July 1, 2009

Kirkland Subdivision and LSM Process Assessment Findings & Recommendations

Summary

The Latimore Company, a consulting firm dedicated to evaluation and improvement of local government development permit operations, expanded an original assessment of the Kirkland Fire & Building, Planning & Community Development, and Public Works Departments’ Single-Family Residential (SFR) permit process to include the residential subdivision and land surface modifications that create new parcels for these homes. The objective of this analysis was to recommend steps the departments could take to improve the predictability, efficiency and collaboration of these reviews, particularly to shorten approval timelines in the context of subdivision to home occupancy.

This assessment identified several strengths that include a best-in-class rating for pre-submittal collaboration. The Kirkland process boasts seven additional strengths in the areas of technology, regulations, and procedures.

Six improvement recommendations are offered to capitalize on Integrated Development Plans to expand development options for prepared applicants, structure the staff report for greater uniformity and efficiency, leverage expertise for more consistent short plat reviews, strengthen interdepartmental workflow tools, and expand Forestry review capacity.

Analysis indicates and applicants confirm that the constraint of the broader residential subdivision process is Planning/Forestry approval. This arises from the currently incremental tree preservation approach and the inherent project management responsibility of planners for land use actions.

The next step is implementation of these recommendations, many of which are logical extensions of the improvements implemented to boost SFR building permit efficiency.
# Table of Contents

Summary ......................................................................................................................................... 1  
Table of Contents ........................................................................................................................ 2  
Introduction ..................................................................................................................................... 3  
  Background ................................................................................................................................... 3  
    Residential Subdivisions ........................................................................................................ 3  
    Influences on the Process ....................................................................................................... 3  
    The Latimore Company ......................................................................................................... 4  
  Phase 2 Objective ........................................................................................................................ 4  
  Scope of Work ............................................................................................................................... 4  
  Assessment Methodology ........................................................................................................... 5  
    The Theory of Constraints ..................................................................................................... 5  
    Process Modeling ..................................................................................................................... 5  
Current Process ........................................................................................................................................ 6  
  Approval Letters ....................................................................................................................... 7  
  Land Surface Modification (LSM) Permits ................................................................................. 10  
  Bonding ...................................................................................................................................... 12  
  Recording .................................................................................................................................... 13  
  Performance Statistics ............................................................................................................... 13  
    Short Subdivision (Short Plat) ............................................................................................. 13  
    Preliminary Subdivision (Plat) .............................................................................................. 17  
    LSM (Grading Permits and Civil Plan Approval) .................................................................. 18  
  Strengths ...................................................................................................................................... 20  
    Best in Class Pre-Submittal Collaboration ........................................................................... 20  
    Additional Strengths .............................................................................................................. 21  
    Applicant Compliments ......................................................................................................... 24  
  Process Constraint .................................................................................................................... 25  
  Improvement Areas .................................................................................................................... 26  
    Applicant Suggestions .......................................................................................................... 26  
Recommendations ................................................................................................................................. 28  
  1. Integrated Development Plans .............................................................................................. 28  
  2. New Service Options for Subdivisions ................................................................................. 30  
    Accelerated Option .............................................................................................................. 30  
    Pre-Submittal Option ............................................................................................................ 31  
    Progressive Option .............................................................................................................. 31  
  3. Short Plat Staff Report Template .......................................................................................... 32  
  4. Short Plat Peer Review .......................................................................................................... 32  
  5. Dashboard Coordinated Subdivision Reviews .................................................................... 33  
  6. Increase Urban Forestry Capacity ....................................................................................... 34  
Conclusions ....................................................................................................................................... 34  
  Next Steps ................................................................................................................................. 34  
Thank you ....................................................................................................................................... 35
Introduction

Background

In 2007, the City of Kirkland, led by its Departments of Fire & Building, Planning & Community Development (PCD), and Public Works, commissioned an assessment of the City’s single-family residential (SFR) permit process to understand the reasons behind an upsurge in approval timelines and seek process improvements that should be implemented when a new permit tracking software was purchased. The departments have been working with The Latimore Company since then to implement a package of recommended improvements to restore performance though improved procedures for tree preservation, average building elevation, intake screening, and interdepartmental coordination.

Residential Subdivisions

Concurrent with implementation of these SFR improvements, the City expanded the original SFR assessment to examine the subdivision and land-surface-modification process that gives rise to the residential lots fueling much of the single-family building permit demand.

A subdivision and land surface modification (LSM) application crosses the same three departmental boundaries as the downstream building permits, Fire & Building, PCD, and Public Works. Plats also require a City Council action for acceptance of the streets, frontage and utilities these projects construct.

As noted in the original assessment, the popularity of Kirkland combined with the sophistication of the zoning and municipal codes to implement the City’s comprehensive plan demand much of its development review process. In balance with this, the staff is highly skilled, most wielding decades of experience in their fields. Several have been with Kirkland for many of these years.

Influences on the Process

A northern annexation is in the process of boosting the current 45,000 population upwards of 78,000 residents. This will increase review and inspection demand accordingly. Kirkland already contains Houghton, a disincorporated city retaining local prerogative to alter development standards. This affects procedures like floor area ratio, regulation of which was disallowed in Houghton.

Economic drivers changed substantially during the course of this assessment. Capitalization of the development industry was strongly impacted by the sub-prime lending crisis, leading to a sharp decline in residential applications throughout the region. Some areas have seen a 75% drop in SFR development applications since the 2006-07 peak. Kirkland declines ranged from 50-60% over the period. This has reduced backlog and improved turnaround time performance, but placed limitations on staffing. The commercial and multifamily market has remained strong.
The Latimore Company

*The Latimore Company, LLC* is a community government consulting firm located in Snohomish County that is dedicated to improving the predictability, efficiency and collaboration of permit operations. The firm has consulted for over 20 Washington cities and counties to improve permit process performance.

Its founder, Kurt Latimore, a professional engineer, led the deployment and refinement of the Model Permit System, a package of administrative processes proven effective at streamlining permit application preparation and review, through the Economic Development Council of Snohomish County in 2003. This work was recipient of the Puget Sound Regional Council’s *Vision 2020* award.

**Phase 2 Objective**

The objective of this expanded assessment was to evaluate the City’s subdivision and land surface modification process, identify its constraint, document findings, and offer recommendations for improved predictability, efficiency and collaboration across the residential development process.

**Scope of Work**

This assessment scope of work ran concurrent with implementation of the SFR assessment recommendations. There is much crossover between the SFR building permit process and the subdivision and LSM process that precedes it, particularly for a critical thread, tree preservation.

This assessment scope of work, like before for SFR, consisted of:

**Task 1 – Interview the Team**
Examined how the current process is designed and how it operates for subdivision, short plat and LSM plan review. Personnel across the Fire & Building, PCD, and Public Works departments were asked for their thoughts and insights. Most sessions were small group or one-on-one discussions. These began with a series of kickoff orientation meetings.

**Task 2 – Observe Interactions and Workflow**
Observed how the interdepartmental team operates.

**Task 3 – Collect Applicant Feedback**
Collected feedback and insights from applicants

**Task 4 – Map the Process**
Documented the review and inspection process
Task 5 – Analyze the Existing Process
Evaluated current performance and identified the process constraint.

Task 6 – Report Findings & Recommendations
Documented herein findings and offer recommendations for improved predictability, efficiency and collaboration in the residential subdivision and LSM process

Assessment Methodology

TLC applied its unique set of methodologies for assessing the Kirkland process.

These included:

- Theory of Constraints
- Structured System Specification.

These techniques were integrated with specialized system analysis based on:

- Interviews
- Observations
- Applicant Feedback
- Analysis and Comparative Measures.

The Theory of Constraints

Influencing efficiency recommendations is Eliyahu Goldratt’s Theory of Constraints. Goldratt, a physics professor, found that by modeling organizations and their objectives as physical systems (like gravity, water flow or electromagnetism) that his model predicted dramatic performance improvement was achievable. Organizations throughout the world are realizing these results. Its fundamental premise is that within any system is a constraint, rarely more than one, that generally remains consistent until changed by market forces or systematic change.

Once we understand this constraint (a particular resource, policy or skill), we aim our improvement efforts on it. This elevates the performance of the entire system. In this assessment of Kirkland residential development processes the constraint was identified and improvement recommendations were focused and prioritized accordingly.

Process Modeling

Tom DeMarco’s Structured System Specification method was used to depict the Kirkland process. This effective method focuses on the data that flows between process steps, noting that any system at its conceptual level performs a series of transformations to incoming data (such as an application) to produce new data (like a permit). By focusing on the data as it is transformed through the sequence of internal system processes, we can see whether there is a smooth evolution, or whether change or rework are present along the way warranting improvement.
The method uses a series of oval “bubbles” and arrow “data flows” to depict processing steps and the data in and out of each step. Implicitly, a step can begin once its first data-flow input is received, but cannot complete before its last input is received. Multi-tasking is generally minimized when processing begins only when all inputs are present (Goldratt). Processing steps (bubbles) are numbered uniquely and are often decomposed into finer working-level steps. This is shown by decomposing Process 1 into processes 1.1, 1.2, etc. This enables us to visualize data flow in detail (at the decomposed levels) or summarized at an abstracted, higher level. Thus we can address details and see “the big picture” while maintaining connectivity between both.

There is a loose sense of time in the diagrams as data generally flows left to right and process numbers generally increase in kind.

Dashed arrows or bubbles indicate data-flows or processes which only occur sometimes or are a lesser-chosen alternative among options. Processing steps outside the scope of this analysis are shown as rectangles for reference.

**Current Process**

The Kirkland residential subdivision and LSM review process is shown in the following data flow diagrams (Figs. 1-6). These diagrams were developed interactively with staff.

The major processing steps are:

- Approval Letter (preliminary plat/short plat approval)
- Land Surface Modification (civil plan and grading) approval
- Bonding (performance and maintenance)
- Recording (final plat).

These major steps are shown in Fig. 1.

Details of approval letters are shown in Figs. 2-4.

LSM approval is shown in Fig. 5.

Bonding and Recording are shown in Figs. 6 and 7 respectively.
Approval Letters

An approval letter (Fig. 1) establishes that an applicant has demonstrated that their subdivision proposal conforms to City zoning codes and can provide its future residents with appropriate provisions for urban housing.

Prospective applicants routinely inquire (Fig. 2) with an on-duty Planning Information Specialist for the latest regulations, standards, forms and process (Step 1.1). Midway through preliminary design, the applicant meets with departmental experts in a mandatory pre-submittal meeting (Step 1.2). This provides Q&A discussion and an opportunity for staff to advise the applicant on what the conditions of approval for the envisioned configuration are anticipated to be. This is an unusually effective collaboration in Kirkland, earning a best-in-class rating as described in the Strengths chapter.

If a full subdivision, a roads concurrency meeting follows the pre-submittal session to verify that the new traffic patterns preserve comprehensive plan concurrency levels of service (Step 1.3).

A neighborhood meeting called by the applicant is encouraged (Step 1.4). Community comments provide a barometer of local sentiment and may reveal impacts and design opportunities. The public can comment online through the excellent KirklandPermits.net too.
Formal submittal “intake” follows in Step 1.5 (Fig. 3), which initiates determination of completeness and notices of application under RCW 36.70B.070. Departmental review follows (Step 1.6, Fig. 4) which typically culminates with comments in a correction letter and one “pre-revision” second review cycle.

Short plats are decided administratively in an approval letter (Step 1.9). Full subdivisions are decided by public hearing (Step 1.7 plus Step 1.8 if challenged by a party of record).

Underlying the process are the Kirkland Municipal Code (KMC), the Kirkland Zoning Code (KZC), and the State RCW and WAC. Tidemark Advantage© and the internet are key toolsets.
Figure 3 – Plat/Short Plat Intake and Assignment
Land Surface Modification (LSM) Permits

The next phase of development after preliminary subdivision or short plat approval is the design, review and approval of site improvement plans (Step 2, Fig. 5). These plans specify exactly how the applicant satisfies the conditions in their approval letter with road improvements, sidewalks, driveways, utility installations and stub-outs, tree preservation and planting, landscaping, and more. These plans may be submitted at the time of plat/short plat submittal though most hold off on the detailed engineering design necessary for this submittal until they receive first review comments from their plat/short plat application.
In most jurisdictions these site improvement plans are regulated by a set of civil plan drawings and a grading permit. Kirkland combines the two into one approval known as a Land Surface Modification permit (LSM).

The LSM includes a specified area of disturbance. This area specifies the limit of allowed construction and ground disturbance operations, which is the minimum necessary to install the required improvements and stub-outs. Clearing and grading of the balance of each parcel is governed by the individual home building permits. This practice limits the removal of trees to just those necessary for site improvement until demonstrated to be necessary by the applicant in their building permit. It also retains pre-existing grades in the area of each home which is important because Kirkland carefully regulates Average Building Elevation (ABE) that is based on pre-disturbance topography.

The LSM review process (Fig. 5) begins with first intake, which may occur any time after plat/short plat intake. Review follows the same routing as the approval letter to the same review team. First review culminates in a comment letter. The applicant incorporates the corrections indicated in the letter and submits a pre-revision. Second review is generally successful, concluding in an administrative approval that may include redlines. The applicant brings in a Mylar set depicting the approved configuration and a LSM permit is issued. Construction can begin after a pre-construction meeting that establishes construction expectations for the contractor team.

Figure 5 – LSM Approval Process
**Bonding**

The next process is bonding (Step 3). Applicants in Washington must post performance sureties at the time construction commences to provide cities with financial wherewithal to complete or remediate projects if the developer proves unable to stabilize and complete improvements affecting the public right of way, health or safety (Step 3.1, Fig. 6). These performance instruments are converted after construction to maintenance sureties which are released after warrantee periods successfully conclude (Step 3.4).

Kirkland allows, as provided for in RCW 58.17, an option for developers (Step 3.3). If sufficient performance bonds are provided, a developer may record the subdivision (Step 4, Fig. 7) prior to constructing some or all required improvements. Recording allows the developer to legally advertise and sell the newly segregated parcels to residents or builders. Such bonds are released once site improvements are actually constructed.

During site improvement construction, Kirkland also allows incremental release of performance bonds as the exposure of the City declines (Step 3.2). This is highly appreciated by builders as it releases more operating capital for construction.

3. Bonding

Figure 6 – Bonding Process
Recording

The last step of the plat process is recording (final plat). In this process (Step 4, Fig. 7), public improvements are dedicated to the City, the site is checked to confirm that approval letter conditions are satisfied, and a recommendation is packaged and set to the City Council for consideration and acceptance. Once accepted, the plat – which is the map depicting the project plus any easements and covenants, codes and restrictions (CC&R) – is recorded with the King County Auditor. The recorded plat is then transmitted to the King County Assessor who assigns tax parcel numbers to the new lots. These new parcel numbers authorize building permit issuance.

Performance Statistics

Short Subdivision (Short Plat)

Short subdivisions “short plats” create a relatively small number of new lots, and as such enjoy some regulatory simplifications under State code (RCW 58.17). Kirkland has taken the action provided for by the State to allow up to nine lots under the short subdivision provisions. The
default is four lots after which full subdivision regulations apply. This fits the nature of infill
development underway in the City well. Nearly all residential subdivisions here are short plats.

As is common regionally, short plat submittals in Kirkland typically require 2 review cycles to
receive an approval letter. The first cycle is a combination of completeness determination and
code compliance check. Most applications (85%) are deemed complete during this first review.

Detailed iteration data has not been retained historically for short plats, but staff reports that:

- First review is typically finished within 40 days, culminating in a correction letter.
- Applicants then take about 40 days themselves to revise and supplement their
  applications in accordance with the correction letter and resubmit.
- Second review finishes 25 days thereafter, generally with an approval letter (Fig. 8).

![Figure 8 - Typical Residential Review Cycles](image)

The average total timeline during 2007 when 37 short plats were applied for and 44 were
approved\(^1\) was 94 days from submittal to approval letter (Fig. 9).

Decisions took twice as long in 2006, averaging 204 days. Some took much longer. That year
38 short plats were requested and 32 were approved. This suggests a third review cycle was
more common in 2006. A three-cycle review inherently represents 50% more City workload and
administration than a two-cycle review. And, it doubles the applicant revision effort and time,
producing a longer total timeframe consistent with the measured average.

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\(^1\) Some were applied for in 2006.
These timelines line up with regional norms for short plat approval decisions (Fig. 10). We see a concentrated band of project approval timelines that indicates better than average predictability here and similarity with cities such as Edmonds, Marysville, Bothell, Olympia, and Lynnwood. A second comparison with a collection of statewide cities puts Kirkland timelines within a few weeks of most, at double to triple the volume, with the nine lot limit, for the years 2005 and 2007 (Fig. 11).

Figure 9 - Short Plat Approval Letter Timelines
Regional Short Plat Decision Cycle Times (2001-2007)
Preliminary Subdivision Approval
(Total Elapsed Working Days from Submittal to Decision)

Figure 10 - Regional Short Plat Approval Timelines

Figure 11 – Short Plat Comparison (2005 and 2007)
Preliminary Subdivision (Plat)

By contrast with scores of short plats, only two subdivisions triggering the full subdivision regulations were decided in 2007. One was processed in 154 days. The other took 242 days, 78 of which was extra time the applicant needed to arrive on a complete application. These timelines are similar to Bothell, Lynnwood, Edmonds, and most other jurisdictions (Fig. 12).

Recall the inherent scope varies widely on these projects. Some create 5 lots, others generate hundreds.

Figure 12 – Regional Preliminary Subdivision Timeline Comparison
LSM (Grading Permits and Civil Plan Approval)

LSM review timelines have been steadily improving since 2006 (Fig. 13). Staff steadily trimmed its review days by 4 weeks over the period. Most LSM approvals require two review cycles.

Applicant timelines to incorporate first-review corrections remained fairly constant in 2006-2007, but broke sharply faster in 2008 as the industry reacted to rapidly changing economics.

Since the team used its tracking system Tidemark Advantage© to monitor its LSM iterations, we can compile detailed statistics on the nature and timing of the review cycles (Fig. 13). We see that LSM first-reviews average 40 days and second reviews average 25 days, just like short plats, which are reviewed by the same personnel.

The pacing department for first LSM review is PCD for zoning and forestry checks, with Public Works a close second for engineering review (Fig. 14). The second review is paced by Public Works to wrap-up engineering drawing approval. Applicants average 68 days between reviews to incorporate their corrections. The rare third, fourth or fifth reviews are faster as the incremental change narrows.
The Fire & Building department role is generally limited to administrative intake and issuance, fire access and hydrant flow rates, and review of any demolitions.

These timelines align with other Washington cities for similar approvals (Fig. 15).

![2007 LSM Department Cycle Times](image)

**Figure 14 - LSM Cycle Times by Department**
Strengths

The Kirkland subdivision and LSM process has several strengths, many of which were echoed by the Kirkland Developers Partnership in their feedback sessions.

Best in Class Pre-Submittal Collaboration

Foremost, the process boasts a best-in-class feature for its pre submittal conferences.

A pre-submittal conference is common practice for residential subdivisions across the state. It provides an opportunity for staff and an applicant to talk about an upcoming project, establish what the review process will be, define what is needed from the applicant, provide the applicant with information the city may have about the project site, and scope what public improvements may be required. These public improvements like road improvements, utility extensions and recreational amenities are a leading expense of residential subdivisions.

In some jurisdictions, pre-submittal conferences are required, in others they are optional. Some require or encourage multiple conferences to interact incrementally as the design evolves.

The range and structure of the pre-submittal dialogue itself also varies widely across the region. In some conferences an applicant writes notes while staff members offer verbal feedback around

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**Figure 15 - Regional Civil Plan Timeline Comparisons (Residential Subdivision/Short Plat)**
the table. At the other end of the spectrum, written staff notes are compiled, the meeting is recorded, forms and reference documents are assembled, and all is provided in electronic format. Kirkland feedback is provided in writing, packaged with the needed application forms and handouts.

Fees vary too. Sometimes the meeting is free, like in Renton. Most often, a $400-500 fee is collected. Some, like Kirkland’s $504 fee, are credited back to timely downstream application fees. Some, like Bothell, levy a $1500 fee with no credit back for this service.

What distinguishes the Kirkland pre-submittal meeting is the quality of the feedback.

**Sanitary Sewer Conditions:**

1. The applicant shall extend the existing public sewer system to provide sanitary sewer service for each lot within the proposed project. Extend an 8" sewer main along 122nd Ave. NE from the north property line to the south property line of lot 2 and terminate the extension with a manhole.

2. From the sewer manhole, extend a 6 inch side sewer to serve lot 1 and to serve the lot to the south at 12056 NE 70th St. The side sewer will need to be encompassed in a 10 ft wide side sewer easement unless it is directly adjacent the ROW in which case it can be reduced to 5 ft in width.

3. Provide a 10 ft wide private sewer easement along the north property line of lot 2. At the northwest and northeast corner of the lot the easement shall be widened to approximately 15 ft in width so that a future side sewer can be installed without impacting the existing trees. The applicant shall contact the owner of the property address 12046 NE 70th St. to see if they would like to pay to have the side sewer installed at the time of construction in this subdivision.

**Figure 16 - Sample Kirkland Pre-Submittal Conference Feedback**

Kirkland is particularly rigorous in the research done to foresee what the specific conditions of subdivision approval would be at the site the applicant is proposing to develop. For example, rather than stating that certain sewer improvements are required, or that sewer lines would have to be extended along a certain roadway, Kirkland takes it a level deeper to specify dimensions by lot number (Fig. 16). Most jurisdictions would stop by item 1 in the example.

This is greatly appreciated by applicants as it provides a more precise basis for project estimation of what are typically the most expensive details, it creates predictability as this feedback translates to the conditions of approval later, and this strong running start accelerates formal application review later.

**Additional Strengths**

The Kirkland process boasts seven additional strengths in the areas of technology, regulations, and procedures. The first contributes to the best-in-class pre submittal strength cited above.
Fire System Modeling
The City has developed a digital water system pressure model that allows the Fire & Building department to check available fire-fighting water pressure for a given site in minutes. This is still verified curbside in many jurisdictions. In combination with GIS-based records of existing hydrant locations, this allows the fire reviewer to quickly determine whether adequate flow exists for the project, whether proposed home sites are close enough to utilize existing hydrants, or whether improvements or residential sprinklers are required.

9 Lot Short Plats
As indicated, Kirkland has elected to allow up to nine lot short plats. This has aligned with market need exceptionally well: 95% of all residential subdivisions are short plats here. This exempts these infill developments from State Environmental Policy Act (SEPA) determination requirements and City project-specific concurrency review, an efficiency envisioned by the State under RCW 43.21C.229. As indicated in Figure 11, some cities have retained the default 4 lot limit, triggering full subdivision review at 5 lots.

Accessory Dwelling Unit Provisions
Accessory dwelling units (ADUs) are a common feature in Kirkland. The City has responded well to RCW 43.63A.215, which promotes the construction of accessory units in SFR zones. In many jurisdictions, ADUs are a detached part of the process. But, in Kirkland, they are discussed in early planning stages with subdivision applicants and ADU construction plans may be submitted on the same set of plans as the main home later in the building permit process.

This is very nicely integrated and as such tends to produce a superior result.

Development Review Committee
Reviewers meet weekly to pose questions and discuss their technical findings for these types of projects. This interdepartmental meeting is a valuable integration point. It draws on the collective experience of managers and supervisors to increase consistency, render code interpretations, and identify emerging policy needs.

Centralized LSM and Building Intake
The Building department currently administers intake and issuance of the combination grading and civil plan LSM permits. Generally, most of the complexity of LSM review is in the Public Works and Planning/Forestry disciplines, so the question arose whether we should shift intake and issuance of these to the Public Works counter.

One of the strengths of the Kirkland team is the way department leaders work together to apply their resources for the best overall customer service.
As Public Works is more often the constraint of LSM review than the Building department, administering LSM intake and issuance at the Building counter has been a strategic use of interdepartmental resources, by shifting this Public Works workload.

Using the same rationale, shifting PCD intake to the Building counter, forming in effect a Development Services wide intake center, would add to the benefit by redistributing workload from the broader PCD constraint. PCD is funded differently than Public Works and Fire & Building, so the accounting would need to be reconciled. Walkabout would remain as it is. This could be timed to coincide with any future City Hall expansion that adds a common counter.

**Performance Bonding Options**

Once an approval letter is issued, Kirkland allows developers to record subdivisions prior to installation of required improvements by posting a performance security of 130% the value of the required improvements. As provided in RCW 58.17.130, this gives developers the ability to advertise and sell the new lots, and establishes the parcel numbers needed for building permits. This can greatly reduce costs of capital, promoting development efficiency.

Many jurisdictions restrict this practice to deferral of only the final roadway paving and street tree installation. Thus, developers must install all other infrastructure before lots can be marketed. This can routinely add an extra year of industry capital holding costs.

**Incremental Bond Release**

Another welcome courtesy of the Kirkland process is incremental release of performance surety. This practice recognizes the value-added as a developer constructs various required improvements. As a developer finishes a major improvement, he or she can request release of a proportionate amount of the performance security. This frees up additional operating capital for greater project efficiency, while still protecting the City with a source of funds should the developer fail to deliver.

**Kirklandpermits.net**

As praised in the SFR assessment, the KirklandPermits.net web site that the City developed for applicants and City residents is outstanding. Of particular value to this phase of residential development is its noticing and comment feature.
Members of the public who see a notice board, receive a mailing, or hear about a project can learn about the details online. Should they wish to comment on the project, they can do so conveniently through the online system as an alternative to writing a letter (Fig. 17).

**Applicant Compliments**

Two Kirkland Developers Partnership forums were held to solicit feedback on the residential subdivision and LSM process. These were attended by several developers, most with extensive experience working in Kirkland and in other jurisdictions. While they asked for a collection of improvements to the process which are addressed later in this report, many also pointed to two strengths in Kirkland, often naming two individuals.

The first is the pre-submittal conference. Applicants greatly appreciate the exceptional depth and reliability of pre-submittal conference comments from Public Works, drawing praise as a best in the area to work with. Fire drew good ratings as well for their pre-submittal fire access and hydrant information. The Building department role in residential pre-submittal meetings is generally minor. Variables, if any, were in the Planning area.
The second compliment is predictability and speed relative to other jurisdictions. While not all are satisfied with current timelines, a number of participants who construct similar projects in other cities and counties noted that it has taken far longer and derailed much easier elsewhere. Ron Hanson, the Planning department’s outside short plat reviewer, received compliments for his seasoned, consistently smooth, fast and professional reviews.

**Process Constraint**

The constraint of the residential subdivision and LSM process is Planning/Forestry approval.

This arises from the inherent project management, site analysis, and coordination required of the City planner to assemble and document preliminary approval findings in the staff report, coupled with management of progressive tree plans that pace how site construction is authorized.

First subdivision/short plat review is paced by determination of completeness, noticing and collection of initial staff comments and conditions. Most Public Works and Fire & Building conditions are drawn from the prior pre-submittal conference comments. There are generally Forestry comments to integrate the arborist report findings with the proposed site plan. If critical areas apply, an outside reviewer makes technical findings about the compliance of the design with the environmental ordinances. One outside planner, a recognized expert by staff and applicants, conducts nearly all short plat reviews for the City. Mr. Hanson’s efficiency and consistency was highly praised by applicants, who noted that when anyone stood in for him that predictability fell and timelines grew substantially. This is further evidence of a process paced by PCD.

After applicant corrections, second subdivision/short plat review is paced by the staff report preparation, Tree Plan III approval, and the administrative decision.

Next in the sequence is LSM review, though this may be submitted as early as the time of subdivision/short plat application.

LSM first review is also paced by the Planning and Forestry reviews to check that conditions of the approval letter are implemented in the site improvement plans and that the proposed area of disturbance and sidewalk layout removes the least practical number of significant trees as defined in the Tree Plan III.

After applicant corrections, the faster LSM second review is paced by the wrap-up of the Public Works details. The rare third or additional iterations resolve unique project issues.

Recall that Planning and Forestry also pace the subsequent building permit reviews, which averaged three cycles to approve and establish Tree Plan I submittals for each home that reconcile with the Tree Plan III for the site and the clearing and grading already performed under the LSM permit.
**Improvement Areas**

As approached from the building-permit side in the SFR assessment, an opportunity exists to significantly streamline the overall residential development process by reorganizing tree preservation and site grading for applicants who know what they want to build.

**Applicant Suggestions**

Two *Kirkland Developers Partnership* forums were held to solicit feedback on the residential subdivision and LSM process. These were attended by several developers, most with extensive experience with Kirkland and other jurisdictions.

The chief desire for change, filling 5 out of 13 pages of flipchart notes and the bulk of the two conversations, is to revise the tree preservation regulations (Fig. 18).

The primary complaints with the current regulations and how they’re applied are:

- Developers have to carefully protect trees that are either removed by the time of home occupancy or by the homeowner in pairs thereafter.
- Progressive tree removal forces the site to be cleared and graded incrementally, which wastes economies of scale and adds time.
- Tree preservation limits architectural options that are also limited by ABE and FAR constraints later.
- Developers should be able to remove trees and plant the species homeowners want in the places they want them once construction is finished.
- Staff tries to retain more than the minimum. Implementation is beyond what the City Council intended.
- Allow all trees inboard of setbacks to be removed and planted elsewhere.
Other themes were:

- Allow building permit application submittal prior to plat recording. Let the developer take the risk of rework should the building plans have to change once reviewed. Allow the payment of impact fees at the time of this earlier submittal too.²

- Be consistent in the Planning reviews. “The developer knows how long the approval will take as soon as they learn who their planner is.”

- When critical areas apply to project, the City uses an outside reviewer to evaluate the applicant’s analysis, buffers and mitigation. Any revisions are coordinated through the City planner. Applicants do not have direct access to this outside reviewer, which can make corrections more iterative, and the aspect of review seemed outside the reach of performance targets. Allow direct access to this reviewer or bring this review in-house.

Figure 19 - Most Requested Approval Timeframe

- Require one title report instead of several. Since the City says title reports can’t be more than 30 days old, a developer often must renew title reports (4 times in one example) because the approval process takes longer than 30 days. This is wasteful.

- When asked how long approvals should take, 60 days from first intake to approval letter, including applicant revision time, was the closest consensus (Fig. 19).

² Impact fees were raised around the time of these forums.
Recommendations

Six recommendations add new options to expedite review and combine field operations when appropriate, increase pacing staff efficiency, better coordinate the delivery of comments and conditions to lead reviewers, and add urban forester capacity.

The first priority is to provide new options for the team to work with developers who can establish what they want to build from the outset with an integrated development plan. Recommendations 1 and 2 provide this.

The next order of business is to enable our planners to operate more efficiently. Recommendations 3 and 4 accomplish this.

Next we make the task of assembling departmental comments and conditions easier and more consistent for the planners by coordinating review timelines as we have done for SFR building permits. Recommendation 5 brings Latimore Dashboard\textsuperscript{©} functionality to this process.

Lastly, a limited urban forester capacity impacts each step of the residential approval process. Recommendation 6 elevates the capacity of this key thread through the Kirkland process.

1. Integrated Development Plans

As recommended in the SFR assessment report and developed collaboratively with staff since, an integrated development plan would allow the applicant and review team to agree on and manage a basic site configuration from as early as pre-submittal conference through building permits.

This has particular benefit for tree retention, the improvement most requested by applicants.
The concept is that an applicant would bring to staff a preliminary drawing that shows the proposed lot configuration, frontage improvement areas, utility service routings, topography, and existing trees (Fig. 20). The applicant and review team would use this information to reach agreement on how to reasonably access and service the lots, and would use this as a basis for indicating trees that would need to be removed to install these services.

The applicant could elect to go further at this point, as described in Recommendation #2, and specify building footprint locations. The applicant and review team would then use these footprints (crosshatched in Fig. 20) to identify any additional trees that would need to be removed to accomplish home construction in these locations. Alternative layouts could be discussed as well.

With agreement on the Integrated Development Plan (IDP), the applicant and review team have created the predictability the applicants are seeking and have a tool for managing site trees throughout the process.

It also provides applicants with three new options, based on how they use the IDP.
2. New Service Options for Subdivisions

Recommended is a suite of three new service options for residential subdivision/short plat applicants. The three options maximize speed for applicants seeking shortest development timelines, maximize predictability for applicants seeking to establish these requirements from the very beginning at pre-submittal, or maximize flexibility for applicants wishing to make their configuration decisions incrementally (Fig. 21).

Details of the three options and how they differ at each step of development review are attached in Appendix A.

<table>
<thead>
<tr>
<th>ID</th>
<th>Task Name</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Maximum Flexibility (Progressive)</td>
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<tr>
<td>2</td>
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</tr>
<tr>
<td>3</td>
<td>Approved Tree Plan III</td>
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<tr>
<td>4</td>
<td>Approval Letter</td>
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<tr>
<td>5</td>
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<tr>
<td>6</td>
<td>Demolition Permit</td>
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<tr>
<td>7</td>
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<tr>
<td>8</td>
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<tr>
<td>9</td>
<td>Record Plat</td>
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<tr>
<td>10</td>
<td>House Design</td>
</tr>
<tr>
<td>11</td>
<td>Approved Tree Plan (I)</td>
</tr>
<tr>
<td>12</td>
<td>Issue Building Permit(s)</td>
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</tr>
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<td>15</td>
<td>Maximum Efficiency (Accelerated)</td>
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<td>17</td>
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<td>21</td>
<td>Approved LSM Permit</td>
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<tr>
<td>22</td>
<td>Infrastructure Construction</td>
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<tr>
<td>23</td>
<td>Record Plat</td>
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<td>House Design</td>
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<td>25</td>
<td>Issue Building Permit(s)</td>
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<td>Approval Letter</td>
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<td>Certificates(s) of Occupancy</td>
</tr>
</tbody>
</table>

Figure 21 - Three New Residential Subdivision Process Options

Accelerated Option

In the new accelerated option, the applicant adds the building footprints to the proposed IDP at the time of subdivision/short-plat application submittal. Staff reviews this configuration in parallel with approval letter review and establishes the result as the IDP for the project.

Thereafter, the applicant can submit their LSM plans and building permit plans. The building permit applications may be submitted prior to plat recording. Both the LSM and building permits are checked for consistency with the IDP during their respective reviews. Since the IDP depicts building envelopes, the planner can quickly confirm tree preservation consistency with the IDP without having to consult the urban forester. This frees forester capacity to establish...
IDPs, accelerate timelines on other reviews, and improve forestry procedures. This contributes to Recommendation #6. The forester would be engaged by the planner if inconsistencies are found during review.

This option also improves construction efficiency. An LSM under the accelerated option can authorize clearing and grading for the building footprint as authorized in the IDP. Therefore, the developer can capture the economies of scale lost in today’s process to clear in one operation, log in one operation, and grade in one operation.

Once exercised to log a building footprint, post-revisions to the IDP to authorize any additional logging could require director approval to ensure the process is being used correctly.

**Pre-Submittal Option**

The new *pre-submittal* option adds a further enhancement to the *accelerated* process. It moves the IDP earlier to the pre-submittal phase. This bolsters predictability one step further in that it establishes the tree preservation and utility service design criteria from the outset, streamlining this aspect of approval letter review in addition to the LSM and building permits.

This is the also most effective time to consider variances to enhance tree preservation. KZC Chapter 95 allows administrative variances of certain lot dimensional requirements to align setback and other undisturbed areas with existing high quality trees. But, this opportunity isn’t exercised often because the design has usually evolved past where such revisions are welcomed. In the *pre-submittal* option, this may see greater application on projects.

This and the *accelerated* option may particularly appeal to a developer planning to construct their own homes.

**Progressive Option**

The *progressive* option is similar to the traditional residential subdivision process in the City.

This option retains the flexibility to relocate and adjust building footprints until individual building permit applications, and driveways and utility runs until LSM application. An IDP is still established at the time of the approval letter. But, it just reduces to the content of the Tree Plan III of today with no agreed areas of disturbance until LSM approval (and these are just the minimum disturbances for the LSM installations). And, no site clearing or grading is approved for the building footprints until justified by building permits.

This may appeal to developers planning to sell individual lots to builders wanting maximum design flexibility at the building stage.

IDP post-revisions are used to maintain configuration control throughout the process, and authorize tree removal as needed in each step.
3. **Short Plat Staff Report Template**

The PCD team recommended during the course of our assessment that a template be created for short plat staff reports. An example is one previously developed for administrative design review staff reports (Fig. 22).

![ADR Summary of Decision](image)

<table>
<thead>
<tr>
<th>REGULATION APPLIES</th>
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</thead>
<tbody>
<tr>
<td>Description</td>
</tr>
<tr>
<td>Blank wall treatments (see Section 50.65.2.e)</td>
</tr>
<tr>
<td>Treatment of building facades (see Section 50.65.2.f)</td>
</tr>
<tr>
<td>Options:</td>
</tr>
<tr>
<td>Transparent windows</td>
</tr>
<tr>
<td>Artwork</td>
</tr>
<tr>
<td>Landscaping</td>
</tr>
<tr>
<td>Description</td>
</tr>
<tr>
<td>Screening of certain areas (see Section 50.65.2.g)</td>
</tr>
<tr>
<td>Major pedestrian pathways (see Section 50.65.3.b)</td>
</tr>
</tbody>
</table>

The planner uses the template to quickly click which regulations apply to the subject project, adding narrative to customize and amplify as needed.

This is an excellent idea and is recommended.

This improves the efficiency of the planner by reducing the amount of effort required to document common conditions of approval. It also provides a built-in checklist to help ensure all the conditions required for the project to comply with the code are attached.

The checklist aspect reinforces Recommendation #4.

4. **Short Plat Peer Review**

Several applicants described a significant variation in timelines and the manner of review based on the planner assigned to their project. Separating the two observations, applicants are seeking reliable speed and a smoother, more consistent experience.

For speed, outside short plat review did perform 34% faster than in-house review in 2007, the peak year for short plat decisions, delivering an 83 day decision on average. In-house review that year averaged 125 days. The department assigned 67% of its short plats over the period to outside review anticipating these efficiencies from the combination of experience, project similarity, and fewer interruptions. In-house reviewers typically work a mix of project types and respond to more frequent inquiries. 34% faster outside review is within the performance gain we would predict.

The other goal of the applicant feedback was a smooth, consistent experience. This can be reinforced with peer review, augmented by the staff report template of Recommendation #3 and the improved workflow coordination of Recommendation #5.
5. Dashboard Coordinated Subdivision Reviews

One of the recommendations in the SFR assessment was improvement in the way department reviewers prioritized their respective workload to create predictable timelines for individual building permits.

In response, the City implemented the Latimore Dashboard©, a system for signaling the order that reviews should be done to deliver best service on the City’s various turnaround time targets. The City then took that functionality and integrated it into the Tidemark Advantage© tracking system. This allows SFR reviewers to quickly see all the review cases awaiting their action, presented in the order of highest priority based on aging relative to the turnaroun target for each type of application in their list (Fig. 23).

![Figure 23 - Latimore Dashboard Example](image)

Recommended now is integration of short plats, subdivisions and LSMs into this system. This will allow those reviewers who process multiple permit types to consistently apply their efforts to the applications most needing their attention. And, it provides real-time visibility for department managers to gauge current service delivery and identify any outliers needing action.

Expanding this system to include all review types would be similarly beneficial.
6. Increase Urban Forestry Capacity

Forestry is a key thread running throughout the Kirkland residential development process. Trees largely dictate how, where and when site construction is currently authorized from LSM through individual home construction. So predictability and efficiency in this step is particularly important. The efficiencies created through the IDP and new subdivision process options (accelerated, express, progressive) reduce and spread out the concentrated workload that currently swamps the part-time Forestry position.

As application volumes rise with annexation and recovery of the housing market, Forestry will be the first specialty that will need extra capacity. Training of additional planners in the Forestry discipline, cross training and/or establishment of outside review options in the interim will enable managers to respond nimbly to rising timeline pressure when it returns.

Conclusions

The Kirkland residential subdivision process compares well with other cities and boasts eight strengths that include outstanding pre-submittal collaboration. The process is staffed with skilled personnel and in general the regulations promote the good infill development we see in the city.

There are six opportunities to improve the process further. Of particular importance are adoption of Integrated Development Plans and the offering of the three new review process options. This will allow prepared applicants to execute the residential development process faster and more efficiently. These same improvements ease and distribute the concentrated Forestry workload to manage today’s process, boosting City review performance at the same time. Code changes are currently underway to provide for these IDPs.

The other four improvements increase PCD efficiency, which adds performance across the whole spectrum of residential development, from plat intake to home occupancy. Keeping LSM intake and issuance at the Building counter benefits the overall system. Consolidating PCD intake with these others would improve system performance even more.

These new efficiencies should be sufficient to remove PCD as the constraint of the LSM process. As project lead, PCD properly remains the constraint of approval letter review. As more projects opt for accelerated or express review, more Forestry capacity will be freed for IDP setup and process improvement, as envelope verification is shifted to the planner.

Next Steps

The next step is implementation of these recommendations, many of which are logical extensions of the improvements implemented for SFR building permit efficiency. The IDP process is
developed and ready for first project use. The three new processing options are ready to go too. The Latimore Company can continue to work with the team to monitor and optimize these new high performance tools.

A short plat staff report template could be prepared in short order. The Latimore Company can produce this for the team. Peer review could begin immediately.

Expansion of the Dashboard functionality to include these broader reviews (or all the reviews in the system) should be a relatively straightforward extension of the logic the City IT crew built into Tidemark Advantage© for SFR review management. A small training effort, launched with a Wednesday all-team briefing on how the new system works, should bring the rest of the team on board quickly.

Boosting Forestry review capacity is a more involved step that starts with cross training of planners for a supporting role, and could add arborist training for a full contribution. Greatest return on investment is likely to be forester-led cross training. This is best accomplished by increasing the Forestry position to full time. Outside review options should also be explored to maintain performance during high demand periods.

Lastly, extending these improvements to commercial, multifamily and mixed-use developments is recommended. These subdivision and LSM improvements added to the SFR building permit improvements are scalable to the non-residential side of our process. They would be shaped to deliver best performance for these types of projects that tend to have more parallel activities, complex building and fire reviews, intensified traffic, solid waste, and landscaping analysis, design review, more involved occupancy punch lists, and other nuances. The Latimore Company is here to help.

Thank you

The Latimore Company thanks the City staff and the Kirkland Developers Partnership for their open and constructive contributions to this assessment. We very much appreciate this opportunity to serve The City of Kirkland and offer these recommendations.

We would be delighted to work together with the City to implement these recommendations and improve the predictability, efficiency and collaboration of the residential development process.

Regards,

Kurt Latimore, Member
The Latimore Company, LLC
September 2, 2008

**Integrated Development Plan**

**IDP Design**

1. Customer draws up an *integrated development plan* (IDP) on a plat that includes:
   - Existing and proposed property lines, easements, and rights of way
   - Lot dimensions, areas, numbers, and required yard setbacks
   - Existing topography to 2’ contours, tied to Kirkland vertical datum
   - Existing structures to be retained or removed
   - Numbered locations, species and drip lines of viable trees on or overhanging the property
   - Any critical areas
   - Where he or she plans to:
     a. Access each lot
     b. Serve the lots (water, sanitary sewer, storm sewer, dry wells, and power)
     c. Improve the frontage (curb, gutter, sidewalk, street trees)
     d. Site the homes (crosshatch a building and impervious envelope for each lot)
     e. Retain (and hence protect) or remove (“x out”) the viable trees

**Pre Submittal Conference**

2. Customer submits the pre-submittal conference (PRE) application
   a. This application includes an IDP if the customer chooses the *pre-submittal* option.
3. Planning, Public Works, Fire (and Building and Forestry if *pre-submittal*):
   a. Review the preliminary plat (and IDP if *pre-submittal*)
   b. Conduct site visits
4. Staff discusses the proposal with the Customer and his or her experts in a PRE
   a. Like today; plus
   b. Discuss and reach agreement on tree retention approach if *pre-submittal*
5. Staff scans and attaches the PRE notes to the *Advantage* PRE case
   a. Same for the IDP if *pre-submittal*
**Plat Submittal**

6. Customer finishes his or her preliminary plat application based on:
   a. The PRE
   b. IDP development (or referencing the IDP if pre-submittal)

7. Customer submits his or her preliminary plat application
   a. Includes an IDP if the customer chooses the accelerated option
   b. The planner of the day screens for counter completeness based on the intake checklist

8. Staff performs first-review on the plat application
   o The team from the PRE reviews the preliminary plat application (and IDP if accelerated)
   o Forestry is included in the routing unless an pre-submittal IDP was approved before

9. Planning sends a consolidated comment letter to the Customer for any required corrections

**Plat Pre-Revision**

10. Customer incorporates the corrections and writes a short narrative explaining how each comment was addressed.

11. Customer submits his or her preliminary plat pre-revision (and IDP pre-revision if accelerated or an IDP post-revision if pre-submittal and needing revision to align with the plat)
   a. The planner of the day screens the narrative for full responsiveness to the first-review comments (referencing Advantage notes as needed)
   b. Pre-submittal or Accelerated: Customer would now typically submit an LSM application and any building applications\(^1\)
      - In accordance with the preliminary plat pre-revision and IDP configuration
      - Same staff team reviews the LSM
        1. Except Planning now reviews for Forestry
        2. Planning routes to and adds a Forestry activity in Advantage if any IDP conflicts are found

12. Staff performs second-review on the plat

13. Planning issues an approval letter if compliant (and approves the IDP)\(^2\)
   a. The IDP reduces to a traditional Tree Plan III if progressive
   b. Steps 9-12 repeat if additional correction cycles are required

**Grading (LSM) and Demolition**

14. Staff reviews the LSM application (and any building application if accelerated or pre-submittal)
   a. First and second reviews accordingly
   b. Planning reviews for Forestry to verify consistency with the IDP

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\(^1\) The Customer may submit his or her LSM and Building applications with the first plat submittal
\(^2\) The Customer may elect to bond for improvements and record the plat at this time
15. Staff reviews and issues demolition permits as needed, consistent with the IDP
16. Building issues the LSM permit
   - Verifying plausible building sites
   - Site work can begin after the LSM pre-con including tree fencing/removal, TESC, foundation grading and frontage improvement per the LSM, consistent with the IDP

### Building Permits

17. Staff accepts building permit submittal(s) and conducts first and second reviews
   a. **Accelerated or Express:**
      - Planning verifies consistency with the IDP
      - Any IDP deviations that propose additional viable tree removal are approved by the Planning Director as IDP post-revisions
      - Impact fees may be paid at the time of building permit submittal
   b. **Progressive:**
      - Forestry verifies consistency with the IDP and expands the area of disturbance as necessary to construct the home per the building permit as an IDP post-revision
      - Building approves foundation grading

18. Building approves submitted building permits

19. Customer completes the LSM improvements and/or bonds for any unfinished work

20. Staff records the plat
   a. The County Assessor issues new parcel numbers

21. Building issues submitted building permits
   a. Under the new parcel numbers
   b. Impact fees are paid
      o Unless paid at submittal for *accelerated or pre-submittal*

22. Building construction begins