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Findings

The west portion of the site is developed with buildings and a parking lot and the east portion (approximately one-third of the site) is forested (Figure 1; Photos 1 and 2). The site is bordered by roads and residential developments to the north, east and south and by the Maple Leaf Reservoir to the west. On the east side of the site, 15th Avenue NE is an arterial with a relatively steady flow of traffic. The roads in the vicinity are busy and likely affect wildlife use of the Camp Fire site.

Forested Habitat

A stand of large conifers is located on east portion of the site. The tree canopy cover in this forested portion of the site is 100 percent. The conifer trees are commonly found in urban forest areas in Seattle. They include Douglas fir and western hemlock, with a few pine and cedar trees also present. The understory is disturbed, only about one third of the area has understory shrubs. Shrubs include both native species such as Oregon grape, evergreen huckleberry and salal, and non-native invasive species such as cherry laurel and Himalayan blackberry. Virtually no native herb layer exists.

Wildlife Observations

Birds observed at the Camp Fire site and adjacent area during the August 7, 2007 site visit included Anna's hummingbird, Steller's jay, black-capped chickadee, and Bewick's wren. Other birds observed on March 6, 2007 included northern flicker, American robin, house sparrow, golden-crowned kinglet, European starling, American crow, dark-eyed junco, and red-breasted nuthatch. All of these species are likely resident species in the area. Other wildlife observations included an Eastern gray squirrel. These species are relatively common in urban forests in Seattle.

A western hemlock snag is present in the northeast corner of the Camp Fire site and appears to be under active use. Numerous cavities were observed in the snag and fresh bird scat was noted. This snag may provide habitat for such cavity nesting species as northern flicker, black-capped chickadee, Bewick's wren, and red-breasted nuthatch, and likely provides forage for species such as nuthatches and woodpeckers.

Project Impacts and Mitigation Measures

The developed portion of the site and approximately half of the existing forested area will be redeveloped with 39 residential units, an underground parking garage, pedestrian walkways, landscaping, and garden spaces. The site design has been revised several times to maximize the amount of forest and native tree retention. Table 1 provides a summary of the tree retention and loss anticipated as a result of this project. More than 50 percent of the native trees will be retained, as well as approximately half of the existing native forest area. All existing non-native trees, including English holly, mugo pine, and other ornamental trees, will be removed. Site landscaping combined with native tree retention should result in a tree canopy coverage that is similar to the existing tree canopy coverage on this site.

Table 1. Existing trees to be retained and removed from the site.*

Native trees:	Number Retained	Number Removed
Douglas fir	27	17
western hemlock	1	5
western red cedar	1	0
alpine fir	0	1
western white pine	0	2
Pacific madrone	1	0
Pacific dogwood	1	1
Total native trees	31	29
Total non-native trees	0	19

*Note that these numbers are approximate and are based on the landscape drawings.

Director's Rule 6-2001

The Director's Rule 6-2001 was written to clarify the SEPA Plants and Animals Policy in the Seattle Municipal Code (SMC 25.05.675). Three main criteria described in SMC 25.05.675 N.2a, 2c, and 2d are presented as policies under this rule. In the following three sections, these criteria are stated in italics along with an explanation of how this project proposal meets the intent of each of these three criteria.

SMC 25.05.675 N.2a

It is the City's policy to minimize or prevent the loss of wildlife habitat and other vegetation which have substantial aesthetic, educational, ecological, and/or economic value.

This report evaluates the ecological values of the site under the Director's Rule. Ecological values are limited due to the residential surroundings and small size of the forest patch, and educational values are limited because the land is privately owned. Much of the forest area will be retained and the development will be landscaped with a variety of trees and shrubs that should preserve ecological value.

SMC 25.05.675 N.2c

When the decision maker finds that a proposed project would reduce or damage:

- 1) *rare, uncommon, unique or exceptional plant or wildlife habitat;*
- 2) *wildlife travelways; or,*
- 3) *habitat diversity for species (plants or animals) of substantial aesthetic, educational, ecological or economic value.*

The decision maker may condition or deny the project to mitigate its adverse impacts. Such conditioning or denial is permitted whether or not the project meets the criteria of the Overview Policy set forth in SMC Section 25.05.665; provided, that for any project subject to the City's Shoreline Master Program, the Overview Policy set forth in SMC Section 25.05.665 shall apply.

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The rule states that trees should be considered under Categories 1 and 3 as listed above, and all trees that qualify as an Exceptional Tree should be considered. An Exceptional Tree is one that “is rare or exceptional by virtue of its size, species, condition, cultural/historic importance, and/or age” as established by the methods outlined in the rule and determined by a tree professional or arborist. Other trees that have special wildlife habitat importance, such as bald eagle nests or communal roosts, should also be considered under Categories 1 and 3.

The report titled *Tree Inspection Prescott Homes Maple Leaf Cottages* (Williams, 2007) examined 79 trees on the Camp Fire site using the criteria outlined in Director’s Rule 6-2001. This review specifically included an examination of tree species, size, condition, and age. Williams (2007) designated four (4) trees as Exceptional Trees based on threshold diameter and tree condition. Three of these four exceptional trees will be retained; these include one Pacific madrone (#2), one Douglas fir (#41), and one Pacific dogwood (#62). The one exceptional tree to be removed is a 36” diameter at breast height (dbh) Douglas-fir (#70). This tree is not part of the larger stand of trees that will be preserved. Removal of this tree is required in order to cluster the development and preserve a larger, contiguous stand of native trees.

The proposal will not otherwise affect rare, uncommon, unique or exceptional plant or wildlife habitat. The forested habitat on the site is similar to forest stands in other City parks such as Woodland Park, though its size is generally smaller than the forested areas in nearby parkland. It does not contain rare, uncommon, or unique plant species or wildlife habitat. The forest tree species are relatively common (Douglas fir and western hemlock) and the understory is relatively disturbed. In contrast, other places in Seattle like Discovery Park contain a diversity of habitats adjacent to Puget Sound, and Seward Park contains remnant stands of old growth near Lake Washington.

Wildlife travelways are not specifically defined in SMC but are presumed to be connections to other native habitats for uninterrupted movement between habitat areas. Based on field observations by Adolfson scientists, wildlife travelways on the Camp Fire site are limited due to the presence of surrounding residential development, major arterial roads, and the lack of connection to nearby habitats. However, the forested portion of the site may act as a “stepping stone” between other native forest areas in the city for a few bird species. This “stepping stone” habitat area will be preserved by the retention of a patch of conifer trees on the east portion of the site.

The site is presumed to provide limited habitat diversity for plants or animals with substantial aesthetic, educational, ecological, or economic value because no special status species, such as bald eagle, are known to use the site other than for the occasional perching by bald eagles and foraging by other birds of prey. Approximately half of the existing native forest will be retained, and other garden areas including water features are planned. These design features should serve to increase the overall habitat diversity of the site. In addition, a western hemlock snag (#13) that provides forage for birds such as nuthatches and woodpeckers will be retained in the forest patch. Therefore, the proposed project is not expected to reduce or damage the habitat diversity currently present on the site.

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SMC 25.05.675 N.2d

Mitigating measures may include but are not limited to:

- i. Relocation of the project on the site;*
- ii. Reducing the size or scale of the project;*
- iii. Preservation of specific on-site habitats, such as trees or vegetated areas;*
- iv. Limitations on the uses allowed on the site;*
- v. Limitations on times of operation during periods significant to the affected species (i.e., spawning season, mating season, etc.); and*
- vi. Landscaping and/or retention of existing vegetation.*

The proposed project meets several of the mitigating measures listed under SMC 25.05.675 N2d, including reduction of the size or scale of the project and preservation of specific on-site habitats, such as trees or vegetated areas. The residential development has been reconfigured several times in order to preserve a contiguous forest area rather than retaining only individual trees scattered throughout the site. The site is zoned for 59 units, but the proposal is for only 39 units. All parking is underground to reduce the overall footprint of the development and to reduce impacts from stormwater runoff. Another benefit of the underground parking is that no internal roads will be required for the development. Foot traffic will be contained on designated trails through the site. Landscaping will include native plant species.

The current site plan (September 25, 2007) contains a tree preservation zone in the eastern portion of the site. This area contains more than half of the conifer trees that currently provide wildlife habitat and known perch sites for bald eagle. Overall, approximately 31 of the 60 native trees will be retained on the site. This number is approximate because it is difficult to anticipate damage to tree roots and limbs during construction.

Conclusions and Recommendations

Based on our review of Director's Rule 6-2001, the tree inspection report (Williams, 2007), and two field investigations, the project proposal meets the intent of SMC 25.05.675 N.2a, 2c, and 2d. A contiguous patch of native forest habitat will be preserved on the east portion of the site and landscaping will include native species. Three of the four exceptional trees will be preserved and more than 50 percent of the total number of native trees will be retained. The site is also designed to meet the goal of no net loss of tree canopy, once the landscape trees have matured.

In addition to the proposed tree preservation area and other garden spaces shown on the site plan, Adolfson recommends that the following measures be considered for incorporation into the final plan in order to improve wildlife habitat conditions:

- Remove non-native invasive species including English ivy, Scot's broom, English holly, Himalayan blackberry, and cherry laurel from the retained native stand of trees, and replace them with native shrubs to create a more diverse native forest habitat area. .
- Use some native species for landscape plantings.
- Retain snags and existing dead/dying trees for cavity-nesting wildlife in the native forest stand if possible considering safety concerns.

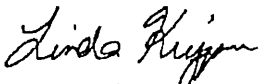
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Limitations

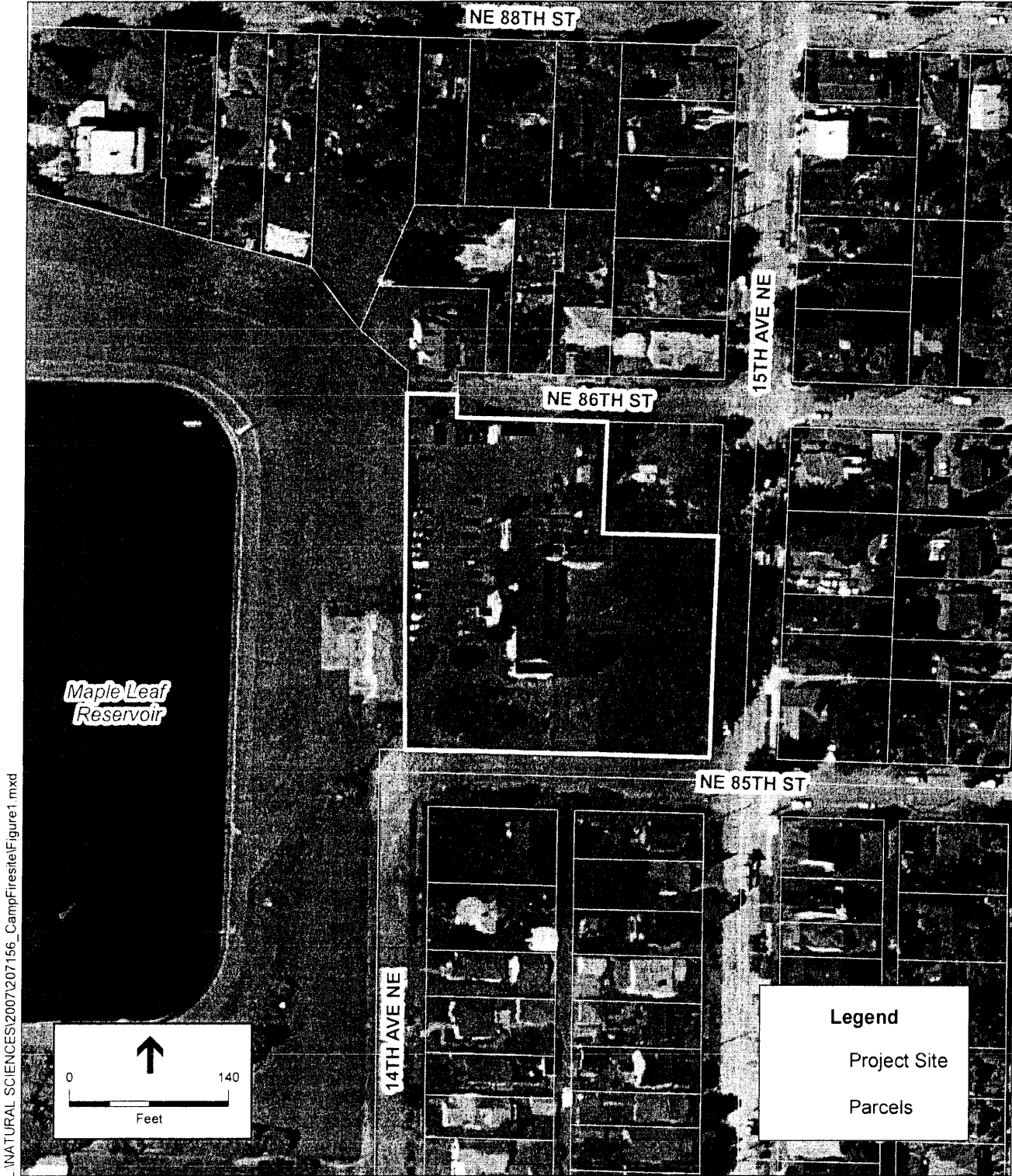
Within the limitations of schedule, budget, seasonal constraints, and authorized scope-of-work, we warrant that this study was conducted in accordance with generally accepted environmental science practices, including the technical guidelines and criteria in effect at the time this study was performed, as outlined in the Methods section. The results and conclusions of this report represent the authors' best professional judgment, based upon information provided by the project proponent in addition to that obtained during the course of this study. No other warranty, expressed or implied, is made.

Thank you for the opportunity to prepare this letter report. Please contact me or Lloyd Skinner if you have any questions at 206-789-9658.

Sincerely,
ESA ADOLFSON


Linda Krippner
Senior Scientist

Attachments: Figure 1
Photos 1 and 2
Site Plan: Landscape
Site: Trees Retained
Site: Trees Lost



SOURCE: King County, 2006

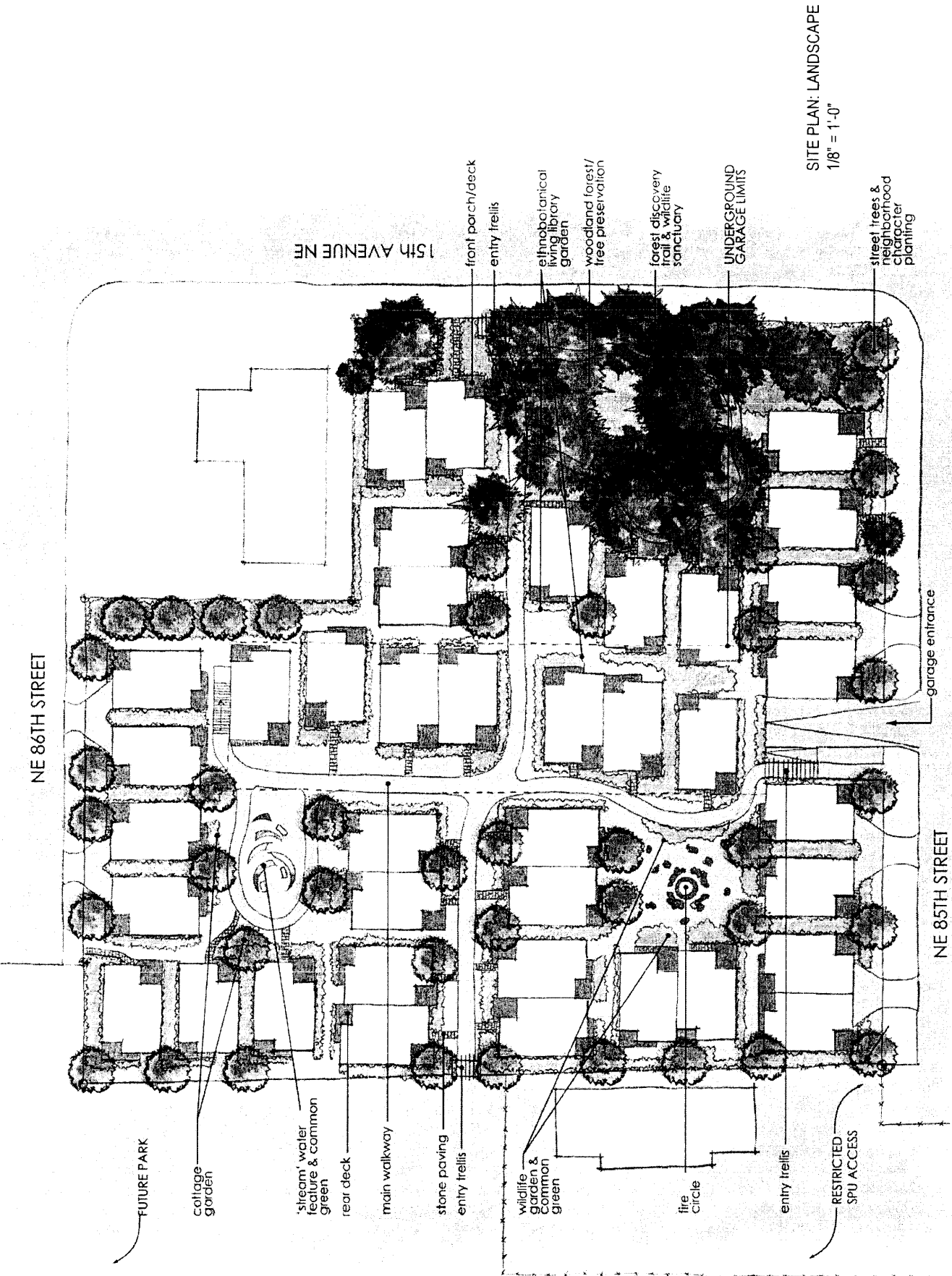
207156 Camp Fire Site
Figure 1
 Aerial View
 Camp Fire Site
 Seattle, Washington



Photo 1. Developed west portion of the Campfire site (March 6, 2007).



Photo 2. Forested east portion of the Campfire site (March 6, 2007).



NE 86TH STREET

15th AVENUE NE

NE 85TH STREET

FUTURE PARK

collage garden

'stream' water feature & common green

rear deck

main walkway

stone paving entry trellis

wildlife garden & common green

fire circle

entry trellis

RESTRICTED SPU ACCESS

front porch/deck entry trellis

ethnobotanical living library garden

woodland forest/ tree preservation

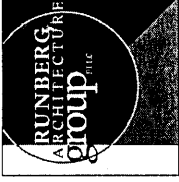
forest discovery trail & wildlife sanctuary

UNDERGROUND GARAGE LIMITS

street trees & neighborhood character planning

garage entrance

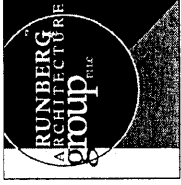
SITE PLAN: LANDSCAPE
1/8" = 1'-0"



Maple Leaf
Cottage Housing
8511 15th Avenue NE
Seattle WA 98116

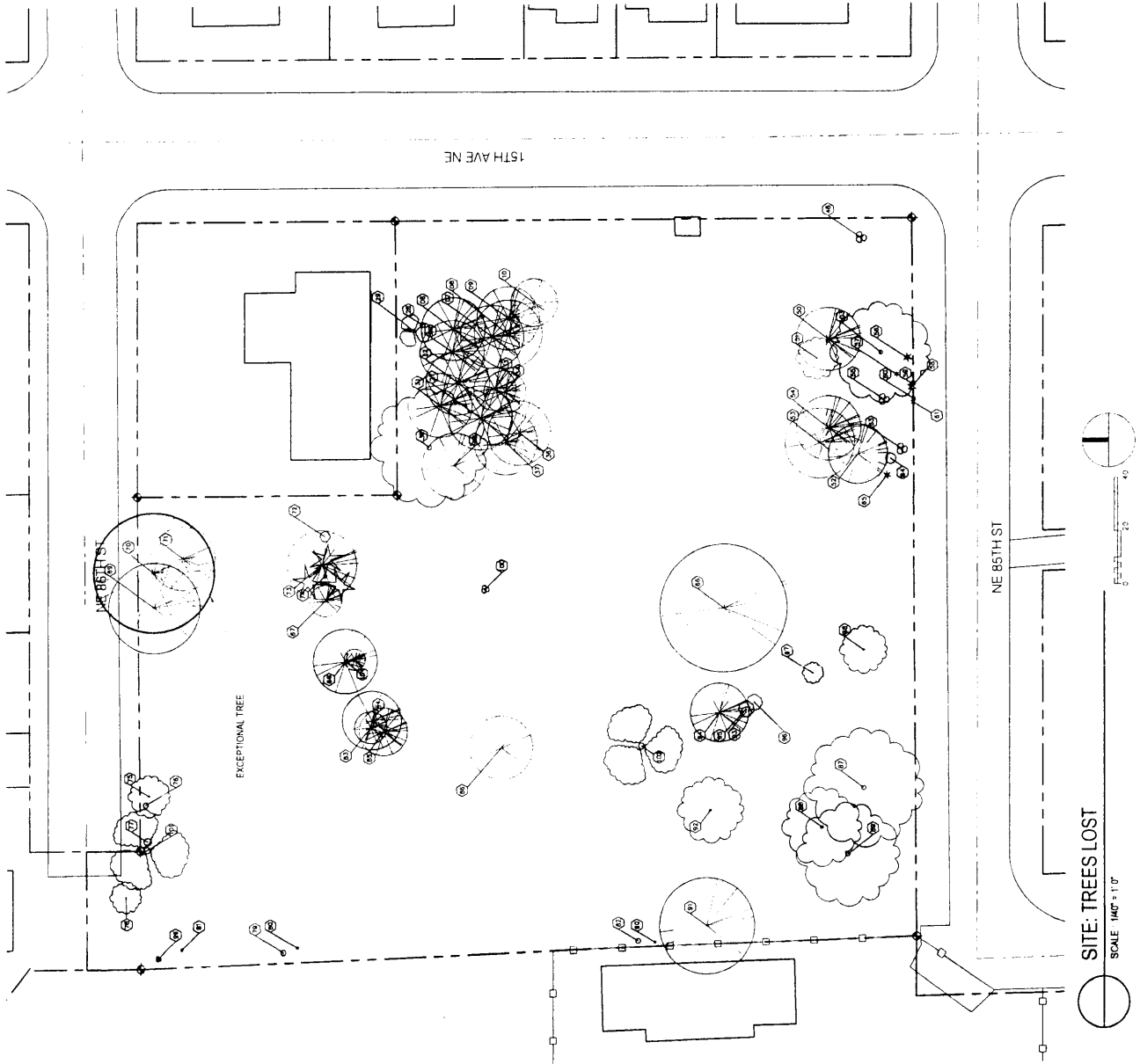
DATE: 9.25.07
SCALE: 1" = 40'
DRAWN: MK
JOB #: 06-130





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Cottage Housing
8511 15th Avenue NE
Seattle WA 98116

DATE: 9.25.07
SCALE: 1" = 40'
DRAWN: MK
JOB #: 06-130



SITE: TREES LOST
SCALE: 1/4" = 10'