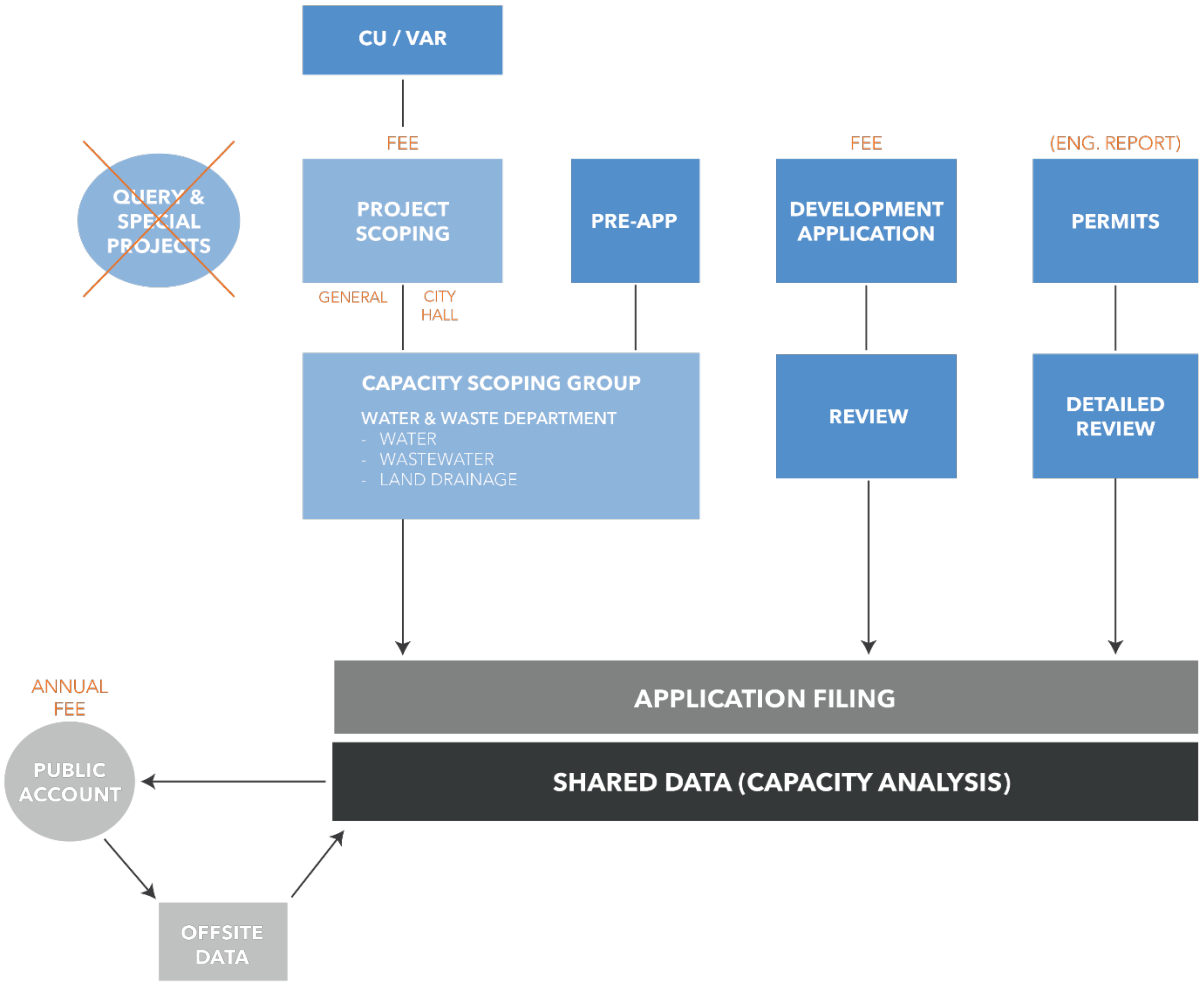


Figure 3 Recommended Application Review Channels Approach

The Project Scoping channel would require payment of a flat fee to formalize the process and to help offset the costs of the service. This channel would include a preliminary review by the respective water, wastewater, and land drainage team members, a short internal meeting of these 3 team members, and a formal response within an established timeframe (e.g., 10-14 days). The Project Scoping team would consist of staff from each service area (water, wastewater, and land drainage). The preliminary review would be intended to identify critical information specific to the request. The level of detail provided by the Public Service will be proportional to the level of detail on the proposed development provided by the applicant. Any information provided in this stage would be considered preliminary and not binding.

Capacity Scoping Group

To create a successful Capacity Scoping Group, W&W will need to provide quality information within the published review timelines. To do this effectively it is recommended that W&W dedicate three new FTEs to this group:

- One water FTE;
- One wastewater FTE (priority); and
- One land drainage FTE.

The Project Scoping channel is intended to both track informal queries and divert queries that precede a formal application away from senior staff whose time is better invested managing actual applications. Combined with additional information described in our later recommendations, this will provide the industry with an efficient way of evaluating the feasibility of development projects and complete their due diligence.

5.1.1.1 Timeline to Implement

Recommendations 1, 2, and 3 are proposed to work in combination. The Project Team estimates a 12-month engagement process to work with internal and external stakeholders to introduce and refine the proposed process changes. It should be noted that Council approval will be needed to implement a new fee and to approve additional staffing resources. Therefore, a 24-month timeframe is expected for full implementation as a minimum.

The three staff recommended for the Capacity Scoping Group and the staff responsible for project scoping and the application filing system should be onboarded during the implementation of the recommended process change. This will allow the new structure to be effective once implementation is completed.

5.1.1.2 Estimated Cost to Implement

Implementation costs associated with Recommendations 1, 2 and 3 are a result of staffing levels required for the project scoping channel, the fee charged by the City, and the software selected by the City. Additional costs may also be required for internal and external training if the City commissions external consultants to support this work. The IT team will also need resources to lead this project on behalf of the W&W team. Further review will be required by the City to determine the appropriate software. A summary of the costs is below:

- 0.5 FTE dedicated to get the process implemented in 24 months. Senior staff member to lead implementation. It is assumed their position would be backfilled over the duration of the project: 0.5 FTE at $130,000/year[3] for 24-months for a total of $130,000. This may also be resourced by an external consultant if no internal capacity exists. It is assumed an external project manager would incur the same cost.
- 1 FTE responsible for project scoping and the application filing system at the Technologist 1 level (scoping clerk): 1 FTE at $76,000/year for a total of $76,000/year. If the City wants redundancy in this role, costs will increase.

[3] All salaries described are burdened salaries, which include Pension, Group Insurance, CPP, EI, and Dental/Vision in the yearly cost.

- Additional staff or consultant to lead and support internal and external stakeholder engagement: $50,000 expense.
- 3 FTE dedicated to the Capacity Scoping Group at the Project Engineer level: 3 FTE at $130,000/year for a total of $390,000/year.
  - Varying levels of Technologists could be fit for this role, meaning the cost estimate range may change accordingly. If the positions are classified as Engineers in Training, it could be part of an overall engineering succession strategy. We expect that a Technologist 2 could cover most of the simple applications under the direction of an existing Project Engineer. The Project Engineer would provide guidance and oversight for complex cross-disciplinary files.
- Flat fee by applicant: $500/application assuming an average of 250 applications per year (W&W received 726 queries in 2023 not including queries submitted by the Technical Services Branch) for a total of $125,000 revenue. The fees above are proposed as indicative fees. Ultimately, the fees should be set to cover the cost of the servicing, including the cost of administering the collection of fees. Depending on volume of fees received, additional FTEs may be required to administer fees.
- Refer to Shared Data and Offsite Data below for costing related to software.

Based on the above the initial cost to the City would be approximately $521,000 over two years to implement. This assumes the scoping clerk and capacity scoping staff are hired in year 2 of the implementation. Once implemented, it is intended that the flat fee would operate as a cost recovery to cover the salary of the Technologist responsible for project scoping and the application filing system resulting in a total cost of $390,000/year.

5.1.2 RECOMMENDATION #2: REFINE INTAKE PROCESSES FOR DEVELOPMENT APPLICATIONS

There is a concern that Variance and Conditional Use applications are not currently being circulated to W&W. It is recommended to leverage this new Project Scoping channel as a mandatory step in the approval process when applications could have servicing implications. Criteria should be established and provided on the application form for Variances and Conditional Uses, in collaboration with PP&D to identify the types of applications that should be reviewed by W&W.

5.1.2.1 Timeline to Implement

Recommendations 1, 2 and 3 are proposed to work in combination. The Project Team estimates a 12-month engagement process to work with internal and external stakeholders to introduce and refine the proposed process changes. It should be noted that Council approval will be needed to implement this type of change. Therefore, a 24-month timeframe is expected for full implementation as a minimum.

5.1.2.2 Estimated Cost to Implement

Outlined in Recommendation #1.

5.1.3 RECOMMENDATION #3: PROJECT SCOPING AND APPLICATION FILING SYSTEM

An internal Application Filing system that can be accessed and shared between all involved departments in the development application review process is required. It will assist in other engineering projects

undertaken by the City or general information inquiries not specific to an application or a project. It will capture and share the information and analysis prepared between W&W internal branches and across departments.

The application filing system would operate as follows:

- The applicant would reach out directly to W&W to file a Project Scoping request.
- The scoping clerk files the request within the system and circulates the file to the Capacity Scoping Group, for analysis and comments, via a meeting (in-person or virtual).
- The scoping clerk consolidates the comments into a report and returns it to the applicant within the established timeframe. A qualified staff will check the work and ensure comments from various sources are coordinated.
- The scoping clerk uploads the data into the City's information sharing portal, where the file is automatically shared with other City departments and all branches within W&W.
- This application filing database should be part of a new Shared Data System leveraging GIS technology and be available to all W&W's development proposal reviewers.
- There could be a future opportunity to allow for public access to the shared data via subscription fee. Users who conduct a servicing study as part of a Development Application could be required to upload off-site content to the shared data system. A system open to applicants will enable the industry to have access to previous work and reduce need for City staff to provide details to industry on this previous work.
- Applicant prepared reports, once approved, may be available for industry wide information.
- The contribution of new data by applicants into the shared system would help to expand the database and enhance the available information for various parts of the City. This is described in detail below.
- At least one FTE should be assigned to manage this system (i.e., scoping clerk), but assigning two FTEs is recommended to ensure there is adequate coverage.

According to the municipal scan, some municipalities (e.g., Saskatoon, Regina, and Calgary) share application data within their administrations (across departments) while others (e.g., Victoria, London, and Ottawa) also share this information publicly.

5.1.3.1 Timeline to Implement

Recommendations 1, 2 and 3 are proposed to work in combination. The Project Team estimates a 12-month engagement process to work with internal and external stakeholders to introduce and refine the proposed process changes. It should be noted that Council approval will be needed to implement this type of change. Therefore, a 24-month timeframe is expected for full implementation as a minimum.

5.1.3.2 Estimated Cost to Implement

Outlined in Recommendation #1.

5.1.4 RECOMMENDATION #4: APPLICATION PRIORITIZATION

In circumstances where there are limited resources available, the municipality should prioritize applications with a high public interest or benefit. Several municipalities are expediting affordable housing projects to address the current housing crisis. Similarly, there may be projects that have high economic development or community benefit that should be expedited. In addition to being expedited, these files should be dealt

with by the most experienced staff. The various department heads and members of the City's executive leadership team should identify the types of files to prioritize.

There is a concern that the quality of application being submitted are resulting in additional review time. It is recommended to designate a certain number of days a month for staff to focus on files that are in excellent condition and deserving of expedited approval, regardless of the order in which the application came in. These would be the files where the applications have all the required studies that are up to date, and which include recent analysis. Staff would have to use some discretion to identify these files. Although there may be some initial pushback from applicants, it will create a time saving reward and encourage them to prepare well-formulated applications, further reducing City review time.

5.1.4.1 Timeline to Implement

This recommendation should be integrated with Recommendation 7.

5.1.4.2 Estimated Cost to Implement

There is no cost associated with this recommendation.

5.2 Theme 2: Improve Capacity

Winnipeg has significantly lower staffing levels in development review of engineering compared to other municipalities. It is necessary to add more capacity to the department by increasing the staff complement to improve the response time for all application types.

5.2.1 RECOMMENDATION #5: ENHANCE STAFF RESOURCES

Winnipeg has significantly lower staffing levels compared to other municipalities of a comparable size and with a similar volume of development applications. This results in each engineer having a high number of files they are responsible for and, the most experienced staff cannot specialize on complex files since they are needed to share the volume of incoming applications.

Resourcing should be established by utility or on a functional basis, and it needs to be monitored every few years against the volume of applications the City is processing. This section discusses our recommendations on where additional resources could be added to enhance service and the specific rationale. There is a summary of all resource requests by recommendation in the Summary of Recommendations at the end of this report. Due to municipal budget priorities, additional resources may need to be phased in over time.

As part of the internal review process, W&W provided estimates of time spent for each type of application they receive as it exists today. They also provided the average number of applications received by the water, wastewater, and land drainage teams for each type of application.

This information has been consolidated in Table 4 below to summarize the average time spent annually on applications by W&W. Note that the available W&W employees also are responsible for and tasked to complete other work; some examples are listed below. Percentage of FTE Hours Annually was based on a

35-hour workweek assuming 45.5 working weeks a year for a total of approximately 1,593 working hours per FTE. This data informed our staffing recommendations below.

Table 4 Annual Application Review Time

City of Winnipeg Branches	Queries	Pre-Applications	Applications	Non-Circulation	Total Hours Annually	Percentage of FTE Hours Annually
Wastewater Planning	720	101	101	303	1,224	**77%**
Water Planning	240	72	90	378	780	**49%**
Land Drainage and Flood Protection	816	156	1,332	360	2,664	**167%**
Services Development Branch	1,445	394	1,769	1,301	4,908	**308%**
Total Hours Annually	3,221	723	3,292	2,341	9,576	**601%**
Percentage of FTE Hours Annually	**202%**	**45%**	**207%**	**147%**	**601%**	

*An additional 20% of FTE hours annually is spent on regional planning queries/applications, service agreements with neighbouring RM's, and large-scale industrial queries

The City currently has seven positions that are tasked with development review as part of their job description. All the positions have multiple other responsibilities. In addition to the tasks in Table 4 above, staff also spend time on other tasks including servicing report iterations, development agreement review, cost sharing administration, developer securities, administer asset acceptance, and easement administration. The amount of time on these tasks varies from staff person to staff person and their branch, and this is not captured in the table.

A lean staff complement doesn't allow for adequate coverage during staff absences or when turnover occurs. Additional resources will help reduce the file load per engineer improving both resiliency and flexibility within the group.

In the Market Scan, we found a wide variety of municipal staffing models. Currently the City of Winnipeg only has intermediate positions that largely do all the reviews for developments (WAPSO 4). Other municipalities integrate more junior staff and technicians in review teams that work together on multiple files and share tasks. In addition to creating adequate coverage, it also creates better career progression for staff within the Department.

Application Filing and Shared Data

It is recommended that W&W dedicate two new FTEs for succession planning, workload management, and to address the additional responsibilities to support the corporate IT group with respect to application filing and shared data.

Development Agreement

Cost sharing obligations are an important aspect for applicants to understand as part of their feasibility for new development projects. As such, we recommend additional staff resources be provided to enhance the documentation and tracking of industry cost sharing. Additional staff devoted to oversight of development agreements will allow a proactive understanding and tracking of cost sharing between developers. We recommend three new FTEs devoted to administering the development agreement program.

5.2.1.1 Timeline to Implement

It is recommended that the five new staff be implemented over the course of the next two budget cycles, as the City's financial resources permit.

Two additional staff recommended for succession planning and workload management can be onboarded in a staggered approach. The first staff should be hired upon implementation of the capacity scoping group within recommendation #1. The remaining staff can be brought on the following year to build the team. Future resourcing needs can be assessed based on workload and turnaround times.

The development agreement resources can be onboarded in a staggered approach. The first staff should be hired upon implementation of the process change. The remaining staff can be brought on the following year to build the team.

5.2.1.2 Estimated Cost to Implement

The two-application filing and shared data staff are recommended to be brought in at varying levels to allow for progression within the department. For costing purposes, we have assumed both FTEs are Project Engineer (WAPSO 4) positions, which has a salary of $130,000/year. These positions will be onboarded in a staggered approach, meaning the full cost would not have to be included in initial annual budget.

The three staff for the development agreements are recommended to be brought in at varying levels to allow for progression within the department. For costing purposes, we have assumed all three FTEs are Project Engineer (WAPSO 4) positions, which has a salary of $130,000/year. These positions will be onboarded in a staggered approach, meaning the full cost would not have to be included in initial annual budget.

Based on the above the cost to the City would be approximately $650,000/year once all staff are onboarded.

5.2.2 RECOMMENDATION #6: REFINE STAFF ROLES AND RESPONSIBILITIES

In circumstances where there are limited senior expertise available within the municipality it is important to focus senior positions on strategic level work. This is especially important when the overall resources are

constrained. The recommended structure used in other jurisdictions would be to have a functional team with junior engineers and technologists being overseen by senior positions. In addition to leveraging the limited capacity of senior expertise, this approach also ensures that the lowest possible salary level is performing the various tasks within the team. The final benefit of this approach is to create a career succession path for the staff. It is recommended that each of the four branches (water, wastewater, land drainage, and services development) should implement this approach in the coming years.

Experienced staff retention is at high risk since there are no senior positions available in the current structure. Experienced intermediate engineers may seek career advancement in other branches.

It is also important to ensure there is senior technical expertise in each service area with the appropriate job classification level to resolve issues on complex files where there are competing objectives within the City. Senior technical staff can work together to create a steering team that will create a unified and comprehensive perspective across the branches.

Other municipalities leverage senior staff to monitor turnaround times and directly support complex or delayed files.

5.2.2.1 Timeline to Implement

The job classification recommendations should be initiated immediately. In our experience, creating, approving, and hiring new positions typically take several months. In the interim, the City should identify key senior technical staff within each branch who can fulfill these responsibilities.

5.2.2.2 Estimated Cost to Implement

It is recommended that this role be a Senior Project Engineer (WAPSO Grade 5), at $142,000/year. Three FTE's within Water, Wastewater, and Land Drainage are recommended, in addition to one FTE in the Services Development Branch, resulting in a total cost of approximately $568,000/year.

5.2.3 RECOMMENDATION #7: ENHANCED STAFF TRAINING

In organizations where resources and senior expertise are constrained, there must be additional focus on training, development, and support for staff. This includes clearly documented processes, extensive onboarding, and ongoing mentoring. Clearly documented processes, roles and responsibilities assist team members to focus on their own responsibilities while also understanding how other team members work is inter-related. This will help to avoid duplication of effort or gaps in responsibilities that delay deliverables.

Detailed orientation for new team members will enhance engagement and help them understand how their work impacts the overall growth objectives for the City. In other jurisdictions where this is leveraged, enhanced quality of service is experienced by applicants.

It was reported by larger municipalities in the Market Scan, that formalized training of staff assists when there is staff turnover and ensure there is a knowledge transfer amongst staff. Five (5) of eight (8) municipalities interviewed responded that both formal and informal mentoring and shadowing is an important part of the training and development process. This includes employees who are new to their roles shadowing senior staff, previous position holders, and positions they support. Formalized training ensures that there is standardization on knowledge transfer.

It was also noted in the Market Scan that many other jurisdictions leverage learning and experience through professional societies or through internal/external courses.

Internal Training (Onboarding)

It is important to have standard training in place to ensure all staff clearly understand the City's growth objectives, policies, design guidelines, standards, and specifications. Knowledge of the structure of the City of Winnipeg, some of the history of its build out, and the objectives of other branches objectives will help staff understand the context around their deliverables.

For all staff to understand the development review process, it is recommended to establish clarity of the approvals process, including:

- roles and responsibilities of each stakeholder;
- define what success looks like for each approvals process;
- map each City approval process;
- identify which groups are responsible for each aspect of the process; and
- provide clarity and the rationale for each application submission requirement.

This can be done as a hands-on training which can be developed for use as onboarding.

The training should also focus on the roles of reviewers at various stages of the process, including how comments are handed off between scoping, pre-application, formal submission, and resubmission. There should be best practices about how issues and comments are to be handed from one stage to another and closed off, and how some regard must be given to direction given to applicants during previous steps in the process.

There is also a place for training of the soft skills required for staff involved in working directly with applicants and the public. These skills include but are not limited to conflict resolution, crucial conversations, negotiating, leading meetings, and formal communication.

Training does not substitute for on-the-job learning. City staff noted it takes new staff approximately a year and a half to become fully versed in their roles. A concerted effort is required to develop and document the orientation and training materials outlined above.

Internal Training (Cross-Training)

Broader cross-training and resources are recommended to address the issues that currently arise when either time off is taken by staff or staff turnover occurs. Industry has expressed their concern with a lack of coverage and resulting delays in deliverables.

Internal Training (Senior Administrative Training)

Land development has the potential to be highly political due to the costs and implications faced by developers when looking to advance new projects. This leads to inquiries that are escalated to elected officials and senior administration. It is important that these stakeholders hold a broad understanding of the City's processes and practices. It is recommended to create internal orientation and training for senior administrative staff and elected officials. This training can cover implications, challenges, City outcomes,

industry business imperatives, and more. This training should be developed in conjunction with PP&D. This can be done as a hands-on training which can be developed for use as onboarding.

5.2.3.1 Timeline to Implement

The preparation of the above training materials should be implemented immediately to ensure that there is immediate benefit realized. It is recommended that corporate resources can be assigned to assist the team to accelerate the development of training materials.

5.2.3.2 Estimated Cost to Implement

To implement City Wide Internal Training, a senior staff member with an understanding of the City's standards, organizational structure, and objectives would need to create the training content. The cost estimate to implement this is 0.5 FTE over 18 months using a combination of Senior Project Engineer's from Services Development Branch, Water, Wastewater, and Land Drainage which has a salary of $142,000, resulting in a cost of approximately $107,000 to implement over 18 months. The City should include an allowance to maintain the training once implemented. Additional costs will apply if external resources are needed to develop training materials.

5.3 Improve Industry Capacity to Submit Better Applications

It is a common frustration across all jurisdictions that an inordinate amount of time is spent working with applicants who do not understand the City's processes and standards. There are experienced developers and consultants who submit well conceived applications, but there are many in the system that are not of that same calibre. It is time consuming to guide individual applications to a level where there is sufficient information to make a decision. Many jurisdictions have invested in steps to improve the quality of applications that come in during intake to help reduce time spent on application reviews. Better quality applications help with faster decision making.

5.3.1 RECOMMENDATION #8: EXTERNAL TRAINING – INDUSTRY STANDARDS

In all jurisdictions surveyed, it is noted that there is a diverse range of the capabilities of consultants involved in land development. Some understand the processes and demonstrate a mastery of the guidelines and standards, while others use the City staff and application process to perform quality control on their work. The latter puts a significant burden on City staff.

It is important for applicants to understand the approvals process, including roles and responsibilities of each stakeholder. Training can be broken down into various topics and both delivered in person but also recorded so it can be available online. This will allow staff to refer new applicants to it for future reference. Ongoing collaboration between staff and industry is encouraged to identify emerging areas or topics where additional training and support is needed to better align applicants with the process. This approach is taken in other jurisdictions where process or standard changes are introduced.

Although consultants and other applicants typically understand their responsibilities in the application process, there are still some issues that arise which inevitably extend the process unnecessarily. For example, the City of Ottawa runs a series of Planning Primer sessions to help stakeholders and industry consultants understand the approval processes. Over time, they have expanded the series to include more

technical topics in response to suggestions from the users. This combined with published terms of reference for various technical studies would decrease the involvement needed by staff to answer application process related questions, as well as alleviate the issues currently faced with lack of developer, consultant, and engineer knowledge.

The initial focus of the training should be on consultants working for applicants. As the training matures, it could be extended to developers or the interested public.

5.3.1.1 Timeline to Implement

The preparation of the above training materials should be initiated immediately and rolled out within 18 months.

5.3.1.2 Estimated Cost to Implement

The cost estimate to implement external training, if it is done using internal resources to the department, is 0.5 FTE over 18 months using a combination of Senior Project Engineer's from Services Development Branch, Water, Wastewater, and Land Drainage which has a salary of $142,000, resulting in a cost of approximately $107,000 to implement over 18 months. The City should include an allowance to maintain the training once implemented. Similar costs will apply if external resources are needed to develop training materials.

5.3.2 RECOMMENDATION #9: UPDATE MODELING TOOLS

One of the major challenges identified by W&W was the time required to review applications with respect to capacity within the wastewater and land drainage systems. While the water team uses EPANET to analyze the City's water distribution system, review of wastewater and land drainage systems are primarily completed through use of calculation spreadsheets and GIS queries. While use of calculation spreadsheets and GIS is both cost-effective and easy to use, it is difficult to capture complex or large-scale systems adequately.

The following was noted with respect to how the hydraulic models are used in the application review process:

- Water provides flow/pressure curves at connection points but does not provide the City-wide model to outside consultants.
- Land drainage currently uses models in certain discrete areas typically to review flood protection requirements. However, a City-wide land drainage model does not exist.
- Wastewater's current hydraulic models are sufficient for CSO planning but need further refinements to the sub catchment areas for better resolution if they are to be utilized for development planning. Flow monitoring would be needed in nearly every sewer district to calibrate the model.
- Model maintenance (calibration) is resource intensive, particularly if it is updated frequently with the results of flow monitoring. Studies of existing lift stations and sewer upgrade or modification construction drawings are needed in infill sewer districts to have appropriate inputs to the model. Ongoing model updates and flow monitoring would be required on a regular basis to ensure the model remains up to date and reflects any sewer system changes and new developments.

Specific benefits of implementing the use of hydraulic models in application reviews include:

- Resourcing – once a reliable hydraulic model is developed, significant reduction in level of effort per review.
- Complex simulations – better understanding of impacts development will have on existing infrastructure, particularly within the existing sewers servicing large areas of the City of Winnipeg.
- Communication – provides a graphical representation of results that can be shared with the applicant improving understanding/communication of the system.
- Reduced risk – built-in calculations reduce manual data entry reducing opportunity for errors and creating more consistent results.

Through discussions with W&W, it appears that wastewater capacity is the primary constraint for most infill development. It is recommended the City invest the necessary effort to update the existing wastewater model to better understand their wastewater infrastructure.

5.3.2.1 Timeline to Implement

Based on existing resourcing challenges in W&W, it is likely that updates to the wastewater model will need to be completed with support from an engineering consulting firm. The preparation of an RFP and execution of City-wide updates to the wastewater model is expected to take a minimum of 36 months.

5.3.2.2 Estimated Cost to Implement

Costs for implementation can vary widely depending on the status of the model and complexity of the infrastructure. We recommend the City allocate an initial budget of $5,000,000 to complete the modeling update and supporting flow monitoring and revisit the long-term program and funding after the City sees the impact of the initial update. This budget would cover internal staff to manage the project along with consultants to complete them. This process will require 0.25 FTE to manage the wastewater model update at the Project Coordinator level, which has a salary of $126,000/year, resulting in a cost of $31,500/year. The cost of the Project Coordinator is included in the initial budget. It is assumed the updates can be maintained by the current staff assigned to maintain the model.

The costs provided are intended to be used for planning purposes only. As noted, exact costs will be dependent on the existing level of detail within the model.

5.3.3 RECOMMENDATION #10: SERVICEABILITY STUDIES

As part of the internal application process review, the W&W team noted that there is a significant difference in the level of effort required to review greenfield applications versus infill applications.

Greenfield development:

- Is typically connecting to newer infrastructure with known capacities.
- Is often larger programs led by Developer's and their consultants who understand the infrastructure and development requirements.

Infill development:

- Is typically connecting to older infrastructure with unknown capacities.
  - Older infrastructure is not designed to accommodate higher densities of today

- Can be a variety of sizes.
- Is typically led by landowners, so understanding of infrastructure and development requirements varies drastically.

PP&D has a mandate to study and recommend areas of the City for intensification in order to promote sustainable development patterns for population growth and to make the best use of existing amenities. However, the level of information available on localized servicing constraints does not currently keep up with the pace of planning decisions. This creates frustration for landowners who wish to follow new planning goals but cannot quantify the cost of servicing improvements. Council has specifically asked if there could be improved and timely modeling of utility constraints to address this. Long range servicing studies should be proactively advanced concurrently with new strategic policy areas. This will position Council to understand the infrastructure costs and implications when approving new policy direction.

Therefore, it is recommended that the City identify the highest priority infill and intensification areas in the City and commission water, wastewater, and land drainage serviceability studies in coordination with PP&D. This can be completed as one big project or by dividing the City up into smaller catchments and completing studies based on priority. The studies would typically be limited to regional infrastructure only but can include local infrastructure if warranted.

Municipalities interviewed in the Market Scan, as discussed earlier, do not have real-time infrastructure constraint models for wastewater. This is extremely difficult to assemble and maintain because:

- Data Collection: Gathering accurate and comprehensive data for existing systems can be difficult. This includes information on pipe sizes, lengths, materials, and conditions, as well as flow rates and patterns.
- System Complexity: Wastewater systems often have complex networks with many interconnected components that must be accurately represented in the model. There may be constrictions in the existing infrastructure due to localized pipe failures, inefficient pumping capacity, infiltration of groundwater into the system.
- Calibration and Validation: Models need to be calibrated and validated against real-world measurements to ensure accuracy. This process can be time-consuming and requires a good understanding of the system's operational work.
- Maintenance: Once developed, hydraulic models require regular maintenance to incorporate changes in the system and to remain useful for decision-making.
- Technical Expertise: Developing and using hydraulic models requires specialized knowledge and experience. Mistakes such as inaccurate system attributes or misunderstanding objectives can lead to poor model performance.

The recommended serviceability studies are not intended to replace developer led studies for specific development. The intent of the serviceability study is to mirror the future demand for a given area to the future planning densities identified in the City’s approved planning documents. This will allow W&W to better understand the regional and local infrastructure required in a certain area to support the City’s infill objectives. This then allows W&W to communicate with developers regarding the necessary infrastructure improvements required and associated timelines of the improvements to unlock development within a certain area.

The serviceability studies are not intended to be a living document, rather a snapshot of the future infrastructure plan required to support increased density in each area. The serviceability study would only need to be updated if there is a substantial change within the area that differs from the planning documents.

5.3.3.1 Timeline to Implement

Based on existing resourcing challenges in W&W, it is likely a City-wide serviceability study will need to be completed with support from an engineering consulting firm. The preparation of an RFP and execution of a serviceability study for a City-wide serviceability study is expected to take a minimum of 24 months. If the City divides the serviceability studies into smaller areas less time may be required per study (depending on complexity of area), but multiple studies will require more staff to manage the consulting assignments.

5.3.3.2 Estimated Cost to Implement

Costs for implementation can vary widely depending on the status of the model and complexity of the infrastructure. We recommend the City allocate a budget of $1,000,000 a year each year for five years to complete these studies and revisit the long-term program and funding after the City sees the impact of the first studies. This budget would cover internal staff to manage the project along with consultants to complete them. This process will require 0.25 FTE to manage the modelling studies at the Project Coordinator level, which has a salary of $126,000/year, resulting in a cost of $31,500/year. The cost of the Project Coordinator is included in the initial budget. It is assumed the updates can be maintained by the current staff assigned to maintain the model.

The costs provided are intended to be used for planning purposes only. As noted, exact costs will be dependent on the size and complexity of infrastructure within the priority areas for the serviceability study.

5.3.4 RECOMMENDATION #11: CHANGES TO SHARED DATA & OFFSITE DATA

Shared Data

In jurisdictions where technical resources are constrained, sharing technical studies and information on the utility systems allows for consultants and applicants to be more aware and engaged in resolving infrastructure capacity issues. This removes the full burden of identifying and directing infrastructure upgrades from City staff and allows them to pivot to more of an oversight role for infrastructure investment.

Shared data refers to information that is made accessible and available for use by multiple individuals, systems, or entities. In the context of this project, shared data refers to infrastructure maps, infrastructure studies, capital plans, project updates, or infrastructure or planning figures that are updated from time to time. It can also refer to approval status of ongoing development proposals or other internal works led by the City.

Sharing data involves allowing authorized users (applicants) to access and utilize the same set of data. The intent of the shared data is to allow applicants to access information they currently do not have access to, such as infrastructure record information, to reduce the number of touchpoints required under the current system.

As per Figure 3, the shared data would become a foundation of the process. Shared data, developed and maintained by W&W, would be shared through a GIS site or similar tool. Access to the Shared Data would be through a public account, managed as a subscription service to cover the cost and ensure the data can be managed. Allowing W&W to communicate the status of existing infrastructure to the public at scale reducing the number of individual touchpoints.

5.3.4.1 Timeline to Implement

Exact timeline for implementation of a Shared Data site will be dependent on timelines for creation of the information to be shared. It is our understanding W&W already has an existing GIS site which can be adapted for this purpose.

5.3.4.2 Estimated Cost to Implement

It is assumed that W&W will utilize the existing GIS to share the information. Therefore, the costs associated with implementing an improved Shared Data site is dependent on the costs to create the information the City intends to share. Costs will also vary depending on type of information to be shared, time period of updates, etc. Therefore, costs cannot be confirmed at this time. It is recommended W&W consult with IT to set initial expectations.

It is likely that existing GIS staff are not able to add this responsibility to existing duties so this recommendation would require a dedicated Project Coordinator to manage the information over time. Costs for the Project Coordinator are identified in Recommendation 5: Application Filing and Shared Data.

Offsite Data

Offsite data refers to information such as reports, studies, or designs that are made accessible and available for review by the public. The intent of the offsite data is to create a library of studies, reports, and designs completed by the City and third parties within the City for reference by potential applicants. The data provided would include the various documents and form part of the public domain. Information disclosed through Section 263 of The Municipal Act or under the Freedom of Information and Protection of Privacy Act for the public domain.

Industry has identified that information on existing infrastructure is not well known or available. It is recommended to have this information publicly available to reduce the amount of time and effort spent by City staff to respond to applicant inquiries.

In addition to both information provided by consultants as part of development applications and existing infrastructure information provided by the City, it is recommended that infrastructure information relating to City-led projects be also publicly available for applicants to reference. This approach is used by a number of other jurisdictions and it is recommended that the resulting information repository be publicly accessible at no charge, although a subscription based fee model may also be employed.

The City may be able to reach out directly to other jurisdictions to gain understanding of how their systems are implemented and managed.

5.3.4.3 Timeline to Implement

The creation of an offsite infrastructure information repository can be implemented in a timeframe of 1-2 years with adequate dedicated resources. The content in the repository will be assembled through the 3 sources outlined above through attrition, with previous information added as capacity warrants. It will take time for applicants to become familiar and start seeing benefits.

5.3.4.4 Estimated Cost to Implement

This recommendation will require some further scoping and analysis. We recommend the City establish an initial budget of $500,000 to charter the project, scope the systems, implement, and commission the product. This scope of work could be accommodated within the responsibilities of the new resources outlined above. Once the information repository is available to the public, there will be an ongoing administrative cost for managing it.

6 SUMMARY OF RECOMMENDATIONS

Table 5 Summary of Recommendations

	Theme 1: Streamline Processes to Save Time or Use if More Efficiently	
	Recommendation 1: Consolidate Inquiry Points	Modifying the existing process on project intake will reduce the number of non-file review functions for senior staff. Non-file related tasks will be delegated to other staff allowing senior staff to focus on file reviews and other corporate priorities.
	Recommendation 2: Refine Intake Processes for Development Applications	
	Recommendation 3: Project Scoping and Document Application Filing System	Documenting project scoping work will make it more efficient for approvals staff to address future developments and inquiries.
	Recommendation 4: Application Prioritization	By devoting a few days each month to expediting approvals of simple and/or well constructed applications will mean that straightforward projects are approved quickly, and not caught behind more complex files that consume staff time. This will improve the average turnaround time on all files.
	Theme 2: Improving Capacity	
	Recommendation 5: Enhance Staff Resources	New resources are needed to address file volumes and provide resiliency for coverage and staff turnover.

	Recommendation 6: Refine Staff Roles and Responsibilities	Senior staff need to focus on the most important and complex files. This will also provide new career succession opportunities for senior engineers within their current branches
	Recommendation 7: Enhance Staff Training	A formalized training approach that includes documentation will ensure consistent practices and support knowledge transfer to new staff in an effective manner.
	Theme 3: Improve Industry Ability to Submit Better Applications	
	Recommendation 8: External Training – Industry Standards	External training of stakeholders, consultants and applicants will clarify expectations and align them with City reviewers, resulting in a lower number of incomplete applications. There is also an opportunity for training interactions with external parties to improve working relationship with City staff and improve their understanding of the infrastructure challenges the City faces.
	Recommendation 9: Update Modeling Tools	Improving the various infrastructure models and making the models available to qualified consultants will improve the quality of analysis in servicing plans for development applications.
	Recommendation 10: Serviceability Studies	Targeted serviceability studies should be completed concurrently with new policy approvals in existing areas.
	Recommendation 11: Shared Data and Offsite Data	Assembling and managing a publicly available infrastructure information repository will allow information on existing infrastructure to be more widely known and reduce the time current spent by City staff to provide it.

Attachment A to this memo is a table summarizing the various recommendations and the associated costs. Including identification of 15 FTEs to implement the recommendations. Note that while 15 FTEs are identified, only 13.5 FTEs continue beyond the 2 years.

W&W to review recommendations and include PP&D, Public Works, Transit, etc. where warranted.

7 NEXT STEPS

As required in the Scope of Services for this project, next steps include:

- Final Report in accordance with D15

Best regards,

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Attachment: Attachment A: Summary of Resource Requirements to Implement Recommendations

Attachment A: Summary of Resource Requirements to Implement Recommendations

	Recommendation	Water Network Planning	Wastewater Network Planning	Land Drainage Network Planning	Engineering Generalists (to be assigned by W&W)	Services Development Branch
1.	Consolidate Inquiry points	1 FTE Project Engineer (WAPSO Grade 4)	1 FTE Project Engineer (WAPSO Grade 4)	1 FTE Project Engineer (WAPSO Grade 4)	1 FTE Technologist 1	0.5 FTE Senior Project Engineer (WAPSO Grade 5) (Implementation)
2.	Refine Intake Processes	No additional resources are required.				
3.	Project Scoping					
4.	Application Prioritization	No additional resources are required.				
5.	Enhanced Staff Resources				2 FTE's Project Engineer (WAPSO Grade 4) positions to coordinate project scoping who can be cross trained to work in multiple roles to allow for them to fill in as staff leave over time.	3 FTE's Project Engineer (WAPSO Grade 4)
6.	Refined Staff Roles	1 FTE Senior Project Engineer (WAPSO Grade 5) If a current staff member is identified at a high enough level of job classification to resolve issues on complex files, there is no cost expected.	1 FTE Senior Project Engineer (WAPSO Grade 5) If a current staff member is identified at a high enough level of job classification to resolve issues on complex files, there is no cost expected.	1 FTE Senior Project Engineer (WAPSO Grade 5) If a current staff member is identified at a high enough level of job classification to resolve issues on complex files, there is no cost expected.		1 FTE Senior Project Engineer (WAPSO Grade 5)
7.	Enhanced Staff Training					0.5 FTE Senior Project Engineer (WAPSO Grade 5) (Implementation) Time shown here is assumed to be split between Services Development Branch, Water, Wastewater, and Land Drainage.
8.	External Training					0.5 FTE Senior Project Engineer (WAPSO Grade 5) (Implementation) Time shown here is assumed to be split between Services Development Branch, Water, Wastewater, and Land Drainage.
9.	Update Modelling Tools		0.25 FTE Project Coordinator to manage the project.			
10.	Serviceability Studies		0.25 FTE Project Coordinator to manage the project.			
11.	Shared Data and Offsite Data				See row 5.	
	Subtotal of New Staff	**2 FTE's**	**2.5 FTE's**	**2 FTE's**	**3 FTE's**	**5.5 FTE's**

	Additional Items	Water Network Planning	Wastewater Network Planning	Land Drainage Network Planning	Engineering Generalists	Development Agreement Administrators
	Estimated Non-W&W staff costs		Update Modeling - $5,000,000 to complete the modeling update and supporting flow monitoring and revisit the long-term program and funding after the City sees the impact of the initial update. Serviceability Studies - $500,000 a year each year for five years (to complete maximum 5 studies and revisit the long-term program and funding after the City sees the impact of the first studies. This budget would cover internal staff to project manage these studies along with consultants to complete them.		Allowance of $50,000 for support to internal and external engagement on recommendations 1, 2, and 3. If external resources are needed to develop training materials, then there will be a cost of approximately $35,000. $500,000 initial budget for the shared data and off-site data management system.	
	Funding Source	Utility rate funded,	Utility rate funded,	Utility rate funded,	Application fee funded,	Subdivision application fee funded,
	Roles of New staff	Long term system forecasting, planning, Responsible for the City's 10-25 year Utility Plan, (updated every 10y) Responsible for capital infrastructure plans and prioritization, Existing system capacity, Asset management and lifecycle analysis, Input on budget and utility rate recommendations,	Long term system forecasting, planning, Responsible for the City's 10-25 year Utility Plan, (updated every 10y) Responsible for capital infrastructure plans and prioritization, Existing system capacity, Asset management and lifecycle analysis, Input on budget and utility rate recommendations,	Long term system forecasting, planning, Responsible for the City's 10-25 year Utility Plan, (updated every 10y) Responsible for capital infrastructure plans and prioritization, Existing system capacity, Asset management and lifecycle analysis, Input on budget and utility rate recommendations, Oversight of applicant reports and studies,	This position will lead on engineering review of active applications, Policy, land use amendments, subdivisions, engineering drawings, development permits, site servicing plans, Liaison with Network Planning for offsite capital infrastructure impacts of new applications, Responsible for public infrastructure construction permissions, Lead internal and industry input for engineering design guidelines, specifications and standards,	Liaison with the Utility Generalists to ensure the scope of work is documented in the development agreement, Administer development cost charges, utility oversize coordination, Preparing general and special clauses for the development agreement, Coordinate cost sharing between developers, Determine and manage public infrastructure performance security, Oversee and administer infrastructure inspection and certification process,