



Memorandum

DATE: November 9, 2007

TO: Shoreline Planning Commission

FROM: Paul Cohen, Senior Planner

RE: Hearing Continuation for Plateau at Jackson Subdivision

On September 20, 2007 staff presented the proposal and recommendation for the subdivision Plateau at Jackson. You can review the original staff report from the City's website at: <http://cosweb.ci.shoreline.wa.us/uploads/attachments/pds/pc/092007/3.iii.pdf>. At that meeting the Planning Commission voted to continue the hearing on November 1. That date was later moved to November 15. The staff report (linked above) was previously presented to you and provides all the necessary information pertaining to the subdivision. On October 1, 2007 the Hearing Examiner held the SEPA appeal hearing. The Hearing Examiner issued a decision on October 5, 2007 (attached). The September 20 meeting minutes are also included in this packet.

I do not expect to present the proposal again but rather leave time for public testimony and questions that you may have. For the purpose of discussion I have written responses to some of the Commission's questions and comments below.

11th Ave NE Easement – Part of the reason why the unimproved easement along the east boundary was not chosen as the proposed site access because it allowed greater separation from the drive for the adjacent property to the east. Criterion 2 of the subdivision code states that, "The proposal shall be designed to minimize grading by using shared driveways and by relating street, house site and lot placement to the existing topography." Staff was not convinced that access at 11th Ave NE would decrease the amount of overall site grading in balance with other requirements of the critical area tract, minimizing access drive length and impervious surface, and the number of lots.

Frontage Improvements – Existing frontage improvements consist of a curb and sidewalk. New improvements would not be required because the frontage is not within the City of Shoreline.

Storm Drain through Critical Area – The site engineer has written that the site is consolidated till. It is very strong and dense soil and referred to as nature's concrete.

Agenda Item - 7.1

Trenching outside the critical area to install the sewer and storm would disturb the surface vegetation. The trench would be about 20' deep in some places. The trench would need to be wide enough to accommodate the equipment. The backfill for the trench would need to be controlled density fill, because getting compaction on the backfill would be difficult. CDF would also discourage groundwater from seeking the path of least resistance, and running through the trench.

Utilities through the critical area will require boring. The sewer in 10th NE is shallow and the storm drainage in 10th would also be shallow. The boring pit in 10th NE would be shallow and could be located away from the slope. If the pit onsite is located outside the buffer and on Lot 5 or farther east, disturbance to the slope would be minimized. There will be two holes, one about 8" for the sewer and one about 12" for the storm drain. These holes will not destabilize the glacial till, provided the boring pits are set back.

Attachments

1. Hearing Examiner Findings for Plateau at Jackson
2. List of comment letters received

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OCT 05 2007
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CITY OF SHORELINE

**CITY OF SHORELINE HEARING EXAMINER
FINDINGS, CONCLUSIONS AND DECISION**

APPEAL OF SEPA THRESHOLD DETERMINATION

PROJECT INFORMATION SUMMARY

Applicant: D.R. Strong Consulting Engineers
Location: 4521 11th Avenue NE, Shoreline, WA
Project Number: 201584
Proposed Project: Preliminary Formal Subdivision to create six single family lots, a critical area tract, and an access/utility tract
Appellant: Paramount Park Neighborhood Group, Inc.
SEPA Threshold Determination: Determination of Nonsignificance (DNS)

INTRODUCTION

The Department of Planning and Development Services issued a Determination of Nonsignificance on the above-referenced project proposal on July 5, 2007. The Appellant, Paramount Park Neighborhood Group, Inc., filed an appeal on July 20, 2007. The hearing was scheduled for August 2, 2007, but was continued to September 20, 2007 and October 1, 2007, by order of the Examiner following a prehearing conference with the parties.

The matter was heard by the Hearing Examiner on September 20, 2007 (in conjunction with the Planning Commissions public hearing on the underlying project application) and on October 1, 2007. Represented at the hearing were the Appellant, Paramount Park Neighborhood Group, Inc., by Brian Derdowski (September 20, 2007) and Chris Eagen (October 1, 2007); the City, by Flannery Collins, Assistant City Attorney; and the applicant, by Gary East, attorney at law.

For purposes of this decision, all section numbers refer to the Shoreline Municipal Code (SMC or Code) unless otherwise indicated. After due consideration of the evidence elicited during the appeal hearing, the following shall constitute the findings of fact, conclusions, and decision of the Hearing Examiner on this appeal.

FINDINGS OF FACT

Proposal and site

1. The project proposal is for a preliminary formal subdivision to create six lots on property addressed as 14521 11th Avenue NE. The property is approximately 69,260 square feet in size, and is undeveloped. The site contains critical areas, including a steep slope area and stream buffer area for Littles Creek, which are located generally at the north and west portion of the site.

2. The property is bordered by NE 145th Street to the south, unimproved 10th Avenue NE to the west, 11th Avenue NE right-of-way to the east, and other properties to the north. The right-of-way for that portion of 10th Avenue NE abutting the site is located entirely within the 115-foot required stream buffer for Littles Creek.

Department review

3. Glen Pickus, at the time a Planner II for the City, conducted the SEPA review of the proposal. The proposal which was considered and reviewed by Mr. Pickus did not propose full street improvements to the 10th Avenue NE frontage abutting the subject property, as would normally be required by SMC 20.70.030.A. The Director of the Department, as responsible SEPA official, subsequently issued a Determination of Nonsignificance (DNS) for the proposal on July 5, 2007.

4. The City issued a Variance from Engineering Standards for the project few weeks later, which waived the requirement for full street improvements for 10th Avenue NE. The variance was granted in order to minimize impacts to the stream buffer, since the 10th Avenue right-of-way was entirely within the buffer. The variance decision also notes that full improvements would be unnecessary, since the proposed new lots would not use 10th Avenue for access and there was no foreseeable reason for the 10th Avenue NE to ever be extended south to NE 145th Street. The variance, as a minor land use decision under WAC 197-11-800, was categorically exempt from SEPA review.

5. Future development of the site will be subject to all of the City's applicable codes and the site development permit process. The site development plans will address details of construction at the site, and the City may require SEPA review of the development of the site.

Appeal

6. The Appellant appealed the DNS on July 20, 2007, and its letter of appeal identified many "procedural objections" and "substantive objections" to the decision. On September 27, 2007, the Appellant moved to have the decision remanded to the City, on the grounds that "no SEPA notice was sent to the affected tribes." The City moved to exclude this claim as being a new issue that had not been identified in the appeal letter or during the prehearing conference on September 17, 2007. The City's motion was granted by order of the Hearing Examiner on September 28, 2007.

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7. At the hearing, the Appellant stated that it was withdrawing its SEPA appeal as to all but two issues. The Appellant indicated the remaining issues in its appeal were: that the City had failed to provide SEPA notice to affected tribes, and that the City had erred by failing to consider associated variances or other permits related to the subdivision application. The Appellant contends that regardless of whether any other permits are categorically exempt from SEPA review, they nevertheless represent interdependent proposals that should be reviewed with the subdivision proposal under WAC 197-11-060.

8. Because the issue of notice to affected tribes was not timely raised, and was disposed of by the September 28, 2007 Hearing Examiner Order, the only issue for consideration in this appeal is whether the City erred by failing to consider any associated variances or other permits.

CONCLUSIONS

1. The Hearing Examiner has jurisdiction over this appeal pursuant Chapter 20.30 SMC. The City's SEPA decision is entitled to substantial weight; SMC 20.30.680.B.2. The Appellant bears the burden of showing that the City's decision is not supported by a preponderance of the evidence; Rule 9.8, Shoreline Hearing Examiner Rules of Procedure.

2. As noted above, the Appellant at hearing withdrew all but two issues in its appeal, and one of those issues, concerning notice to affected tribes, was disposed of prior to hearing. Therefore, the sole issue before the Examiner in this appeal is whether the City erred by failing to consider associated variances or other permits as related or interdependent proposals pursuant to WAC 197-11-060, even if those permits were categorically exempt from SEPA review.

3. The variance from engineering standards waived full street improvements along 10th Avenue NE for this project, but the Department considered the proposal in light of the lack of street improvements into account during its SEPA review. Thus, even if the variance could be considered a related or interdependent proposal, the impacts of the proposed variance were considered during the SEPA review of the proposed subdivision. No evidence in the record identifies any other "associated variances and other permits" that were required to have been considered as part of the SEPA review of the subdivision proposal. The appeal should therefore be denied.

DECISION

The Director's Determination of Nonsignificance is hereby **AFFIRMED**.

Entered this 5th day of October, 2007.

Anne Watanabe
Hearing Examiner

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Concerning Further Review

NOTE: It is the responsibility of the person seeking to appeal a Hearing Examiner decision to consult Code sections and other appropriate sources, to determine applicable rights and responsibilities.

SMC 20.30.250 provides that "Any judicial appeal shall be filed in accordance with state law. If there is not a statutory time limit for filing a judicial appeal, the appeal shall be filed within 21 calendar days after a final decision is issued by the City."

EXHIBITS

- Exhibit 1** Notice of Public Hearing of the Planning Commission and SEPA Determination
Dated July 5, 2007
- Exhibit 2** Original Appeal Document and Receipt of Appeal Fee
Dated July 20, 2007
- Exhibit 3** Letter from City Clerk Scott Passey to Designated Appellant Representative, Jan Stewart RE: Rescheduling of Appeal Hearing, Project No. 201584
Dated August 3, 2007
- Exhibit 4** Letter from Attorney Gary W. East to Hearing Examiner and referenced persons in interest RE: Plateau at Jackson, Preliminary Formal Subdivision Application #201584
Dated August 6, 2007
- Exhibit 5** Letter from Jan Stewart and Vicki Westberg to City Clerk Scott Passey RE: Preliminary Formal Subdivision #201584 D.R. Strong Consulting Engineers, Applicant SEPA Appeal
Dated September 5, 2007
- Exhibit 6** City of Shoreline List of Documents
Dated September 6, 2007
- Exhibit 7** City of Shoreline Motion to Compel
Dated September 5, 2007
- Exhibit 8** Order Scheduling Hearing Conference
Dated September 6, 2007

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- Exhibit 9** Order Continuing PreHearing Conference and Hearing
Dated September 10, 2007
- Exhibit 10** Order
Dated September 12, 2007
- Exhibit 11** Letter from Jan Stewart to City Clerk's Office, City of Shoreline
RE: File #201584 (appointing new Appellant Representative)
Dated September 14, 2007
- Exhibit 12** Letter from Brian Derdowski to Anne Watanabe
Dated September 17, 2007
- Exhibit 13** City of Shoreline Witness List
Dated September 17, 2007
- Exhibit 14** City of Shoreline Modified List of Documents
Dated September 17, 2007
- Exhibit 15** Partial List of Witnesses
Dated September 20, 2007
- Exhibit 16** Partial List of Exhibits
Dated September 20, 2007
- Exhibit 17** List of Appellant questions and needs from the City
Date stamped September 20, 2007
- Exhibit 18** Declaration of Kristie Anderson, City of Shoreline Code
Enforcement Officer
Dated September 24, 2007
- Exhibit 19** Response to Appellants' Witness List and Appellants' Request to
Compel Witnesses and Documents w/ Exhibit A – Letter to
Brian Derdowski
Dated September 24, 2007
- Exhibit 20** Order
Dated September 24, 2007
- Exhibit 21** List of Witnesses
Date stamped September 27, 2007
- Exhibit 22** Letter from Brian Derdowski to Anne Watanabe
Dated September 27, 2007

List of Comment Letters
Plateau at Jackson, Project #201584

1. Barry Sommerdorf
2. Barbara J. Howery
3. Jan Stewart on behalf of Llyn Doremus
4. Donald Norman
5. Vicki Westberg
6. Kenneth E. Cottingham
7. Mamie Bolender
8. Jan Stewart on behalf of Terri Benson

Comment letters are being provided to the Planning Commission under separate cover and are available online at:

<http://cosweb.ci.shoreline.wa.us/uploads/attachments/pds/pc/111507/agenda.htm>

Plateau at Jackson Comment Letter
#1 Barry Sommerdorf

November 4, 2007

To: Shoreline Joint Planning Commission

RE: 6-lot Subdivision SEPA – at 14521 11th Ave. NE – File # 201584

From: Barry and Darlene Sommerdorf, residents due west of property, west side of 10th Ave. NE, 14600 9th PL NE, Shoreline, 98155

We are writing to express our concern over the development of the above mentioned property for two major reasons: 1) the rain water run off impact into Little's Creek running through our back yard and; 2) the plan to tie into the sewer on 10th Ave requiring access through a steep incline and sensitive, critical area slope.

Regarding the creek: We have lived on this property for 36 years and when it rains hard lower 8th Ave, 9th Ave, 9 Place, 146 and 147th NE all drain into Little's Creek. We suspect some of 12th Ave NE also drains into the creek bed. Hard rain in 20 minutes will bring the water level to the top of the creek banks. Please see accompanying pictures depicting normal flow and storm flow levels. We are seriously concerned that any more water flow into this creek could cause flooding and severe damage. Our house is about 20 feet at the closest point to the creek bed.

We are concerned that a holding tank meant to meter out water from 4-6 new house roofs, driveways and access road will not be adequate to stop flooding when we have heavy rain.

Regarding the trees on the steep hillside: Our concern about digging to install sewer lines and storm drain pipes is that it would disturb the fragile root system of the big trees on this steep slope. Our risk is that these trees could fall on our property. Please see accompanying photos.

Why disturb this fragile eco system when storm and sewer drains run along NE 145th Street that are just feet away from this property and development project?

Thank you for your consideration of our concerns.

Sincerely,

Barry and Darlene Sommerdorf











Plateau at Jackson Comment Letter
#7 Mamie Bolender

Mamie Bolender
16730 32nd Place NE
Lake Forest Park, Washington 98155

November 8, 2007

Shoreline Planning Commission
City of Shoreline, Washington

Re: Plateau at Jackson Subdivision-Permit application: 201584

After spending a considerable amount of time examining the files for this subdivision and visiting the site, it is clear there are a number of troubling issues which the Planning Commission needs to consider before deciding to pass this request to the City Council for action.

The owner states in the SEPA that an HPA will be required, and I believe that to be true, since Littles Creek, a tributary to Thornton Creek will be receiving runoff water from the site, which will impact both salmonid streams. It is my understanding that water cannot be introduced to a designated stream without Washington State Fish and Wildlife oversight. *I did not see paperwork for an HPA application or approval in the packet, therefore the City must not issue a permit for this subdivision, unless this is a next step once the subdivision is secured.*

It was made clear to me that the SEPA is not in question, but I wanted to make reference to one item because it revealed information which I didn't find elsewhere in the file.

In 3-C-2 of the SEPA questionnaire the developer states: "Oils, grease and other pollutants could enter groundwater or downstream surface water." *It is unacceptable and illegal to be introducing such pollutants into these salmon streams. If this is to happen, this application should not be approved.*

Neighbors just downstream from the point at which runoff from the houses and driveways of this development is to be introduced to the stream have reported flooding in their backyards in the past. *The increased runoff (and it will be increased) will exacerbate the problem along Littles Creek as well as known problems downstream in Thornton Creek, where much effort and thousands of dollars have gone into restoration work. No increase in stream flow is to be tolerated. New construction must be mitigated to allow zero runoff through the use of innovative projects, such as permeable paved areas, green roofs, restoration with native plants, rain gardens fed by captured runoff.*

Travis W. Price of D.R. Strong Engineering firm wrote: "The site contains steep slopes regulated by Shoreline Municipal Code 20-80-Critical Areas. 'Slopes greater than 40% are considered steep slopes upon which no development can take place. In addition there

Plateau at Jackson Comment Letter
#7 Mamie Bolender

are 50 foot setbacks required from top and toe of steep slopes, which can be reduced to 15 feet when technical studies conclusively (*emphasis added*) demonstrate that the reduction will adequately protect the proposed and surrounding development from critical landslide hazard'. " *Associated Earth Sciences, Inc., of Kirkland, who reported on February 24, 2006 refers in their report to the fact their study was being conducted "within constraints of scope, schedule and budget". Later they report "The number, locations and depths of explorations were completed within site and budgetary constraints. because of the nature of exploratory work below ground, extrapolation (underline added) of subsurface conditions between field explorations is necessary."* They go on to say (paraphrased) that "it should be noted that differing subsurface may be random. If variation are observed during construction, re-evaluation will be necessary". The question is "Who is watching?" **This hardly seems like a conclusive technical study.** This project should not go forward with such an unresolved conclusion in an area which is classified as an "erosion hazard", a Geological Hazard Area in the City of Shoreline's Critical Areas ordinances.

The same Travis M. Price report refers to the unnatural steep slopes adjacent to 145th Street, as "exempted from critical area regulation as they may have been created by prior legal grading to construct a street". (There is, apparently no proof of this 'legal grading'). The developer proposes cutting into this presumed legal grading on the east side and then placing two houses on top of it! *This cut, if legally done, was not made with the prospect of putting two large houses on top of it. Being an unnatural cut in the first place, this excessively steep slope would seem likely to be even less stable than the less steep, but higher slope to the northwest. The Travis M. Price report states: "A soils report must demonstrate no adverse impact would result from the exemption." Associated Earth Sciences, Inc., of Kirkland were again less than conclusive about its likely stability because of "scope, schedule and budget constraints" which hampered their thoroughness*

D.R. Strong Consulting Engineers, Inc. of Kirkland states: "The proposed retention/detention facility should help to prevent any potential downstream nuisance (*emphasis added*) problems". *Are water quality issues on Thronton and Littles Creek considered "nuisance" problems? They are looking at this issue from the point of view of the inconvenience which may be caused for humans. The important consideration here is water quality and it should be considered from a fish's viewpoint. To fish water quality is a life and death matter. To us a little more water in the creek is not even a 'nuisance'. Never mind that it may cause sedimentation from erosion or wash out a few fish eggs or juveniles before they're ready. What's a few more oils and toxins to us—we're not drinking the water anyway. But the fish are trying to live in it! Does the standard of water treatment on this project conform to the 2005 King County design manual? Who's checking those filters?*

It appears that Fire Department access could be a problem, especially to any building on lot #5. Has this been addressed?

Associated Earth Sciences, Inc., of Kirkland states: "At no time should fill be pushed over top of the bank." This will be hard to monitor after the houses are occupied. "Fill",

Plateau at Jackson Comment Letter
#7 Mamie Bolender

in this context, must include mowed grass, clippings, prunings and "junk". These come under the same category as fill and will and do cause serious landslides.

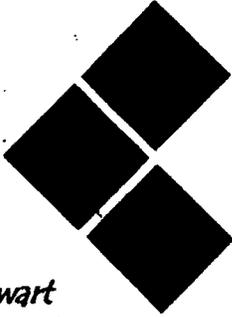
I saw nothing in the way of mitigation for setback reductions. For safety and for the environment these exceptions must be addressed. Some of these issues may be addressed at a later time in the process.

I hope the Planning Commission will hold this application back until these very important issues have been addressed for the safety and welfare of the prospective inhabitants, their neighbors, the environment and for all of us.

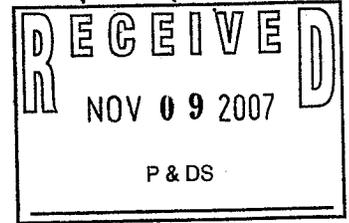
Thank you for your consideration of these concerns. These comments are my own, not those of the Lake Forest Park Stewardship Foundation. Though if time permitted, I'm quite sure they would approve them.

Sincerely,

Mamie Bolender
Vice President, Lake Forest Park Stewardship Foundation



COTTINGHAM
TRANSPORTATION ENGINEERING
350 N.W. 175th St. Seattle WA 98177
voice: 206-546-3030 fax: 206-546-5203



Jan Stewart
Vicki Westberg
Paramount Park Neighborhood Group, INC.
14613 - 9th Place N.E. / 1231 N.E. 148th St.
Shoreline WA 98155

Nov. 2, 2007

Page 1 of 2

*RE: Preliminary Formal Subdivision #201584
N.E. 145th St vicinity - 1st Ave N.E., Shoreline WA
D.R. Strong Engineers, SEPA Appeal*

Dear Jan and Vicki,

On September 14, 2005, I examined the location of the proposed development at 14521 - 11th Ave N.E. and took photographs on the same date at several different locations along N.E. 145th St.

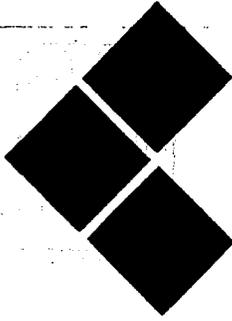
Without a firm access to N.E. 145th St by the development, it became obvious that sight distance to N. 145th St will be a problem due to the crest of the hill known as vertical sight distance.

This east - west street is also known as SR-523, a state highway on the dividing line of City of Shoreline on the north side and City of Seattle on the South side. Traffic volumes are heavy with signalized platoons of traffic to the I-5 interchange on the west and 15th Ave N.E. on the east. The furthest west end is to 3rd Ave N.W. and to the east is Lake City Way.

A traffic study will most probably show that the access to the north side at either 10th or 11th Ave N.E. would not be a safe access point to or from the south side of N.E. 145th St. Therefore, only access would be for westbound (WB) vehicles as a right turn into the driveway and a right turn out of the driveway, (right in and right out only).

Trip generation for the development will depend on the size and number of units to be accessed by the new driveway at either 10th or 11th Ave N.E. Without the exact number and location, the traffic analysis cannot be performed for the development.

The steep grade of a driveway may not fit with the design requirements for WSDOT local Agency Guidelines without a deviation of standards, or construction geometrics that fit within the standards for the roadway, both State and City. Nothing has been provided as of this date regarding the driveway approach to N.E. 145th St.



Jan Stewart, Vicki Westberg

Page 2 of 2

Nov. 2, 2007

Standards for a traffic study are available at City Hall of Shoreline and clearly point out requirements for the Traffic Study Guidelines in four different categories depending on peak hour traffic trips. Nothing has been done to perform such a study.

Circulation of traffic in the area needs to be addressed since it is likely that left turns in to and out of the development will not be allowed. The present traffic to enter will be circuitous on arterials or rely on residential streets, but must be considered based on the trip generation and traffic volume conflicts.

I will change my schedule so as to attend the rescheduled Planning Commission meeting on November 15 at 7:00pm, Shoreline Center and present the basic contents of this letter report.

Very truly yours,

*Kenneth E. Cottingham, P.E.
Transportation Engineer*

*Enclosure: Map of streets
CV of K. E. Cottingham*

Plateau at Jackson Comment Letter
#5 Vicki Westberg

-----Original Message-----

From: Vicki Westberg [mailto:vkwestberg@comcast.net]
Sent: Thursday, November 08, 2007 4:14 PM
To: Jessica Simulcik Smith
Subject: Fw: Preliminary Formal Subdivision #201584

Dear Jessica,

Regarding the Subdivision #201584 I am forwarding a letter from Bob Vreeland which was written before the SEPA Hearing and never submitted. We have attempted to contact Bob to revise the letter removing references to the SEPA Hearing, but he appears to be travelling. The comments he makes are still relevant to the case, however. Please let me know that you have received this. Thank you.

Vicki Westberg
vkwestberg@comcast.net
206-363-1231

----- Original Message -----

To: <vkwestberg@comcast.net>
Cc: <holsegh@dfw.wa.gov>
Sent: Monday, September 17, 2007 8:46 AM
Subject: Preliminary Formal Subdivision #201584

City Clerk's Office
City of Shoreline
17544 Midvale Ave. N
Shoreline, WA 98133

Mr. Scott Passey
City Clerk

Re: Preliminary Formal Subdivision #201584
D.R. Strong Consulting Engineers, Applicant
SEPA Appeal

Dear Mr. Passey:

I am providing the following as expert testimony with regard to fisheries and stream impacts of the preliminary formal subdivision #201584. I am a retired fisheries biologist with a bachelors degree in fisheries biology from Oregon State University and a masters in fisheries science from the University of Washington. I was employed by NOAA Fisheries for 26 years, 19 years on the Columbia River working on hatchery, habitat and hydroelectric salmon issues and 6 years in the Regional Office of NOAA in Seattle working on harvest, habitat and hydroelectric salmon issues. My familiarity with the Thornton Creek watershed and fishery resources comes from living in the watershed in Seattle near the confluence of the North and South Forks of Thornton Creek and the protection of these resources through involvement with several projects and groups. During my 12-year residence in the Thornton Creek watershed I observed major flooding on several occasions, adult and juvenile salmon presence on a number of occasions in Thornton Creek, and worked on habitat restoration projects at several locations (Meadowbrook playfield wetland and creek creation, Meadowbrook detention pond habitat enhancement, Matthews Beach habitat restoration, Northgate Park 6 habitat restoration. I was a member of Thornton Creek Alliance where I served on the by-laws committee, as Treasurer, and 1st Vice President. I am a founding member of Thornton Creek Legal Defense Fund (TCLDF) and have served as Treasurer since its inception. I was the senior fisheries biologist on the City of Seattle Thornton Creek Watershed Management Committee and contributor to the Thornton Creek Watershed Characterization

Plateau at Jackson Comment Letter
#5 Vicki Westberg

Report, Nov. 2000. I represented TCLDF on the Northgate Stakeholders Committee in 2003-2004.

I have personally observed adult fall chinook and sockeye salmon, steelhead, and cutthroat trout in Thornton Creek. I identified an adult steelhead in the North Fork of Thornton Creek near NE 130th St. and 17th Ave. NE in Seattle in March, 1992 (in the North Fork of Thornton Creek, perhaps a mile downstream of the proposed development) and what I believe to be an adult steelhead near 155th St and 1st Ave NE in Shoreline in 2003 or 20004 (in the North Fork upstream of the confluence of Littles Creek with the North Fork). Both Puget Sound Fall Chinook and Steelhead are presently listed as Threatened under the Endangered Species Act.

I have several concerns about this proposed subdivision: 1) stormwater impacts of downstream fish resources in Thornton Creek, 2) proposed new utility work in the Littles Creek buffer, and 3) proposed stormwater detention facility directing additional stormwater directly into Littles Creek.

The proposed subdivision will require removal of a number of mature cedar and other evergreen trees on the site. Evergreen trees intercept about half of the rainfall reaching them. Thus, removal of these mature trees will about double the amount of rain that reaches the ground beneath these trees. The tree cover will likely be replaced primarily with impervious surfaces; roofs, driveways, sidewalks and lawns. The rain that now falls on this site is intercepted by the evergreen vegetation, and that that now reaches the ground is primarily absorbed into the soil. Also, the site area proposed for development slopes away from Littles Creek. Thus at present, rainfall on this site, if it reaches Littles Creek at all, does so primarily through groundwater infiltration which greatly slows and disperses the point of entry of stormwater into Littles Creek. The proposed stormwater system will collect stormwater from created impervious surfaces that slope away from Littles Creek and direct this stormwater in a enclosed pipe (tightline it) directly to Littles Creek, introducing this stormwater at a single site (point source). This tightlining and point source entry will greatly increase the rate and amount of stormwater entering Littles Creek, exacerbating the already problematic erosion, flooding and detrimental fish habitat damage that now occurs in Littles Creek and Thornton Creek downstream of this site.

The proposed new utility work in the Littles Creek buffer circumvents the intent of the City of Shoreline environmental code. The intent of the present code, is to allow access for repair (particularly emergency repair) and maintenance to utilities that already exist in stream buffers in Shoreline, without having to seek SEPA approval for such work. Interpreting the existing code to allow new utility systems in stream buffers without environmental review creates an entitlement for development, which will encourage developers to encroach into stream buffers to avoid SEPA review. In my view, this creates a "developer welfare" system. Any new utilities proposed in stream buffers must undergo environmental review, and only be allowed if there is NO OTHER alternative that would allow development of a site. If new utilities are allowed in a stream buffer, the developer must provide mitigation (preferably on-site) for this work. To do otherwise compromises stream buffer protection.

In addition, the proposed utility work would occur at the base of a steep slope that drains directly into Littles Creek. The potential for this work resulting in slope failure, further loss of evergreen trees and other vegetative cover, and the potential for erosion and sediment entering Littles Creek during and after construction must be considered.

I do not believe the stormwater detention system proposed for this subdivision takes into the account 1) the increased rate and amount of stormwater entering Littles Creek caused by the removal of mature evergreen trees on the site, 2) the tightlining and point source entry of stormwater into Littles Creek, 3) loss of groundwater infiltration from stormwater presently falling on the site, and 4) the additional volume of stormwater that would enter Littles Creek resulting from collection from impervious surfaces that drain away from the Creek. All of these issues impact the existing and potential fisheries resources in Littles Creek and Thornton

Plateau at Jackson Comment Letter
#5 Vicki Westberg

Creek downstream of the site, particularly given present stormwater flows in the watershed, such as November, 2006 storms, and low summer flows in the watershed creeks.

For the above reasons, I do not believe the subdivision as currently proposed warrants a Determination of Non-Significance (DNS). I believe the DNS must be withdrawn, and the subdivision proposal significantly revised before further environmental review occurs.

Sincerely,

Robert Vreeland
Fisheries Biologist, Retired

Plateau at Jackson Comment Letter
#5 Vicki Westberg

NORMAN Wildlife Consulting
2112 NW 199th
Shoreline, WA 98177
(206) 542-1275 pugetsoundbird@gmail.com

Wildlife Toxicology and Environmental Assessment

November 7, 2007

Wildlife Assessment of the Plateau at Jackson. Shoreline, WA

Donald Norman, Norman Wildlife Consulting, November 2007.

Summary of Facts

The site contains a large number of trees, including several large trees that present a significant current and potential habitat for a Priority Species under the Growth Management Act, the Pileated Woodpecker.

The site contains a large steep-sloped area that will not be developed. This area has good habitat but will be invaded by noxious weeds that will reduce its wildlife value if there is not a plan to remove existing invasive species and maintain that removal.

The site contains madrone and native dogwood, both of which provide fruits which band-tailed pigeon consume, another Priority Species under GMA. Band-tailed pigeons were observed using the site on a short site visit. These two small trees also provide an important fall source of food for a number of other bird species when most other fruit is not available. These trees also provide a source of seeds for re-establishing these species in the Jackson Park forest.

The site is adjacent to a small park and currently provides a disturbance and isolation boundary for the protection of wildlife. It is not clear how that boundary will be maintained. Ready access along this boundary to Paramount Park by pets, children and by the disposing of garbage will reduce the effectiveness of the natural area in that part of the park.

The site is currently abandoned and the lack of disturbance allows a corridor between the Jackson Park natural areas surrounding the golf course there and Paramount Park.

Summary of Recommendations

All large trees should be retained and if in areas conflicting with structures or roads, left as wildlife trees. All significant trees removed should be replaced with native trees, especially conifers and important wildlife trees such as madrone or dogwood (*Cornus nutallii*).

A mitigation buffer along Paramount Park should be established and native plants be used in this buffer. If possible, removal of invasives along this boundary within the Park should be coordinated to establish a solid thicket that can maintain the isolation in the park.

A maintenance plan for the retained steep sloped area should be established, including a tree maintenance plan, an invasive removal schedule, and a checklist of the status of the site for establishing priority for maintenance.

Construction of houses close to the steep slope and the area along 145th where the concentration of madrones are located could impact the roots of these trees and reduce their wildlife value. There are excellent native plants for a sunny south facing slope that could help the esthetics of this strip on 145th and provide wildlife habitat. Additional shrubs on this slope could improve its stability.

Reviewer Qualifications

Donald Norman has been a resident of Shoreline for 27 years. He has been a field biologist for over 30 years, and received his MS degree in Environmental Studies at Huxley College at Western, where he studied the impact of environmental contaminants in great blue herons. For the past 14 years Donald has performed terrestrial bird surveys, primarily in the Fort Lewis area, but also in urban and rural King County. For the past 12 summers he has operated bird banding stations in the Fort Lewis areas under the MAPS program (see birdpop.org) and has also performed several winter bird surveys, including one relating to the development of the ball field at Shoreview Park. Donald is currently a founder of the Puget Sound Bird Observatory, which is working to provide the critical information for adaptive management in the conservation of birds in the Puget Sound area.

Background Information on Wildlife Issues in Urban Areas.

It is difficult to assess the wildlife value of property through the Growth Management Act (GMA) as the local Critical Area Ordinances (CAO) have no specific guidelines to address the use of habitat on a parcel basis. There are several species indicated by the Washington State Department of Fish and Wildlife as Priority Species (PHS), which may or may not be utilized by local jurisdictions under GMA in the CAOs.

Specific assessment of a small parcel presents difficult problems. Does the presence of a pileated woodpecker or a band-tailed pigeon, the two species that use the proposed development site, albeit only infrequently, mean that these sites are critical? However, if all such patches of habitat are removed in the area, as is currently being mandated under the urban infill requirements, there will obviously be no habitat left at all. Existing forested areas, as well as those adjacent to existing areas of habitat have inherently higher value.

As part of the appeal of development on 145th (The Plateau at Jackson), a document of the environmental importance of the Paramount Park area for wildlife is needed. NWC has developed a method for producing a validated list of the occurrence of birds for such areas. This approach allows a focus upon goals for enhancement, restoration and mitigation that can be designed for the site. Once such goals are established, it is much easier for property owners to understand their role in providing and maintaining appropriate buffers adjoining parks, and for developments to address their impacts with mitigations that produce the best results. Such goals are based upon the local inventory and park plans. In Shoreline, the City has recently begun to address an inventory need for some of its parks with a study by Seattle Urban Nature. The local Paramount Park group is beginning to establish such goals.

The proposed project (Plateau on Jackson) has several wildlife issues relating to such Park goals. There is a habitat set aside for protection on a steep slope, which should be integrated into a park maintenance plan. The property adjoining to the Park and should have appropriate native plant buffers. The site proposed for development has large trees, especially madrone (*Arbutus menzesii*), and it has connectivity to Jackson Park across NE 145th St in Seattle. These present both issues as well as opportunities in the context of development on the site. Retention of trees, snagging of trees, and planting of native plants may not be perceived as esthetic to many property owners, but if designed well, can reduce maintenance costs and retain high value.

This annotated I submitted for the site and Paramount Park list has two purposes, first to validate species occurrence and second to provide a professional comment on which species should benefit from mitigation actions and why. This is critical information for species that WDFW designated at PHS species in the GMA, and that are incorporated in local Critical Area Ordinances. Unfortunately, information about many other bird species were lacking when GMA was passed, and current information on their status has been validated in several reports and management plans (Altman 2000, Rich et al 2004). How these species occur and survive in urban areas is at the core of determining the practical goals for parks and open space areas. Recent studies at the University of Washington have validated that size and habitat type are extremely important in the retention of species typical of Puget Sound Lowland forests (Donnelly and Marzluff. 2004). Many breeding species using conifers have been eliminated due to the lower percentage of conifers in the canopy. Preserves less than 100 acres lose a number of the species requiring large tracts of habitat, not just species like the pileated woodpecker and band-tailed pigeon that require large tracts of land because of their habitat and food requirements. Because many Shoreline Parks are less than 100 acres, the status of adjoining private property is key to retention of many species.

Another critical factor in this evaluation of sites is the presence of noxious and invasive plant species. Because many Shoreline Parks have been invaded and now are dominated by non-native noxious weeds, the cost for their removal is significant. The establishment of locally managed park associations that can address this removal, and the use of mitigations from nearby developments should be explored to assist such actions. Such public-private partnerships may be the only solution to past poor stewardship due to the lack of knowledge about these species impacts. Local vigilance needs to be recognized and rewarded.

Most bird studies are focused upon the breeding season, however many small lots in urban areas also provide migration and wintering habitat for wildlife species. Very little assessment of this important part of local wildlife life history is documented in relation to development. A recent study on Vashon Island has also provided some baseline information relating to non-breeding season species (Hudson and Norman 2007). That project, however, does not provide the detail to track survival of birds in urban areas, or the best management practices to improve the survival of wildlife in smaller parks. Some initial research at the University of Washington has addressed the survival of juvenile birds, but survival over the winter has not been addressed. This annotated list of bird species is based upon the species observed at Paramount Park in general, but does not contain much information about the migration and over-winter survival due to the lack of adequate surveys at the appropriate times.

Fortunately, Paramount Park has water and has been restored with many native plants, so its potential as a refuge for birds in migration and winter is good. The connection to the south facing area in the proposed development site could provide good migrant and winter foraging areas if the landscape on the lot was converted to the appropriate native plantings for such periods of the year. Little has been done to link such fall and winter food sources for the common species using the Lowlands. The primary reference for this work, Russell Link's *Gardening For Wildlife in the Pacific Northwest*, is a start, but does not contain enough landscaping information for homeowners or data on their actual food value for migrant and wintering wildlife.

Because bird surveys of small areas are typically beyond the scope of local bird studies, a habitat-based approach is necessary to provide some basis for determining whether the site is important for a particular species. The origin of the submitted observed and expected annotated list comes from the excellent *Birds of King County* by Gene Hunn (1982, Seattle Audubon Society), and the recently published *Breeding Bird Atlas (BBA, Smith et al., 1997)*. No list of bird species of Jackson Park has been located, but there are ongoing Neighborhood Bird Surveys performed at many Seattle Parks by Seattle Audubon, and these

data are being compiled (Seattle Audubon Science Committee, personal communication). NWC has been performing bird surveys for the past 14 years in the Puget Sound Lowlands, many in urban settings, so these lists are based upon their experience.

In assessing the importance of habitat for birds in Shoreline Parks, there are several important considerations for success. These include:

- Nesting Habitat
- Foraging Habitat
- Disturbance (Isolation, noise, prevention from roosting)
- Invasive Species (Plants and Animals)

The majority of nesting birds fall into three categories: cavity, branch and ground nesting birds. The cavity nesters rely heavily on snags and older trees for breeding and are typically the most lacking feature in urban parks. Policies for the parks should retain all trees to be removed for safety to be retained at the highest safe elevation, at least 15 to 20 feet in edge areas and higher in forested locations. In addition to woodpeckers, many species like red-breasted nuthatch and brown creeper require snags or trees with broken and dead branches. Many species re-use woodpecker cavities, and many woodpeckers will not reuse cavities the next year. Pileated woodpeckers also require roosts that have double openings that are completely different from nesting cavities with only one hole (Aubry and Parkes 2002). These types of roost trees are more difficult to locate and it is not clear whether the woodpeckers will actually excavate a snag into a roost. The loss of extremely large trees, large enough for roost trees, is a significant problem in urban areas.

Ground nesting birds need areas free from disturbance in which to build their nests, brood their young, and safely forage on the ground for food. Cavity nesters can tolerate some ground disturbance as long as there are snags and suitable nesting holes; ground nesters cannot tolerate disturbance in their area—their nests will fail or be destroyed, and they will leave the area. Ground nesters are greatly impacted by the presence of invasive plants, as most birds have very specific nesting micro-habitat selection requirements, which are generally not in invasive plants.

There are many correlations between foraging habitat, invasive plants, and disturbance, mostly from invasive/ introduced mammals. In most of our Seattle area parks, Seattle Urban Nature has shown that much of the ground cover is dominated by English Ivy and now open areas by “Stinky” Bob (a geranium). These reduce the foraging areas for many ground nesting and ground foraging birds like winter wren, Swainson’s thrush (and hermit thrush in

the winter), dark-eyed junco, spotted towhee, orange-crowned warbler, and even northern flicker. There is also a strong relationship between the occurrence of many birds and the type of shrubs that are present. There are also many invasive shrubs like holly (*Ilex opaca* and variations), laurel, evergreen and Himalayan blackberry, and numerous other ornamental shrubs and trees. Recent studies have shown that bird diversity and abundance is negatively associated with invasive shrubs and positively associated with native vegetation, each separately measured (Henning 2007). Work to increase native plant species diversity and to remove invasive ground covers are both especially important.

Disturbance of nests and foraging can be from human traffic, as well as from pets. Invasive species of importance include domestic and feral cats, eastern gray squirrels, Norway and Black rat, Virginia opossum and raccoons. Many studies have shown that small patches of habitat often suffer from higher rates of nest predation due to easier searching by nest predators. Issues that impact the reduction in bird use in such exotic dominated habitats include the selection of nesting sites by birds, foraging habitats, arthropod availability as food for nestlings, and fruit availability for fledglings and survival of fledglings. Research is ongoing at the UW Urban Ecology program at the School of Forest Resources, but it has not translated down to the parcel level yet.

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Wildlife Toxicology and Environmental Assessment

An Annotated Bird Species List of Paramount Park and Surrounding Areas, City of Shoreline, for Use in Park and Private Property Evaluation for Wildlife Protection.

Compiled by Donald Norman, Norman Wildlife Consulting, November 2007.

As part of the appeal of development on 145th (The Plateau at Jackson), a document of the environmental importance of the Paramount Park area for wildlife is needed. NWC has developed a method for producing a validated list of the occurrence of birds for such areas. This approach allows a focus upon goals for enhancement, restoration and mitigation that can be designed for the site. Once such goals are established, it is much easier for property owners to understand their role in providing and maintaining appropriate buffers with adjoining parks, and for developments to address their impacts with mitigations that produce the best results. Such goals are based upon the local inventory and park plans. In Shoreline, the City has recently begun to address an inventory need for some of its parks with a study by Seattle Urban Nature. The local Paramount Park group is beginning to establish such goals.

A Key to the Annotated List

The list below is provided to confirmation of occurrence and to provide the status and comments on particularly important species. Local residents provided information to NWC was a list of 42 species that have occurred in the Paramount Park area. That list was evaluated by NWC, and site visits to the Park with occurrences confirmed are indicated in **BOLD**. This totals 42 species. A total of 35 species have been observed at the nearby Hamlin Park or adjoining are given an (H) and 51 species at Chris Southwick's yard adjoining Grace Cole Park are given an [S]. At least 6 species are breeding in Paramount

Park, which are noted with an “**” , with additional 23 species potentially breeding, including some that would respond to restoration in the park and also those in adjoining residential habitat (like swallows) indicated by (*? parentheses). More summer surveys would easily confirm most of these species. Additional surveys would also likely add an additional 16 species on the site, designated in ***Bold Italics***. There are other species listed that might be considered to occur, but specific habitat requirements and local populations probably prevent their occurrence, they are given in italics if more possible than plain text. Species that were reported but are very rare or could be errors were given an explanation and are listed in [parentheses].

The Annotated List for Paramount Park, Shoreline, WA

MALLARD (MALL) ?* *Anas platyrhynchos*

This species breeds in most wetlands in the Seattle area (BBA Smith et al., 1997). It is difficult to tell if the birds are from wild or domesticated stock.

BUFFLEHEAD (BUFF) *Bucephala albeola*

The fact that this species was observed on one of the ponds at Paramount Park indicates that the wetlands is visible and at least worth investigating by species that are likely using the Jackson Park ponds.

GREAT BLUE HERON (S) (GBHE) *Ardea herodias*

This species breeds in several areas in Seattle (BBA Smith et al., 1997) and is observed feeding in any area with water, including such small areas as Paramount Park. The closest nesting by this species is at the Kenmore Park and Ride, and recently, a small colony at Matthews Beach in Seattle near 90th. The open water at Jackson Park probably attracts more herons to this area than most places.

Bald Eagle (H) (S) (BAEA) *Haliaeetus leucocephalus*

This species is listed as breeding in several areas in King County (BBA Smith et al., 1997) and is still increasing in Washington. Likely observed flying over Paramount Park.

SHARP-SHINNED HAWK (H) (S*) (SSHA) *Accipiter striatus*

This species occurs as a migrant and winter resident. Its presence in the summer is possible, as there have been breeding records in mixed deciduous conifer forest on nearby Bainbridge Island (BBA Smith et al., 1997). Since this species' diet is strictly passerine birds, the presence of many birds in the woodland edge (and with probable bird feeders at nearby houses) makes Paramount Park particularly favored for occurrence. Has been seen at Grace Cole Park in the summer.

COOPER'S HAWK (H) (S) *? (COHA) *Accipiter cooperii*

Similar to the Sharp-shinned Hawk, but this species is more likely to be a breeding species, as it breeds in lowland sites in Puget Sound (BBA Smith et al., 1997). The

isolation of the site also increases its appeal as a breeding site. Observed hunting in Paramount Park.

RED-TAILED HAWK (H) (S) (RTHA) *Buteo jamaicensis*

The isolated woods make an idea location for nesting of this resident of open space but it requires more open space for breeding, which occurs in Jackson Park and along I-5. Red-tails have been seen during migration and may perch in some of the tall trees. Observed flying over Paramount Park.

Merlin (MERL) *Falco columbarius*

This species is a wintering species in King County, as well as a migrant, and often associates with wetlands, where it hunts for small waterfowl and shorebirds. Merlins do breed in the mountains of King County (BBA Smith et al., 1997), but it is unlikely that this species uses such small isolated forest patches for breeding. Merlins are not as likely to be observed foraging in dense woods, as would the sharp-shinned or Cooper's Hawk. They are regularly observed each winter in Richmond Beach (Norman 2007.)

PEREGRINE FALCON (PEFA) *Falco peregrinus*

Similar to Merlin but much rarer, and likely observed as a rare occurrence in Paramount Park. The presence of nearby ducks at Jackson Park ponds could be responsible for its occurrence. It has only been observed 3 times at Richmond Beach in over 2000 days of observation, compared to over 50 times for the Merlin.

CALIFORNIA QUAIL (H) (*nearby) (CAQU) *Callipepla californica*

This resident species occurs in brushy open areas and uses the forest in the Paramount Park as cover from cats and dogs in surrounding open areas. This species has certainly declined in areas with denser housing in Richmond Beach (Norman 2007). This species has dramatically declined in Discovery Park, mostly due to loose dogs disturbing their breeding/roosting areas. The open area in the proposed development is likely an important area for quail to cross 145th into Jackson Park.

ROCK PIGEON (Rock Dove) (ROPI) *Columba livia*

This species is common at feeders at the edge of Paramount Park, but it is not clear where it breeds. Typically this species breeds in building eaves or under bridges.

BAND-TAILED PIGEON (H) (S) * ? (BTPI) *Columba fasciata*

This species occurs in mixed forest sites in western Washington, especially associated with edges, and it is also fond of madrone and native dogwood in the fall when the fruit is present. This is a WA state Priority Species, and impacts to this species require management plans in many Critical Area Ordinances (CAOs). Breeds in the trees at NE 163 and 28 Place NE. *Cornus nutallii* was observed on the property proposed for development, which is a fall food source, as are madrone fruit.

Western Screech-Owl (SCOW) *Otus kennicottii*

Screech owls in western Washington are associated with wooded areas especially near streams or wetlands. The forest surrounding the 16 Acres Reserve would provide a particularly important place for the owls to hunt, and its trees are large enough to nest in. This species will utilize nesting boxes.

GREAT HORNED OWL *? (GHOW) *Bubo virginianus*

This species requires forest for nesting, but hunts in many urbanized areas, especially those with open areas. Large trees are acceptable for nesting as long as the site is not disturbed. Nesting begins late in winter. The dense forest in the retained area on the proposed development site would be good nesting habitat on the top of a snag in a dense area, as it is close to the open area at Jackson Park where there are likely lots of rats, and perhaps rabbits.

Northern Pygmy-Owl (NOPO) *Glaucidium californicum*

This is a species of coniferous forest, but also occurs on forest edges where it hunts. Though there are no breeding records for this species in urban Puget Sound Lowlands, it has been observed breeding at Fort Lewis.

Northern Saw-Whet Owl (NSWO) *Aegolius acadicus*

This species is common to uncommon in the mixed coniferous forests of the Puget Sound lowlands during winter and early spring (Hunn 1982). Though this species has not been observed in Paramount Park, the coniferous forest is appropriate for this species.

Barred Owl (H) (S) (BAOW) *Strix varia*

This species has invaded the Pacific Northwest in the past 40 years, as a result of habitat openings in the forested areas. It has become a regular breeder in the Puget Sound Lowlands. It has been seen at Grace Cole Park, with newly fledged young.

Vaux's Swift (VASW) *Chaeture vauxi*

The status of breeding swifts in the Urban King County area has not been confirmed. This is a Washington State species of concern; it requires large snags as nesting trees that often occur in forested wetlands (BBA Smith et al., 1997). It is likely to be seen overhead in the early fall, or on some summer days when it is stormy in the mountains, requiring foraging in the Lowlands.

RUFOUS HUMMINGBIRD (H) (S) *? (RUHU) *Selasphorus rufus*

This species is an abundant migrant and common summer breeder, using Indian Plum (*Oemleria cerasiformis*), honeysuckle (*Lonicera ciliosa*), thimbleberry (*Rubus parviflorus*) snowberry (*Symphiocarpos alba*) and twinberry (*L. involucrata*) flowers for nectar. This species has been declining in numbers on the Washington State BBS routes. The presence of these plant species during the spring and summer ensures that various nectar sources in Paramount Park ensures that this species is present, and if all of the plant species necessary are present, it may remain and breeding would be an indication that enough varied food resources are available in the Park.

Anna's Hummingbird (H) (S*) *? (ANHU) *Calypte anna* This species arrived from Oregon in the 1950's and has become a common breeder in the coastal areas of Puget Sound.. Year-round population banded at NE 163 and 28 PI NE.

BELTED KINGFISHER (BEKI) *Megaceryle alcyon*

Kingfishers are typically more common in winter than in summer in the Pacific Northwest, as this species requires a sandy bank for nesting by digging a tunnel. It is

unknown but doubtful there is habitat at Jackson Park, making the occurrence of this species a migrant or wintering bird.

Red-Breasted Sapsucker (H) (S) (RBSA) *Sphyrapicus ruber*

This resident species has bred in Lowland King County (BBA Smith et al., 1997) and is associated with riparian and wetland areas, though it is not a common species. It is a quiet species, so it is often not detected and often only seen along the shoreline in winter.

DOWNY WOODPECKER (H) (S*) *? (DOWO) *Picooides pubescens*

This resident breeding species (BBA Smith et al., 1997) is the most likely species encountered in a forested urban area. It does not occur as frequently on the BBA as a confirmed breeder as the flicker from the 16 - 9 square mile BBA blocks from Edmonds to South Seattle, but is much more common than the Hairy Woodpecker (DMN Unpublished compilation of BBA). Newly fledged feeding at NE 163 and 28 PI NE.

HAIRY WOODPECKER (S*) (HAWO) *Picooides villosus*

This resident breeding species (BBA Smith et al., 1997) is more associated with coniferous forest than the Downy Woodpecker, but it will also use wetlands, as they often have many snags which are important for sources of food and nesting sites. This species is also an indicator of good habitat. Newly fledged feeding at NE 163 and 28 PI NE.

NORTHERN FLICKER (H, S) *? (NOFL) *Colaptes auratus*

This resident breeding species is more common in migration and winter than in summer with the addition of migrants and wintering individuals. The presence of many snags in the Park make this species likely to breed, as the dense forest deters Starlings, which can evict Flickers from a nest. Newly fledged young seen feeding at NE 163 and 28 PI NE.

PILEATED WOODPECKER (H, S*) *? (PIWO) *Dryocopus pileatus*

The status of this resident species is quite rare because of the large snags it requires. Paramount Park benefits this species as it provides an isolated location with snags large enough for nesting. This is another WDFW PHS species, and any projects destroying large trees should address whether this species occurs in the project areas, as outlined in many CAOs. A dead recently fledged juvenile was retrieved by DMN in Woodway. Observed at Hamlin Park. (Reports of nest tree in proposed dog park area.) Newly fledged young were observed feeding at NE 163 and 28 PI NE.

Olive-Sided Flycatcher (S) (OSFL) *Contopus borealis*

This Neotropical migrant summer breeder in western Washington is associated with upper canopy openings in coniferous forests. Its call can be heard from a great distance but observations are few. There are no known nesting records for the Puget Sound Lowlands of King County (BBA Smith et al., 1997) It has been observed at NE 163 and 28 PI NE.

Western Wood-Pewee (WWPE) *Contopus sordidulus*

This Neotropical migrant summer breeder in western Washington is associated with open coniferous and deciduous habitats. It is listed as core habitat in coastal King

County (BBA Smith et al., 1997), but it has not been observed in the Park. Migrants have been observed in Richmond Beach as late as June (Norman 2007).

Pacific-Slope Flycatcher (S) (PSFL) *Empidonax difficilis*

This Neotropical migrant summer breeder in western Washington is associated with open coniferous forests with deciduous understory, and is an abundant breeder in many areas (BBA Smith et al., 1997). It has been seen in Shoreview Park and also in Richmond Beach during migration. Observed at NE 163 and 28 PI NE.

Willow Flycatcher (WIFL) *Empidonax trailii*

This Neotropical migrant is a common summer breeder in western Washington and is associated with the edges of many riparian areas and also occurs in many clear cuts. This species has bred in King County (BBA Smith et al., 1997), and though it might not breed at Paramount Park because of the lack of open brushy habitat, it is also an abundant species in migration and would occur in spring and fall. Observed at NE 163 and 28 PI NE.

Dusky/Hammond's Flycatcher (UNFL) *Empidonax* sp.

It is very difficult to distinguish these two species apart in migration, which is when they would be expected to be observed. The Dusky Flycatcher has been observed in May at McChord AFB (Norman 2007), but they do not remain to breed.

VIOLET-GREEN SWALLOW (S) ?* (VGSW) *Tachycineta thalassina*

This species commonly breeds in urban areas in buildings, so although it is unlikely to be breeding at the site, it could be seen feeding over the forest and along the edges near houses. Observed flying over Paramount Park. This species readily accepts boxes.

Tree Swallow (TRES) *Tachycineta bicolor*

This species was recorded as occurring in Paramount Park, but it is more likely to be the Violet-green Swallow. This species could occur at Jackson Park if there were nesting boxes and also in migration, but prefers more open areas than the park.

BARN SWALLOW (BARS) *Hirundo rustica*

This species commonly nests in urban buildings especially where there is open area for insects, so although it is unlikely to be breeding at the site, it was observed feeding over the forest and along the edges near houses.

STELLER'S JAY (H) (S*)?* (STJA) *Cyanocitta stelleri*

This is a common resident of coniferous forest that has adapted well to suburban areas. It is regularly observed in the Park, but is quiet during the breeding season and seldom observed then.

AMERICAN CROW (H) (S*)?* (AMCR) *Corvus brachyrhynchos*

There remains some issue about the disappearance of the Northwest Crow or interbreeding of the American Crow with the Northwest Crow. The Northwest Crow is a smaller marine based bird, common in flocks along the coast, breeding colonially, and feeding along the tideline, being the "species" occurring along the Olympic Coast. Color banded crows observed are part of UW studies.

Common Raven (H) (S) (CORA)

Corvus corax

Has been observed at Hamlin Park and nearby wetlands since 2003. There has been a pair occasionally using trees behind NE 163 and 28 PI NE as recently as October 2006. Likely a nest predator of crows.

BLACK-CAPPED CHICKADEE (H) (S*) * (BCCH) *Parus atricapillus*

This is a common resident that uses wetlands extensively, but not exclusively. It is also a species that uses wetlands in small flocks in the winter, and especially in colder periods may be protected from freezing weather there. It is a cavity nester and readily accepts boxes.

CHESTNUT-BACKED CHICKADEE (H)(S*) *? (CBCH) *Parus rufescens*

This resident species prefers more coniferous habitat for foraging, but often nests in open habitats. This species needs used cavities for nesting, as it cannot excavate its own and readily accepts boxes. This species is also very associated with western hemlock. It is a common breeder in King County (BBA Smith et al., 1997).

BUSHTIT (H)(S*) * (BUSH) *Psaltriparus minimus*

This common resident species of the Puget Sound Lowlands is typically associated with human dominated landscapes..

RED-BREASTED NUTHATCH (H) (S*) *? (RBNU) *Sitta canadensis*

This common resident species is encountered in almost all wooded habitats. This species needs snags for nesting, as it does not use boxes .

BROWN CREEPER (H) (S*) ?* (BRCR) *Certhia americana*

This is a common resident species of coniferous forest in western Washington (BBA Smith et al., 1997). Preservation of local trees, especially snags and dead branches on trees is essential for its protection. Protection of large conifers is essential for its breeding.

[House Wren] (HOWR) *Troglodytes aedon*

This species was reported as being seen at Paramount Park, but was likely a Bewick's Wren, as it occurs in the Puget Sound Lowland in only a few dry habitat areas like the oak-prairie and ponderosa pine at Fort Lewis or the dry San Juan Islands.

BEWICK'S WREN (H) (S*) * (BEWR) *Thryomanes bewickii*

This common resident species of western Washington is associated more with brushy areas than wetlands (BBA Smith et al., 1997) but will use wetlands for foraging, especially during colder weather. Newly fledged juveniles observed feeding at NE 163 and 28 PI NE.

WINTER WREN (H) (S) *? (WIWR) *Troglodytes troglodytes*

This is a common resident species of well vegetated coniferous forest floor in western Washington. In migration and winter it utilizes a variety of shrubby habitats, and is likely to be present in wetland vegetation, especially during freezing weather. Individuals are heard singing in Richmond Beach into April but do not breed there (Norman 2007).

Winter wrens were confirmed in 7 of the 25 blocks in the Seattle area are, with 13 probable and possible (BBA Smith et al., 1997).

VARIED THRUSH (H) (S) (VATH) *Zoothera naevia*

This common resident species of coniferous forest breeds in King County (BBA Smith et al., 1997), but is rarely observed in the Puget Sound Lowlands in summer. In the fall and winter it occurs in deciduous habitats, including forested wetlands, and the wetlands play an important role for winter cover and forage during rare winter storms, when hundreds of varied thrushes can be observed foraging on litter under wetland deciduous trees. This species is also associated with the fall madrone berry crop.

Swainson's Thrush (S) (SWTH) *Catharus ustulatus*

This is an abundant summer breeding thrush in the Puget Sound Lowlands in forested habitat (BBA Smith et al., 1997), along with the American Robin. This species disappears in the winter. Banded at NE 163 and 28 PI NE.

Hermit Thrush (HETH) *Catharus guttatus*

This species is a common migrant and rare but regular wintering thrush in the Puget Sound Lowlands, where it uses the litter area under wetland deciduous trees for foraging and cover, and uses coastal wetland areas during cold periods. Over the winters of 1998-2002, thrushes have been banded at Shoreview Park between November and March (DMN Unpublished banding results).

AMERICAN ROBIN (H) (S*) * (AMRO) *Turdus migratorius*

An abundant adaptable open space and woodland breeding summer resident in Puget Sound, with differing subspecies appearing in migration and in winter (Hunn, 1982). This is one of the most abundant species in all forested habitats, and one of the most common species in Paramount Park.

RUBY-CROWNED KINGLET (H) (S) (RCKI) *Regulus calendula*

This is an abundant migrant and wintering species in the Puget Sound Lowlands, occurring in a wide variety of habitats, including forested wetlands, and undoubtedly one of the most likely encountered species at the Paramount Park in the winter. It arrives in October and is gone by mid-April.

GOLDEN-CROWNED KINGLET (H) (S) *? (GCKI) *Regulus satrapa*

This abundant coniferous forest resident is an abundant breeder in King County (BBA Smith et al., 1997), and is commonly heard in all coniferous forests. During the winter, especially in cold weather, it is known to forage in non-coniferous habitats, including wetlands, and will forage close to the ground. The close proximity of conifer forest to wetland provides an important benefit to this species. It is a breeder in large cedar-dominated conifer forests. New fledglings seen feeding and were banded at NE 163 and 28 PI NE.

CEDAR WAXWING (H) (S) *? (CEDW) *Bombycilla cedrorum*

This is a common breeding species in the Puget Sound lowlands, rare in winter (Hunn, 1982; BBA Smith et al., 1997). Birds are common in wetland habitats, but avoid more closed forested habitats. This species feeds heavily on fruit.

Bohemian Waxwing (BOWA) *Bombycilla garrulus*

This is a winter vagrant from north and has been seen only once in Richmond Beach (Norman 2007). It occurs in King County from November to March (Hunn 1982).

European Starling (H) (S) (*Residential) (EUST) *Sturnus vulgaris*

This species was introduced into eastern North America in the late 1800's, and the first starlings occurred in Washington in 1945, and by 1956 winter roosts in the thousands were seen in Seattle (Hunn, 1982). It breeds generally in human associated habitats, though it will occupy appropriately-sized nesting holes. It is actually not a species that uses wetlands much, but might visit habitats in Paramount Park in late summer and fall to forage for fruit.

Hutton's Vireo (H) (S)*? (HUVI) *Vireo huttoni*

This is a resident species in western Washington, associated with mixed coniferous-deciduous forest and is an uncommon breeder in King County (BBA Smith et al., 1997). It is often not recorded during the June BBS surveys because it sings more in early spring and nests as early as March. It is quite retiring in habit when not singing and is therefore not observed, and is often mistaken for the abundant ruby-crowned kinglet. It is very rare visitor observed to Donald Norman Richmond Beach yard (Norman 2007).

Western Warbling-Vireo (WAVI) *Vireo g. swainsonii*

This Neotropical migrant is an uncommon summer breeding vireo in western Washington, where it nests in deciduous woodlands (BBA Smith et al., 1997).

[Red-eyed Vireo] (REVI) *Vireo olivaceus*

This species was reported on the Paramount Park list and is possible but is a very uncommon species mainly associated with cottonwood areas, especially on the Snoqualmie River. This species is also easily mistaken for Warbling Vireo, which is a common spring migrant in the city.

[Cassin's Vireo] (CAVI) Previously Solitary Vireo *Vireo cassinii*

This is also a Neotropical migrant that breeds in deciduous forest, but it is more abundant in the oak-pine forests in eastern Washington and is less common than the warbling vireo in western Washington. It has not been recorded in Richmond Beach (Norman 2007) but was only recorded once on the Vashon Island surveys (Hudson and Norman 2007)

Orange-crowned Warbler (S) (OCWA) *Vermivora celata*

This Neotropical Migrant is a common breeding warbler in brushy habitat, breeds in King County (BBA Smith et al., 1997), and is an abundant migrant. It has a well established decline in western BBS counts, making it an important species to protect. Wetland habitat is important for this species.

Yellow Warbler (S) (YWAR) *Dendroica petechia*

This Neotropical Migrant is a very common bird in willows and wetland vegetation in western Washington, but it is declining on the Breeding Bird Survey in the region (Altman 2000). It is not a common breeding species in King County (BBA Smith et al., 1997), but it is expected to breed at Paramount Park because of the open deciduous habitat, and is likely to be observed. Observed at NE 163 and 28 PI NE.

Yellow-rumped Warbler (H) (S) (YRWA) *Dendroica coronata*

This species is an abundant migrant in the Puget Sound Lowlands (BBA Smith et al., 1997), and uses wetlands as well as forested areas for foraging.

Black-throated Gray Warbler (BGWA) *Dendroica nigrescens*

This Neotropical Migrant is listed as a breeding species in King County (BBA Smith et al., 1997), where it uses both riparian as well as coniferous forest. It has never been recorded in DMN's Richmond Beach (Norman 2007).

Townsend's Warbler (H) (S) (TOWA) *Dendroica townsendii*

This species is a common migrant and uncommon wintering species in the Puget Sound Lowlands, and a rare breeder. Observed at NE 163 and 28 PI NE.

MacGillivray's Warbler (H) (S) (MGWA) *Oporornis tolmiei*

This summer breeding Neotropical Migrant breeds in eastern King County, but the Puget Sound Lowlands are not listed as core habitat (BBA Smith et al., 1997). It is typically seen in migration.

Common Yellowthroat (COYE) *Geothlypis trichas*

This common Neotropical Migrant is an unlikely breeder at the Paramount Park. Though it is surprisingly adaptable to a variety of habitats, forested wetlands are not among the preferred sites without some open areas. It may be present at Jackson Park along the many ponds (water hazards). This species has only been recorded once in Donald Norman's Richmond Beach yard (Norman 2007.).

Wilson's Warbler (H) (S) (WIWA) *Wilsonia pusilla*

This is one of the most commonly encountered warblers in Paramount Park in migration, as it is a vocal singer. It is also listed as a declining species in the BBS in WA. It is a confirmed breeder in King County (BBA Smith et al., 1997), using forested sites similar to Paramount Park and breeding would be a goal of restoration actions.

Bullock's Oriole (BUOR) *Icterus bullockii*

This species has become rare in King County where it occurs in deciduous habitats, especially cottonwoods wetlands foraging high in the trees. There are breeding records in the 1980's from Richmond Beach, but none for the 1990's and recent years (DMN, personal Obs).

Red-winged Blackbird (RWBL) *Agelaius phoeniceus*

One would not expect this species to be a breeder at Paramount Park, but red-wings often appear in early spring in Puget Sound, often calling in forested areas in migration.

Brown-Headed Cowbird (H) *? (BHCO) *Molothrus ater*

This species is abundant in the Puget Sound Lowlands in the summer especially in farmed and open areas where it forages. It is an important species because it parasitizes many nests of Neotropical Migrants, but the rates of parasitism are not known for many Washington State Species of Concern. It has been observed at Paramount Park and is likely using Jackson's Park's open areas for foraging. It has adapted to suburban yards to parasitize White-crowned Sparrows and towhees.

WESTERN TANAGER (S) (WETA)

Piranga ludoviciana

This Neotropical Migrant species is associated with coniferous forest in the Puget Sound Lowlands, and is a common breeder in such habitats in King County (BBA Smith et al., 1997). Pair observed at NE 163 and 28 PI NE May 2006.

House Sparrow (*Residential nearby) (HOSP) *Passer domesticus*

This abundant semi-domesticated species nests near all human activities, and would be expected to be seen on roads and yards adjacent to the site, but not in the forest interior.

Pine Siskin (H) (S) *? (PISI)

Carduelis pinus

This abundant resident species, occurring more at higher elevations, is a breeder in King County but its status in the Puget Sound Lowlands is not well known (BBA Smith et al., 1997). In migration and winter, it occurs in flocks in all forested areas, especially in riparian deciduous forests, and is common, especially in migration. Birds have been confirmed breeding in Richmond Beach. Banded at NE 163 and 28 PI NE.

AMERICAN GOLDFINCH (H) (S) (AMGO) *Carduelis tristis*

This resident of the Puget Sound Lowlands becomes abundant in May when additional migrants arrive. It breeds in open fields often later in the year and is a common breeder in King County (BBA Smith et al., 1997). In migration and the winter, it occurs in many forested areas, seeking seeds and catkins of deciduous species, often in the accompaniment with Pine Siskins. Observed flying over Paramount Park. Banded at NE 163 and 28 PI NE.

[Cassin's Finch] (CAFI) *Carpodacus cassinii*

This is the resident finch of east-side coniferous forest, and is rare outside of the Cascades, so this species was removed from the annotated list as a regular species in Paramount Park.

PURPLE FINCH (S) (PUFI)

Carpodacus purpureus

This is the resident finch of coniferous forest, and is rare outside of the forests where House Finches dominate the open suburban yards. Its status in the Paramount Park is unclear. No birds have been seen in Richmond Beach for over 10 years (Norman 2007). Seen at NE 163 and 28 PI NE in 2005.

HOUSE FINCH (H) (S*) (HOFI) *Carpodacus mexicanus*

This species has expanded its range into the Pacific Northwest, and now occurs in all areas associated with human activity. It breeds in close proximity to houses. Observed at Paramount Park. Newly fledged young seen feeding and banded at NE 163 and 28 PI NE.

Red Crossbill (H) (RECR)

Loxia curvirostra

This common resident of the coniferous forest wanders widely in the Puget Sound Lowlands and is generally recorded flying overhead. It is likely to be seen in Douglas Firs on the site. It has been documented as a breeder in nearby Shoreview Park.

EVENING GROSBEAK (H) (EVGR) *Hesperiphona vespertina*

Though this species breeds in King County (BBA, Smith et al 1997), it is mostly observed flying overhead, or seen feeding on seeds and catkins of deciduous trees, some of which occur in Paramount Park.

SONG SPARROW (H) (S*) * (SOSP) *Melospiza melodia*

This is a common resident of brushy habitat and is a common breeder in King County (BBA, Smith et al 1997). In Paramount Park it uses wetter areas for breeding and additional birds may arrive as early as August from other areas (as confirmed by banding records in Richmond Beach in August 2002) and spread out into other habitats during the wintering season. Observed at Paramount Park. Newly fledged birds seen feeding and have been banded at NE 163 and 28 PI NE.

Lincoln's Sparrow (LISP) *Melospiza lincolnii*

This species may breed in the mountains of King County (Hunn 1982), and is a common migrant and rare winter resident in the Puget Sound Lowlands. It prefers open grassy wet areas, so it is unlikely that it would occur in the forested areas or wetlands of Paramount Park. It does occur in more forested areas during migration, as evidenced by several banding records in Richmond Beach (Norman 2007).

Fox Sparrow (H) (S) (FOSP) *Passerella iliaca*

This species may breed in the mountains of King County (Hunn 1982). It is a common winter resident, most abundant in salal in the winter, but it also occurs in brushy areas and wetlands, and is especially common in cold events. It is also associated with madrone forests, especially where there is salal in the understory.

WHITE-CROWNED SPARROW (H) (S) *? (WCSP) *Zonotrichia leucophrys*

There are several White-crown subspecies occurring in western Washington; one is present primarily in the summer as an abundant breeder in variety of field and shrubby habitats, the other subspecies (*gambelii*) is a common migrant and uncommon winter resident. Just like the Golden-crowned Sparrow, may occur on more of the upland sites, except in cold periods, when it may use wetland areas for water and cover.

GOLDEN-CROWNED SPARROW (H) (S) (GCSP) *Zonotrichia atricapilla*

This is an abundant migrant and common winter resident in western Washington. It is more of an upland brushy habitat species than a forested wetland species. This species may occur on more of the upland sites, except in cold periods, when it may use wetland areas for water and cover.

DARK-EYED (Oregon) JUNCO (H) (S*) *? (DEJU) *Junco hyemalis*

This is a resident common species of coniferous forest edge and an abundant winter resident in western Washington, using a variety of edge habitats. In many areas in the Puget Sound Lowlands it disappears in the summer, but the presence of a bird in the summer indicates that good nesting habitat exist in the upland mixed forest. It breeds in the Highlands and Grace Cole Park, which has a much larger open coniferous forest, so it is not clear if it remains to breed at Paramount Park.

SPOTTED TOWHEE (H) (S*) * (SPTO) *Pipilo maculatus*

This is a common resident species of brushy habitat, also especially associated with wetlands (BBA Smith et al., 1997). It may also tend to flock in wetland areas in the winter, as banding studies have shown larger numbers of towhees in a small wetland at McChord AFB in the winter than occur in the area in summer. Towhees were heard singing on the April 2000 visit, and heard on the August 2000 visit (DMN), as well as on many other trips. Observed at Paramount Park. Newly fledged young seen feeding and banded at NE 163 and 28 PI NE.

Black-Headed Grosbeak (H) (S) (BHGR) *Pheucticus melanocephalus*

This Neotropical Migrant breeding species is confirmed as a breeder in King County (BBA Smith et al., 1997), though it is not nearly as common as in eastern Washington. It occurs in forested wetland and deciduous areas, but may not breed at Paramount Park. It uses the site during migration and appears to be more common in the fall, when birds start passing through the area in early August (Norman 2007). Observed flying over Paramount Park and feeding at NE 163 and 28 PI NE.

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Plateau at Jackson Comment Letter
#4 Donald Norman

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Plateau at Jackson Comment Letter
#3 Llyn Doremus

Jessica Simulcik Smith

From: Jan Stewart [stewartjr_5@hotmail.com]
Sent: Thursday, November 08, 2007 1:49 PM
To: Jessica Simulcik Smith
Cc: Doremus, Llyn
Subject: File #201584 6 lot subdivision

Hi Jessica,
Please include the attached report from Llyn Doremus in the record for the Planning Commission Hearing scheduled for November 15th.
Thank you,
Jan Stewart

Boo! Scare away worms, viruses and so much more! Try Windows Live OneCare! [Try now!](#)

Plateau at Jackson Comment Letter
#3 Llyn Doremus

Llyn Doremus
4017 Willowbrook Lane
Bellingham, WA 98229

November 7, 2007

Shoreline Planning Commission
Shoreline Conference Center
15860 First Avenue NE
Shoreline, WA 98111

**Plateau at Jackson Subdivision
Hydrogeologic Analysis**

This report presents recommendations for the proposed subdivision at 15421 11th Avenue NE, in Shoreline, to enhance the slope stability and site drainage for the development as it is currently proposed. It is based on a site inspection conducted November 1, 2007, review of the Associated Earth Sciences, Inc. February 24, 2007 report entitled *Subsurface Exploration, Geologic Hazard and Geotechnical Engineering Report, Little Property, Shoreline, Washington* and the *Plateau at Jackson Level One Downstream Analysis* by D.R. Strong Consulting Engineers, Inc., my knowledge of the geology of the Shoreline area and stormwater management practices, and the Western Washington Stormwater Management Manual.

Background

The Plateau at Jackson development plan shows that six houses will be constructed on a 1.59-acre property whose ground surface slopes in some locations at a 40% grade. The project site drains directly to Littles Creek, at the northwest corner of the property. There are more than 130 significant trees present, approximately 89 of which will be removed with the proposed construction. The steep slopes present on the site create an erosion hazard, which classifies as a Geologic Hazard Area in the City of Shoreline Critical Areas ordinances.

Stormwater Runoff

Stormwater runoff from this property will be significantly increased with the construction proposed for the Plateau at Jackson development. The construction of roof tops, sidewalks, driveways and street surfaces will convert the majority of the surface area of the site to impervious surface. Because impervious surfaces prevent precipitation from

infiltrating to the subsurface, all precipitation falling onto the impervious areas of the site will have to be routed to a stormwater drain system. This direct stormwater routing bypasses the natural systems that dissipate and absorb precipitation, and a significant increase in stormwater runoff peak volumes and rates during precipitation events results; runoff that is proposed for discharge to Littles Creek.

Under the natural conditions existing at this site precipitation that falls to the ground infiltrates through shallow soils to the subsurface or evaporates from the ground to the atmosphere (about half of precipitation is evaporated or transpired back into the atmosphere). The remaining water that infiltrates to the subsurface migrates downward until reaching a barrier to vertical movement (an impermeable sediment formation) and then moves laterally as groundwater to discharge to surface water. Shallow groundwater moves extremely slowly in the subsurface, compared with overland or surface water flow rates. It discharges at slow and relatively constant rates to surface water (in this case Littles Creek) supporting a relatively constant baseflow in the stream year round. The routing of stormwater directly to the stream (and bypassing the groundwater infiltration, subsurface flow and discharge processes) decreases the baseflow contribution to the stream during low flow seasons and increases the peaks of flood flows during storm events. The alteration to these natural processes will cause an increase in the number and magnitude of flooding events in Littles Creek if stormwater from the Plateau at Jackson is not properly retained and discharged.

The large coniferous trees that currently grow on the entire site absorb water from the subsurface, and contribute to stability of the steep slopes. Trees remove water from the ground through evaporation and transpiration (the common term is evapotranspiration). In addition, trees stabilize slopes via the "gripping" capacity of the roots, which holds sediments that comprise slopes in place. Trees evapotranspire a considerable volume of the precipitation that infiltrates into the ground. An average rate of evapotranspiration for a large mid-aged conifer tree in the Pacific Northwest is 4 inches of water from the surrounding soil during the growing season. Multiplied by the approximately 1.59-acre fully vegetated site, a 4-inch reduction in soil moisture yields a calculated volume of over 23,000 cubic feet (over 172,000 gallons) of water that is removed annually from the site by the trees present. Because the till sediments underlying this site are largely impermeable to infiltration and much of the shallow topsoil layer overlying the till is planned for removal during project construction, this excess water will migrate rapidly via surface runoff to the Creek below (and contribute to increased erosion on slopes it flows over).

Flooding occurs under existing conditions in Littles Creek. In October and November 2003 floodwater in the Creek rose high enough to fill the backyards of the residences adjacent to the project site, downstream on the west side of the Creek. The increase in stormwater routed to Littles Creek associated with the tree removal and increased

impermeable surface area for the Plateau at Jackson, if improperly detained, will raise flooding to water levels higher, which will be disastrous to these residences. To prevent flooding damage to adjacent homes, stormwater drainage from the site should be controlled and discharged according to the standards presented in the 2005 Stormwater Management Manual for Western Washington and comply with the Western Washington Phase II Municipal Stormwater NPDES Permit. Flow discharge rates for stormwater should be restricted to those specified in the 2005 Stormwater Management Manual for Western Washington.

Slope Stability

Sites classified as very high hazard erosion areas (as this site is) are required to maintain a 50 foot set back distance between the slope and any structures under current Shoreline regulations. The project proponents plan to reduce this safety buffer to one third of the regulated distance (15 feet). With the increase in erosion hazard that would be expected with the removal of the trees and the associated increase in runoff-related erosion, the protective buffer that the fifty-foot setback distance provides should be retained. While the city regulations do not require that the 50-foot setback distance be maintained for the site perimeter along 145h Street because steep slopes were formed by a road cut, erosion hazards are still present along 145th St NE. The proposed setback distance of 5 feet does not provide adequate protection from erosion and slope failure along the steep slope adjacent to 145th Street NE (the same conditions are present in the steep slopes along 145th Street NE as those along the west side of the site), and should be extended to the 50-foot set back distance.

Evidence of erosion along the steep slopes on the western margin of the property is visible in the “bowed” shape of the tree trunks growing from the slopes. Structures built at the top of these slopes will increase the weight loading to and the instability of the underlying slope. Again, a margin of safety is necessary to protect the homes built at the top of the slope from undermining through erosion and should be provided in the form of the 50-foot set back from the slope edge.

Conclusion and Recommendations

An increase in stormwater runoff from the construction of the proposed Plateau at Jackson project will result from the removal of the mature trees on the property and the construction of impervious surfaces and structures. The increased stormwater volumes and rates will enhance erosion along the steep slopes present on this site, that are already recognized as an erosion hazard in their existing condition by the high erosion hazard classification applied to this area. The five foot set back distance proposed between the steep slopes on site and the building footprints is not adequate to protect structures from erosion and landsliding. The 50 foot set back distance mandated under existing Shoreline

Plateau at Jackson Comment Letter
#3 Llyn Doremus

City regulations should be required for all structures built on this site to protect buildings from undermining and collapse.

In addition, the increased stormwater runoff routed to Littles Creek will contribute to flooding in the Creek and potential flood damage to downstream residences.

To reduce both the erosion hazards and flooding hazards associated with increased discharge from this site, stormwater runoff from the developed property should be managed in accordance with the provisions of the Phase II NPDES for Western Washington permit and the 2005 Stormwater Management Manual for Western Washington.

A handwritten signature in black ink, appearing to read "Llyn Doremus". The signature is fluid and cursive, with the first name "Llyn" and last name "Doremus" clearly distinguishable.

Llyn Doremus

Washington Licensed Hydrogeologist no. 1580

Plateau at Jackson Comment Letter
#2 Barbara J. Howery

Barbara J. Howery
1102 NE 146th St.
Shoreline WA 98155

Shoreline Planning Commission
17544 Midvale Ave North
Shoreline WA 98133 - 4921

November 2, 2007

RE: Planning Commission Hearing
6 Lot Subdivision
Plateau at Jackson
File: 201584

Dear Mr. Broili:

My property borders the southeast corner of Paramount Park which is adjacent to 14521-1 11th Ave NE, the proposed site of six (6) new homes.

My concern is erosion or sloughing off of my property into the park due to the significant amount of earth removed from the park earlier this year. It caused enough of a concern the park department found it necessary to snag (top) a tree approximately 80 - 100 feet high, to a height of approximately 20 feet high, due to the extensive removal of the root system and its supporting plants on its west side.

It is my understanding the park is to be restored to its original condition and that has not yet happened. It will not be possible to restore the missing earth after the six (6) new homes are built.

Thank you for your consideration.


Barbara J. Howery

Plateau at Jackson Comment Letter
#8 Jan Stewart/Terri Benson

Jessica Simulcik Smith

From: Jan Stewart [stewartjr_5@hotmail.com]
Sent: Friday, November 09, 2007 12:42 PM
To: Jessica Simulcik Smith
Cc: Benson, Terri; Westberg, Vicki
Subject: Photos re Nov. 15 hearing #201584

Hi Jessica, we would like these storm event photos taken by Terri Benson introduced into the record for the hearing. Also would like to arrange for viewing these and the photos submitted by Barry Sommerdorf on screen during the hearing. Thank you, Jan Stewart

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Plateau at Jackson Comment Letter
#8 Jan Stewart/Terri Benson

Jessica Simulcik Smith

From: terriyaki2@comcast.net
Sent: Friday, November 09, 2007 1:18 PM
To: Jessica Simulcik Smith
Subject: re Nov. 15 hearing #201584

Hi, Jessica,

My name is Terri Benson and my property will be directly effected in a very negative way should any construction be allowed for project #201584. Jan Stewart, my neighbor, has sent some photos from my backyard and my next door neighbor's.

I plan to speak at the hearing on the 15th and would like to know there is enough time allowed for all who would like to do the same.

I am on your regular mailing list but, feel free to include my in emails as well.

Thank you,

Terri Benson
368-9590

Plateau at Jackson Comment Letter
#8 Jan Stewart/Terri Benson



Plateau at Jackson Comment Letter
#8 Jan Stewart/Terri Benson



Plateau at Jackson Comment Letter
#8 Jan Stewart/Terri Benson



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#8 Jan Stewart/Terri Benson



Plateau at Jackson Comment Letter
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