

RESOLUTION NO. R- 3630

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF KIRKLAND APPROVING THE SUBDIVISION AND FINAL PLAT OF PARC PROVENCE BEING DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT FILE NO. SF-90-117 AND SETTING FORTH CONDITIONS TO WHICH SUCH SUBDIVISION AND FINAL PLAT SHALL BE SUBJECT.

WHEREAS, a subdivision and preliminary plat of Kirkland Acres was approved by the Hearing Examiner on February 2, 1990; and

WHEREAS, thereafter the Department of Planning and Community Development received an application for approval of subdivision and final plat, said application having been made by Pan-Terra, Inc., the owner of the real property described in said application, which property is within a Residential Single Family RS 35 zone; and

WHEREAS, pursuant to the State Environmental Policy Act, RCW 43.21C and the Administrative Guideline and local ordinance adopted to implement it, an environmental checklist has been submitted to the City of Kirkland, reviewed by the responsible official of the City of Kirkland, and a negative determination reached; and

WHEREAS, said environmental checklist and determination have been made available and accompanied the application throughout the entire review process; and

WHEREAS, the Director of the Department of Planning and Community Development did make certain Findings, Conclusions and Recommendations and did recommend approval of the subdivision and the final plat, subject to specific conditions set forth in said recommendation.

WHEREAS, the City Council, in regular meeting, did consider the environmental documents received from the responsible official, together with the recommendation of the Planning Commission, and

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Kirkland as follows:

Section 1. The Findings, Conclusions and Recommendations of the Director of the Department of Planning and Community Development, filed in Department of Planning and Community Development File No. SF-90-117, are hereby adopted by the Kirkland City Council as though fully set forth herein.

Section 2. Approval of the subdivision and the final plat of Parc Provence is subject to the applicant's compliance with the

conditions set forth in the recommendations hereinabove adopted by the City Council and further conditioned upon the following:

- (a) A Plat Bond or other approved security performance undertaking in an amount determined by the Director of Public Works in accordance with the requirements therefor in Ordinance No. 2178 shall be deposited with the City of Kirkland and be conditioned upon the completion and acceptance by the City of all conditions of approval, including public improvements, within one year from the date of passage of this Resolution. No City official, including the Chairperson of the Planning Commission, the Mayor, or the City Engineer, shall affix his signature to the final plat drawing until such time as the plat bond or other approved performance security undertaking herein required has been deposited with the City and approved by the Director of Public Works as to amount and form.

Section 3. Nothing in this Resolution shall be construed as excusing the applicant from compliance with all federal, state or local statutes, ordinances or regulations applicable to this subdivision, other than as expressly set forth herein.

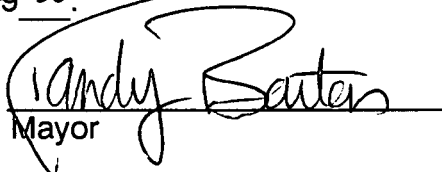
Section 4. A certified copy of this Resolution, along with the Findings, Conclusions, and Recommendations hereinabove adopted shall be delivered to the applicant.

Section 5. Certified or conformed copies of this resolution shall be delivered to the following:

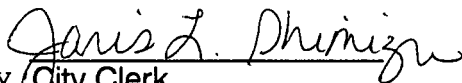
- (a) Department of Planning and Community Development for the City of Kirkland
- (b) Fire and Building Department of the City of Kirkland
- (c) Public Works Department for the City of Kirkland
- (d) City Clerk of the City of Kirkland

PASSED in regular meeting of the Kirkland City Council on the 2nd day of October, 19 90.

SIGNED IN AUTHENTICATION thereof on the 2nd day of October, 19 90.


Mayor

Attest:


Deputy City Clerk

CITY OF KIRKLAND

123 FIFTH AVENUE

KIRKLAND, WASHINGTON 98033-6189

(206) 828-1257

**DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT
MEMORANDUM**

To: Terry Ellis

From: Joseph W. Tovar 

Date: September 24, 1990

Subject: PARC PROVENCE FINAL SUBDIVISION, FILE SF-90-117

RECOMMENDATION:

Staff recommends that the Council adopt the resolution to approve the final plat of Parc Provence.

POLICY IMPLICATIONS:

Approval of this plat will affirm the City's Comprehensive Plan policies concerning clustered development in environmentally sensitive areas. Parc Provence is one of the first developments to be approved near the wetland in the Forbes Valley.

BACKGROUND:

This is an application for an 18-lot final subdivision on an 8.8-acre site located at the intersection of Forbes Creek Drive and 108th Avenue NE. Enclosure 1 to this memo is the staff report on this application.

Enclosure:

1. Staff report on Final Plat, File SF-90-117

CITY OF KIRKLAND

123 FIFTH AVENUE

KIRKLAND, WASHINGTON 98033-6189

(206) 828-1257

**DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT
MEMORANDUM**

To: Joseph W. Tovar

From: Nancy Carlson *NC* Project Planner

Date: September 25, 1990

Subject: PARC PROVENCE FINAL SUBDIVISION, FILE SF-90-117

RECOMMENDATION:

I recommend approval of the application subject to the following conditions:

1. The application is subject to the applicable requirements contained in the Kirkland Municipal Code, Zoning Code, Building and Fire Code, and Subdivision Ordinance. It is the responsibility of the applicant to ensure compliance with the various provisions contained in these ordinances. Attachment 5, Development Standards, is provided in this memo to familiarize the applicant with some of the additional development regulations. This attachment does not include all of the additional regulations. It is also the responsibility of the applicant to ensure that all building permit applications are consistent with conditions of approval in this and related files (i.e. S-IIB-89-19).
2. Prior to recording the final plat mylar, the applicant shall:
 - a. Install or bond for the completion of required right-of-way improvements. A plat bond or other approved security performance undertaking in an amount determined by the Director of Public Works in accordance with the requirements therefore in Ordinance 2178 shall be deposited with the City of Kirkland and be conditioned upon the completion and acceptance by the City of all conditions of approval, including public improvements, with one year from the date of plat recording.
 - b. Submit a title report no less than 30 days old from the date the final plat mylar was signed by the owners.

BACKGROUND:

1. The applicant is Pan-Terra Inc.
2. This is a final subdivision application to approve an 18-lot subdivision on an 8.8-acre parcel in an RS 35 zone called Parc Provence (formerly Kirkland Acres) (see Attachment 1). Once the plat is recorded, the zoning map will be changed to read RS 35 and PUD.

Enclosure 1
File SF-90-117

3. The site is located south of NE 108th Street, west of 108th Avenue NE, north of Forbes Creek Drive (see Attachment 2).
4. History:
 - a. The preliminary plat and preliminary PUD for Kirkland Acres (File S-IIB-89-19) were approved by the City Council per Ordinance No. 3209 and Resolution 3593 on March 20, 1990. The final Planned Unit Development (File S-IIB-89-19 final PUD) was approved by the Planning Director on July 17, 1990 (Attachment 3).
 - b. A Determination of Non-significance was issued on August 10, 1990, pursuant to SEPA. The Environmental Checklist and determination are included in Attachment 4.
 - c. On March 5, 1990, the applicant, Robert Pantley, wrote the City offering to dedicate the wetlands (see Tract A in Attachment 1). The Council agreed to accept the wetlands and added appropriate language in O-3209 and R-3593. The applicant has submitted a Statutory Warranty Deed for Tract A which will be recorded after the plat has been assigned a recording number.

ANALYSIS:

The final subdivision application complies with Chapters 3 and 4 of the Subdivision Ordinance and with the conditions of the preliminary subdivision and PUD, and final PUD.

1. Section 3.175 discusses the conditions under which the final plat may be approved by the City Council. These conditions are as follows:
 - a. Consistency with the preliminary plat, except for minor modifications. Modifications since the preliminary plat, including for lot size, were made either to comply with conditions of approval established by the Hearing Examiner for file S-IIB-89-19, or by the Planning Director for the final PUD.
 - b. Consistency with the provisions of the Subdivision Ordinance and RCW 58.17.

The applicant has complied with all of the conditions that were placed on the preliminary subdivision by the Hearing Examiner and on the final PUD by the Planning Director.

2. Subdivision Ordinance Section 5.10 authorizes the City to accept maintenance and performance securities. If the right-of-way improvements have not been accepted by the Public Works Department, the applicant should submit a performance security to cover the cost of remaining improvements. A maintenance security will be required once final inspection has occurred.

CHALLENGES AND JUDICIAL REVIEW:

1. Challenge - Any person who disagrees with the report of the Planning Director may file a written challenge to the City Council by delivering it to the City Clerk not later than the close of business the evening City Council first considers the final plat.
2. Judicial Review - The action of the City in granting or denying a final plat may be reviewed for unlawful, arbitrary, capricious, or corrupt action in King County Superior Court. The petition for review must be filed within 30 calendar days of the final decision of the City on the final plat.

RECORDING TIME LIMITS:

Unless specifically extended in the decision on the plat, the plat must be recorded with King County within 120 calendar days following the date of approval or the decision becomes void.

APPENDICES:

Attachments 1 through 5 are attached:

1. Final Plat
2. Vicinity Map
3. Notice of Approvals for File S-IIB-89-19, O-3209, and R-3593
4. Environmental Information
5. Development Standards

Review by Planning Director:

I concur _____

I do not concur _____

Comments: _____


Joseph W. Tovar

9/24/90
Date

cc: Pan-Terra Inc., 624 17th Avenue, Kirkland, WA 98033
File No. SF-90-117

THE PLAT OF
PARC PROVENCE
 SOUTHWEST QUARTER OF SECTION 32, TOWNSHIP 26 NORTH, RANGE 5 EAST, W.M.
 KING COUNTY, WASHINGTON

APPROVALS

Approved by the Kirkland City Council this _____ day of _____, 19____

Attest: _____

Examined and approved this _____ day of _____, 19____
 DEPARTMENT OF PUBLIC WORKS

City Engineer (Director)

CITY TREASURER CERTIFICATE

I hereby certify that there are no delinquent Local Improvement Assessments and that all special assessments on any of the property herein contained, dedicated as streets or for other public use are paid in full this _____ day of _____, 19____
 DEPARTMENT OF ADMINISTRATION AND FINANCE

Treasurer, City of Kirkland

FINANCE DIRECTOR CERTIFICATE

I hereby certify that all property taxes are paid, that there are no delinquent Special Assessments certified to this office for collection and that all special assessments certified to this office for collection on any of the property herein contained, dedicated as streets or for other public use are paid in full this _____ day of _____, 19____
 OFFICE OF FINANCE

Director Deputy

CITY OF KIRKLAND DEPARTMENT OF PLANNING & COMMUNITY DEVELOPMENT

Examined, reviewed and approved by the City of Kirkland pursuant to the _____ Subdivision Provisions of Title 22 (Land Subdivision) Kirkland Municipal Code this _____ Day of _____, 19____

Director, Department of Planning and Community Development

DEPARTMENT OF ASSESSMENT

Examined and approved this _____ day of _____, 19____

King County Assessor

RECORDER'S CERTIFICATE

Filed for record at the request of the City of Kirkland this _____ day of _____, 19____, at _____ minutes past _____ and recorded in Volume _____ of plats, pages _____, records of King County, Washington.

DIVISION OF RECORDS AND ELECTIONS

Manager Supt. of Records

ACKNOWLEDGEMENTS, DECLARATION, DEDICATION AND RESTRICTIONS
 (R.C.W.) 58.17.165

SUBDIVISION DEDICATION

KNOW ALL PEOPLE BY THESE PRESENTS that we, the undersigned being all of the owners of the land hereby subdivided, hereby declare this plat to be the graphic representation of the subdivision made hereby, and do hereby dedicate to the use of the public forever all streets and avenues not shown as private hereon and dedicate the use thereof for all public purposes not inconsistent with the use thereof for public highway purposes, and also the right to make all necessary slopes for cuts and fills upon the lots shown hereon in the original reasonable grading of said streets and avenues, and further dedicate to the use of the public all the easements and tracts shown on this plat for all public purposes as indicated hereon, including but not limited to parks, open space, utilities and drainage unless such easements or tracts are specifically identified on this plat as being dedicated or conveyed to a person or entity other than the public. Furthermore, the owners of the land hereby subdivided agree to defend, pay and save harmless, any governmental authority, including the City of Kirkland, in respect of all claims for damages against any governmental authority, including the City of Kirkland, which may be occasioned, to the adjacent land by the established construction, drainage or maintenance of said right-of-way or other areas so dedicated.

IN WITNESS WHEREOF we set our hands and seals.

PAN-TERRA, INC.
Robert P. Pantley, Director
 Name _____
PUGET SOUND BANK
W. J. ...
 Name _____
 Name _____
 Name _____

ACKNOWLEDGMENTS

STATE OF WASHINGTON)
 COUNTY OF KING) ss.

This is to certify that on the 15th day of August, 1990, before me the undersigned, a Notary Public, personally appeared Robert P. Pantley of PAN-TERRA CORPORATION, a Washington corporation, to be known to be the individual(s) who executed the within dedication and acknowledged to me that he/they signed and sealed the same as his/their voluntary act and deed for the uses and purposes therein mentioned and on oath stated that he/they was/were authorized to execute said instrument and seal affixed (if any) is the corporate seal of said corporation. WITNESS my hand and official seal the day and year first above written.

Notary Public in and for the State of Washington,
 residing at Kirkland
 My commission expires 6-1-92



STATE OF WASHINGTON)
 COUNTY OF KING) ss.

This is to certify that on the 15th day of August, 1990, before me the undersigned, a Notary Public, personally appeared W. J. ... of PUGET SOUND SAVING BANK, a Washington corporation, to be known to be the individual(s) who executed the within dedication and acknowledged to me that he/they signed and sealed the same as his/their voluntary act and deed for the uses and purposes therein mentioned and on oath stated that he/they was/were authorized to execute said instrument and seal affixed (if any) is the corporate seal of said corporation. WITNESS my hand and official seal the day and year first above written.

Notary Public in and for the State of Washington,
 residing at Kirkland
 My commission expires 6-1-92



SURVEYOR CERTIFICATE

I hereby certify that this plat of Parc Provence is based on an actual survey and subdivision of Section 32, Township 26N, Range 5E, W.M.; that the courses and distances are shown correctly hereon; that the monuments, lot and block corners as shown will be (have been) staked correctly on the ground as construction is completed; and that I have fully complied with the provisions of all platting and subdivision regulations.

Michael S. Yeoman
 Name _____ P.L.S.
 Certificate No. 19651



RECEIVED

SEP 25 1990

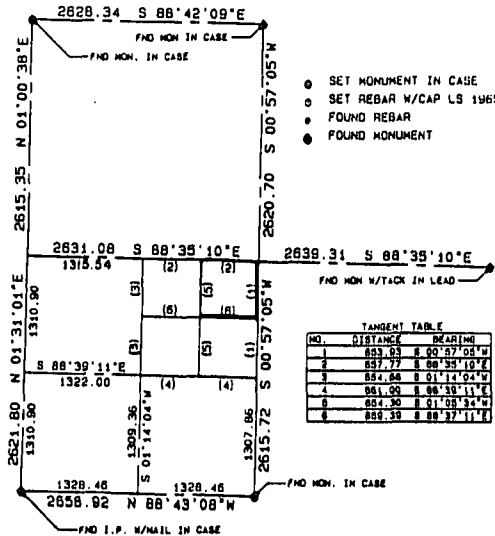
10:00 AM _____ PM
PLANNING DEPARTMENT

BY CP



ATTACHMENT 1
FILE NO. SF-90-117
 SHEET 1 OF 3

THE PLAT OF
 PARC PROVENCE
 SOUTHWEST QUARTER OF SECTION 32, TOWNSHIP 26 NORTH, RANGE 5 EAST, W.M.
 KING COUNTY, WASHINGTON



SEC. 32, T 26 N, R 5 E, WM
 SCALE 1" = 1000'

NOTES

BASIS OF BEARINGS: KCAS NORTH-SOUTH CENTER LINE OF SECTION
 THE WEST QUARTER CORNER OF SECTION 32 WAS SEARCHED FOR, NOT
 FOUND. CALCULATED POSITION PER KCAS SECTION BREAKDOWN.
 MONUMENT VISITED JANUARY 1989
 INSTRUMENT USED LIETZ SOM3E

LEGAL DESCRIPTION

The Northeast Quarter of the Northeast Quarter of the Southwest Quarter of Section 32, Township 26 North, Range 5 East, W.M. in King County, Washington;
 EXCEPT the South 30 feet for Northeast 108TH Street;
 AND EXCEPT the East 25 feet conveyed to King County for 108TH Avenue
 Northeast by deed recorded under Recording Number 1669853;
 AND EXCEPT the North 100 feet of the West 115 feet of the East 315 feet
 thereof.

EASEMENT PROVISIONS

A reciprocal driveway easement is hereby granted between: Lots 1 and 2, Lots 4 and 5, Lots 8 and 9, Lots 10 and 11, Lots 14 and 15, and Lots 18 and 17, as shown on the face of this plat.

A storm water drainage easement is hereby granted being the Northwest-erly 5 feet of Lot 3, the Southeast-erly 5 feet of Lot 4 and the West-erly 5 feet of Lot 10, the Easterly 5 feet of Lot 11 and Tracts C and D as shown on the face of this plat.

Tract "B" is reserved for Open Space.

Tract "E" is a common guest parking area for all Lots.

NATURAL GREENBELT PLAT DEDICATION

The area designated hereon as a natural greenbelt is hereby Dedicated to the general public as and for a perpetual natural greenbelt open space area. No tree topping, tree cutting or tree removal, nor shrub or brushcutting or removal, nor construction, clearing or alteration activities, shall occur within the greenbelt easement area without prior written approval from the City of Kirkland. Application for such written approval to be made to the Kirkland Department of Planning and Community Development who may require inspection of the premises before issuance of written approval and following completion of the activities. Any person conducting or authorizing such activities in violation of this dedication, or the terms of any written approval issued pursuant to this dedication shall be subject to the enforcement provisions of Chapter 170, Ordinance 2740, the Kirkland zoning code. In such event the Kirkland Department of Planning and Community Development may also require within the immediate vicinity of the damaged or fallen vegetation, restoration of the affected area by planting shrubs of comparable size and/or trees of three inches or more in diameter, measured one foot above grade. The department also may require that the damaged or fallen vegetation be removed.

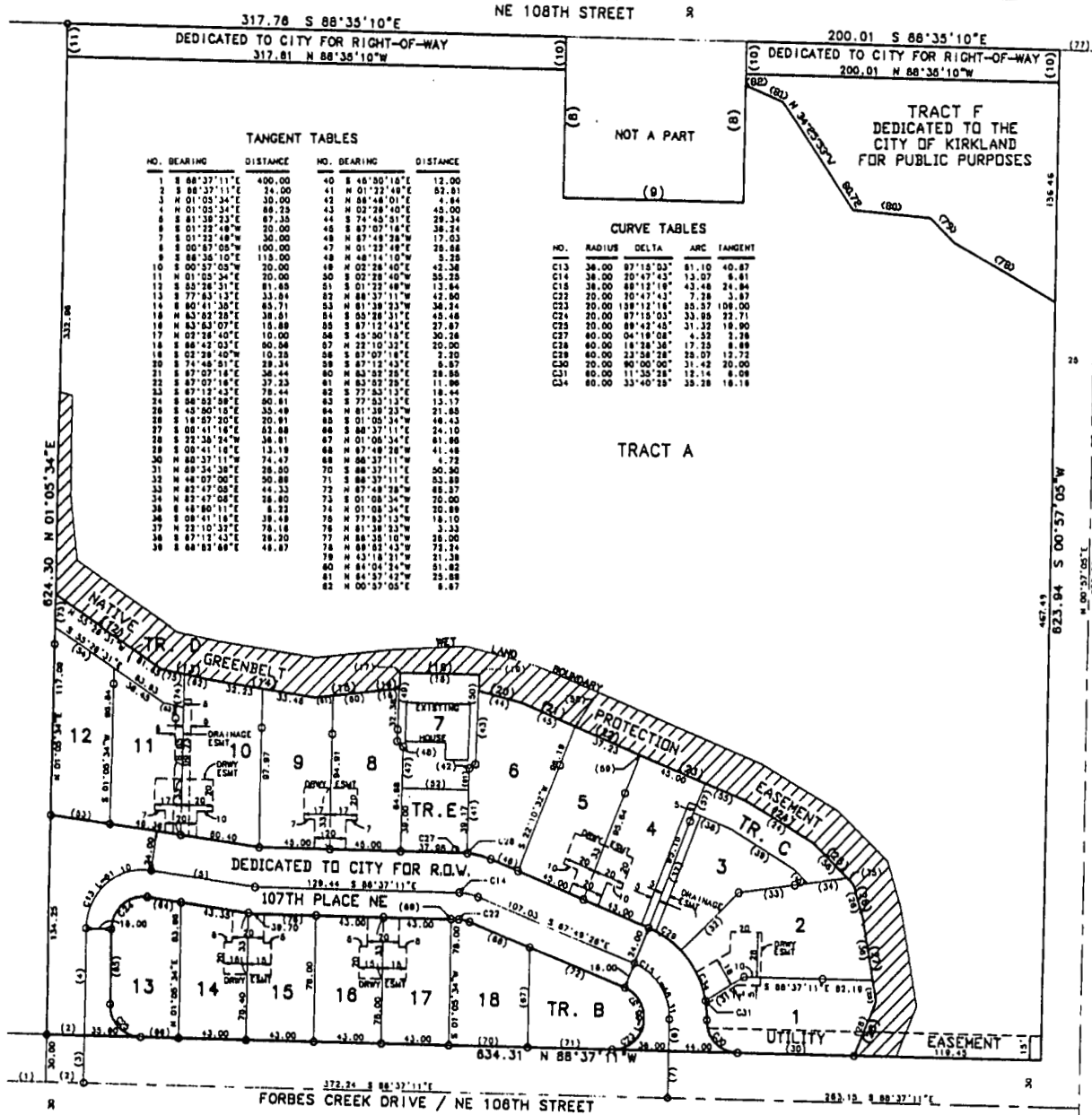
DEDICATION

Lots 1 through 18 own an equal and undivided interests in Tract B, Tract C, Tract D, and Tract E. And are responsible for the maintenance of said Tracts

CITY OF KIRKLAND FILE NUMBERS
 S-IIB-89-18, SF-90-117



THE PLAT OF
PARC PROVENCE
 SOUTHWEST QUARTER OF SECTION 32, TOWNSHIP 26 NORTH, RANGE 5 EAST, W.M.
 KING COUNTY, WASHINGTON



TANGENT TABLES

NO.	BEARING	DISTANCE	NO.	BEARING	DISTANCE
1	S 88°37'11"E	400.00	40	S 46°30'16"E	12.00
2	S 88°37'11"E	24.00	41	N 01°22'49"E	92.81
3	N 01°05'34"E	30.00	42	N 88°44'01"E	4.84
4	N 01°05'34"E	88.23	43	N 02°28'40"E	45.00
5	S 81°38'23"E	67.33	44	S 74°45'51"E	28.34
6	S 01°22'48"W	30.00	45	S 87°07'18"E	38.34
7	S 01°22'48"W	30.00	46	N 87°48'28"W	17.03
8	S 00°57'05"W	100.00	47	N 01°22'49"E	28.88
9	S 88°36'10"E	115.00	48	N 46°11'10"W	5.28
10	S 00°57'05"W	20.00	49	N 02°28'40"E	42.38
11	N 01°05'34"E	20.00	50	S 02°28'40"W	55.23
12	S 83°26'31"E	81.85	51	S 01°22'48"W	13.84
13	S 77°53'13"E	33.04	52	N 88°37'11"W	42.80
14	S 80°41'38"E	65.71	53	N 81°38'23"W	38.34
15	N 83°02'25"E	38.81	54	S 55°20'31"E	45.88
16	N 83°53'07"E	16.88	55	S 87°12'43"E	27.87
17	N 02°28'40"E	10.00	56	S 42°50'18"E	30.28
18	S 88°42'03"E	60.58	57	N 22°10'32"E	20.00
19	S 02°28'40"W	10.28	58	S 87°07'18"E	2.20
20	S 74°48'21"E	28.34	59	S 87°12'43"E	6.87
21	S 87°07'18"E	38.44	60	N 83°02'25"E	28.88
22	S 87°07'18"E	37.23	61	N 83°02'25"E	11.98
23	S 87°12'43"E	78.44	62	S 77°53'13"E	18.44
24	S 88°36'10"E	115.00	63	S 77°53'13"E	13.17
25	S 42°50'18"E	35.48	64	N 81°38'23"W	21.85
26	S 16°57'20"E	20.81	65	S 01°05'34"W	48.43
27	S 88°37'11"E	74.47	66	S 88°37'11"E	24.10
28	S 22°38'24"W	36.81	67	N 01°05'34"E	61.88
29	S 00°41'18"E	13.18	68	N 87°48'28"W	41.48
30	S 88°37'11"E	74.47	69	N 88°37'11"E	6.72
31	N 88°34'38"E	26.80	70	S 88°37'11"E	50.30
32	N 46°07'00"E	50.88	71	S 88°37'11"E	53.88
33	S 87°47'08"E	44.33	72	N 87°48'28"W	85.37
34	N 87°47'08"E	26.80	73	S 01°05'34"E	20.00
35	N 46°07'00"E	8.23	74	N 01°05'34"E	20.88
36	S 08°41'18"E	38.48	75	N 22°10'32"E	18.10
37	N 22°10'32"E	78.18	76	N 81°38'23"W	3.33
38	S 88°37'11"E	28.20	77	N 88°35'10"W	26.00
39	S 88°37'11"E	48.87	78	N 87°48'28"W	18.10
			79	N 43°18'21"W	21.38
			80	N 84°04'24"W	51.82
			81	N 44°33'47"W	25.88
			82	N 00°57'05"E	8.87

CURVE TABLES

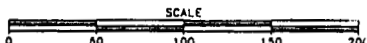
NO.	RADIUS	DELTA	ARC	TANGENT
C13	36.00	87°15'03"	81.10	40.87
C14	36.00	20°47'43"	13.07	8.81
C15	36.00	88°12'18"	43.48	24.84
C22	20.00	20°47'43"	7.28	3.87
C23	20.00	138°12'18"	35.57	108.00
C24	20.00	87°15'03"	33.85	22.71
C25	20.00	89°42'45"	31.32	18.90
C27	80.00	04°18'08"	4.52	2.28
C28	80.00	18°28'38"	17.23	8.89
C29	80.00	23°58'28"	28.07	13.72
C30	20.00	90°00'00"	31.42	20.00
C31	80.00	11°35'28"	12.14	6.08
C34	80.00	33°40'25"	35.28	18.18

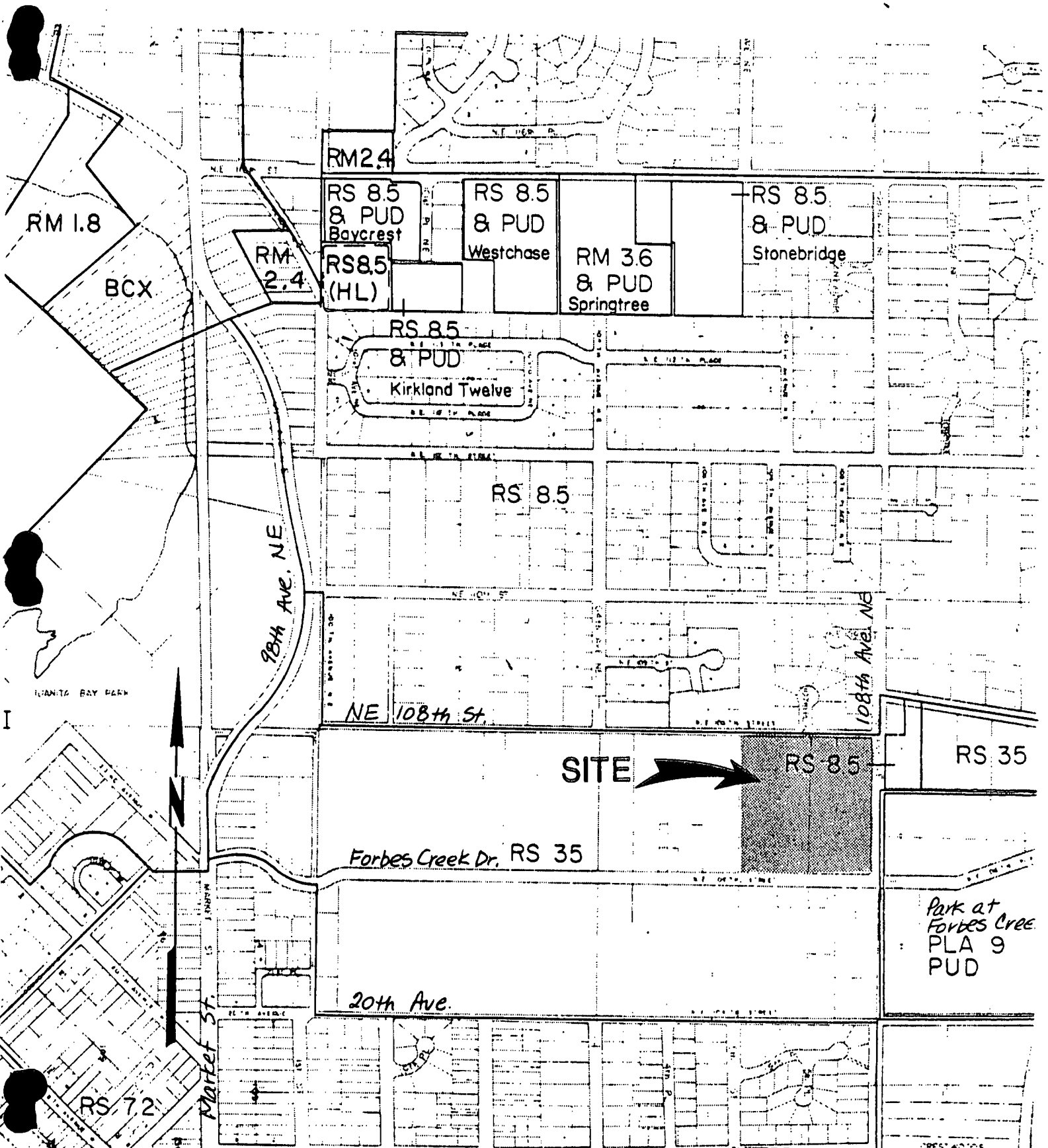
- LEGEND**
- SET MONUMENT IN CASE
 - SET REBAR W/CAP LS 19851
 - FOUND MONUMENT
 - FOUND REBAR

NOTES:

BASIS OF BEARINGS: KCAS NORTH-SOUTH CENTER LINE OF SECTION

REBAR SET FOR LOT CORNERS 1 TO 12 ALONG THE WET LAND TRACT ARE SET ON A 25.00 FOOT OFFSET LINE PARALLEL TO SAID TRACT.





ATTACHMENT 2
 FILE NO. SF-90-117

ORDINANCE NO. 3209

AN ORDINANCE OF THE CITY OF KIRKLAND RELATING TO LAND USE, AND APPROVAL OF A PRELIMINARY PUD AS APPLIED FOR BY PAN TERRA, INC., IN DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT FILE NO. S-IIB-89-19 AND SETTING FORTH CONDITIONS OF SAID APPROVAL.

WHEREAS, the Department of Planning and Community Development has received an application, pursuant to Process IIB, for a Preliminary Planned Unit Development (PUD) filed by Pan Terra, Inc., as Department of Planning and Community Development File No. S-IIB-89-19 to construct an 18-lot subdivision within a RS 35 zone.

WHEREAS, the application has been submitted to the Kirkland Hearing Examiner who held hearing thereon at his regular meetings of September 28, 1989, and January 11, 1990; and

WHEREAS, pursuant to the State Environmental Policy Act, RCW 43.21C, and the Administrative Guideline and local ordinance adopted to implement it, an environmental checklist has been submitted to the City of Kirkland, reviewed by the responsible official of the City of Kirkland, and a negative determination reached; and

WHEREAS, said environmental checklist and determination have been available and accompanied the application through the entire review process; and

WHEREAS, the Kirkland Hearing Examiner after his public hearing and consideration of the recommendations of the Department of Planning and Community Development did adopt certain Findings, Conclusions, and Recommendations and did recommend approval of the Process IIB Permit subject to the specific conditions set forth in said recommendations; and

WHEREAS, the City Council, in regular meeting, did consider the environmental documents received from the responsible official, together with the recommendation of the Hearing Examiner; and

WHEREAS, the Kirkland Zoning Ordinance requires approval of this application for PUD to be made by ordinance.

NOW THEREFORE, BE IT ORDAINED by the City Council of the City of Kirkland as follows:

ATTACHMENT 3

FILE NO. SF-90-117

Section 1. The Findings, Conclusions, and Recommendations of the Kirkland Hearing Examiner as signed by him and filed in the Department of Planning and Community Development File No. S-IIB-89-19 are adopted by the Kirkland City Council as though fully set forth herein, and the City Council further finds that it is in the public interest to accept the offer by the permit applicant that he dedicate to the City those portions of the subject property identified in the development permit file as "regulated wetlands." We, therefore, conclude that the final plat drawing shall be appropriately revised, and an appropriate legal instrument to convey title to the wetland property shall accompany final City approval of the Subdivision of "Kirkland Acres."

Section 2. After completion of final review of the PUD, as established in Sections 125.50 through 125.75 (inclusive) of the Kirkland Zoning Code, Ordinance 2740, as amended, the Process IIB Permit shall be issued to the applicant subject to the conditions set forth in the Recommendations hereinabove adopted by the City Council.

Section 3. Nothing in this ordinance shall be construed as excusing the applicant from compliance with any federal, state, or local statutes, ordinances, or regulations applicable to this project, other than expressly set forth herein.

Section 4. Failure on the part of the holder of the permit to initially meet or maintain strict compliance with the standards and conditions to which the Process IIB Permit is subject shall be grounds for revocation in accordance with Ordinance No. 2740, as amended, the Kirkland Zoning Ordinance.

Section 5. This ordinance shall be in full force and effect five (5) days from and after its passage by the Kirkland City Council and publication, pursuant to Section 1.08.010.

Section 6. A certified copy of this ordinance, together with the Findings, Conclusions, and Recommendations herein adopted shall be attached to and become a part of the Process IIB Permit or evidence thereof delivered to the permittee.

Section 7. Certified or conformed copies of this ordinance shall be delivered to the following:

- (a) Department of Planning and Community Development of the City of Kirkland
- (b) Fire and Building Departments of the City of Kirkland

- (c) Public Works Department of the City of Kirkland
- (d) The City Clerk for the City of Kirkland.

PASSED by majority vote of the Kirkland City Council in regular, open meeting this 20th day of March, 1990.

SIGNED IN AUTHENTICATION THEREOF on this 20th day of March, 1990

Candy Burton
Mayor

[Signature]
City Clerk

APPROVED AS TO FORM:

[Signature]
City Attorney

RESOLUTION NO. R-3593

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF KIRKLAND APPROVING THE PRELIMINARY SUBDIVISION AND PRELIMINARY PLAT OF KIRKLAND ACRES AS APPLIED FOR BY PAN TERRA, INC., BEING DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT FILE NO. S-IIB-89-19 AND SETTING FORTH CONDITIONS TO WHICH SUCH PRELIMINARY PLAT SHALL BE SUBJECT.

WHEREAS, the Department of Planning and Community Development has received application for a subdivision and preliminary plat of property within a RS 35 zone and said application having been made by Reider K. Selset Estate, the owner of the real property described in said application; and

WHEREAS, pursuant to the State Environmental Policy Act, RCW 43.21C, and the Administrative Guideline and local ordinance adopted to implement it, an environmental checklist has been submitted to the City of Kirkland, reviewed by the responsible official of the City of Kirkland, and a negative determination reached; and

WHEREAS, said environmental checklist and determination have been available and accompanied the application throughout the entire review process; and

WHEREAS, the proposal for subdivision and preliminary plat has been submitted to the Kirkland Hearing Examiner who held public hearing thereon at his regular meetings of September 28, 1989, and January 11, 1990; and

WHEREAS, the Kirkland Hearing Examiner, after public hearing and consideration of the recommendations of the Department of Planning and Community Development, did adopt certain Findings, Conclusions, and Recommendations and did recommend approval of the subdivision and the preliminary plat subject to the specific conditions set forth in said recommendation; and

WHEREAS, the City Council, in regular meeting, did consider the environmental documents received from the responsible official, together with the recommendation of the Hearing Examiner.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Kirkland as follows:

Section 1. The Findings, Conclusions, and Recommendations of the Kirkland Hearing Examiner as signed by him and filed in Department of Planning and Community Development File No. S-IIB-89-19 are hereby adopted by the Kirkland City Council as though fully set forth herein, and the City Council further finds that it is in the public interest to accept the offer by the permit applicant that he dedicate to the City those portions of the subject property identified in the development permit file as "regulated wetlands." We, therefore, conclude that the final plat drawing shall be appropriately revised, and an appropriate legal instrument to convey title to the wetland property shall accompany final City approval of the Subdivision of "Kirkland Acres."

Section 2. The subdivision and preliminary plat of Kirkland Acres is hereby given approval subject to the

conditions set forth in the recommendations hereinabove adopted by the City Council.

Section 3. Nothing in this Resolution shall be construed as excusing the applicant from compliance with all federal, state, or local statutes, ordinances, or regulations applicable to this subdivision other than as expressly set forth herein.

Section 4. A certified copy of this Resolution, along with the Findings, Conclusions, and Recommendations hereinabove adopted, shall be attached to and become a part of the evidence of the preliminary approval of said subdivision and preliminary plat to be delivered to the applicant.

Section 5. Certified or conformed copies of this Resolution shall be delivered to the following:

- (a) Department of Planning and Community Development of the City of Kirkland
- (b) Building and Fire Department of the City of Kirkland
- (c) Public Works Department of the City of Kirkland
- (d) City Clerk for the City of Kirkland

PASSED by majority vote of the Kirkland City Council in regular, open meeting on the 20th day of March, 1990.

SIGNED IN AUTHENTICATION thereof on the 20th day of March, 1990.

Candy Barton

MAYOR

ATTEST:

[Signature]

City Clerk

CITY OF KIRKLAND

123 FIFTH AVENUE KIRKLAND, WASHINGTON 98033-6189 (206) 828-1257

DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

AMENDED NOTICE OF APPROVAL

ZONING CODE/SUBDIVISION CODE PERMIT

File No. S-IIB-89-19

PROJECT NAME: Kirkland Acres

PROJECT ADDRESS: S. of NE 108th St., W. of 108th Ave NE, N. of Forbes Creek Dr.

APPLICANT OR AGENT: Pan Terra, Inc.

CITY OF KIRKLAND APPROVAL DATE: March 20, 1990

LAPSE OF APPROVAL DATE(S): Under Sections 125.10, 125.45, 125.50 and 152.115 of the Zoning Code, the applicant must submit an application for final site plan review within one (1) year after the decision (MARCH 20, 1991) on the Preliminary PUD, or the decision becomes void.

Under Section 3.120.1 of the Subdivision Ordinance, the owner must submit a final plat to the Planning Department, meeting the requirements of the Subdivision Ordinance and the preliminary plat approval, within three years following the date the preliminary plat was approved (March 20, 1993), or the preliminary plat approval becomes void.

LAPSE OF APPROVAL DATE APPLIES UNLESS JUDICIAL REVIEW PROCEEDINGS ARE INITIATED WITHIN 30 DAYS OF APPROVAL DATE (BEFORE April 20, 1990).

This NOTICE OF APPROVAL is granted subject to the attached conditions and development standards. Failure to meet or maintain strict compliance shall be grounds for revocation in accordance with the Kirkland Zoning Ordinance No. 2740 as amended.

The applicant must also comply with any federal, state or local statutes, ordinances or regulations applicable to this project. This Notice of Approval does not authorize grading or building without issuance of the necessary permits from the Kirkland Building Department.

**CITY OF KIRKLAND
PLANNING AND COMMUNITY DEVELOPMENT
Joseph W. Tovar, Director**

By: Nancy Carlson
(signature)

Nancy Carlson

Title: Senior Planner

- Attachments: XX Conditions of Approval
- XX SEPA MITIGATING MEASURES
- XX Development Standards
- XX Procedures for Judicial Review

CONDITIONS OF APPROVAL

KIRKLAND ACRES
S-IIB-89-19

- A. This application is subject to the applicable requirements contained in the Kirkland Municipal Code, Zoning Code, Building and Fire Code, Subdivision Ordinance. It is the responsibility of the applicant to ensure compliance with the various provisions contained in these ordinances. Exhibit A, Attachment 4, Development Standards, is provided to familiarize the applicant with some of the additional development regulations. This attachment does not include all of the additional regulations.
- B. As part of an application for a Final Subdivision and PUD, the applicant shall submit:
1. An agreement which is acceptable to the City Attorney between the applicant and property owners to the west stating their acceptance of a 20-foot front setback yard created on their property as a result of dedication of the new loop road abutting the west property line of the subject property. The agreement must receive approval of the City Attorney before the Final Subdivision can be approved (Exhibit A, Conclusion II.E.1.b and Hearing Examiner Conclusion C).
 2. A revised plan showing:
 - a. Lots 15 and 16 moved next to the open space to the east. The guest parking removed from the open space and additional area incorporated into Lot 15 (Exhibit A, Conclusion II.G.2.b.);
 - b. Minimum 15-foot building setbacks along Forbes Creek Drive. Sixteen-foot setbacks shall be maintained as shown along the loop road and a minimum 10 feet shall be maintained between detached structures (Exhibit A, Conclusion II.G.2.b);
 - c. Lot line and split rail fence on Lot 7 moved to top of topographic break subject to Planning Staff on-site approval (Exhibit A, Conclusion II.E.3.b);
 - d. Half street improvements along 108th Avenue NE to be approved by the Department of Public Works. The improvements shall include curb and gutter. Modification of normal standards may be required especially concerning the landscape strip because of the wetland (Exhibit A, Conclusion II.E.2.b.2 and Hearing Examiner Conclusion F);

KIRKLAND ACRES MITIGATING MEASURES
S-IIB-89-19

1. The applicant shall submit plans for the PUD and Subdivision showing:
 - a. All structures, parking areas, or other improvements located at least 25 feet away from the edge of the regulated wetland.
 - b. Storm drainage discharged through grasslined swales and oil/water separators prior to release into the wetland. Where possible, discharge away from the wetland is strongly encouraged. Parking areas, driveways, and structures should be located at least 5 feet from grasslined swales.
2. Prior to grading or building permit, the applicant shall:
 - a. Submit to the City for recording with King County Records and Elections Division, a signed and notarized covenant indemnifying the City from any loss, including claims made therefore arising out of maintenance, flooding, damming, or enlargement of the wetland on the subject property.
 - b. Install a construction-phase, snow-fence, chain-link fence or equivalent and silt screen along the upland edge of the buffer to be approved and inspected by the Planning Department.
3. Prior to recording the short plat, the applicant shall:
 - a. Erect a 3- to 4-foot high permanent fence or earthen berm between the upland edge of all wetland buffers and the developed portion of the site, subject to approval by the Planning Department. Installation of the fence or berm must be done by hand to prevent machinery from entering the wetland or its buffer.
 - b. Erect public information signs describing the function and values of wetlands at the upland edge of the buffer. The design and placement of the sign shall be consistent with City standards and subject to Planning Department approval.
 - c. Prepare and ready for distribution information brochures for all home purchasers which outline the function and values of the wetland, subject to approval by the Planning Department. The brochures should include a statement that residents keep outdoor pets on site and out of the wetland and its buffer to the greatest extent possible and not use chemicals and fertilizers within all wetland buffers.

- d. Include on the subdivision mylar to be recorded, a Native Growth Protection Easement covering the regulated wetland area, based on a survey approved by the City of Kirkland. Language on the face of the mylar should state, "No land surface modification of any kind shall be allowed in the regulated wetland, except for wetland enhancement or water quality improvements that are specifically approved by the State Department of Fisheries, Game, and Ecology, and provided that said enhancements and improvements are made using hand implements only. Utilities and public improvements may be in the easement area only if there is no other feasible location."
- e. Submit cash contributions representing 1.20 percent of the cost to improve the intersection of NE 112th Street and Forbes Creek Drive, 1.08 percent for the intersection of NE 112th Street and 120th Avenue NE, and 1.08 percent for the intersection of NE 116th Street and 120th Avenue NE.

4. The applicant shall:

- a. Stage all construction from the upland area.
- b. Revegetate any soil or vegetation disturbance within the buffer with hydroseed or other supplemental wetland native vegetation approved by the Planning Department.

CITY OF KIRKLAND

123 FIFTH AVENUE

KIRKLAND, WASHINGTON 98033-6189

(206) 828-1257

**DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT
MEMORANDUM**

To: Joseph W. Tovar

From: Nancy Carlson

Date: August 2, 1989

Subject: KIRKLAND ACRES SEPA COMPLIANCE, LOCATED BETWEEN FORBES CREEK DRIVE AND NE 108TH STREET AND WEST OF 108TH AVENUE NE, FILE NO. SS-IIB-89-19 (PENDING)

The above project is a 20- to 22-lot subdivision and Planned Unit Development (PUD) on a nine-acre parcel. Forbes Creek and associated wetlands are on site. The following site visits have been conducted and information reviewed for this project:

Site visits February 21, 1989 with Michelle Stevens, DOE (drive-by)

May 10, 1989 with Roger del Moral, Nelson Betty, Robert Pantley, and yourself

July 18, 1989 with Angela Ruggeri, Pat Davis, and yourself.

Environmental Checklist Received February 21, 1989 and revised July 24, 1989 (Attachment 1)

Reports and Letters Wetlands Delineation Evaluation and Regulated Wetlands Determination of Pan-Terra, Forbes Creek/108th Street Development Site for Pan-Terra by IES Associates, dated February 8, 1989 (Attachment 2)

Letter to Nelson Betty from Terra Associates, Inc., dated March 23, 1989 (Attachment 3)

Evaluation of Report: "Wetlands Delineation, Evaluation and Regulated Wetland Determination of Pan-Terra Forbes Creek Development Site" for City of Kirkland by Roger del Moral, CSE, dated March 31, 1989 (Attachment 4).

Letter to Nancy Carlson from Michelle Stevens dated April 25, 1989 (Attachment 5)

Letter to Nancy Carlson from IES Associates,
dated May 3, 1989 (Attachment 6)

The primary area of concern is the wetland which covers approximately six acres of the central area of the site. The wetland experts and DOE staff have agreed on the regulated wetland line in the southwest portion of the site. The line in that area has been surveyed.

Your letter to Mr. Pantley, dated June 12, 1989, sets forth the determination of regulated wetland line for the northeast portion of the site pursuant to Zoning Code Section 90.9.c (Attachment 7). In summary, the regulated wetland line is the line established by Roger del Moral. It lies between the IES line and the DOE line. This line was flagged, field-verified by Roger del Moral, and surveyed.

Pursuant to the June 12 letter, a Native Growth Protection Easement should be established over the entire regulated wetland area. This easement would require that no land surface modification of any kind be allowed, except if a wetland enhancement or water quality improvement is specifically approved by the State Departments of Fisheries, Game, and Ecology, and if those improvements are made using hand implements only. I am also recommending other standard wetland-related mitigation measures be applied to this project to mitigate potential impacts.

It should be noted that a proposed sewer line may cross the wetland near the southeast corner of the site. The Public Works Department has determined that this is the only feasible location for this line. Improvements in the public rights-of-way which surround the site and wetland may be required of the developer through the zoning permit process. Part of the proposal is a master plan for a public trail along the NE 108th Street right-of-way from 108th NE west to Juanita Bay. The applicant has proposed this trail as a public benefit for the PUD permit. Given the above, utilities and public improvements may be in the Native Growth Protection Easement because there is a high order of public interest in doing so.

Another area of concern relates to traffic generated by the proposed development. Attachment 8 is a traffic analysis prepared by me and approved by Fred French of the Public Works Department, and supporting materials. As you can see, three of the intersections studied have over a 1 percent signal warrant. I recommend that the applicant submit a cash contribution based on Public Works Department's best estimate of the cost of the total improvement, because the subdivision will probably be built within five years.

The most current site plan for this project was received on July 20, 1989 (Attachment 9). It is my understanding, however, that revisions may be made to the site plan prior to or during the hearing. Any revisions would probably be in the northeast corner of the site and may involve building two to four residential units instead of a park.

In summary, based on my review of all available information and adopted policies of the City, I am recommending that the proposal be changed or clarified to include the following mitigating measures so that a DNS can be issued:

1. The applicant shall submit plans for the PUD and Subdivision showing:
 - a. All structures, parking areas, or other improvements located at least 25 feet away from the edge of the regulated wetland.
 - b. Storm drainage discharged through grasslined swales and oil/water separators prior to release into the wetland. Where possible, discharge away from the wetland is strongly encouraged. Parking areas, driveways, and structures should be located at least 5 feet from grasslined swales.
2. Prior to grading or building permit, the applicant shall:
 - a. Submit to the City for recording with King County Records and Elections Division, a signed and notarized covenant indemnifying the City from any loss, including claims made therefore arising out of maintenance, flooding, damming, or enlargement of the wetland on the subject property.
 - b. Install a construction-phase, snow-fence, chain-link fence or equivalent and silt screen along the upland edge of the buffer to be approved and inspected by the Planning Department.
3. Prior to recording the short plat, the applicant shall:
 - a. Erect a 3- to 4-foot high permanent fence or earthen berm between the upland edge of all wetland buffers and the developed portion of the site, subject to approval by the Planning Department. Installation of the fence or berm must be done by hand to prevent machinery from entering the wetland or its buffer.
 - b. Erect public information signs describing the function and values of wetlands at the upland edge of the buffer. The design and placement of the sign shall be consistent with City standards and subject to Planning Department approval.
 - c. Prepare and ready for distribution information brochures for all home purchasers which outline the function and values of the wetland, subject to approval by the Planning Department. The brochures should include a statement that residents keep outdoor pets on site and out of the wetland and its buffer to the greatest extent possible and not use chemicals and fertilizers within all wetland buffers.

- d. Include on the subdivision mylar to be recorded, a Native Growth Protection Easement covering the regulated wetland area, based on a survey approved by the City of Kirkland. Language on the face of the mylar should state, "No land surface modification of any kind shall be allowed in the regulated wetland, except for wetland enhancement or water quality improvements that are specifically approved by the State Department of Fisheries, Game, and Ecology, and provided that said enhancements and improvements are made using hand implements only. Utilities and public improvements may be in the easement area only if there is no other feasible location."
 - e. Submit cash contributions representing 1.20 percent of the cost to improve the intersection of NE 112th Street and Forbes Creek Drive, 1.08 percent for the intersection of NE 112th Street and 120th Avenue NE, and 1.08 percent for the intersection of NE 116th Street and 120th Avenue NE.
4. The applicant shall:
- a. Stage all construction from the upland area.
 - b. Revegetate any soil or vegetation disturbance within the buffer with hydroseed or other supplemental wetland native vegetation approved by the Planning Department.

This recommendation is based on adopted policies of the City as found in the City's Land Use Policies Plan. Specifically, the "Natural Environment Goals and Policies" chapter includes the following policies:

Policy 2.2: Natural features and systems that are biologically significant or provide significant habitat should be preserved, rehabilitated, or enhanced.

Policy 2.4: The functional integrity of water courses, groundwater, wetlands, and small bodies of water should be maintained or approved by regulating land surface modifications and other development activity.

Policy 4.3: The City should be indemnified from damages resulting from development in natural constraint areas.

Policy 4.5: Protective greenbelts should be established to preserve existing natural vegetation.

The "Public Services/Facilities Goals and Policies" chapter includes the following policy:

Policy 1.1: Developers should be responsible for providing the additional capital facilities required by their development. This responsibility includes actual installation of facilities at the time of development

and/or a contractual agreement to contribute to installation upon determination of need by the City.

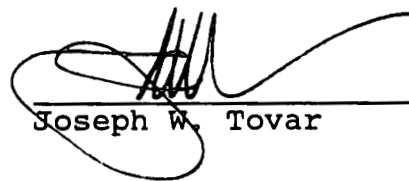
These policies directly support the above mentioned mitigation measures and require the measures in order to fully mitigate the impacts created by the proposal.

Review by Responsible Official:

I concur

I do not concur

Comments: _____



Joseph W. Tovar

8/2/89
Date

Attachments

KIRKACR.JUL/NC:rk

CITY OF KIRKLAND
ENVIRONMENTAL CHECKLIST

Purpose of Checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the City identify impacts from your proposal and to reduce or avoid impacts from the proposal, whenever possible.

Instructions for Applicants:

This environmental checklist asks you to describe some basic information about your proposal. Answer the questions briefly, with the most precise information known, or give the best description you can.

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply". Complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the City staff can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The City may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impacts.

Use of checklist for nonproject proposals:

this checklist for nonproject proposals also, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be "proposal," "proposer," and "affected geographic area," respectively.

ROUND

of proposed project, if applicable: Kirkland Acres

of applicant: Pan-Terra Homes, Inc.

SEPA Attachment 1
FILE NO. IIB-89-19

RECEIVED

JUL 24 1989

AM PM
PLANNING DEPARTMENT

3. Address and phone number of applicant and contact person: Nelson Betty, President; Pan-Terra Homes, Inc.;
624 8th Street South; Kirkland, Washington 98033; (206) 828-3151
4. Date checklist prepared: February 20, 1989 Revised July 24, 1989
5. Agency requesting checklist: City of Kirkland, Planning Department
6. Proposed timing or schedule (including phasing, if applicable): Complete Plans City Approval Begin Construction
7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? No future additions or expansions are known
8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal. Wetlands Evaluation by IES Associates - February 8, 1989
Wetlands Evaluation by Del Moral - March 31, 1989
9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. Not aware of other proposals
10. List any government approvals or permits that will be needed for your proposal, if known. City of Kirkland
Building Permits, PUD and Subdivision
11. Give brief, complete description of your proposal; including the proposed uses, the size and scope of the project and site including dimensions and use of all proposed improvements. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page.
The proposed project calls for the development of a ±9 acre parcel into residential (single family) housing. The existing site is presently undeveloped, except for an existing single family residence. A utility substation is also located within the general site area but not included in the proposed project. This project will subdivide the existing parcel into 20-22 lots for the construction of single family residential units, on approximately 3 acres. The remainder of the site will be left undisturbed for preservation of wetlands. See plans and specific PUD application parameters.
12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. The proposed project is located within the City of Kirkland. It is bordered on the north by NE 108th Street, on the south by NE 106th Street and on the east by 108th Avenue NE. A site plan with vicinity map and legal description has been submitted to the City of Kirkland.

B. ENVIRONMENTAL ELEMENTS

1. EARTH

- a. General description of the site (circle one): Flat, rolling, hilly, steep slopes, mountainous, other a gradually sloping creek bottom.
- b. What is the steepest slope on the site (approximate percent slope)? 50%
- c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland. Kitsap silt-loam (2 to 8% slope), Kitsap silt-loam (15-30% slope), Alderwood gravelly sandy loam, underlain by Norma soil. Not considered prime farmland.
- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe. Soils along the creekbank could be unstable and erode during flood events.
- e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill. Grading will be done to provide access roads and level homesites. No significant fill is proposed, but, if required, would be imported from clean local borrow site. Sewer line extension to occur in wetland. All proper construction procedures will be followed under the Kirkland codes.
- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. Erosion could occur as a result of stripping existing vegetation and from erosion of temporary spoil piles during excavation for utilities and building foundations but proper siltation procedures will be followed. Sewer line extension to be located through wetland area.
- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? Approximately 15-20% of the site will become impervious surface area.
- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any: Erosion will temporarily be controlled by covering spoil piles with plastic. Impacts to wetlands/stream will be mitigated by installation of a silt fence between the construction zone & wetlands. Exposed earth will be landscaped after construction.

- a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known. Air emissions would result from residential heating system emissions, which may include fireplace/woodstove smoke, vehicle exhaust emissions will occur from construction equipment and eventually homeowner automobiles,

reviewed by N. Carlson

see attached wetland reports

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. No significant off-site emission sources are known.

c. Proposed measures to reduce or control emissions or other impacts to air, if any: Use of approved manufacturer sources for heating and woodstoves that meet or exceed emissions standards.

3. WATER

a. Surface

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. Yes, Forbes Creek and

see attached reports

its associated wetlands bisect the property and flows into Lake Washington approx. 1 mile.

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans. Yes, utility installation and site grading. See attached plan.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material. Some fill could be brought in the non-regulated wetlands in the NE corner of the property (500cy). Fill will also be needed for access and foundation work on the southwest corner of the parcel. Fill material would be clean borrow from an approved local source.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. No withdrawals or diversions of surface water are planned.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan. Yes, see plan

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge. No discharges of waste materials are planned.



b. Ground

- 1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known. No groundwater withdrawal or discharge is planned.
- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals ...; agricultural; etc). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve. No wastewater discharge to groundwater is planned.

c. Water Runoff (including storm water):

- 1) Describe the source of runoff (include storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe. Rain water from roofs and driveways will be directed into grass lined swales for eventual discharge via sheetflow into wetlands and Forbes Creek.
- 2) Could waste materials enter ground or surface waters? If so, generally describe. Stormwater runoff from driveways and yards would carry certain trace amounts of automotive oils and other fluids as well as domestic pesticides, fertilizers and pet waste into the drainage way.
- d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any: A 25' vegetative buffer will be maintained between the lot line and wetlands boundary. This existing plant buffer and the grass lined swales will act as a biological filter to trap and assimilate pollutants prior to reaching the wetlands/creek.

4. PLANTS

- a. Check or circle types of vegetation found on the site:

- deciduous tree: alder, maple, aspen, other
- evergreen tree: fir cedar, pine, other
- shrubs
- grass
- pasture

WillowsSee attached reports

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe. No

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any: Energy conservation features include dual pane windows, walls (R-13), floor (R-19), and ceiling insulation (R-30) and draft seals on doors/windows.

7. ENVIRONMENTAL HEALTH

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe. No unusual risks are anticipated

1) Describe special emergency services that might be required. Normal fire, police and ambulance services.

2) Proposed measures to reduce or control environmental health hazards, if any: Installation of home smoke detectors.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? No unusual noise sources exist in the area

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site. Construction noise would result for 6-12 months during normal working hours. Long term noise will result from additional homeowner vehicles, etc. in the area.

3) Proposed measures to reduce or control noise impacts, if any: Adherence to City of Kirkland ordinances relating to noise.

8. LAND AND SHORELINE USE

a. What is the current use of the site and adjacent properties? The site is mostly undeveloped land within an existing residential area.

single family west, north
and south
mult-family east

b. Has the site been used for agriculture? If so, describe. No known commercial agriculture production, but some evidence of family farming.

c. Describe any structures on the site. A single family residence which will remain.

d. Will any structures be demolished? if so, what? No demolition is planned.

e. What is the current zoning classification of the site? Zoning is residential.

g. If applicable, what is the current shoreline master program designation of the site? Not applicable

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify. Yes, Forbes Creek and regulated wetlands.

i. Approximately how many people would reside or work in the completed project. Assuming a 2.5 family household for 22 units, approximately 55 people.

j. Approximately how many people would the completed project displace? No displacement

k. Proposed measures to avoid or reduce displacement impacts, if any: Not applicable

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: Meets current zoning/preservation requirements.

9. HOUSING

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. 22 middle income housing units

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. None

c. Proposed measures to reduce or control housing impacts, if any: This project responds to areawide lower priced housing needs that are in extreme short supply.

RS 35 (35,000 sq. ft. min. lot size)

Entire site is noted Differential Settlement Alluvium on City's ESA map. This map also shows Forbes Creek across the site.

Applicant is requesting PU and Subdivision.

10. AESTHETICS

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?
Tallest structure is estimated to be less than 30' high; principal building material is cedar siding.
- b. What views in the immediate vicinity would be altered or obstructed?
Views north from NE 106th St. and south from NE 108th St. will be altered by the presence of the new homes.
- c. Proposed measures to reduce or control aesthetic impacts, if any:
Provide a well-planned, pleasantly-designed subdivision.

11. LIGHT AND GLARE

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur? Light from home and yard lights and vehicle headlamps will occur during evening hours.
- b. Could light or glare from the finished project be a safety hazard or interfere with views? No safety hazard or view obstruction is anticipated.
- c. What existing off-site sources of light or glare may affect your proposal?
No known sources
- d. Proposed measures to reduce or control light and glare impacts, if any:
No mitigation is planned.

12. RECREATION

- a. What designated and informal recreational opportunities are in the immediate vicinity? Juanita Park is less than 1 mile west of the site; Crest Woods Park is a few blocks to the southeast.
- b. Would the proposed project displace any existing recreational uses? If so, describe. No displacement of existing recreation use is anticipated.
- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any: No provision for new recreation opportunities is included with this proposal, unless the 2 - 4 lots in NE corner are moved to the S. side of the property and this is converted to a future park.

g. Proposed measures to reduce or control transportation impacts, if any:

None proposed

15. PUBLIC SERVICES

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)?

If so, generally describe. Yes, new residences would require all the public services.

b. Proposed measures to reduce or control direct impacts on public services, if any.

None proposed; not previously mentioned.

16. UTILITIES

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed. Extensions to the sanitary sewer

main and services to all houses must be provided by the respected utilities:

City of Kirkland: sewer, water, refuse (contract)

Puget Power: electricity GTE: telephone

Washington Natural Gas: gas

The sewer will extend through the wetland and perhaps be routed under Forbes Creek.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge.

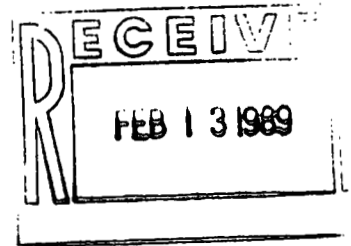
I understand that the lead agency is relying on them to make its decision.

Signature: *[Handwritten Signature]*

Date Submitted: *2-21-89*

Revised 7/24/89

[Handwritten Signature], Director



**Wetlands Delineation,
Evaluation and
Regulated Wetlands Determination**

of

**Pan-Terra
Forbes Creek/108th Street S.E.
Development Site**

for

**Pan-Terra, Inc.
10640 118th Place Northeast
Kirkland, Washington 98033**

by

**IES Associates
1514 Muirhead Avenue
Olympia, Washington 98502**

February 8, 1989

Introduction :

A site evaluation was conducted on the Pan-Terra development property located along both sides of Forbes Creek west of 108th Avenue North, between 106th and 108th Streets and extending westerly towards Lake Washington. The Corps of Army Engineers multiparameter wetlands analysis procedure was used to define the boundaries of the overall wetland on the site. An additional evaluation of the wetland was based on "Regulated Wetland Status" as identified in the City of Kirkland's Wetland Ordinance and through discussions with the City of Kirkland.

Procedures :

The procedure was a variation of the standard procedure of the Corps of Army Engineers multiparameter analysis process. The process includes the evaluation of vegetation, soils and hydrology. Under this analysis procedure, a minimum of one positive wetland indicator for each of the three parameters must be found in order to make a positive wetland determination. Utilizing the vegetation, it has been determined that, for a site to be either wetland or upland, it must contain a predominance of wetland vegetation (i.e., 51 percent or more) to be classified as a wetland by vegetative standards.

The soils procedure, as identified in the Corps Manual, depends on soils type analysis as provided by the U.S. Department of Agriculture Soils Surveys and by a soil coring process and the use of the Munsell Color Series to determine the value of the soil, which designates it either as wetland or upland in character.

Hydric conditions are not as defined a parameter in western Washington in the winter, since much of the area is supersaturated with surface rain during much of the winter.

Because of the configuration of the site, no true transect baselines were established. A series of test holes and one meter quads were established south of 108th Street.

The lines were dropped due south from 108th Street until the wetlands edge was defined. Because of the topographic conditions, a series of random soil samples and hydric test holes were completed in an effort to find how the groundwater flow and soil conditions related to changes in topographic conditions.

A vegetative survey was conducted of the entire site and mapped for utilization in the analysis of the multiparameter process. The wetland boundaries were flagged by IES. They will be surveyed by Pan-Terra or an assigned surveyor before submission to the City.

Site Description :

General :

The site consists of Forbes Creek drainage from 108th Avenue Northeast on the east, between 106th Street on the south and 108th Street on the north. The creek floodplain enters the site approximately equidistant from the north and south property boundaries, then flows west to northwesterly throughout the length of the project. The stream continues to flow west through the Forbes Creek drainage system under the causeway at 98th Avenue Northeast to Lake Washington.

The center core of the site is a floodway and floodplain, and an associated wetlands with Forbes Creek that extends west to Lake Washington along the creek. There is a residence and upland area bordering the south edge of the Forbes Creek floodway. This area includes a sloped grass pasture area in the east, a residence and yard in the center, and a grass pasture meadow area to the west.

The north side of the creek is bordered by a wooded low area situated east and south of the existing residence that was built on a fill, the residence and 108th Street to the extent of its paved portion.

Vegetation :

Vegetation on the Pan-Terra project was grouped into three basic communities. They consisted of; (1) the open pasture/meadow community south of the Forbes Creek drainage,

(2) the Forbes Creek drainage (which is a complex stream bottom community that actually incorporates more than one basic wetland type) and (3) the deciduous forested/shrub area in the northeast corner of the site.

Because of the slope and the residential modifications, the vegetation on the south side of Forbes Creek is fairly straightforward. At the east end there is a dense Himalayan blackberry (Rubus discolor) border that extends from the driveway entrance to the residence east along 106th Street to the bottom of the slope, which is approximately 120 feet west of 108th Avenue Northeast. The blackberry extends from 106th Street northerly to the south edge of an open meadow pasture. The open meadow pasture slopes north and east to the flat boundary of the Forbes Creek floodplain.

Dominant vegetation on this site was a mix of orchard grass (Dactylis glomerata), giant ryegrass (Elymus cinereus), red-top (Agrostis rubra, subspecies stolonifera), with intermittent patches of Canadian thistle (Cirsium vulgare) and scattered individual starts of Himalayan blackberry (R. discolor). The east edge of this area, where it abuts the Forbes Creek drainageway, gives way to a mix of buttercup (Ranunculus repens)/orchard grass at the transition border between upland and wetland. As the Forbes Creek floodplain swings west, the wetland transition line changes to a mix of willow (Salix lasiandra and Salix sessifolia) along the edge.

As the meadow extends to the west it is higher in elevation, providing a defined slope separation between the uplands and wetlands in this area. As the area flattens out to the west, the native grass pasture gives way to the residence and the yard. A majority of the yard is a continuation of the native grasses. The only difference is they have been maintained. The dominant grass continues to be the orchard grass (D. glomerata) and red-top (A. rubra stolonifera).

The area behind the house is shaded and has some large trees. The trees are a mix of weeping willow (Salix babylonia), Pacific willow (Salix lasiandra) and Douglas fir

(Pseudotsuga menziesii). These trees are on the bank separating the uplands from the wetlands. The backyard, in the shade, there is a small area dominated by buttercup (R. repens), however the soils in this area are characteristic uplands, so the area was considered an upland on the wetlands mapping.

To the west of the house, the pasture area is high and slopes gradually from 106th back to the creek. At the confluence between the upland and the creek floodplain there is a steep bank ranging from four to six feet high. The slope is 1:1 or greater. Vegetation on the slope is Himalayan blackberry, giving way to a mix of willow and salmonberry at the bottom.

The dominant vegetation on the pasture is a continuation of the orchard grass/red-top mix with tansy (Tansineum vulgare), Canadian thistle (Circium vulgare), with scattered patches of buttercup (R. repens).

The hillside slope from 106th to the creek is underlain with an intermittent flow of water that comes from the south. The flow is relatively deep (i.e., 60 inches plus, according to the Soil Conservation Survey) in most areas.

The vegetative community in the northeast corner of the site consists of a black cottonwood/red alder stand that, because of its size and uniformity, indicates that the vegetation is invader vegetation that has occurred since there was disturbance on the site approximately 10 to 20 years ago.

The understory under the trees is a mix of reed canarygrass (Phalaris arundinacea), Himalayan blackberry (R. discolor), with scattered patches of hardhack (Spirea douglasii), salmonberry (Rubus spectabilis), and swordfern (Polystichum munitum).

To the south, as the site gets closer to the Forbes Creek drainage basin, Pacific willow (S. lasiandra) and red alder (Alnus rubra) become mixed with the black cottonwood. The vegetation was considered predominantly wet if the dominant

vegetation was canarygrass and salmonberry. If Himalayan blackberry was present or dominant, the vegetation was considered upland.

Soils :

The soils on the site are a mix of Kitsap silt-loam (KpB), 2 to 8 percent slopes in the bottom, including most of the Forbes Creek drainage basin, and Kitsap silt-loam (KpD), 15 to 30 percent on the slopes. This soil extends up the slope on the south side of the property. The third soil type Alderwood gravelly sandy loam, extends into the northeast corner of the property. The soil in this area is underlain with a Norma soil, which are poorly drained soils, which account for the black cottonwood (Populus trichocarpa)/reed canarygrass (P. arundinacea) vegetative composition on the site.

Soil samples taken on the south side ranged from 10YR, value 3, chromas 3 and 4 on the upper slopes to 10YR value 2, chroma 1, with isolated patches of mottling at the edge or transition boundary at the edge or transition boundary between the uplands and the wetlands.

The soils in the northeast corner were much less consistent, having soil colors varying from 10YR value 1, chroma 3 in the wetter areas (where there appears to be a subsurface sheetflow of water at about 12 inches sitting on top of a hardpan) to value 6, chroma 3 (i.e., light-brown reddish soils).

The break line in soils was a small elevation change approximately one foot in height, where the soil changed from 10YR value 3, chroma 3 and 4 to 10YR, value 1, chroma 3 and, in some instances, value 1, chroma 1. The small, high ridge separating the hardpan/sheetflow area from the creek showed a definite change in vegetation to the red alder with a Himalayan blackberry/salmonberry mixed understory and the soils that were 10YR, value 2, chroma 4 with no mottling in the lower areas, to 10YR value 5, chromas 4 and 5.

Because of the hardpan there was groundwater within 12 to 15 inches of the surface on much of community three.

Wetlands :

The wetland community or stream bottom is a mixed community, but all wetland character. At the west end of the property, the area is relatively open, with a border of shrubs along the south side and a border of shrubs along the north side. The creek comes in to a fairly open meadow along the north half of the floodplain and runs northwesterly to a point where it comes within 25 feet of 108th Street near the west end of the north side of the Pan-Terra property.

The open area along the south side of the creek in the west end of the site is a mixed vegetation community with cattail (Typha latifolia), buttercup (R. repens), big-headed rush (Juncus macrocephalus), small-fruited sedge (Carex microcephalus), reed canarygrass (P. arundinacea), softtrush (Juncus effusus), with isolated clumps of willow (Salix piperi and Salix sessifolia). This area is a Palustrine Emergent wetland (PEM).

In the south two-thirds of the site, the stream bottom gives way to a forested shrub wetland (Palustrine Forested [PFO] wetland) that is dominated by a mix of Pacific willow (S. lasiandra) and black cottonwood (P. trichocarpa). There is a variety of other willow shrubs (Salix spp.), red-osier dogwood (Cornus stolonifera), ninebark (Physocarpus capitatus), evergreen blackberry (Rubus laciniatus) and Himalayan blackberry (R. discolor).

Soils in this area are predominantly Kitsap loam, with pockets of Mulkiteo peat and Norma soils. The entire area was supersaturated during the period of our review, with groundwater at or immediately below the surface with pockets of standing water.

Under the Corps wetlands jurisdiction, there is a small area that extends from the creek behind the residence on 108th Street into a small, swaled area approximately 100 feet east

to west by 150 feet north to south up to within 30 feet of 108th Street. This small area is isolated from the creek by high ground, but does meet the Corps' criteria for wetlands because of the groundwater and the shallow hardpan.

Regulated Wetlands :

Based on the wetlands regulations and definitions provided in Kirkland's Ordinance Chapter 90, Streams, Minor Lakes, and Wetlands, the Forbes Creek floodway would be considered a regulated wetland. However, the small, isolated area in the northeast corner of the site would not be considered a regulated wetland because of its isolation from the main body of the creek and the fact that the area is only wet because of subsurface waters that flow on top of the hardpan down to the areas where the soils contain more sand and gravels.

Vegetation in this area is predominantly reed canarygrass, which is a non-native invader species usually found in open disturbed areas. Mixed in with the canarygrass are individual plants of Scots broom (Cytisus scoparius) and Himalayan blackberry (R. discolor).

The south half of this portion of the wetland is lower because of the impacts resulting from placement of utilities through the area by the City of Kirkland in the past. This depressed area has allowed water to settle and stand, and provide an optimum habitat for wetter tolerant species. Without this manmade alteration, the isolated wetland in the northeast corner of the site would (1) be smaller and (2) have no physical or subsurface connection to Forbes Creek.

Wetlands Classifications :

The wetland in the northeast corner of the site would be classified as a Palustrine Shrub/Scrub wetland using the U.S. Fish and Wildlife Service (Classification of Wetlands and Deepwater Habitats in the U.S.) plant classification procedure. The wetlands in the Forbes Creek drainage vary from a Palustrine Emergent (PEM) wetland in the west half to a

Palustrine Shrub/Scrub (PSS) wetland along the south boundary and in the center at the west edge of the wooded area, and a Palustrine Forested (PFO) wetland in the center core, where the black cottonwood and Pacific willow trees are dominant.

Impacts :

The project will be located out of the regulated wetlands. It will encompass a small (less than .4 acre) non-regulated Corps designated wetland in the northeast corner of the site.

Mitigation Enhancement Concepts :

In discussions with Pan-Terra, they stated that they had a desire to conduct some wetlands enhancement programs in the main body of the Forbes Creek drainageway floodplain. The proposed enhancement plan was not, at the time of our initial evaluation, and is not at the time of this discussion, based on a need or a desire to fill regulated wetlands per the proposed amendments to the City of Kirkland wetlands ordinances.

The proposed plan is an enhancement plan since it will not create additional acres of wetlands on the site. It is, however, designed to create a diversity in the upper reaches of the Forbes Creek drainage that no longer exist. This diversity will include a permanent year-round open water complex, with a cattail/bulrush perimeter, cradled against the existing willow/riparian edge.

Design :

The area proposed for the enhancement is in the east end of the wetlands between the south wetland boundary and Forbes Creek. At this location, Forbes Creek is near the north edge

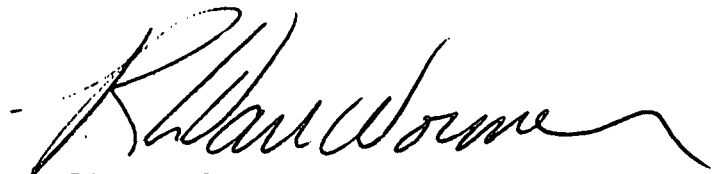
of the wetland. Two areas considered for the enhancement package are: (1) along the south boundary of the wetlands, in an area that is dominated by buttercup with a fringe of big-headed rush. The intent is to create an open water pond which will extend partially into an existing dense cattail stand that is surrounded on three sides by a heavy willow stand. The kidney shaped pond will have two types of surrounding riparian edges. In the west half, it will consist of a tight willow growth on the north and south sides, with the undisturbed portion of the cattail stand bordered by willows on the west side. The east half will be bordered on the south side by willows and on the north and east sides by reed canarygrass/cattail emergent marsh meadow. (2) The second site is just north of the first site, in a reed canarygrass area that is situated between a dense willow stand and Forbes Creek. Two advantages to this alternative are: (i) it eliminates the reed canarygrass stand and (ii) it is located further away from potential development, which should decrease secondary impacts from noise and human activity. Disadvantages are its close proximity to Forbes Creek, which is a high quality salmonid stream. The disadvantage would be if the construction were such that the pond would weaken the bank of the creek or if it would allow overflow waters to become trapped in the pond and thereby have the potential of trapping juvenile salmonids.

In addition to the excavation, revegetation, sloping, and grade work to be completed to enhance the wetland area, a wildlife enhancement program will be initiated. This program will include the placement of islands in the pond with duck nesting structures located on the islands, the placement of duck nesting structures on the periphery of the pond, wood duck nest boxes in larger trees in the immediate area, and revegetation of the open water ponds with a mix of Sago pondweed (Potamogeton pectinatus) and water smartweed (Polygonum aquifolium). These activities will provide an incentive for increased wildlife use of the open water pond and the meadow areas during the spring and summer period, when wildlife use in the area is not limited to the lake edge. The open water pond will also provide loafing/feeding areas for

wintering and migrating waterfowl. The intended sloping and design of the ponds will provide a long, shallow pan area at the east edge of the pond, which will provide a shallow water loafing, feeding and wading area for waterfowl and possibly some shorebirds. The shallow shelf edge will also provide a hunting area for great blue herons.

Water Quality :

As an enhancement to Forbes Creek, the water being discharged onto the site from the south, which now flows along 108th Avenue N.E., will be diverted through the ponded wetland area. This will provide a source of water to the ponds, as well as create extended biofiltration through movement of the water in a longer grass-lined swale and additional detention in the ponded area before the water integrates with Forbes Creek.



Sincerely,

R.L. Van Wormer
Senior Biologist
IES Associates

- e. Tract A (as proposed) and 20 feet of land (west of the former METRO station to complete the NE 108th Street right-of-way) dedicated to the City (Exhibit A, Conclusion II.D.4.b). Curb, gutter, and paving as necessary along NE 108th Street. The sidewalk shall be deferred until construction of the Forbes Valley Trail (Exhibit A, Conclusion II.E.2.b.2);
- f. The loop road redesigned and land shown to be dedicated as necessary to provide future right-of-way access to the west (Exhibit A, Conclusion II.D.4.b. and Hearing Examiner Conclusion D); and
- g. Access easements meeting the requirements of Zoning Code Section 105.10 established over all combined driveways (Exhibit A, Conclusion II.D.7.b.).

C. Prior to recording the final subdivision, the applicant shall:

OK rec'd

- 1. Submit to the Department of Planning and Community Development a revised title report which verifies ownership of the subject property on the date that the property owner(s) (as indicated in the report) sign(s) the subdivision documents (see Exhibit A, Conclusion II.D.2.b.).
- 2. Install a sanitary sewer and water system to serve each lot created. The sewer and water system shall be extended from what is shown in the application materials (Exhibit A) to meet Forbes Creek Drive. Disturbance of the wetland shall be absolutely minimized, and a revegetation plan for the disturbed areas shall be required. Replacement plants shall be of like species and volume as those damaged or removed (see Exhibit A, Conclusion II.D.10.b. and Hearing Examiner Conclusion G). Prior to installation, the applicant must submit for approval construction plans including sufficient information to determine fire flow requirements. In lieu of completing these improvements, the applicant may submit to the Department of Planning and Community Development a security device to cover the cost of installing the improvements and guaranteeing installation within one year of the date of final plat approval (see Exhibit A, Conclusion II.D.17.b.).
- 3. Install clustered mail box structures for units in the development in a location approved by the U.S. Postal Service (see Exhibit A, Conclusion II.E.5.b.).

4. Install the following half-street improvements within the Forbes Creek Drive right-of-way bordering the subject property: pavement as required, vertical curb and gutter, meandering sidewalk, and landscape strip with street trees.

of Show on the plat mylar a 40-foot dedicated right-of-way for the new loop road. Install the following improvements in the new right-of-way: 28 feet of pavement, vertical curb, 4½-foot landscape strip with street trees planted 30 feet on center next to the 5-foot sidewalk on the north side, and connecting on both ends to Forbes Creek Drive. Street trees on the south side shall be planted close to the property lines on private property (see Exhibit A, Conclusion II.E.5.b).

Prior to installing the mailbox structures, easement or right-of-way improvements, plans must be submitted for approval by the Department of Public Works. In lieu of completing the improvements, the applicant may submit to the Department of Planning and Community Development a security device to cover the cost of installing the improvements and guaranteeing installation within one year of the date of final plat approval (see Exhibit A, Conclusion II.D.17.b.).

5. Sign and submit to the Department of Planning and Community Development for recording with the King County Records and Elections Division concomitant agreements, as set forth in Exhibit A, Attachment 14, to:
1) underground all existing overhead utility lines bordering the subdivision within the Forbes Creek Drive and 108th Avenue NE rights-of-way; 2) install the portion of the Forbes Valley Trail along NE 108th Street (see Exhibit A, Conclusion II.E.2.b. and 5.b.).

rec'd

rec'd

#5950
rec'd

6. Pay to the City a sum of \$350 per new lot created to be placed in the "In-Lieu Park Open Space Fund" (see Exhibit A, Conclusion II.D.12.b.).

7. Install a permanent storm water control system (see Exhibit A, Conclusion II.E.4.b.). Prior to installation, a plan must be submitted for approval by the Department of Public Works. In lieu of completing the system, the applicant may submit to the Department of Planning and Community Development a security device to cover the cost of installing the improvements and guaranteeing installation within one year of the date of final plat approval.

8. Submit a revised plat mylar showing:

- a. All changes approved through the Final PUD per Condition of Approval I.B.2.; and

b. The wetland buffer areas between the lot lines and the wetland covered with a Natural Greenbelt Protective Easement, with an exception for the swales in Tracts B and C, and said language on the face of the plat (Exhibit A, Conclusion II.E.3.b.).

*OK on
myler*

9. Sign and submit to the Department of Planning and Community Development for recording with the King County Records and Elections Division an agreement, as set forth in Exhibit A, Attachment 13, to continually maintain the landscaping within the new loop road, Forbes Creek Drive, NE 108th Street and 108th Avenue NE right-of-way (see Exhibit A, Conclusion II.E.5.b.).

rec'd

10. Provide funds to the City to pay for the Forbes Valley Trail Plan. The cost of the study to the applicant is not to exceed \$12,000 (see Exhibit A, Conclusion II.E.2.b.).

*rec'd
8/15/90*

D. Installation of road or utility improvements may be authorized prior to approval of the final subdivision subject to City approval of a grading permit. Prior to either issuance of a grading permit or approval of the final subdivision, the applicant shall:

*N.O.A.
7/17/90*

1. Have received approval of the Final PUD (see Exhibit A, Conclusion II.D.16.b.).

*OK
grading
permit*

2. Submit to the Department of Planning and Community Development for approval, a plan showing the limit of grading and clearing for right-of-way, access easement, and utility construction (see Exhibit A, Conclusion II.D.16.b.).

OK

3. Submit to the Department of Planning and Community Development for approval, a plan depicting retention of at least 25 percent of existing "significant" trees (i.e., deciduous trees, 12 inches in diameter or greater, and evergreen trees, 8 inches in diameter or greater, measured one foot above grade) (see Exhibit A, Conclusion II.D.15.b.).

OK

4. Prominently mark each significant tree designated to be retained. Install a construction fence around the drip line of the willow trees if the drip line abuts an area to be graded (see Exhibit A, Conclusion II.D.15.b.).

E. Prior to issuance of a Building Permit for any new structure, the applicant shall submit to the Department of Public Works for approval a construction phase storm water control plan (see Exhibit A, Conclusion II.E.4.b.).

F. Prior to beginning work on any combustible element of a structure, the applicant shall:

1. Have completed and approved fire lanes, and
 2. Have completed and approved fire turn-around (see Exhibit A, Conclusion II.F.1.b.).
- G. Prior to final inspection of the first house, the applicant shall:
1. Complete installation of a potable water system and sanitary sewer system to serve each lot created (see Exhibit A, Conclusions II.D.8.b. and II.D.10.b.).
 2. Complete the installation of required tract and half-street improvements within the Forbes Creek Drive, NE 108th Street and 108th Avenue NE rights-of-way, and complete the new loop road, as specified in Condition I.B.2 and 3 (see Exhibit A, Conclusion II.E.5.b.).
 3. Install a fully-operational permanent storm water control system (see Exhibit A, Conclusion II.E.4.b.).
 4. Install the mail box structures as specified by Condition I.B.3.c.
 5. Submit to the Department of Planning and Community Development a security device to ensure maintenance for two years of right-of-way and/or easement improvements as well as the permanent storm water control system (see Exhibit A, Conclusion II.D.17.b.).
- H. Within seven (7) calendar days after the final public hearing, the applicant shall remove all public notice signs and return them to the Department of Planning and Community Development (see Exhibit A, Conclusion II.D.3.b.).
- OK
- I. The Department of Planning and Community Development shall be authorized to approve modifications to the approved site plan, unless:
1. There is a change in use and the Zoning Code establishes different or more rigorous standards for the new use than for the existing use; or
 2. The Planning Director determines that there will be substantial changes in the impacts on the neighborhood or the City as a result of the change (see Exhibit A, Conclusion II.E.7.b.).

KIRKLAND ACRES MITIGATING MEASURES
S-IIB-89-19

1. The applicant shall submit plans for the PUD and Subdivision showing:
 - OK a. All structures, parking areas, or other improvements located at least 25 feet away from the edge of the regulated wetland.
 - OK b. Storm drainage discharged through grasslined swales and oil/water separators prior to release into the wetland. Where possible, discharge away from the wetland is strongly encouraged. Parking areas, driveways, and structures should be located at least 5 feet from grasslined swales.
2. Prior to grading or building permit, the applicant shall:
 - a. Submit to the City for recording with King County Records and Elections Division, a signed and notarized covenant indemnifying the City from any loss, including claims made therefore arising out of maintenance, flooding, damming, or enlargement of the wetland on the subject property.
 - OK b. Install a construction-phase, snow-fence, chain-link fence or equivalent and silt screen along the upland edge of the buffer to be approved and inspected by the Planning Department.
3. Prior to recording the ~~sub~~ plat, the applicant shall:
 - a. Erect a 3- to 4-foot high permanent fence or earthen berm between the upland edge of all wetland buffers and the developed portion of the site, subject to approval by the Planning Department. Installation of the fence or berm must be done by hand to prevent machinery from entering the wetland or its buffer.
 - b. Erect public information signs describing the function and values of wetlands at the upland edge of the buffer. The design and placement of the sign shall be consistent with City standards and subject to Planning Department approval.
 - c. Prepare and ready for distribution information brochures for all home purchasers which outline the function and values of the wetland, subject to approval by the Planning Department. The brochures should include a statement that residents keep outdoor pets on site and out of the wetland and its buffer to the greatest extent possible and not use chemicals and fertilizers within all wetland buffers.

*not needed
because
wetland was
decided to
the city*

- d. Include on the subdivision mylar to be recorded, a Native Growth Protection Easement covering the regulated wetland area, based on a survey approved by the City of Kirkland. Language on the face of the mylar should state, "No land surface modification of any kind shall be allowed in the regulated wetland, except for wetland enhancement or water quality improvements that are specifically approved by the State Department of Fisheries, Game, and Ecology, and provided that said enhancements and improvements are made using hand implements only. Utilities and public improvements may be in the easement area only if there is no other feasible location."
 - e. Submit cash contributions representing 1.20 percent of the cost to improve the intersection of NE 112th Street and Forbes Creek Drive, 1.08 percent for the intersection of NE 112th Street and 120th Avenue NE, and 1.08 percent for the intersection of NE 116th Street and 120th Avenue NE.
4. The applicant shall:
- a. Stage all construction from the upland area.
 - b. Revegetate any soil or vegetation disturbance within the buffer with hydroseed or other supplemental wetland native vegetation approved by the Planning Department.

DEVELOPMENT STANDARDS

Kirkland Acres, File No. S-IIB-89-19

A. Department of Planning and Community Development

1. **Zoning Code:**
 - a) Chapter 107; Storm Water Control
 - b) Chapter 110; Required Public Improvements
 - c) Chapter 175; Bonds
2. **Subdivision Ordinance:**
 - a) Section 3.150; Effect of Preliminary Plat Approval
 - b) Section 3.155; Time Limits to File Final Plat
 - c) Section 3.160; Contents of Final Plat
 - d) Section 3.165; Information to Accompany Final Plat
 - e) Section 3.175; City Council Action
 - f) Section 3.190; Filing of Plat Documents
 - g) Section 4.45; Utilities and Related Requirements - General
 - h) Section 4.70; Utilities and Related Improvements - Easements
 - i) Section 4.100; Natural Features - Easements

B. Department of Public Works

1. a) **Sanitary Sewer:**
 - 1) Stream crossing not required.
 - 2) Existing sanitary sewer main and stub adequate.
 - 3) Extend sanitary sewer main to serve property.
- b) **Authority:** K.M.C. Title 15
2. a) **Domestic Water:** Existing water main adequate.
- b) **Authority:** K.M.C. Title 15
3. a) **Storm Water:**
 - 1) Provide detention per City of Kirkland standards.

- 2) Provide storm drainage connection for each lot.
- 3) Storm detention calculations required.
- b) Authority: Zoning Code Chapter 107
4. a) Right-of-Way Improvements:
 - 1) Install half-street improvements along property frontage per City of Kirkland standards on Forbes Creek Drive and 108th Avenue NE.
 - 2) 20-foot dedication on NE 108th Street.
 - 3) Modify street improvements to pedestrian trail on NE 108th. Trail improvements to provide useable pedestrian link between 108th Avenue NE and Juanita Bay Park.
- b) Authority: Zoning Code Chapter 110
5. a) Transmission Lines:
 - 1) Underground on-site.
 - 2) Defer with concomitant agreement for off-site.
 - 3) No new poles.
- b) Authority: Zoning Code Chapter 110
6. Other:
 - a) Street signs and stop signs required at new intersections.
 - b) New street lights required at new street per City policy and Puget Power design.
 - c) Lot 1 must access past point of tangency on radius curve (west side).
 - d) Access to Lots 20 and 21 must be moved further north.

C. Building Department

1. Relevant Building Code Requirements:
 - a) Buildings must comply with the Uniform Building Code, Uniform Mechanical Code, and the Uniform Plumbing Code, as adopted and amended by the City of Kirkland.
 - b) Proposed zero lot-line buildings require 30-inch parapets.
 - c) Grading Permit required; inspected by Building Division.

D. Fire Department

1. Emergency Access:

- a) Fire Lanes (UFC 10.207): Required as noted on plans. Must be completed and approved prior to any combustible construction.
- b) Turn-around (UFC 10.207): Must be completed and approved prior to any combustible construction.
- c) Grade: Not to exceed 15 percent.

2. Fire Hydrants (UFC 10.301): Adequate

3. Fire Flow Information (UFC 10.301): 750 gpm minimum

JUDICIAL REVIEW

Section 152.110 of the Zoning Code and Section 3.110 of the Subdivision Ordinance allows the action of the City in granting or denying this zoning permit to be reviewed in King County Superior Court. The petition for review must be filed within 30 days following the postmarked date when the City's final decision was distributed.

If issues under RCW 43.21C (the State Environmental Policy Act--SEPA) are to be raised in the judicial appeal, the "SEPA" appeal must be filed with the King County Superior Court within 30 days following the postmarked date when the City's final decision was distributed.

Blg 172
NE

CITY OF KIRKLAND

123 FIFTH AVENUE KIRKLAND, WASHINGTON 98033-6189 (206) 828-1257

DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

NOTICE OF APPROVAL

ZONING CODE/SUBDIVISION CODE PERMIT

File No. S-IIB-89-19

PROJECT NAME: PARC PROVENCE FINAL PLANNED UNIT DEVELOPMENT

PROJECT ADDRESS: Forbes Creek Drive/108th Avenue N.E.

APPLICANT OR AGENT: PanTerra Homes

CITY OF KIRKLAND APPROVAL DATE: July 17, 1990

LAPSE OF APPROVAL DATE(S): Development activity must begin within one year (by July 16, 1991) or the decision becomes void. Development activity must be substantially completed within five years (by July 16, 1995) or the decision becomes void.

LAPSE OF APPROVAL DATE APPLIES UNLESS JUDICIAL REVIEW PROCEEDINGS ARE INITIATED WITHIN 30 DAYS OF APPROVAL DATE (BEFORE n/a).

This NOTICE OF APPROVAL is granted subject to the attached conditions and development standards. Failure to meet or maintain strict compliance shall be grounds for revocation in accordance with the Kirkland Zoning Ordinance No. 2740 as amended.

The applicant must also comply with any federal, state or local statutes, ordinances or regulations applicable to this project. This Notice of Approval does not authorize grading or building without issuance of the necessary permits from the Kirkland Building Department.

CITY OF KIRKLAND
PLANNING AND COMMUNITY DEVELOPMENT
Joseph W. Tovar, Director

By: Nancy Carlson
(signature)

Nancy L. Carlson, AICP

Title: Senior Planner

- Attachments: Conditions of Approval
- SEPA MITIGATING MEASURES
- Development Standards
- Procedures for Judicial Review

NOTICE OF APPROVAL, CONT'D

CONDITIONS OF APPROVAL

1. The Final Subdivision mylar shall show an additional 450 square feet of open space. All of the open space should be set aside in a separate tract. The landscaping for the open space tract should be revised to be around the perimeter of the space.
2. Building permit applications shall show dimensions of all structures extending into setback yards and comply with Section 115.115.3.a,b, and d.
3. Dedication of Tract A, the wetland, and 20 feet for NE 108th Street shall be shown on the mylar for recording the final subdivision.
4. The final subdivision mylar shall also show 20 foot wide easements for mutual driveways in accordance with Section 105.10. Pavement shall be at least 16 feet wide within the easements.
5. Building permit applications shall include current Average Building Elevation (ABE) calculations and show where the ABE strikes the building and the elevation of the peak of each roof.
6. The final subdivision mylar shall show the common guest parking area on Lot 7 in a separate tract.

It is the responsibility of the applicant to ensure that all grading and building permit plans are consistent with the applicant's Final PUD submittal as modified by these conditions.

It is also the responsibility of the applicant to ensure compliance with the Kirkland Municipal Code, Zoning Code, and Building and Fire Code. Attachment 2, Development Standards, is provided to familiarize the applicant with some of the additional development regulations. This attachment does not include all of the additional regulations. When a condition of approval conflicts with a development regulation in Attachment 2, the condition of approval shall be followed.

LAPSE OF APPROVAL:

The applicant must begin the development activity approved under Chapters 125 within one year after the final decision on the Final PUD, or the decision becomes void. Furthermore, the applicant must substantially complete the development activity approved under Chapter 125 and complete the applicable conditions listed on the Notice of Approval within five (5) years after the final decision on the PUD, or the decision becomes void.

"Final Decision" means the final decision of the City of Kirkland, or the termination of judicial review proceedings, if such proceedings were initiated pursuant to Section 145.110.

APPEAL:

The decision of the Planning Director in approving or denying the final site plan may be appealed using the appeal provisions, as applicable, of Process 1 of this Code, Sections 145.60 through 145.110.

DEVELOPMENT STANDARDS

Kirkland Acres Final PUD aka Park Provence
File No. IIB-89-19

A. Department of Planning and Community Development

Zoning Code:

1. Chapter 107; Storm Water Control
2. Chapter 110; Required Public Improvements
3. Chapter 115; Miscellaneous Use Development and Performance Standards

B. Department of Public Works

1. a) Sanitary Sewer:

- 1) Extend sanitary sewer main to serve property.
- 2) Conceptual design adequate.
- 3) Install sewer stubs for each property.
- 4) Extend sewer to south side of NE 106th at west entrance of plat.
- 5) Provide plan and profile drawing showing limits of future extension.

b) Authority: K.M.C. Title 15

2. a) Domestic Water:

- 1) Existing adequate.
- 2) Loop main through P.U.D. along right-of-way.

b) Authority: K.M.C. Title 15

3. a) Storm Water:

- 1) Provide detention per City of Kirkland standards.
- 2) Provide storm drainage connection for each lot.
- 3) Storm detention calculations required.
- 4) Provide for right-of-way storm drainage.
- 5) Downstream analysis required.
- 6) Fisheries comments required.

b) Authority: Zoning Code Chapter 107

- #### 4. a) Right-of-Way Improvements: Install curb, gutter, and sidewalk along entire property frontage for NE 106th, curb and gutter for 108th Avenue and NE 108th; and full street improvements within P.U.D. with sidewalk on north side.

- b) Authority: Zoning Code Chapter 110
- 5. a) Transmission Lines:
 - 1) Underground all on-site utility lines.
 - 2) Defer all off-site utility lines with concomitant agreement.
- b) Authority: Zoning Code Chapter 110

C. Building Department

- 1. a. Relevant Building Code Requirements:
 - 1) Buildings must comply with the Uniform Building Code, Uniform Mechanical and Uniform Plumbing Code, as adopted and amended by the City of Kirkland.
 - 2) Grading permit required; inspected by Public Works Department.
- b. Authority: K.M.C. 21.08.232(A)1
- 2. a. Other: Proposed zero lot line buildings (14/15 and 16/17) each require one-hour exterior walls, 30-inch high parapet and fire retardant roof covering.
- b. Authority: UBC 504(b), 1709 and KMC 21.08.160

D. Fire Department

- 1. Emergency Access (UPC 10.207):
 - a) Fire Lane: Roadway for north side lot must be completed and approved prior to any combustible construction.
 - b) Grade: Not to exceed 15 percent.
- 2. Fire Hydrants (UPC 10.301): Must be completed and approved prior to any combustible construction.
- 3. Fire Flow Information (UPC 10.301): 750 gpm minimum adequate.



RECEIVED

AUG 7 1989

.....AMPM
PLANNING DEPARTMENT

BY:

City of Kirkland
Atten: Joe Tovar, Nancy Carlson
123-5th ave
Kirkland, Washington 98033

Re: Kirkland Acres, located at Forbes Creek Drive and 108th
Avenue NE, File No. s-IIB-89-19

Dear Joe and Nancy:

We are in receipt of your letter in regards to the SEPA
Threshold Determination. We agree to amend our application
to reflect the requirements of your letter dated August 2,
1989. If you have any further need of us to issue a DNS,
please call at any time at 822-1177.

Warm Regards,

Robert R. Pantley 8/7/89
Pan-Terra, Inc.
Robert R. Pantley, Director

rpkoo87

624 8th St. South
Kirkland, WA 98033

ATTACHMENT 4
FILE NO. SF-90-117

CITY OF KIRKLAND

123 FIFTH AVENUE KIRKLAND, WASHINGTON 98033-6189 (206) 828-1257

RCW 197-11-970 Determination of nonsignificance (DNS).

DETERMINATION OF NONSIGNIFICANCE

Description of proposal PUD and subdivision of an approx. 9 acre parcel into approx. 22 lots. Forbes Creek and associated wetlands are on-site.

Proponent Pan-Terra Homes Inc.

Location of proposal, including street address, if any South of NE 108th St., West of 108th Ave. NE and North of NE 106th St.

Lead agency CITY OF KIRKLAND

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

There is no comment period for this DNS.

X This DNS is issued under 197-11-340(2); the lead agency will not act on this proposal for 15 days from the date below. Comments must be submitted by 8/25/89.

Responsible Official Joseph W. Tovar

Position/Title Director, Department of Planning and Community Development
Phone 828-1257

Address City of Kirkland, 123 Fifth Avenue, Kirkland, WA 98033-6189

Date 8/9/89 Signature [Handwritten Signature]

Mailed & issued 8/10/89

X You may appeal this determination to Nancy L. Carlson at Kirkland City Hall, 123 Fifth Avenue, Kirkland, no later than (date) Sept. 1, 1989 by WRITTEN NOTICE OF APPEAL

You should be prepared to make specific factual objections. Contact Nancy L. Carlson to read or ask about the procedures for SEPA appeals.

X Distribute to "Checked" Agencies on Reverse side of this form along with a copy of the Checklist.
X Publish in the Daily Journal American, Date: Aug. 17, 1989

Mailed to the following along with Environmental Checklist:

X Department of Ecology, Environmental Review Section,
Mail Stop PV-11, Olympia, WA 98504-8711

X Department of Fisheries,
115 General Administration Building, Olympia, WA 98504-8711

X Department of Game,
16018 Mill Creek Boulevard, Mill Creek, WA 98012

X Seattle District, U.S. Army Corps of Engineers,
P. O. Box C-3755, Seattle, WA 98124

Others:

X Applicant/Agent Pan-Terra Homes Inc., 624 ~~8th St.~~ ~~60~~ 17th Ave.
Kirkland, 98033

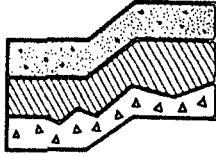
pc: Planning & Community Development File No. 5-IIB-89-16
 Building Department (Permit No. _____)

X Mitigating Measures Incorporated into the Proposal:

See attached

Distributed by: _____
(Date)

by: _____



TERRA ASSOCIATES, Inc.

Consultants in Geotechnical Engineering, Geology
and
Environmental Earth Sciences

MAR 24 1989

RECEIVED

MAR 31 1989

March 23, 1989
Project No. T-984

.....AMPM
PLANNING DEPARTMENT

BY.....

Mr. Nelson Betty
Pan-Terra, Inc.
624 - 8th Street South
Kirkland, Washington 98033

Subject: Wetland Review
Kirkland Acres
106th Street N.E. & 108th Avenue N.E.
Kirkland, Washington

Dear Nelson:

As requested, we met with you at the subject site on March 21, 1989, to observe wetland conditions at the subject site. We had previously reviewed a wetland evaluation report for the property dated February 8, 1989 prepared by IES Associates. The purpose of our site visit was to review the wetland boundaries in the northeast and southeast property corners as had been delineated by IES Associates.

Forbes Creek runs through the property from east to west toward Lake Washington. On the property and extending to the west, there is a rather extensive creek bottom wetland with meandering channels. Our review was limited to the northeast and southeast property corners.

In the southeast corner, the marked wetland limits corresponds to the transition from vegetation dominated by orchard grass (Dactylis glomerata) and other grasses to buttercup (Ranunculus repens) with some horsetail (Equisetum sp.), and grasses. In general, we would concur with the wetland limits in this area as marked in the field.

The northeast corner shows a young successional plant community with red alder (Alnus rubra) and black cottonwood (Populus trichocarpa). This area appears to have been disturbed in the past presumably during construction of the sewer line and roadways. A roadside ditch flows along 108th Avenue N.E. and empties into a channel within the wetland.

Mr. Nelson Betty
March 23, 1989

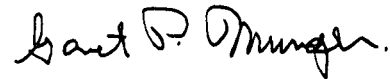
There is an area of wetland delineated in the northeast corner. Between this area and the main body of the Forbes Creek associated wetland, there appears to be a shallow berm blocking surface movement of water directly into the larger wetland. Vegetation on this shallow berm includes sword fern (Polystichum munitum) and Himalayan blackberry (Rubus discolor) under the red alder. Soils generally had chroma values of 2. Thus this small zone has non-hydric soils and supports non-hydrophytic plant species (sword fern and Himalayan blackberry) and is a non-wetland habitat area.

On the basis of the presence of this low berm, the wetland in the northeast corner has been delineated as separate from the main body of wetland and has been designated as a non-regulated wetland under City of Kirkland definitions. We generally concur with the conclusions of the IES report regarding conditions in the northeast corner.

We will be available to provide additional consulting services if requested, regarding the wetland evaluations and your proposed wetland mitigation. If you have any questions, please call.

Sincerely yours,

TERRA ASSOCIATES, INC.



Garet P. Munger
Project Scientist

GPM:pm

EVALUATION OF REPORT:

"WETLANDS DELINEATION, EVALUATION AND REGULATED WETLANDS
DETERMINATION OF PAN-TERRA FORBES CREEK DEVELOPMENT SITE"

PREPARED BY IES ASSOCIATES ON BEHALF OF PAN-TERRA, INC.

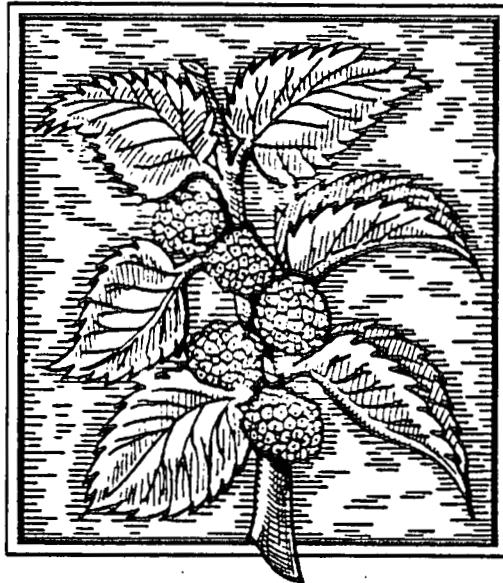
prepared by

Roger del Moral, C.S.E.

del Moral and Associates
2002-42nd Ave. East
Seattle, Washington 98112

Prepared for City of Kirkland Dept. of Planning and
Community Development

March 31, 1989



PROJECT DESCRIPTION

Client: City of Kirkland
Dept. of Planning and Community Development
123 Fifth Ave.
Kirkland, WA 98033-6189

Attention: Ms. Nancy Carlson

Report by: Mr. Rex Van Wormer
IES Associates
1514 Muirhead Ave.
Olympia, Washington 98502

Dated: February 8, 1989

Report for: Mr. Nelson Betty
Pan-Terra, Inc.
10640 118th Place NE
Kirkland, WA 98033

Subject
Property: Forbes Creek site south of NE 108 St., north
of NE 106th St, and from 108th Ave. NE to
approximately 600 ft west of 108th Ave. NE.

Date: Field survey, March 29, 1989
Report, March 31, 1989

Purpose: To evaluate the report prepared by IES
Associates. In particular this report will:
assess the accuracy of wetland delineations,
review interpretations of regulated and non-
regulated wetlands and assess proposals for
wetland enhancement. In addition, the IES
Associates report will be reviewed for
consistency and conformation to standard
practices.

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[Forbes Creek Wetland Delineation--
Report Evaluation by del Moral & Associates]

INTRODUCTION

This report evaluates the report prepared by IES Associates describing wetlands associated with Forbes Creek on property to be developed by Pan-Terra, Inc. of Kirkland, Washington. The main issues to be addressed are:

1. The accuracy of the delineation of wetlands on this site;
2. The determination that a portion of wetland in the north-east corner of the property is a non-regulated wetland; and
3. The proposed enhancement plans.

My evaluation is based on the information provided in the IES Associates report, on a site inspection, on a map provided by the City of Kirkland, on criteria in Ch.90 and on comparisons to normal ecological practices.

PROCEDURES

The IES Associates report was first evaluated for consistency with common ecological practices, conformity to requirements of Ch.90, definitions of wetland indicator species, definitions of wetland and regulatory terms and taxonomic accuracy.

I clarified questions of interpretation by phone with Mr. Rex Van Wormer on March 27, 1989. On March 29, the site was visited for five hours. During this time, all boundary determinations were inspected. Particular attention was paid to the north-east corner of the site where the wetland was described as a non-regulated wetland by IES Associates. In this area, south of NE 108th St, between 108th Ave. NE and the Utility building, I determined the overall wetland boundary by visually determining that point where the preponderance of plant cover was contributed by wetland species. To confirm this determination, 2 by 2 meter quadrats were sampled on either side of the apparent wetland boundary. Percent cover of each identifiable species, determined visually, was recorded. IES Associates apparently did not mark the boundaries of what they determined to be the non-regulated wetland.

It should be noted that the transition from upland to wetland is quite gradual in this location. Therefore, accurate delineation is difficult and alternative interpretations of wetland boundaries can be justified.

The wetland boundary was marked by five orange flags and noted on the base map provided in relationship to the cottonwoods mapped in this region. A sketch map of this portion of the property was prepared (Fig. 1).

DEFINITIONS

Wetland Types

Wetland vegetation usually is classified by the U.S. Fish & Wildlife System.¹ A summary is given in Appendix I.

Wetlands in the vicinity of the subject property fall into the Palustrine System (non-tidal wetlands dominated by trees, shrubs, persistent emergents, etc.) Any wetland dominated by herbaceous species such as cat-tail (Typha latifolia) is termed a Persistent Emergent Wetland. Any wetland dominated by wetland shrub species such as willows (Salix spp.) or hardhack (Spiraea douglasii) is a Scrub-Shrub Wetland. Any wetland dominated by wetland trees such as cottonwood (Populus trichocarpa) is a Forested Wetland.

Wetland Indicator Species

Ecologists use the indicator species concept to help determine the presence of wetlands. Certain species suggest the presence of wetlands, but few are absolute indicators. Some "wetland" species are less definitive than others and frequently occur in uplands. Therefore it is important to distinguish between obligate wetland species such as cat-tail (always found in wetlands), facultative wetland species such as salmon-berry (usually found in wetlands) and facultative species such as red alder (often found in wetlands). In problematic cases, soils, hydrology and the preponderance of the species may be used. Note that the City of Kirkland makes no explicit statement about delineation methodology (CH. 90, 1-23-89.) Table 1 summarizes the definitions of wetland indicators used by the U.S. Army Corps of Engineers and the U.S. Fish & Wildlife Service.²

The species noted in the IES Associates report plus additional species I noted in late March are listed in Table 2 with their indicator ranking. Key species require comment.

Lady fern (Athyrium filix-femina) is an excellent wetland indicator in this region.³ Reed canarygrass (Phalaris arundinacea), an introduced species, usually occurs in wetlands, but it may grow on upland sites. Where it is common, other indications are required to indicate a wetland. Big-headed rush (Juncus macrocephalus) and small-fruited sedge (Carex microcephalus) are not recognized in Hitchcock and Cronquist,⁴ but are

1 Cowardin, L. M., V. Carter, F. C. Golet, & E. T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. U.S. Fish & Wildlife Service Publication FWS/OBS-79/31.

2 Reed, P. B., Jr. 1986. Wetland plants of the State of Washington, 1986. U.S. Fish & Wildlife Service Publ. WELUT-86/W12.47.

3 Crawford, V. 1981. Wetland plants of King County. King County Planning Division, Seattle, WA.

4 Hitchcock, C. L. & A. Cronquist. 1973. Flora of the Pacific Northwest. Univ. Washington Press, Seattle.

almost certainly wetland indicator species. Himalayan blackberry (Rubus discolor) commonly occurs scattered in wetlands, but where it forms dense thickets, the habitat is usually an upland one, often bordering a wetland. Creeping buttercup (Ranunculus repens) is an introduced weed and, like reed canarygrass, its presence alone does not indicate a wetland.

=====
 Table 1. Definitions of categories of wetland species.
 Frequency values show the number of all individuals of a species that occur in a wetland.

Term	Definition
Obligate	Always found in wetlands; may persist outside wetlands if planted or if wetland has been drained.
Facultative Wetland	Usually found in wetlands, but may occur in non-wetland wetlands (67 to 99% frequency in wetlands).
Facultative	Sometimes found in wetlands (34 to 66% frequency in wetlands).
Facultative Upland	Seldom found in wetlands (1 to 33% frequency in upland wetlands).
Nonwetland	Rarely if ever occurs in wetlands.

=====
Edge Criterion

A wetland is usually identified on the basis of having at least one positive wetland indicator from each category: vegetation, soils and hydrology.⁵ Normally, vegetation is the most readily observed. In Kirkland, there is no explicit requirement to use the Corps of Engineers multiparameter system.

The basic wetland edge criterion applied by IES Associates and I was the point where more than 50% of the cover on the uphill side was upland plants and 50% of the plants on the downhill side were wetland plants. Species definitions are those of the Corps of Engineers (Table 2).

Wetland indicator species used by IES Associates include: black cottonwood, (Populus trichocarpa), Pacific willow (Salix lasiandra), other willows (S. sessifolia, S. piperi), red-osier dogwood (Cornus stolonifera), ninebark (Physocarpus capitatus), salmonberry (Rubus spectabilis), hardhack (Spiraea douglasii), cat-tail (Typha latifolia), reed canarygrass (Phalaris arundinacea), rushes (Juncus macrocephalus and J. effusus) and sedges (Carex microcephalus). Under certain conditions, creeping buttercup (Ranunculus repens) also indicates wetland conditions.

⁵ U.S. Army Corps of Engineers. 1987. Corps of Engineers Wetlands Delineation Manual. Tech. Rep. Y-87-1.

In addition, I encountered skunk cabbage (Lysichitum americanum) and lady fern (Athyrium filix-femina)

=====
 Table 2. Alphabetical list of species found by IES Associates and by del Moral & Associates and their wetland indicator value. OBL=always found in wetlands; FACW=usually found in wetlands; FAC=Sometimes found in wetlands; FACU=seldom found in wetlands. + = tending more towards wetlands; - = tending more towards uplands. ?=species not listed in standard references.
 =====

Species	Value	Species	Value
Agrostis stolonifera	FAC+	Physocarpus capitatus	FAC+
Alnus rubra	FAC	Polystichum munitum	FAC
Athyrium filix-femina	FAC	Ranunculus repens	FACW
Carex microcephalus	?	Rhamnus purshiana	FAC*
Cirsium arvense	FACU+	Rubus discolor	FACU-
Cornus stolonifera	FACW	Rubus laciniatus	FAC*
Cytissus scoparius	FACU*	Rubus spectabilis	FAC
Dactylis glomerata	FACU	Salix lasiandra	FACW+
Elymus canadensis	FAC	Salix piperi	FACW
Juncus effusus	FACW+	Salix sessifolia	FACW
Juncus macrocephalus	?	Spiraea douglasii	FACW
Lysichitum americanum	OBL	Tanacetum vulgare	FAC
Oemleria cerasiformis	FACW*	Thuja plicata	FAC
Phalaris arundinacea	FACW	Typha latifolia	OBL

* not listed in sources, rating from local experience.

Nomenclature after Hitchcock and Cronquist.

Wetland Soils

Wetland soils are defined by the Corps of Engineers. To determine whether or not a soil is hydric, any one of the following criteria is used: reducing soils (in general) that are somewhat poorly drained with a water table within 6 in. of the surface for over a week during the growing season; poorly drained soils with either the water table within 1 ft. of the surface for over a week during the growing season if permeability is great or within 1.5 ft from the surface if permeability is low; soils that are ponded during the growing season; and soils that are frequently flooded during the growing season. There are a variety of other criteria to determine whether a soil is hydric, but these are beyond the scope of this evaluation.

Soil colors are also used to indicate hydric soils. There are three aspects of color: hue, value and chroma. Hue is the soil color in relation to red, yellow, blue, etc.; value is the lightness of the hue; and chroma is the intensity or strength of the color; these are determined using the Munsell Color Book. In general, hydric soils have matrix chroma of 2 or less, if mottled and matrix chroma of 1 or less if not mottled.

Regulated Wetlands

A wetland, according to the City of Kirkland, is any area that is saturated or inundated by surface or by groundwater so as to support a prevalence of vegetation adapted to life in saturated soils conditions.

In terms of this site, the City of Kirkland defines a Regulated Wetland as any wetland that serves one or more of these functions: significant biological functions (e.g. wildlife habitat), significant drainage and sedimentation functions; valuable storage area for storm and flood waters; prime natural recharge area; or serves significant water purification functions. In addition, any wetland failing to meet any of these criteria will be considered a regulated wetland if it is functionally related to another wetland that meets the criteria.

A wetland must be judged by these criteria whether or not it is natural or a product of direct or indirect human activities.

I understand "functional relationship" to mean a direct physical connection by which the functions of a regulated wetland are enhanced or abetted.

Whether or not a function is "significant" or "valuable" is not clearly defined in the guidelines. Small, isolated or highly disturbed wetlands with a preponderance of weedy wetland species are likely to be insignificant and therefore non-regulated.

Examples of non-regulated wetlands include: swales in upland habitats with no clear hydrological connections to wetlands, small isolated pools of ephemeral standing water that have wetland soils and plants, ditches, and some wetlands dominated by introduced species.

EVALUATION OF THE IES ASSOCIATES REPORT

Methods

Vegetation was sampled using 19 1 m² quadrats, 12 of them along the northern boundary at approximately 50 ft intervals. This procedure is adequate, though larger quadrats would be better, particularly for woody vegetation. Along the southern boundary, where the edge is relatively clear, 7 quadrats were located at the upland-wetland transition. The boundaries of the wetland determined by IES Associates to be regulated were marked with flagging.

Interpretation of the vegetation results would have been facilitated if the data had been presented.

Soil procedures appear to have been followed appropriately and the soils discussions appear adequate. Hydrology is not discussed separately, due primarily to the season.

Taxonomy

In general, the report shows clear understanding of the important species in question, particularly of wetland species taxonomy. The report evidences an understanding of how the various definitions must be applied under field conditions. There are a few minor errors and uncertainties in the report, some of which have been clarified in discussions with Mr. Wormer. Because they are minor, I list them separately in Appendix II.

Conformance to Chapter 90

Chapter 90 of the City of Kirkland Code outlines what is required in a wetland report. These requirements include: an overview of the methodology used; description of the wetland, a map identifying the wetland edge and plant communities, and a detailed description of the method used to identify the wetland edge; a list of plants and wildlife species observed and a description of their relative abundance; a list of potential plant or animal species based on signs; and an assessment of potential impacts of the proposed development on the wetland.

The IES Associates report provides a general overview of methods they used. The wetlands are described in general. However, the map indicates only the edge of what was determined to be the regulated wetland, not all wetlands on the site. The map does not identify locations of plant communities. Plant species observed are noted in the text. They are not listed. Their relative abundances are only very generally described. No animal species are noted and no list of potential plant or animal species is provided. Potential impacts are addressed briefly (see below).

Descriptions

General. The report accurately describes the overall situation. The central portion of the site is a creek, its floodplain and associated wetlands.

Vegetation. The report classifies the vegetation into three basic "communities", which are actually land-form categories. The grassland/meadow complex is an upland which also includes the Himalayan blackberry thickets. Most of the species reported are facultative species and elevation and drainage patterns support the classification as upland.

The Forbes Creek drainage is a wetland with several plant communities, comprising palustrine emergent vegetation, scrub-shrub wetlands and deciduous forested wetlands. The northeast corner of the site consists mostly of a palustrine deciduous forested wetland. In addition to species listed as common in the understory, ninebark (Physocarpus capitatus) should be added. Indian plum (Oemleria cerasiformis) and cascara (Rhamnus purshiana) also occur. Though not listed, they are considered wetland indicators in this area.

Overall, the descriptions on pages 2-4 are adequate and appear to validate the wetland delineations. However, the absence of a map marking the boundaries of the "non-regulated" wetland makes detailed evaluation difficult.

Areas on the south side with creeping buttercup are validly considered to be upland on the basis of soil conditions and because this species frequently grows in non-wetland situations.

Soils. Soils descriptions are adequate. A map showing the approximate locations of soil cores would have improved the clarity of the report. Considerable reliance appears to have been placed on soil color. Other criteria also indicate hydric conditions.⁵

Wetlands. Characterization of the wetlands is adequate, though more quantitative data should have been provided. Boundaries were inspected in the field. Along the southern edge of the wetland, the delineation, as shown on the IES Associates map and as marked in the field, is correct.

From the utility building on the north side of the wetland west to the boundary, the wetland approaches NE 108th St. and the boundary delineated on the map is correct.

The northeast section is described as a small swale isolated from the creek by high ground, about 100 ft (e-w) by 150 ft (n-s) and extending to within 30 feet of NE 108th St. Accurate delineation in this area is difficult. I determined that the actual boundary is somewhat further south, except for a portion on the western edge and a small impoundment along 108th Ave. NE. I marked this boundary, which is the edge of the wetland in this location, with orange flagging. It is likely that this determination excludes some habitat from wetland that the IES Associates report included as non-regulated wetland. Soils in the upper portions were relatively well-drained and vegetation was dominated by facultative and weedy species such as reed canary grass, which dominated open areas. While this usually occurs in wetlands, it frequently also occurs in disturbed drier habitats. The gradient here is very shallow, change being quite gradual. It is possible that more detailed analysis of soils and vegetation during the height of the growing season would suggest that the boundary as I marked it be moved further north, in accordance with the IES Associates report. The area between my boundary delineation could reasonably be considered either non-regulated wetland or upland.

Data and methods are described in Appendix III. Point A, on the eastern edge of the property, is a small swale, perhaps formed by the ditch berm. Though dominated by alder and willows and containing skunk cabbage, this portion is considered to be non-regulated in that there is no clear connection to either Forbes Creek or to the ditch. The standing water appears stagnant, with an oil slick.

Points B through F are along the regulated wetland border. While alder is common throughout and reed canarygrass common in openings, greater weight was placed on the presence of cottonwood, willows, salmonberry and hardhack, all species which typically are less likely to

be common in uplands. Upland plot soil did not show water logging as did wetland plots and vegetation is dominated by the weedy reed canarygrass.

The remaining plots are from selected points within the wetland. G1 and G2 are within the regulated wetland as depicted by IES Associates. H is within the wetland and contains willows and reed canarygrass. I is another variant, with cottonwood, willows and ninebark dominating the vegetation. J is on the drier rise. Soil here is firmer and shows little surface impoundment. However, this area appears to be part of the current flood way and is very near Forbes Creek.

Regulated Wetlands. The report correctly determines that this portion of the Forbes Creek floodway is a regulated wetland. The report does not explicitly state the criteria used to make this determination. Forbes Creek serves significant hydrological functions, such as flood detention and sedimentation, and significant biological functions, including habitat for waterfowl and salmonids. It was not determined, either by IES Associates or by me, whether or not any threatened or sensitive animal species use this site.

The remainder of this section deals with the northeast corner wetland and describes it as a non-regulated wetland. The report justifies this conclusion, here and elsewhere, in these ways:

1. It is isolated from the main body of the creek;
2. The area is wet due to subsurface waters flowing on top of a hardpan;
3. It is disturbed and may have originated from human activities.

Criteria 2 and 3 are irrelevant. Regulated wetlands may have been altered or created by human activities. Perched wetlands exist in several places in King County, presumably due to underlying hardpans. A non-regulated wetland exists if it meets all three of these criteria:

- A. It is isolated;
- B. It is small (normally less than 1 acre); and
- C. It serves no significant biological or hydrological function.

The northeast wetland is small, and satisfies Criterion B. It serves as habitat for numerous birds (robins and sparrows were observed). Water moves slowly through it. Nutrients are removed from this water and thus a bio-filtering occurs. Therefore it serves both biological and hydrological functions and Criterion C is not satisfied.

Of greatest concern is whether or not it is isolated. There appears to be a direct connection along the eastern edge of the "dry island" shown in Fig. 1, and there is surface water moving from the northeast corner just north of the dry island, south of the utility building, between points G1 and H. Therefore, the northeast corner is not isolated and must be considered part of the regulated wetland. Above the marked boundary may be considered nonwetland or non-regulated wetland.

Wetland Classification

The northeast corner wetland is dominated by relatively large cottonwoods and alder taller than 20 ft. Therefore it is primarily a palustrine forested wetland (PF01). Other classifications are substantially correct.

Impacts

The impact section does not address several issues. These include effects of construction on Forbes Creek, potential long-term effects of erosion once the project is complete, effects of alteration of surface runoff from the developed properties.

The report states that the 0.4 acre wetland, which it determined to be a non-regulated wetland, will be "encompassed." What "encompassing" entails and what the impacts on the wetland will be are not addressed.

Mitigation/Enhancement Concepts

Two alternative plans to enhance the Forbes Creek wetland are presented by IES Associates. Plan 1 would create a pond along the southern boundary of the wetland, while Plan 2 would create a pond north of site one, in reed canarygrass vegetation.

Enhancement implies that some quality of the wetland will be improved. In this case, the goal of enhancement is to improve habitat for waterfowl and to improve the quality of water entering Forbes Creek.

A number of questions should be answered before enhancement plans are carried out. These include:

1. What maintenance will be required to prevent pond siltation and natural in-filling? Without maintenance, what is the useful life of the pond?
2. Pond vegetation will remove nutrients from entering water, but increased use by water fowl will add nutrients. On balance, will nutrient levels in water reaching Forbes Creek be higher or lower than water reaching the site?
3. How will the effects of pond construction be constrained so as not to carry over to Forbes Creek?
4. What wildlife, if any, currently use the Forbes Creek habitat? Will any of these suffer adverse effects due to converting one type of wetland habitat into another?
5. What will be the nature of connections between the pond and Forbes Creek? Will fish be trapped in the pond?

Plan 2 risks significant damage to Forbes Creek, either during construction or during floods. Therefore, any enhancement should be sited along the southern boundary of the wetland. Buttercup provides very little wildlife cover or food. The diversity described in Plan 1 is greater than existing conditions. Impacts from human activities on the created habitat are of less importance than impacts to Forbes Creek. Loss of buttercup meadow is of less concern than loss of reed canarygrass marsh.

While wetland enhancement projects are increasingly common, their value is not always demonstrated. The questions raised should be answered satisfactorily before any enhancement plan is approved.

CONCLUSIONS

1. The IES Associates report on the Pan-Terra Forbes Creek property was evaluated. Though sketchy in details, the report characterizes the site adequately.

2. Delineations of wetland boundaries on the south side of Forbes Creek are accurate. Delineations of wetland boundaries along the north side, from the Utility building west along NE 108 St., are accurate.

3. The mapped delineation of the north side from 108th Ave. NE west approximately 250 ft would be accurate if the remaining wetland were not regulated.

4. The northeast corner of the property contains a regulated wetland, extending about 100 ft north of the boundary mapped by IES Associates. This area is considered to be regulated because: a. is physically and hydrologically connected to Forbes Creek, b. it performs significant hydrological functions and c. is likely to provide significant biological functions. This area is not a swale, nor is it an isolated impoundment. North of the boundary marked by del Moral & Associates (Fig. 1), the land may be considered to be either nonwetland or non-regulated wetland.

5. The report does not adequately address potential impacts of this project.

6. If any enhancement is to be performed, Plan 1, creating a pond along the southern boundary of the wetland, is preferred. It would create lower potential for impacts on Forbes Creek. However, the report fails to show that construction of a pond would enhance the biological or hydrological functions of Forbes Creek. Further discussions concerning this point are required.

Submitted by

Roger del Moral

Dr. Roger del Moral, C.S.E.
Owner, del Moral & Associates

APPENDIX I

Definitions of Wetlands

Wetlands

A wetland is any area inundated or saturated by ground or surface water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands include swamps, marshes, bogs and similar areas. Where the vegetation has been removed, a wetland shall be determined by the presence of hydric soils.

Wetlands in King County and in many other jurisdictions are classified by the U.S. Fish & Wildlife Classification system. This is a hierarchical system designed for use in all wetlands of the United States. The hierarchy consists of Systems, Classes, Subclasses and Dominance Types. In the Forbes Creek wetland, the following categories occur.

System: Palustrine. All non-tidal wetlands dominated by trees, shrubs or persistent emergent herbaceous vegetation, including vegetation surrounding lakes smaller than 20 acres and water depth less than 2 meters.

Classes: Emergent Wetland: erect, rooted herbaceous hydrophytes.

Subclass: Persistent Emergent Wetland (PEM) include vegetation dominated by species such as cat-tails and reed canarygrass (PEM5).

Scrub-shrub Wetland (PSS) includes vegetation dominated by woody vegetation less than 20 ft tall.

Subclass: Broadleaf deciduous (PSS1) includes shrubs like hardhack, willows and dogwood.

Forested Wetland (PFO) includes vegetation dominated by woody vegetation more than 20 ft tall.

Subclasses: Broad-leaved Deciduous (PFO1) is dominated by deciduous species like alder, Oregon ash and willow; **Needle-leaved evergreen (PFO4)** is dominated by evergreen conifer species like red cedar and lodgepole pine.

Appendix II
Minor Corrections

References are to the original IES Associates report.

Page	Para.	Line	Comment
Title Page			108th Street
1	5	3	quads=quadrats.
2	3	2	between NE 106th ...and 108th St. on
2	5	3	and 108th Street...
3	2	5	NE 106th Street
3	2	7	NE 106th Street
3	3	2	<u>Elymus cinereus</u> is a plant of eastern Washington, esp. gullies and sand dunes. Is this identification correct?
3	3	4	<u>Circium=Cirsium</u> . Discussions indicate that both Canada thistle (<u>C. arvense</u>) and bull thistle (<u>C. vulgare</u>) occur.
3	4	5	Orchard grass is an introduced species.
3	4	8	Red-top= <u>Agrostis alba</u> var. <u>stolonifera</u> .
4	3	2	<u>Tansineum=Tanacetum</u> .
4	4	1	NE 106th Street.
4	6	3	<u>Spirea=Spiraea</u> .
6	2	6	port=point.
6	3	4	<u>Juncus macrocephalus</u> is not listed in sources.
			<u>Carex microcephalus</u> is not listed in sources.

Note: Taxonomy follows treatment and spelling in Hitchcock and Cronquist (1973).4

Appendix III
Summary of Wetland Delineation Data for Northeast Corner

At points B through F, two 2 x 2 m quadrats were established, one on either side of the visually estimated wetland boundary. At other points, quadrats were established as shown on Fig. 1.

Delineation is somewhat down hill of that inferred from the IES Associates report because: 1. Reed Canarygrass was not considered to represent a wetland habitat in this location, 2. the presence of upland species such as Scotch broom and English holly in places, and 3. the relatively firm, lighter-colored soil.

Species	Plot Designation									
	A		B		C		D		E	
	Wet	Upl	Wet	Upl	Wet	Upl	Wet	Upl	Wet	Upl
Red alder	75	5	40	70				50		
Black cottonwood			90		80	10	50			
Willows	30						60		80	
Salmonberry			20							
Hardhack					30		20			
Him. blackberry	3		5	20	10	20	30	60		5
Indian plum			40							
Cascara			1							
English holly				1						
Skunk cabbage	5									
Reed canary grass	40	80		60	30	70	70	60	70	90
Sword fern			1							
Scotch broom										6

Species	Plot Designation									
	F		G1	G2	H	I		J		
	Wet	Upl	Wet	Wet	Wet	Wet		Dry		
Red alder	30	15	80	75	15				70	
Black cottonwood							80			
Willows	40				75		50			
Salmonberry										
Hardhack	50						3			
Him. blackberry		5		5					10	
Ninebark			30	40			60		15	
Cascara			5							
English holly										
Skunk cabbage										
Reed canary grass	20	70	1	60	60		5			
Buttercup			10				1			
Lady fern				3						

NE 108th St.

UTILITY

DMA WETLAND BOUNDARY
F E D C

NON REGULATED

108th Ave. NE

G1 drainage
H

96'

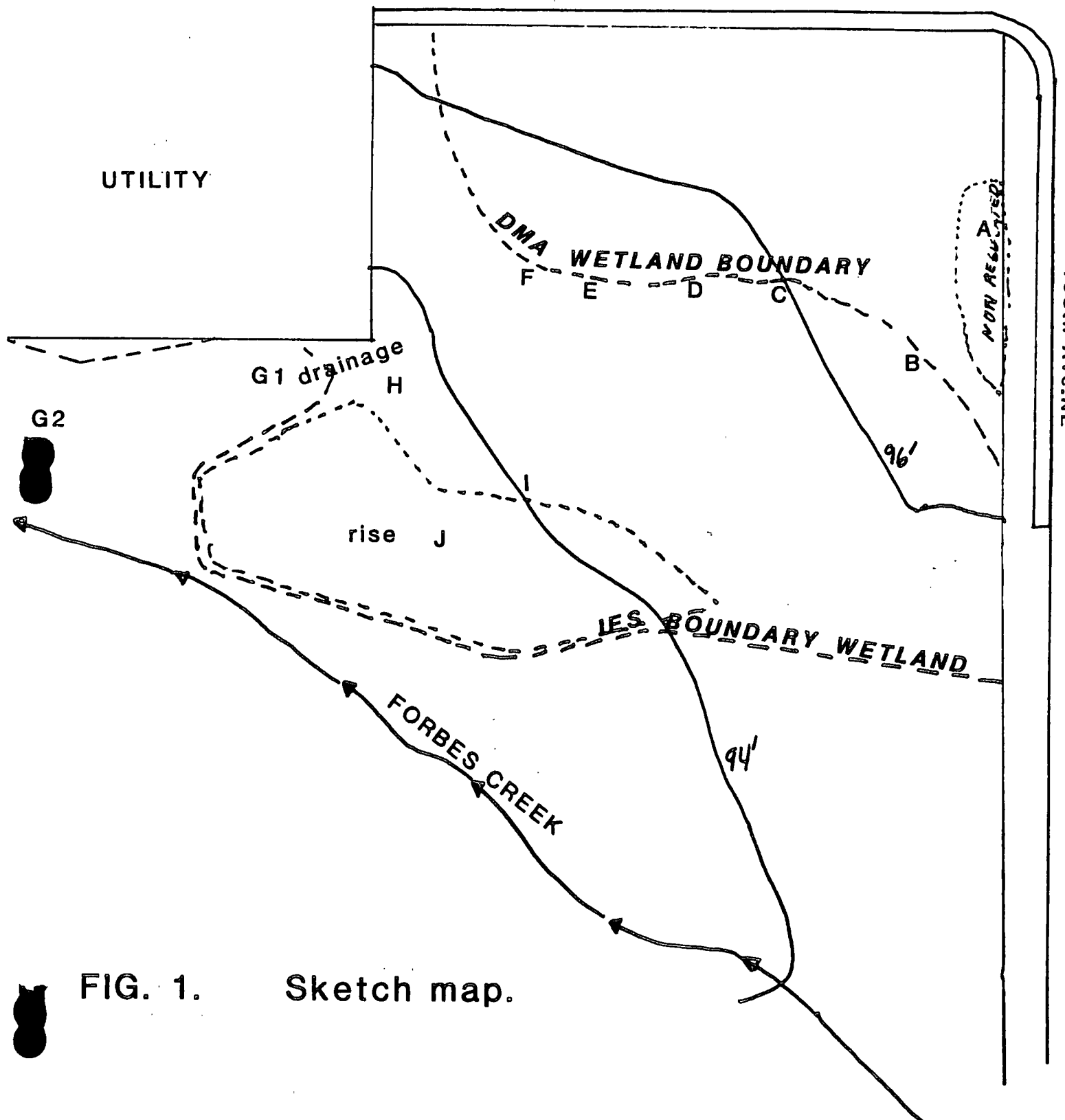
G2

rise J

IES BOUNDARY WETLAND

FORBES CREEK
94'

FIG. 1. Sketch map.



CHRISTINE O. GREGOIRE
Director

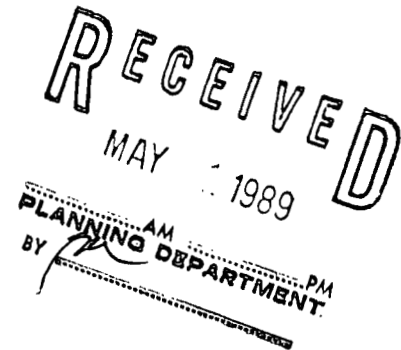


STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

Mail Stop PV-11 • Olympia, Washington 98504-8711 • (206) 459-6000

April 25, 1989

Nancy Carlson
City of Kirkland Planning Department
123 Fifth Avenue
Kirkland, Washington 98033



Dear Nancy,

Thank you for involving us early in the wetland delineation and evaluation of the Pan-Terra Forbes Creek Development Site. Hopefully our assistance with wetland delineation and value and function assessment can streamline project development, through identifying wetland concerns and resource management.

Thank you also for coming out in the field with me yesterday. The two Canadian geese we saw on the apartment window boxes were eating the newly planted green shoots out of someone's flower boxes. They won't be too happy when they get home!

We concur with the wetland line flagged by IES on the South side of the project area. An investigation of the soils on both sides on the line revealed that this line would be valid under the new federal wetland delineation methodology (hydric soils were not present on the landward side of the line).

The wetland line on the northeast corner of the property was inaccurately flagged by all three consultants. Continuous hydric soils, hydrophytic vegetation and low elevation changes occurred from their wetland lines to approximately 20 feet from the edge of the road, where fill had been placed. Details of the field investigation and a map with the wetland line will be attached at the end of this letter. In summary, under the federal wetland delineation methodology, which is a three-parameter wetland delineation method using the Clean Water Act definition, this entire area would be considered to be a wetland.

SEPA Attachment 5
FILE NO. IIB-89-19

Nancy Carlson
April 25, 1989
page two

We also recommend that the City of Kirkland treat this wetland as a Regulated Wetland for the following reasons:

1. The wetland area provides important biological habitat for fisheries (coho salmon often use these wetlands adjacent to streams during high water when they are young). The diversity of structural habitat, with many layers of vegetation, provides feeding, roosting, and cover for many species of wildlife. The corridor of vegetation from Forbes Creek to Juanita Bay provides an important pathway for wildlife to move through. The "edge" from the creek up into the shrubs and trees also provides important habitat.

2. The project area is within a mile of Juanita Bay, which is an impounded area in Lake Washington. The wetlands along Forbes Creek to the mouth provide important filtration of sediment, nutrients and pollutants before reaching Juanita Bay; this provides significant water quality benefits.

3. Much of the Forbes Creek watershed has been urbanized. With an increase in impermeable surfaces in a watershed, more volume of water washes off the slopes and down the creek during storms, creating greater flood damage. Wetlands in the project area provide stormwater detention and reduce downstream flooding impacts in Juanita Bay.

We recommend avoidance of impact to wetlands on the Northwest corner of the project. This would provide continuous wildlife habitat associated with the creek, and reduces human caused impacts. We support fencing the wetland and maintaining a 25' native growth protection easement buffer around the wetland to reduce impacts from humans and pets on wildlife. We would also like to review the mitigation plan with the questions asked by Dr. Roger Del Moral answered.

Once again, thank you for involving us early in this project. With avoidance of impact on the northwest side of the project, we see no significant resource impacts. If homes are to be built and fill placed in wetlands, we recommend an environmental impact statement be prepared. A permit may also be needed from the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act.

Nancy Carlson
April 25, 1989
page three

If I can be of further assistance on this project, please feel free to contact me at 459-6765.

Sincerely,

Michelle L Stevens

Michelle L. Stevens
Wetlands Ecologist

cc. Nelson Betty, Pan-Terra, Inc.
Gayle Kreitman, WA Dept. of Fisheries
Rex Van Wormer, IES Associates
Roger Del Moral
Garet Munger, Terra Associates
U.S. Army Corps of Engineers

APPENDIX

Vegetation:

A review of Appendix III in Dr. Roger Del Moral's report substantiates that a predominance of hydrophytic vegetation is present throughout the site. Determination of hydrophytic vegetation under the Federal Wetland Delineation Methodology is based on the indicator status of the vegetation, which is listed in the National List of Plant Species that occur in Wetlands prepared by the U.S. Fish and Wildlife Service. Each species is given an indicator of its relative water tolerance, and a predominance of hydrophytic vegetation occurs when over 50% of the vegetation is Facultative or wetter. Overstory species include Red Alder (Fac) and Black Cottonwood (Fac). The midstory shrub species include all Facultative or Facultative Wet vegetation with the exception of isolated patches of Himalayan Blackberry. The understory was dominated by Reed Canary Grass (FacW), with small patches of Skunk Cabbage (Obligate Wet) and Buttercup (FacW). The data sheets in the Del Moral report and my field investigation indicate hydrophytic vegetation occurring on the site up to the wetland line 20' from the edge of the road.

Soils:

Soils are 2.5 Y 3/2 with mottling. Soils were fully saturated with some pockets of standing water near the creek, and were damp and unsaturated further from the creek. These soils contained a good bit of sand, but had reliable color readings. Soils color was consistent throughout. Sandy soils are more porous in texture than other soils; clear color readings are highly diagnostic of hydrology being present in this situation.

Hydrology:

Was not present in the upper levels of the soil, but you would not expect hydrology in late April. I visited the site on February 21, and shallow standing water could be observed from the road.

In conclusion, a predominance of hydrophytic vegetation, hydric soils and hydrology are present on this site, making it a wetland under any wetland definition.

RECEIVED

IES ASSOCIATES

MAY 8 1989

PLANNING DEPARTMENT

BY

1514 Muirhead
Olympia, WA 98502

Ph: (206) 943-0127

8835 SW Canyon Lane
Portland, OR 97225

Ph: (503) 297-6081

May 3, 1989

TO : City of Kirkland Planning Department
123 Fifth Avenue
Kirkland, Washington 98033

Attention : Nancy Carlson

Dear Nancy:

I received a copy of the Department of Ecology's evaluation of the wetlands delineation of the Pan-Terra Forbes Creek development site today. In context, we agree with many of the basic statements and findings made, however we would like to offer the following to justify the differences that were noted between the findings of Michelle Stevens (DOE) and our findings.

In reference, we will first discuss those issues addressed in the appendix. Under vegetation, we agree that there is a predominance of hydric vegetation throughout the site. However, one point, not listed in Michelle's report, is the presence of non-wetland indicator species such as Scots broom (Obligate Upland), Himalayan blackberry (Upland), young Douglas fir (Up) and bull thistle (Up1) growing under the Facultative dominant canopy and the Facultative-dominated shrub component. Patchy reed canarygrass was the only Facultative Wet species found in the upper reaches of the northwest corner of the site.

Facultative plants, as defined in the plant indicator status category, Corps of Army Engineers Delineation Manual, as "Plants with a similar likelihood (estimated probability 33% to 67%) of occurring in both wetlands and non-wetlands." It is our opinion, based on the fact that the predominance of the species were only Facultative, and not FacW or Obligate, and the presence of a variety of new intruder Upland species and the presence of Himalayan blackberry in much of the open area, that the area was marginally wet and some physical changes were occurring. Based on this, we looked at the other two parameters before making our final determination.



SEPA Attachment 6
FILE NO. IIB-89-19

Nancy Carlson
Pan-Terra/Kirkland
May 3, 1989

Soils :

Our findings on the soils were significantly different than those findings by Michelle. In our preliminary analysis we utilized 2.5Y, 10YR, 7.5YR and 5YR in an attempt to make a determination. According to our field notes, we felt that there was a variation of soils on the site. We disregarded the 2.5Y soils because of the lack of yellow coloring in the soils, and the 5YR soils because of the lack of red color in the soils. Our soils chart determination, we felt, varied between 7.5YR and 10YR because of a predominance of the brown coloring in the soils. We concluded that 10YR was the appropriate color because of the darkness of the brown in the soils.

The brown coloring in the soils is consistent with Kitsap silty loams, which are the soils identified on the site by the Soil Conservation Service. In the SCS soils report, King County, Kitsap silty loams are stated as; "zero to five inches, very dark brown, 10YR 2/2, silt-loam; dark grayish brown, 10YR 4/2, dry, moderate, medium granular structure. 5 to 24 inches, dark yellowish brown, 10YR 3/4, silty-loam 10YR 5/3 dry. Slightly hard, friable, slightly sticky." We felt our calls were consistent with the classified soil condition.

As you will note, in our wetlands delineation there is a portion of the site where the wetland came within 20 feet of the road. This is the area where there is surface sheet flow in the winter, and where the soils are dark and mottled. Areas where we found sandy intrusions into our soil profile were in the east half of the northwest corner of the site, beneath mixed black cottonwood/alder stands with Himalayan blackberry and sword fern in the ground cover.

Hydrology :

Michelle's statement indicates that hydrology was not present in late April, but that we should not expect hydrology in late April. According to the Corps of Army Engineers (Karen Northup, phone conversation 5/3/89), we should expect hydrology at 12 to 15 inches below the soil surface at this time of year. Although this is an unwritten consideration, we have been informed by the Corps that we should be finding ground water 12 inches below the surface soil at this time of the year.

Nancy Carlson
Pan-Terra/Kirkland
May 3, 1989

When we conducted our site evaluation there were pockets of water in the center core of the wetland in the northwest corner. These pockets of standing water are in the areas which were identified as wetlands by IES and in the area that extended up to within 20 to 30 feet of the road fill. These areas were predominantly in the west half of the northwest corner of the site. In the east half of the northwest corner of the site, five of our seven soil bores did not have ground water at 18 inches. Those areas that were wet had ground water anywhere from 6 to 12 inches, but always on top of the hardpan which underlays the western half of the northwest corner of the site.

Regarding comments made relative to the wetland line in the northeast corner of the property, paragraph 4, page 1, Michelle stated that there were only "low elevation changes occurring from their wetland lines to approximately 20 feet from the edge of the road" There was, in fact, an elevational difference of over three feet from the northwest corner of the site in the area which we identified as wetlands to the wetland boundary along the west and southwest corners of the property. There is also a small, slightly raised ridge that encompasses sandier soils, dense dog-hair alder, Himalayan blackberry and piggyback between the identified wetland and the Forbes Creek drainage.

These elevational changes may not be of consequence if the soils, vegetation and ground water conditions are consistent throughout, however we believed that there was a significant difference in vegetation, a change in soil type (from the denser Kitsap loams to an Alderwood sandy-gravelly loam) and a lack of ground water at 15 inches. With these changes, we believed that the change in elevation did mark a significant different in the overall physical conditions of that portion of the site.

Our work was completed in February, at the same time as Michelle Stevens initially visited the site. Because of the vegetation, the mixed nature of the soil samples that we took, and the time of year, we felt that the most important parameter to use in determining the wetland character of the site was hydrology. The lack/presence of ground water in a number of the holes in February to a depth of 15 inches or to the top of the hardpan, we felt, was a strong indication of the conditions that were allowing the non-wetland species to remain viable and, in some instances, to expand in the midst of the Facultative-dominated vegetative community. We did not find ground water in the holes located in the area we delineated as non-wetland. For this reason, we delineated our wetland line.

Nancy Carlson
Pan-Terra/Kirkland
May 3, 1989

We considered the area atypical or disturbed because of the road impacts and the even age of the dominant tree species. The following was considered in determining the historic hydric conditions. (See attached copy of pages 80 and 81, Federal Manual for Identifying and Delineating Jurisdictional Wetlands). Since there were no Obligate or Facultative Wet species on the site and there was a presence of four Upland species, the area would still not be considered a wetland under this procedure.

We feel that our procedure was accurate, our determinations were made with a great deal of care, and that our intent was not to define the area as an upland or as a wetland, but to attempt to accurately describe the physical parameters on the site that are used by the Corps of Army Engineers in delineating wetlands.

In regard to the regulated wetlands, we used the same procedure that had been explained to us by your office and used by us for your office on other projects. It was our determination that the area was non-regulated, since the sources of water that were making the wetland area wet were not waters from Forbes Creek, but were sheetflow waters from an uphill area. In our interpretation of your meaning of the word, "regulate," we felt that this created a physical separation between Forbes Creek and this ground water influenced wetland area adjacent to Forbes Creek. Had the area been a floodway of Forbes Creek or directly influenced by the waters in Forbes Creek, we would have made a different determination.

We do not disagree with findings (1), (2) or (3), Michelle's consideration of the wetland systems. However, it should be noted that the waters coming off of the hill that influence the wetland conditions in the northwest corner are almost always subsurface and never reach the surface waters of Forbes Creek. During high winter flows, it is expected that a certain amount of this water would mix with and be diluted into the flood waters that expand across the entire floodway of the Forbes Creek drainage in this area. However, at that point in time, the limited amount of water that comes from this area would not have a significant influence on water quality or fisheries habitat in Forbes Creek.

We question the reliability of Michelle's statements in paragraph 4 about a continuous wildlife habitat, particularly a habitat of importance, created by the northwest corner of the site. The northwest corner of the site is boxed in on three

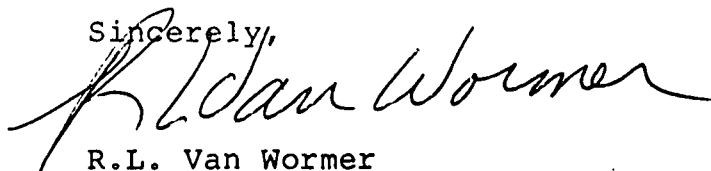
Nancy Carlson
Pan-Terra/Kirkland
May 3, 1989

sides by roads and a residence, and is small and isolated. It does not provide either a contaminated or an uncontaminated direct surface flow of water to a stream, except possibly during high flood periods, as we mentioned.

In most instances I would agree with Michelle that fencing around the wetland in an urban area would be advisable and would help in protecting some of the qualities of the wetlands. However, in this area it should be noted that there is a significant amount of animal movement from the hillsides down through the properties into the wetlands. If fencing of a small, narrow, short section is allowed for protection, then it should be continued throughout the borders of the wetland as future developments occur on the hillsides or on other properties adjacent to the creek in the immediate vicinity. With this fencing, unless the fencing is designed to allow wildlife (particularly deer) access, it could actually become a detriment to wildlife that currently utilize the entire wetland area from the proposed development site to Juanita Bay.

In conclusion, we still disagree with the wetland boundary as delineated by Michelle, based on hydrology and soils.

Sincerely,



R.L. Van Wormer
Senior Biologist
IES Associates

Attachments : Federal Interagency Committee for Wetland Delineation. 1989. Federal Manual for Identifying and Delineating Jurisdictional Wetlands. U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, and U.S.D.A. Soil Conservation Service, Washington, D.C. Cooperative technical publication. pp 80-81.

~~April 25, 1989 letter, Michelle Stevens to Nancy Carlson.~~

cc. Nelson Betty, Pan-Terra, Inc.
Michelle Stevens, Department of Ecology
U.S. Army Corps of Engineers
Gayle Kreitman, Washington Department of Fisheries

hydrology criterion. If these signs are observed, return to the applicable step of the onsite determination method being used. If such signs are not present, then one should conduct an onsite inspection as follows.

- C) Inspect the site on the ground, look for field indicators of wetland hydrology, and assess changes in the plant community, if necessary. If field indicators of wetland hydrology (excluding hydric soil morphological characteristics) are present, then wetland hydrology exists; return to the applicable step of the onsite determination method being used. If such indicators are lacking, then examine the vegetation following an appropriate onsite determination method. If OBL and FACW plant species (especially in the herb stratum) are dominant or scattered throughout the site and UPL species are absent or not dominant, the area is considered to meet the wetland hydrology criterion and remains wetland. If UPL species predominate one or more strata (i.e., they represent more than 50 percent of the dominants in a given stratum) and no OBL species are present, then the area is considered effectively drained and no longer wetland. If the vegetation differs from the above situations, then the vegetation at this site should be compared if possible with a nearby undisturbed reference area (substep 3D); if it is not possible to evaluate a reference site and the area is ditched, channelized or tile-drained go to (substep 3E), or else go to substep 3F.
- D) Locate a nearby undisturbed reference site with vegetation, soils, hydrology, and topography similar to the subject area prior to its alteration, examine the vegetation (following an appropriate onsite delineation method), and compare it with the vegetation at the project site. If the vegetation is similar, (i.e., has the same dominants or the subject area has different dominants with the same indicator status as the reference site) then the area is considered to be wetland - the wetland hydrology criterion is presumed to be satisfied. If the vegetation has changed to where FACU and UPL species or UPL species alone predominate and OBL species are absent, then the area is considered effectively drained and is nonwetland. If the vegetation is different than indicated above, additional work is required -- go to (substep 3E), if the area is ditched, channelized, or tile-drained, or to (substep 3F) if the hydrology is modified in other ways.
- E) Determine the "zone of influence" of the ditch (or excavated channel) and the effect on the water table by using existing SCS soil drainage guides. Obtain the appropriate guide for the project area's soil(s) and collect necessary field measurements (e.g., ditch or other drainage structure dimensions) to use the guide. The zone of influence is the

- 5) Determine whether wetland hydrology previously occurred. Examine available data. If no indicators of wetland hydrology are found, and other evidence of wetland hydrology is lacking, the original hydrology of the area is not considered wetland hydrology. If wetland hydrology indicators and other evidence of wetland hydrology are found, the area meets the wetland hydrology criterion. Record decision and return to the applicable step of the onsite determination method being used.

Step 6. Determine whether wetland hydrology still exists. Many wetlands have a single ditch dissecting them, while others may have an extensive network of ditches. A single ditch through a wetland may not be sufficient to effectively drain it; in other words, the wetland hydrology criterion still may be met under these circumstances. Undoubtedly, when ditches are observed, questions as to the extent of drainage arise, especially if the ditches are part of a more elaborate stream channelization or other drainage project. In these cases and other situations where the hydrology of an area has been significantly altered (e.g., dams, levees, groundwater withdrawals, and water diversions), one must determine whether wetland hydrology still exists. If it is present, the area is not effectively drained. To determine whether wetland hydrology still exists:

- 1) Describe the type or nature of the alteration. Look for evidence of:
 - A) dams;
 - B) levees, dikes, and similar structures;
 - C) ditches;
 - D) channelization;
 - E) filling of channels and/or depressions;
 - F) diversion of water; and
 - G) groundwater withdrawal.(See Step 5 above for discussion of these factors.)
- 2) Determine the approximate date when the alteration occurred, if necessary. Check aerial photographs, consult with local officials, and review other possible sources of information.
- 3) Characterize the hydrology that presently exists at the area. The following sequence of actions is recommended:
 - A) Review existing information (e.g., stream gauge data, groundwater well data, and recent observations) to learn if data provide evidence that wetland hydrology is still present.
 - B) Examine early spring or wet growing season aerial photographs for several recent years and look for signs of inundation and/or soil saturation. (NOTE: Large-scale aerial photographs, 1:24,000 and larger, are preferred.) Signs of wetness indicate that the area still meets the wetland

File



CITY OF

KIRKLAND

123 FIFTH AVENUE · KIRKLAND, WASHINGTON 98033-6189 · (206) 828-1100

June 12, 1989

Mr. Robert Pantley
Pan-Terra, Inc.
624 8th St. So.
Kirkland, WA 98033

Dear Mr. Pantley:

Subject: Determination of Regulated Wetland and SEPA Compliance for
"Kirkland Acres"

Pursuant to our discussion this day on the "Kirkland Acres" site, I have the following information to convey. First, I have again reviewed the information from IES Associates, the Department of Ecology and Roger del Moral. I have concluded that the del Moral line in the N.E. corner of the Kirkland Acres site will be construed to be the limit of the regulated wetland pursuant to Zoning Code Chapter 90. Consequently, this establishes a fifty foot setback as well, within which improvements may not be located. With your PUD application, you may wish to make a case for such setback encroachment, but this letter is not intended to indicate the City's approval or support. As I said, at this time, we have no recommendation on how many, if any, lots or homes are appropriate in the northeast corner of the site.

With respect to SEPA, I propose to issue a Determination of Non-Significance, provided that you indicate your concurrence with several conditions, such as traffic mitigation. With respect to the wetland, I propose that no land surface modification of any kind be allowed in the area identified as regulated wetland and that a native growth protection easement be recorded over this area. The only exception to this exclusion would be any wetland enhancement or water quality improvements that are specifically approved by the State Departments of Fisheries, Wildlife and Ecology and further provided that said improvements are made using hand implements only.

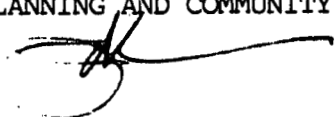
On a related point, I did remind you that the Planned Unit Development Chapter of the Zoning Code requires an applicant to show some public benefit. Brochures and other educational systems are desirable, however, by themselves do not, in my opinion, rise to the status to justify the nature and extent of modifications that your project require. I therefore suggest you give serious consideration to a more significant public benefit. We discussed several ideas, including the possibility of viewpoints and interpretive centers on the subject property and relating these to a larger

Mr. Robert Pantley
June 12, 1989
Page 2

master plan system of walkways and interpretation throughout the Forbes Creek Valley. As you refine your thinking on these possibilities, please feel free to contact me or Nancy Carlson of my Department.

Very truly yours,

PLANNING AND COMMUNITY DEVELOPMENT



Joseph W. Tovar, AICP
Director

JT:bk

cc: Nancy Carlson
Nelson Betty, Pan-Terra, Inc.

Kirkland Acres
NE 112th St./Forbes Creek Dr.

SIGNAL WARRANT ANALYSIS

Note:
Use only daily
total leg volumes
NORTH LEG VOLUME 0
SOUTH LEG VOLUME 100
EAST LEG VOLUME 90
WEST LEG VOLUME 10

CASE 1 - APPROCH LANES - 1 MAJOR 1 MINOR
E-M
N-S
PROJECT TRAFFIC ON MAJOR (TOTAL OF BOTH APPROACHES) 50
PROJECT TRAFFIC ON MINOR (HIGHEST APPROACH VOLUME) 45

WARRANT 1
WARRANT 2

0.75%
1.10%

CASE 1 - APPROCH LANES - 1 MAJOR 1 MINOR
E-M
N-S
PROJECT TRAFFIC ON MAJOR (TOTAL OF BOTH APPROACHES) 50
PROJECT TRAFFIC ON MINOR (HIGHEST APPROACH VOLUME) 45

WARRANT 1
WARRANT 2

0.90%
1.20%

Kirkland Acres
NE 112th St./120th Ave. NE

Note:
Use only daily
total leg volumes
NORTH LEG VOLUME 90
SOUTH LEG VOLUME 0
EAST LEG VOLUME 0
WEST LEG VOLUME 90

CASE 1 - APPROCH LANES - 1 MAJOR 1 MINOR
E-M
N-S
PROJECT TRAFFIC ON MAJOR (TOTAL OF BOTH APPROACHES) 45
PROJECT TRAFFIC ON MINOR (HIGHEST APPROACH VOLUME) 45

WARRANT 1
WARRANT 2

0.72%
1.08%

CASE 1 - APPROCH LANES - 1 MAJOR 1 MINOR
E-M
N-S
PROJECT TRAFFIC ON MAJOR (TOTAL OF BOTH APPROACHES) 45
PROJECT TRAFFIC ON MINOR (HIGHEST APPROACH VOLUME) 45

WARRANT 1
WARRANT 2

0.72%
1.08%

Kirkland Acres
NE 116th/120th Ave. NE

Note:
Use only daily
total leg volumes
NORTH LEG VOLUME 90
SOUTH LEG VOLUME 0
EAST LEG VOLUME 0
WEST LEG VOLUME 90

CASE 1 - APPROCH LANES - 1 MAJOR 1 MINOR
E-M
N-S
PROJECT TRAFFIC ON MAJOR (TOTAL OF BOTH APPROACHES) 45
PROJECT TRAFFIC ON MINOR (HIGHEST APPROACH VOLUME) 45

WARRANT 1
WARRANT 2

0.72%
0.98%

CASE 1 - APPROCH LANES - 1 MAJOR 1 MINOR
E-M
N-S
PROJECT TRAFFIC ON MAJOR (TOTAL OF BOTH APPROACHES) 45
PROJECT TRAFFIC ON MINOR (HIGHEST APPROACH VOLUME) 45

WARRANT 1
WARRANT 2

0.72%
0.98%

To: Fred French
From: Nancy Carlson
Date: March 31, 1989

Traffic Analysis - Kirkland Acres Subdivision and PUD, File S-IIB-89-19

1. Project Description

Subdivision into 20 single family lots.

Property located south of NE 108th St., west of 108th Ave. NE, north of Forbes Creek Dr. (NE 106th St.)

Vehicular access - 1 access easement on NE 108th St., 1 access easement and 1 cul-de-sac on Forbes Creek Dr.

Pedestrian access - sidewalk proposed along Forbes Creek Dr., sidewalk proposed for a portion of NE 108th east of utility station and for a portion of 108th Ave. NE frontage, pedestrian path proposed along NE 108th St. west of utility station.

2. Existing Conditions - no. - single family
so. - single family
w. - single family
e. - multifamily

NE 108th St. and 108th Ave. NE are Neighborhood Access Streets, Forbes Creek Dr. and NE 112th St. are Collector Arterials, NE 116th St. is as Secondary Arterial

3. Planned Improvements in Study Area

116th Ave. NE/NE 112th St. - signalize, \$100,000

120th Ave. NE/NE 112th St. - signalize, \$100,000

120th Ave. NE/NE 116th St. - signal modification, \$50,000

4. Trip Generation

ITE p. 257 - $10.062 \times 20 = 201.24$ Average Daily Trips

ITE p. 261 - $1.012 \times 20 = 20.24$ trips in pm peak hour of generator

5. Trip Distribution

See attached map.

50% east to I-405 (Everett, Bellevue) and points east (Redmond)

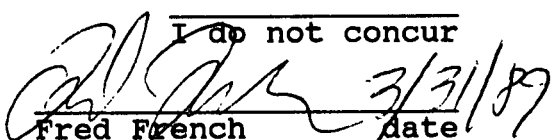
50% west to Market St. (Bellevue, downtown Seattle) or 98th Ave. NE (Bothell, north Seattle)

6. Signal Warrant Analysis

See attached.

I concur

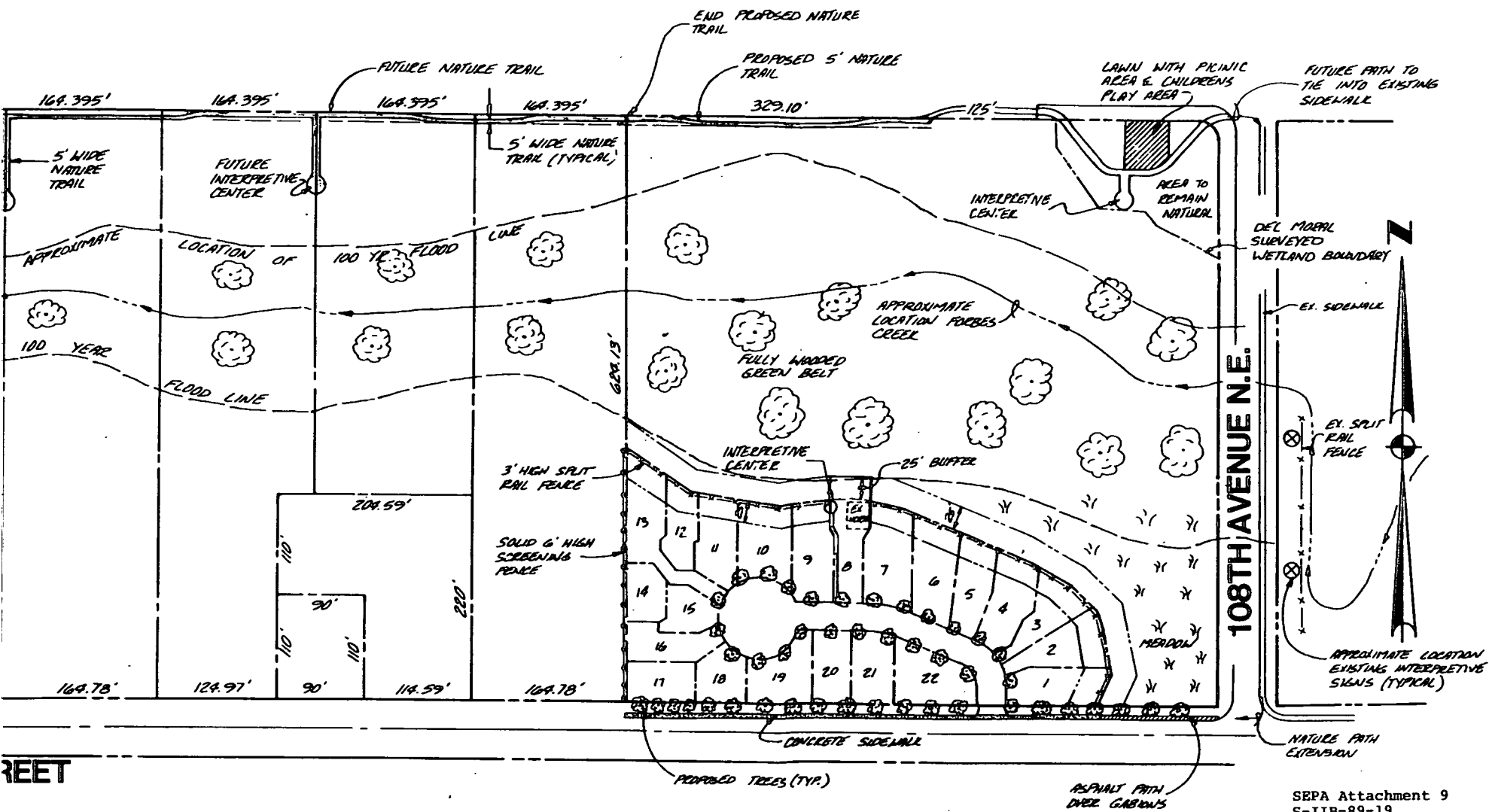
I do not concur


Fred French

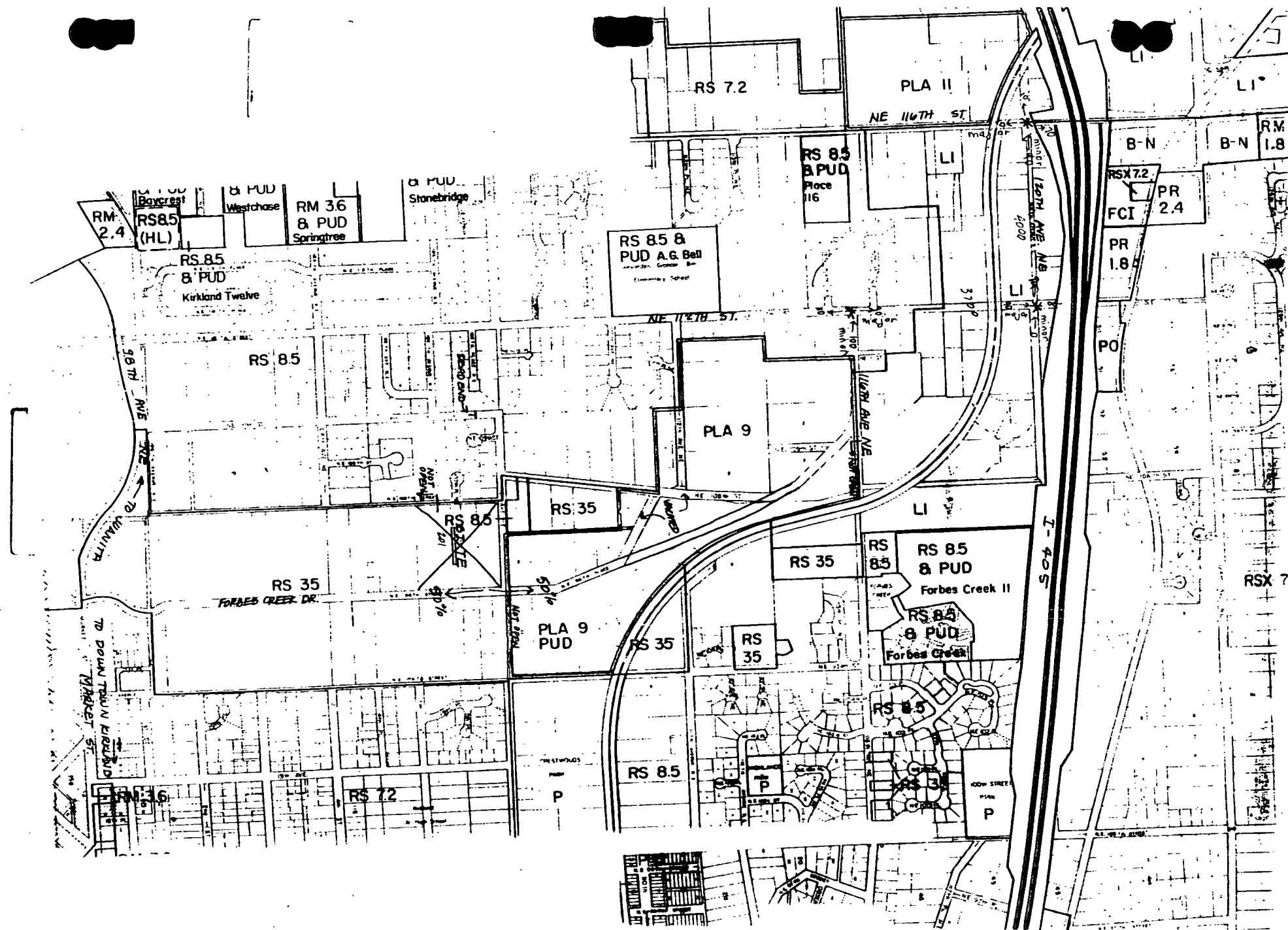
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date

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PRETATIVE CENTER MASTER PLAN



SEPA Attachment 9
S-IIB-89-19



RM 2.4
RS 8.5 (HL)
RM 3.6 & PUD Springtree

RS 8.5 & PUD
Kirkland Twelve

RS 8.5 & PUD A.G. Bell
Elementary School

RS 8.5 & PUD
Floce 116

B-N B-N RM 1.8

RSX 7.2
FCI PR 2.4

PR 1.8

PO

RS 8.5

PLA 9

RS 35

RS 35
FORBES CREEK DR.

PLA 9 PUD

RS 35

RS 8.5
RS 8.5 & PUD
Forbes Creek II

RS 8.5 & PUD
Forbes Creek

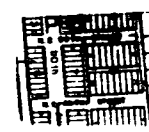
RS 35

RS 8.5

RS 8.5

RS 7.2

P



DEVELOPMENT STANDARDS

Parc Provence Final Subdivision, File No. Sf-90-117

A. Department of Planning and Community Development

1. **Subdivision Ordinance:**
 - a. Section 3.175; City Council Action
 - b. Section 3.190; Filing of Plat Documents

B. Department of Public Works

1. a. **Sanitary Sewer:** Utility easement should be shown across Tract A east of Lot 1.
 - b. **Authority:** K.M.C. Title 15
2. a. **Storm Water:** If possible, a 15-foot easement should be recorded between Lots 3 and 4 and 10 and 11.
 - b. **Authority:** Zoning Code Chapter 107
3. a. **Right-of-Way Improvements:**
 - 1) Proposed improvements adequate.
 - 2) Right-of-way dedication adequate.
 - b. **Authority:** Zoning Code Chapter 110
4. a. **Transmission Lines:**
 - 1) Concomitant agreement required for off-site lines.
 - 2) Underground on-site lines.
 - b. **Authority:** Zoning Code Chapter 110

C. Building Department

1. **Relevant Building Code Requirements:**
 - a. Buildings must comply with the Uniform Building Code, Uniform Mechanical Code, and the Uniform Plumbing Code, as adopted and amended by the City of Kirkland.
 - b. Land Surface Modification permit required. Inspections will be conducted by the Department of Public Works.

D. Fire Department

F.D. Ref. #H4-6

1. **Fire Hydrants (UFC 10.301):**

ATTACHMENT <u>5</u>
FILE NO. <u>SF-90-117</u>

- a. One each.
 - b. Must be completed and approved prior to any combustible construction.
2. **Fire Flow Information (UFC 10.301):**
- a. 750 gpm required (minimum). Verify with Water Department.
 - b. Must be completed and approved prior to any combustible construction.

DS90-117.SEP/NC:rk