
JUSTMAN MAZAMA POCKET GOPHER (*Thomomys Mazama*) AND PRAIRIE SURVEY REPORT

Prepared For:

Benjamin and Daniel Justman

Prepared By:

ALEXANDER CALLENDER, M.S., PWS
LAND SERVICES NW LLC
OLYMPIA, WASHINGTON

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Contents

1.0 INTRODUCTION	- 1 -
Figure 1 Vicinity Map	- 2 -
2.0 METHODS.....	- 3 -
2.1 Review of Existing Information	- 3 -
2.2 Summary of Existing Information	- 3 -
Figure 2 NRCS Soil Survey.....	- 5 -
2.3 2019 Thurston County Mazama Pocket Gopher Protocol	- 6 -
3.0 CURRENT CONDITIONS AND METHODS FOR SURVEYS.....	- 10 -
4.0 RESULTS.....	- 10 -
5.0 CONCLUSIONS	- 12 -

1.0 INTRODUCTION

This report is the result of the study of the 9.37 acre and 5.26 acre parcels at 16731 STATE ROUTE 507 SE, Parcel # 64303200600 and 64303400601 respectively in Yelm, WA with the legal description of MC KENNA IRR TR L 6 B 32; LESS EASE; LESS PTN TO HWY: 1334/552 and Section 29 Township 17 Range 2E Quarter NW Plat MCKENNA IRRIGATED TRACTS ; BLA-8118 LT 2 Document 015/615 THAT PORTION OF LOT 6A AND LOT 6B

TRACT 34 OF THE MCKENNA IRRIGATED TRACTS in Thurston County (Figure 1

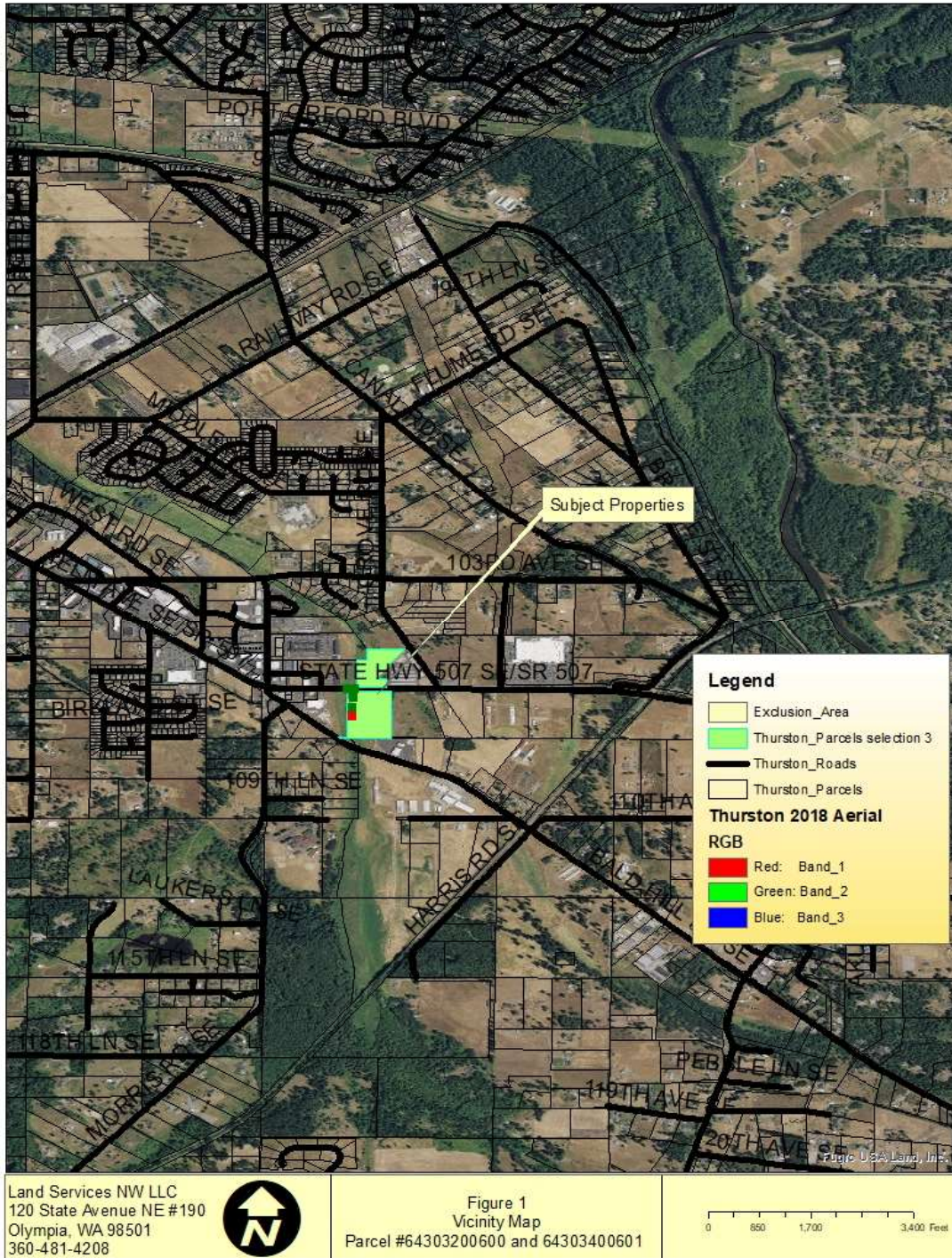


Figure 1 Vicinity Map

The Purpose of this report is to provide a study of the presence or absence of indicators of the Mazama Pocket Gopher (*Thomomys Mazama*) (MPG) and the presence or absence of regulated prairie.

Four subspecies of Mazama pocket gophers found in Thurston County are listed as threatened under the Endangered Species Act (ESA). Impacts to Mazama pocket gophers should be avoided or addressed through USFWS permitting processes. The presence of this species on a property may have regulatory implications that may limit the amount or type of development that can occur on a property. This survey is conducted in order to reduce the risk of “take” of the species. It is designed to screen for the presence or absence of the Mazama pocket gopher on the subject property. Take is defined under the ESA as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect any threatened or endangered species. The Taylors checkerspot butterfly is also listed under the ESA, and the critical prairie habitat that support this butterfly is also protected under the Thurston County CAO.

This study should allow the reader to assess whether the Mazama pocket gopher or regulated prairie is likely to be found on site and what the implications of its presence or absence may have with regard to permitting a residence or other structures or development.

2.0 METHODS

2.1 Review of Existing Information

Background Review

Background information on the subject property was reviewed prior to field investigations and included the following:

- Thurston County Critical Areas Ordinance Title 24
- Thurston County Geodata Gopher Soils Shapefiles
- WDFW Priority Habitats and Species Information
- USFWS species list information
- WDFW species information

2.2 Summary of Existing Information

The existing information shows gopher soils on and within 300 feet of the subject property. The site has The site Spanaway gravelly sandy loam, 0-3 percent slopes and Spanaway gravelly sandy loam 3-15 percent and Spanaway stoney sandy loam 0-3 percent slopes which are more preferred soils and McKenna Gravelly Silt Loam which is Less preferred by the MPG (See Attachment A below) **(Figure 2)**.

Attachment A

Table 1. Soils known to be associated with Mazama pocket gopher occupancy.

Mazama Pocket Gopher Preference	Soil Type
<p>More Preferred (formerly High and Medium Preference Soils)</p>	<p>Nisqually loamy fine sand, 0 to 3 percent slopes Nisqually loamy fine sand, 3 to 15 percent slopes Spanaway-Nisqually complex, 2 to 10 percent slopes Cagey loamy sand Indianola loamy sand, 0 to 3 percent slopes Spanaway gravelly sandy loam, 0 to 3 percent slopes Spanaway gravelly sandy loam, 3 to 15% slopes</p>
<p>Less Preferred (formerly Low Preference Soils)</p>	<p>Alderwood gravelly sandy loam, 0 to 3 percent slopes Alderwood gravelly sandy loam, 3 to 15 percent slopes Everett very gravelly sandy loam, 0 to 3 percent slopes Everett very gravelly sandy loam, 3 to 15 percent slopes Indianola loamy sand, 3 to 15 percent slopes Kapowsin silt loam, 3 to 15 percent slopes McKenna gravelly silt loam, 0 to 5 percent slopes Norma fine sandy loam Norma silt loam Spana gravelly loam Spanaway stony sandy loam, 0 to 3 percent slopes Spanaway stony sandy loam, 3 to 15 percent slopes Yelm fine sandy loam, 0 to 3 percent slopes Yelm fine sandy loam, 3 to 15 percent slopes</p>

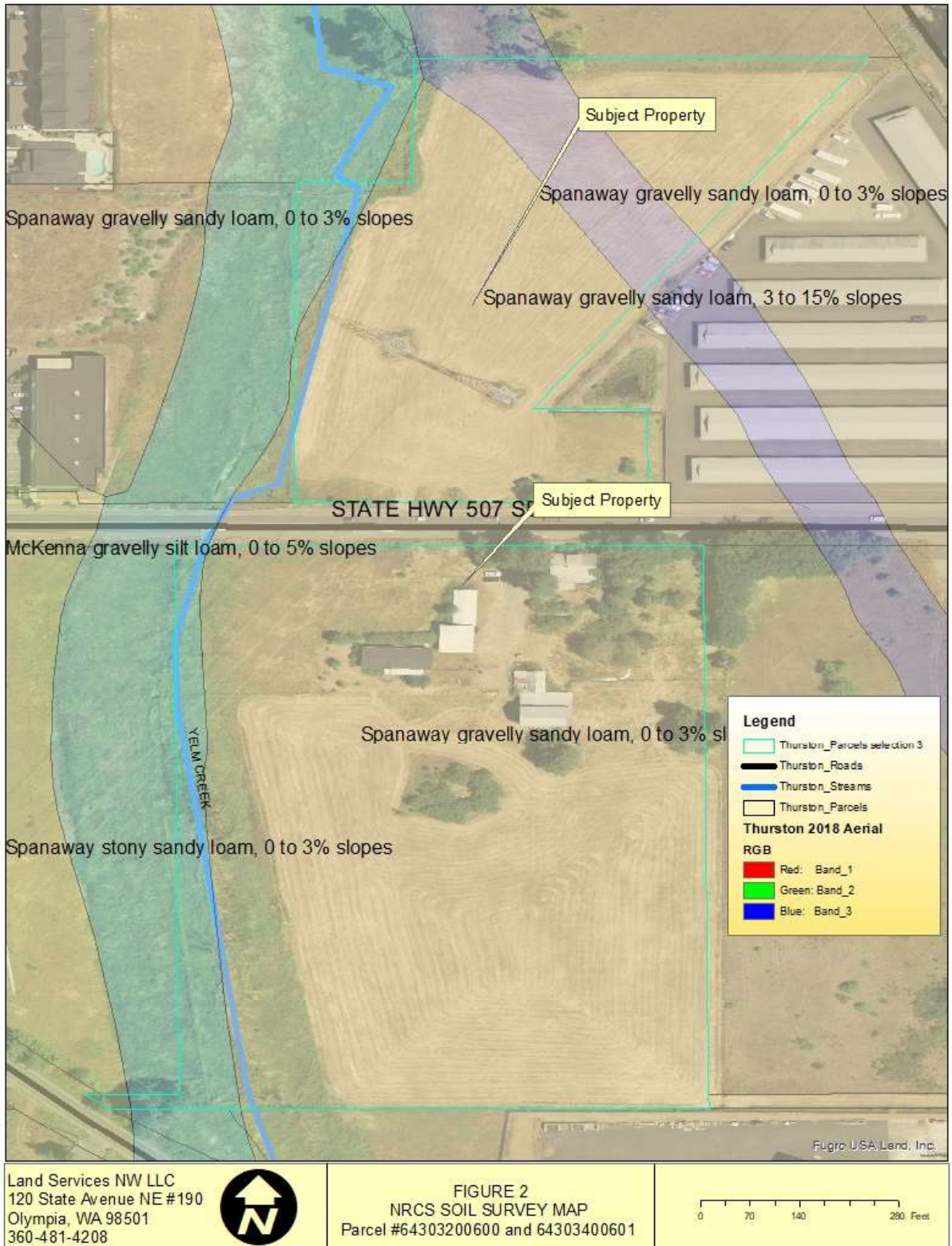


Figure 2 NRCS Soil Survey

According to the 2019 protocol the site will require 2 site visits in order to reduce the risk of “take”. “Take” is defined under the ESA as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect any threatened or endangered species. The survey will meet the needs and will be performed according to the 2019 survey protocol. The site was also surveyed at this time for prairie species since the protocol for walking the site is identical.

The WDFW Priority Habitats and Species Map does not show the MPG in the vicinity of the subject property (**Appendix B**). No instances were found within 600 feet of the subject property in the GIS review. The nearest siting was behind the Walmart in the road easement.

2.3 2019 Thurston County Mazama Pocket Gopher Protocol

A. General Information – 2019 Approach

1. The MPG review season will run June 1-October 31, 2019.

Survey done June 7, 2019 and July 13, 2019.

2. The protocol described in this memorandum will only apply to properties not known to be occupied by MPG since April 2014, the date of the federal listing.

The property is not known to be occupied since April 2014.

3. Negative determinations will be valid for the length of the underlying County permit or approval, per County code.

The determination is negative.

4. Qualified consultants may perform field reviews and submit results for County evaluation, per the CAO. Consultants must have received training from USFWS at one of the two trainings offered in May/June 2018.

Alex Callender of Land Services NW, LLC has received US Fish and Wildlife Service Training and is qualified to perform the survey.

B. In-Office Procedures

1. Staff will review land use applications to determine if the MPG field screening protocols described in this memorandum must be initiated for the following:

a. Within 600 feet of a site known to have positive MPG occurrence; or

The WDFW PHS does not show the Mazama pocket gophers in the vicinity of the site within 600 feet.

b. On or within 300 feet of a soil type known to be associated MPG occupancy.

The Map shows associated soils on and off site within 300 feet.

2. County staff will determine if other factors preclude the need for field screening. See Preliminary assessment below.

3. County staff will notify applicants if their application cannot be excluded from further review.

4. Applicants may hire a consultant to perform field review, or may request that field review be conducted by County staff according to the protocol described in this memorandum.

Alex Callender with Land Services NW LLC is on the listed of qualified consultants.

5. County staff will review critical area reports submitted by consultants.

6. For sites to be screened by the County, staff will coordinate site visits with landowners/applicants, ensure advance notification and property access, and develop site visit schedules.

7. For sites where no MPG activity is observed, the County will provide applicants with a

project condition that requires them to stop construction activity and alert the County and USFWS if evidence of MPG occupancy is observed.

No MPG activity observed

8. Thurston County landowners who know or learn that Mazama pocket gophers are present on their property can move forward with their proposed development by: 1) proposing mitigation to the County as directed in the County's Critical Areas Ordinance (Title 24 TCC); or 2) contacting USFWS directly to discuss the review, assessment, and mitigation process most appropriate for their site(s) and proposed activities; or 3) waiting to participate in the yet to be completed Thurston County HCP.

No Mazama Pocket Gophers were found.

C. Preliminary Assessment

As land use applications are received, properties mapped with or within 300 feet of gopher and/or prairie soils undergo the following preliminary assessment in-office.

1. For properties or project areas that appear to meet County criteria below, an internal review is conducted by staff biologist to determine if the project may be released from the full gopher review process. The following criteria may release a project from further gopher review:

a. Locations west of the Black River, or on the Steamboat Island or Cooper Point peninsulas.

N/A

b. Sites submerged for 30 consecutive days or more since October 31, 2017.

N/A.

c. Sites covered with impervious surfaces (as defined in CAO Chapter 17.15 and Title 24).

No impervious areas are found on site.

d. Fully forested (>30%) sites with shrub and fern understory.

The whole site was inventoried. See Appendix C.

e. Sites that consist of slopes greater than 40 percent, or that contain landslide hazard areas (per existing County regulations).

N/A

f. Sites on less preferred MPG soils north of Interstate 5.

N/A

g. Building to take place in the footprint of an existing structure (also mobile home replacements in the same footprint).

N/A

h. Mobile home replacements in existing lots in an existing mobile home park.

N/A

i. Heating oil tank removal

N/A

j. Foundation repair

N/A

k. Projects which lie >300 feet from mapped gopher soils.

N/A

l. Replacement wells and utilities

N/A

2. If a property and/or project area do not meet internal review criteria, the project is put on a list to be scheduled for full MPG review during the appropriate seasonal review

period.

3. In addition to the in-office preliminary assessment, the County HCP biologist may, if time allows, visit properties prior to the first gopher review in order to screen for prairie habitat. This screening process focuses on the presence or absence of native prairie plants, Oregon white oak trees (*Quercus garryana*), or Mima mounds protected under the Critical Areas Ordinance (CAO).

The subject property is primarily agricultural land that is typically hayed a few times a year. Prairie plants were surveyed as well. There were some instances of the prairie lupine (*Lupinus lepidus* var. *lepidus*), however no other prairie plants besides weedy species such as narrow leafed plantain were found. No instances of Mima mounds were found and no instances of Oregon white oak (*Quercus garryana*) were found on site.

D. Implementation Measures

In order to ensure the review process runs efficiently, the following measures will be implemented as part of the 2019 screening approach. These are intended to reduce costs and staff time, and ensure that MPG screening requests, especially those associated with building permit applications, are screened during the screening season.

1. No soil verification will be required in conjunction with MPG field screening.
2. Site mowing or brushing will be required to initiate first site visits, where necessary and feasible, and completed two to four weeks in advance of the site visit.

Most of the site is farmed land with some border fencing and was mowed 3 weeks prior to the survey

3. No further screening will be conducted in 2019 following the detection of MPG mounds on a property. The County will notify landowners that MPG evidence has been detected within two weeks.

The Mazama pocket Gopher mounds were **not** found.

4. At the end of the 2019 season, County staff will provide data regarding MPG occupancy to USFWS.

5. No additional site visit will be required if indeterminate mounds are detected, if the full number of required visits has been completed.

N/A

6. The County will prioritize project specific applications over non-project applications. This will help ensure that applicants that have projects ready for construction will receive necessary permits and may initiate construction in a timely manner.

E. Site Visit Overview

County field personnel or hired consultants will conduct field observations to determine MPG presence on sites with potential habitat. These site visits will be conducted as follows:

1. All valid site visits must be conducted from June 1 through October 31, 2019. Site visits outside that survey window will not be considered valid.

Site visit conducted June 7, 2019 and July 13, 2019.

2. A site or parcel is considered to be the entire property, not just the footprint of the proposed project.

The property was surveyed except for a portion of wetland area on the western edge, near Yelm Creek.

3. Sites with less preferred soils (see Attachment A) will be visited two (2) times, at least 30 days apart.

N/A -No MPG activity found

4. Sites with more preferred soils (see Attachment A) will be visited two (2) times, at least 30 days apart.

Site was surveyed according to this protocol with a site visit on June 7, 2019 and July 13, 2019.

5. Site conditions must be recorded on a data sheet. A separate data sheet shall be submitted for each site visit. Similar information documented in narrative form. A template data sheet can be found on the County website at <http://www.co.thurston.wa.us/permitting/gopher-reviews/index.html>.

The data sheets are provided in Appendix C.

Document and describe which areas of the parcel can not be screened due to limited accessibility and/or dense understory. This should be depicted on an aerial or site plan submitted to the County.

This area is depicted in Appendix C.

6. The ground must be easily visible to ensure mound observation and identification. Request mowing if necessary to ensure visibility. Wait two to three weeks after mowing before beginning screening.

The site was mowed in the survey area, The ground was visible in all areas surveyed.

F. Detailed Field Methodology

1. The survey crew orients themselves with the layout of the property using aerial maps, and strategizes their route for walking through the property.

2. Start GPS to record survey route.

3. Walk the survey transects methodically, slowly walking a straight line and scanning an area approximately 2-3 meters to the left and right as you walk, looking for mounds. Transects should be no more than five (5) meters apart when conducted by a single individual.

The survey was conducted according to protocol.

4. If the survey is performed by a team, walk together in parallel lines approximately 5 meters apart while you are scanning left to right for mounds.

The survey was conducted according to the protocol.

5. At each mound found, stop and identify it as a MPG or mole mound. If it is a MPG mound, identify it as a singular mound or a group (3 mounds or more) on a data sheet to be submitted to the County. (County has developed data sheets for your use on <http://www.co.thurston.wa.us/permitting/gopher-reviews/index.html>)

Only mole mounds were found.

6. Record all positive MPG mounds, likely MPG mounds, and MPG mound groups in a GPS unit that provides a date, time, georeferenced point, and other required information in County GPS data instruction for each MPG mound. Submit GPS data in a form acceptable to the County. County GPS Data instruction can be found at <http://www.co.thurston.wa.us/permitting/gopher-reviews/index.html>

N/A

7. Photograph all MPG mounds or MPG mound groups. At a minimum, photograph MPG mounds or MPG mound groups representative of MPG detections on site.

No MPG mounds found.

8. Photos of mounds should include one that has identifiable landscape features for reference. In order to accurately depict the presence of gopher activity on a specific property, the following series of photos should be submitted to the County:

a. At least one up-close photo to depict mound characteristics

No MPG mounds were found.

b. At least one photo depicting groups of mounds as a whole (when groups are

encountered).

N/A

c. At least one photo depicting gopher mounds with recognizable landscape features in the background, at each location where mounds are detected on a property

N/A

d. Photos can be taken with the GPS unit or a separate, camera, preferably a camera with locational features (latitude, longitude)

N/A

e. Photo point description or noteworthy landscape or other features to aid in relocation. Additional photos to be considered.

Photos are found in Appendix A

Additional photos

f. The approximate building footprint location from at least two cardinal directions.

N/A

g. Landscape photos to depict habitat type and in some cases to indicate why not all portions of a property require gopher screening.

Appendix A Photos

9. Describe and/or quantify what portion and proportion of the property was screened, and record your survey route and any MPG mounds found on either an aerial or parcel map.

The wetlands associated with Yelm Creek were excluded, but as much of the site was surveyed as possible.

10. If MPG mounds are observed on a site, that day's survey effort should continue until the entire site is screened and all mounds present identified, but additional site visits are not required.

No MPG mounds were found.

11. In order for the County to accurately review Critical Area Reports submitted in lieu of County field inspections the information collected in the field (GPS, data sheets, field notes, transect representations on aerial, etc.) shall be filed with the County prior to October 31, 2019. GPS information (in electronic form) shall be submitted in a form approved by the County.

No mounds were found, the information was submitted in an acceptable format.

3.0 CURRENT CONDITIONS AND METHODS FOR SURVEYS

Land Services NW LLC conducted surveys on June 7, 2019 and July 13, 2019. The survey was conducted with transects 5 meters apart as available and as mounds were encountered, a GPS point was taken with a Garmin 64 ST in WGS 84 projection and a photo was usually taken (**Appendix A**). The site was recently mowed and the ground was visible.

4.0 RESULTS

As previously mentioned, the area has more and less preferred soils for the MPG. The Mazama pocket gopher mounds were not found on site. The walking survey noted mounds

which were found in a linear association typical of moles. The mounds were circular and not crescent shaped, clumpy and not finely sifted, and there were no visible plugs. All these indicators make it very likely that the area has moles, but no mounds typical of the Mazama pocket gopher were found during the limited experience of the survey.

5.0 CONCLUSIONS

A survey was conducted using the protocol required by Thurston County to review for the presence and absence of the Mazama Pocket Gopher and Upland Prairie Habitat. No evidence of the Mazama Pocket Gopher was found and no evidence of regulated prairie was found during the limited experience of the survey.

Appendix A Photos







Appendix B

WDFW Priority Habitats and Species Map



WASHINGTON DEPARTMENT OF FISH AND WILDLIFE PRIORITY HABITATS AND SPECIES REPORT

SOURCE DATASET: PHSPlusPublic
REPORT DATE: 09/11/2019 12:49

Query ID: P190911004845

Common Name	Site Name	Priority Area	Accuracy	Federal Status	Sensitive Data	Source Entity
Scientific Name	Source Dataset	Occurrence Type		State Status	Resolution	Geometry Type
Notes	Source Record	More Information (URL)	Mgmt Recommendations	PHS Listing Status		
	Source Date					
Coho	Yelm Creek	Occurrence/Migration	NA	N/A	N	Lines
Oncorhynchus kisutch	SWIFD 49064	Occurrence/migration http://wdfw.wa.gov/wlm/diversity/soc/soc.htm		N/A	AS MAPPED	Lines
		http://wdfw.wa.gov/publications/pub.php?		PHS LISTED		
Fall Chinook	Yelm Creek	Occurrence/Migration	NA	N/A	N	Lines
Oncorhynchus tshawytscha	SWIFD 49058	Occurrence/migration http://wdfw.wa.gov/wlm/diversity/soc/soc.htm		N/A	AS MAPPED	Lines
		http://wdfw.wa.gov/publications/pub.php?		PHS LISTED		
Freshwater Emergent	N/A	Aquatic Habitat	NA	N/A	N	US Fish and Wildlife Service Polygons
	NW/Wetlands	Aquatic habitat http://www.ecy.wa.		N/A	AS MAPPED	
		Aquatic Habitat	NA	N/A	N	US Fish and Wildlife Service Polygons
		Aquatic habitat http://www.ecy.wa.		N/A	AS MAPPED	
Pink Salmon Odd Year	Yelm Creek	Occurrence/Migration	NA	N/A	N	Lines
Oncorhynchus gorbuscha	SWIFD 49068	Occurrence/migration http://wdfw.wa.gov/wlm/diversity/soc/soc.htm		N/A	AS MAPPED	Lines
		http://wdfw.wa.gov/publications/pub.php?		PHS LISTED		
Resident Coastal Cutthroat	Yelm Creek	Occurrence/Migration	NA	N/A	N	Lines
Oncorhynchus clarki	SWIFD 49057	Occurrence/migration http://wdfw.wa.gov/wlm/diversity/soc/soc.htm		N/A	AS MAPPED	Lines
		http://wdfw.wa.gov/publications/pub.php?		PHS LISTED		
Sockeye	Yelm Creek	Occurrence/Migration	NA	N/A	N	Lines
Oncorhynchus nerka	SWIFD 49071	Occurrence/migration http://wdfw.wa.gov/wlm/diversity/soc/soc.htm		N/A	AS MAPPED	Lines
		http://wdfw.wa.gov/publications/pub.php?		PHS LISTED		









Common Name Scientific Name	Site Name Source Dataset Source Record	Priority Area Occurrence Type More Information (URL) Mgmt Recommendations	Accuracy	Federal Status State Status PHS Listing Status	Sensitive Data Resolution	Source Entity Geometry Type
Townsend's Big-eared Bat <i>Corynorhinus townsendii</i>	WS_OccurPoint 109970 June 22, 2009	Communal Roost Biotic detection http://wdfw.wa.gov/publications/pub.php?	GPS	N/A Candidate PHS LISTED	Y TOWNSHIP	WA Dept. of Fish and Wildlife Points
Townsend's Big-eared Bat <i>Corynorhinus townsendii</i>	WS_OccurPoint 109972 June 23, 2009	Communal Roost Biotic detection http://wdfw.wa.gov/publications/pub.php?	GPS	N/A Candidate PHS LISTED	Y TOWNSHIP	WA Dept. of Fish and Wildlife Points
Winter Steelhead <i>Oncorhynchus mykiss</i>	Yelm Creek SWIFD 49073	Occurrence/Migration Occurrence/migration http://wdfw.wa.gov/wim/diversity/soc/soc.htm http://wdfw.wa.gov/publications/pub.php?	NA	N/A N/A PHS LISTED	N AS MAPPED	Lines
Yuma myotis <i>Myotis yumanensis</i>	WS_OccurPoint 141079 June 05, 2004	Breeding Area Biotic detection http://wdfw.wa.gov/publications/pub.php?	GPS	N/A N/A PHS LISTED	Y TOWNSHIP	WA Dept. of Fish and Wildlife Points

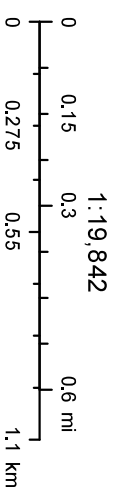
DISCLAIMER. This report includes information that the Washington Department of Fish and Wildlife (WDFW) maintains in a central computer database. It is not an attempt to provide you with an official agency response as to the impacts of your project on fish and wildlife. This information only documents the location of fish and wildlife resources to the best of our knowledge. It is not a complete inventory and it is important to note that fish and wildlife resources may occur in areas not currently known to WDFW biologists, or in areas for which comprehensive surveys have not been conducted. Site specific surveys are frequently necessary to rule out the presence of priority resources. Locations of fish and wildlife resources are subject to variation caused by disturbance, changes in season and weather, and other factors. WDFW does not recommend using reports more than six months old.

WDFW Test Map



September 11, 2019

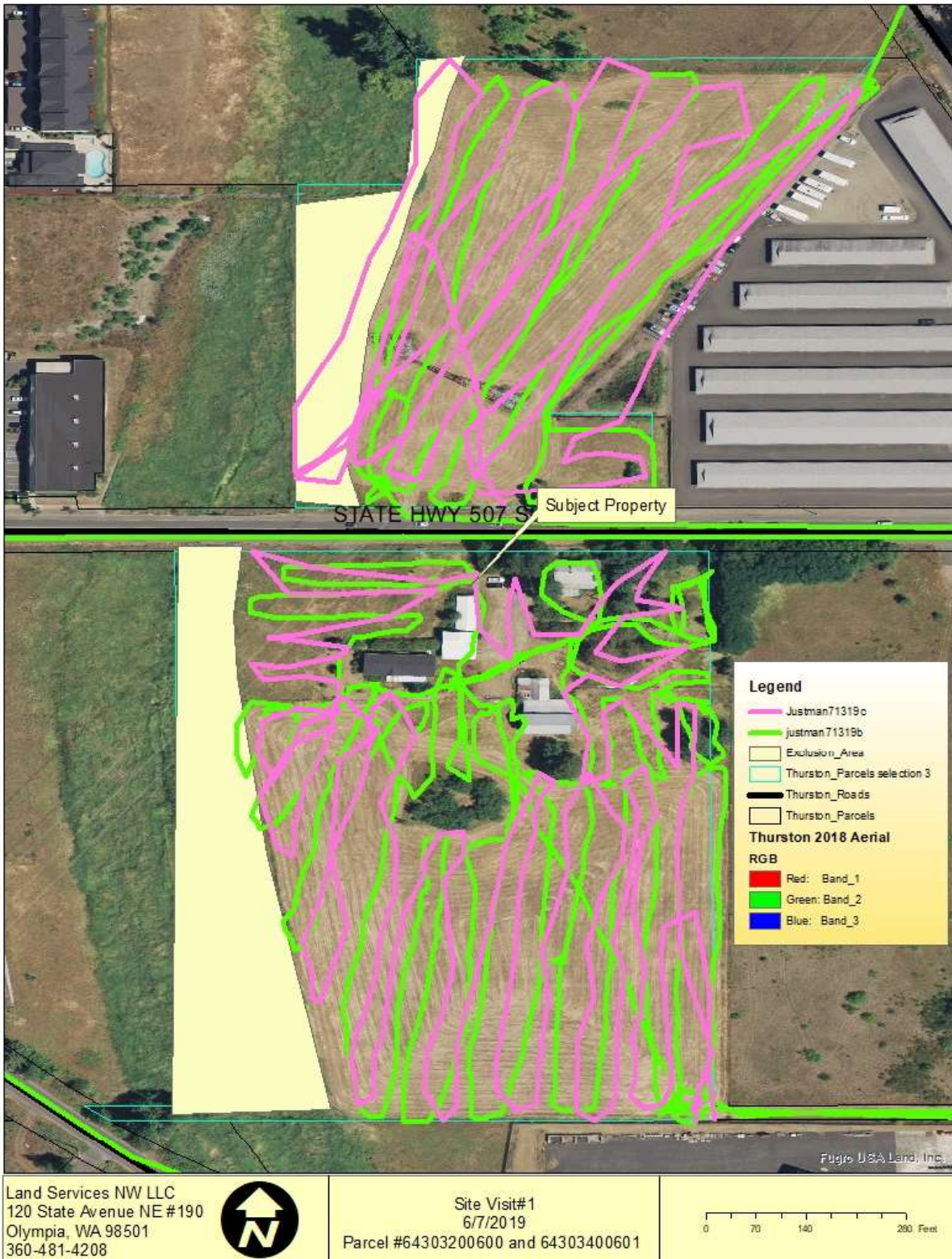
-  PHS Report Clip Area
-  PT
-  LN
-  POLY
-  AS MAPPED
-  SECTION
-  QTR-TWP
-  TOWNSHIP



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Appendix C

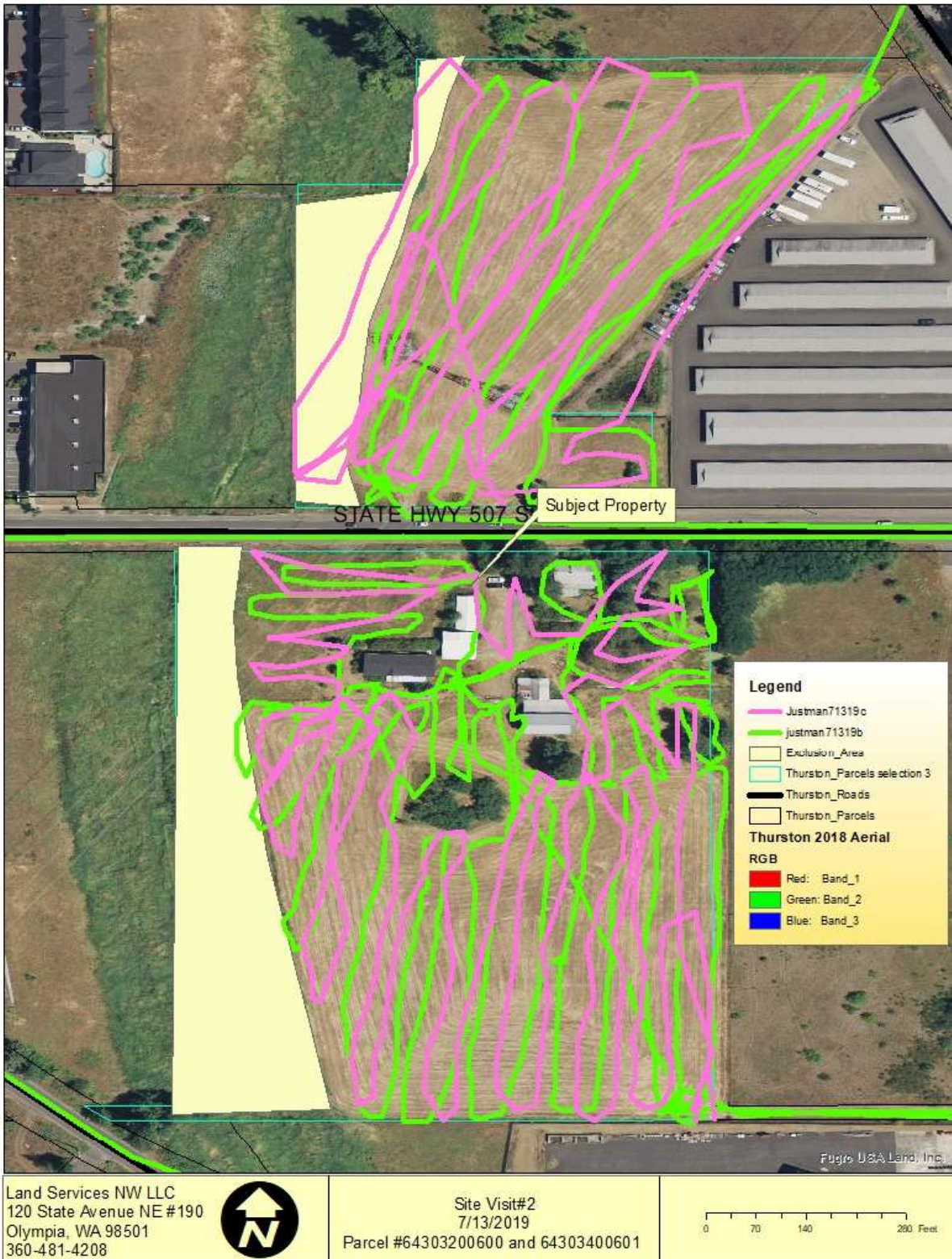
MPG Survey Form and Transect Maps



2019 Thurston County Mazama Pocket Gopher Screening Field Form Site Visit Date: June 7, 2019

<p>Site Name and Parcel #</p>	<p>Parcel #: <u>64303200600 and 64303400601</u></p> <p>Project #: _____</p> <p>Site/Landowner: <u>Benjamin and Daniel Justman</u></p>
<p>How were the data collected? (circle the method for each)</p>	<p>Transect: Trimble Garmin Aerial</p> <p>Mounds Trimble Garmin Aerial</p> <p>Notes: <u>No mounds found</u></p>
<p>Field Team Personnel: (Indicate all staff present, CIRCLE who filled out form)</p>	<p>Name: Alex Callender</p> <p>Name: Ian McDonald</p> <p>Name: _____</p>
<p>Others onsite (name/affiliation)</p>	<p>_____</p>
<p>Site visit # 1 (CIRCLE all that apply)</p>	<p>1 st 2nd Unable to screen</p> <p>Notes: _____</p>
<p>Do onsite conditions preclude the need for further visits?</p>	<p>Yes No</p> <p>Dense woody cover that encompasses the entire site (trees/shrubs) that appears to preclude any potential MPG use.</p> <p>Impervious Compacted Graveled Flooded</p> <p>Other _____</p>
<p>Describe visibility for mound detection:</p>	<p>Poor Fair Good Notes: _____</p>
<p>Request mowing? (CIRCLE and DESCRIBE WHERE MOWING IS NEEDED and SHOW ON AERIAL PHOTO)</p>	<p>Yes No N/A Notes: <u>Area was sufficiently mowed ground was visible in all surveyed areas.</u></p>

Mounds observed over the whole site are characteristic of:	MPG Mounds	Likely MPG Mounds	Indeterminate	Likely Mole Mounds	Mole Mounds
Quantify or describe amount of each type and approx. # of mounds <i>Group = 3 mounds or more</i>	None found	None found	None found	N/A	~20
No MPG mounds (circle)					
MPG mounds in GPS? (CIRCLE and DESCRIBE) If MPG mounds present, entered in GPS?	<input checked="" type="radio"/> None All Most Some Notes: Yes No <input checked="" type="radio"/> N/A				
Does woody vegetation onsite match aerial photo?	<input checked="" type="radio"/> Yes No - describe differences and show on parcel map/aerial:				
What portion(s) of the property was screened? (CIRCLE and DESCRIBE)	All <input checked="" type="radio"/> Part - describe and show on parcel map/aerial: See Appendix C Maps Wetlands Associated with Yelm Creek were excluded.				
Notes -	Describe, and show on parcel map/aerial if applicable: A parcel map shows area of survey in Appendix C				
Team reviewed and agreed to data recorded on form? (CIRCLE, and EXPLAIN if "No")	<input checked="" type="radio"/> Yes No Reviewed by initials: <u>ASC</u> <u>IM</u> _____ Notes:				



2019 Thurston County Mazama Pocket Gopher Screening Field Form Site Visit Date: July 13, 2019

<p>Site Name and Parcel #</p>	<p>Parcel #: <u>64303200600 and 64303400601</u></p> <p>Project #: _____</p> <p>Site/Landowner: <u>Benjamin and Daniel Justman</u></p>
<p>How were the data collected? (circle the method for each)</p>	<p>Transect: Trimble Garmin Aerial</p> <p>Mounds Trimble Garmin Aerial</p> <p>Notes: <u>No mounds found</u></p>
<p>Field Team Personnel: (Indicate all staff present, CIRCLE who filled out form)</p>	<p>Name: Alex Callender</p> <p>Name: Ian McDonald</p> <p>Name: _____</p>
<p>Others onsite (name/affiliation)</p>	<p>_____</p>
<p>Site visit # 2 (CIRCLE all that apply)</p>	<p>1 st 2nd Unable to screen</p> <p>Notes: _____</p>
<p>Do onsite conditions preclude the need for further visits?</p>	<p>Yes No</p> <p>Dense woody cover that encompasses the entire site (trees/shrubs) that appears to preclude any potential MPG use.</p> <p>Impervious Compacted Graveled Flooded</p> <p>Other _____</p>
<p>Describe visibility for mound detection:</p>	<p>Poor Fair Good Notes: _____</p>
<p>Request mowing? (CIRCLE and DESCRIBE WHERE MOWING IS NEEDED and SHOW ON AERIAL PHOTO)</p>	<p>Yes No N/A Notes: <u>Area was sufficiently mowed ground was visible in all surveyed areas.</u></p>

Mounds observed over the whole site are characteristic of:	MPG Mounds	Likely MPG Mounds	Indeterminate	Likely Mole Mounds	Mole Mounds
Quantify or describe amount of each type and approx. # of mounds <i>Group = 3 mounds or more</i>	None found	None found	None found		~20
No MPG mounds (circle)					
MPG mounds in GPS? (CIRCLE and DESCRIBE) If MPG mounds present, entered in GPS?	None	All	Most	Some	
	Notes:	Mostly fully forested			
	Yes	No	N/A		
Does woody vegetation onsite match aerial photo?	Yes	No - describe differences and show on parcel map/aerial:			
What portion(s) of the property was screened? (CIRCLE and DESCRIBE)	All	Part - describe and show on parcel map/aerial: See Appendix C Maps			
Notes -	Describe, and show on parcel map/aerial if applicable: A parcel map shows area of survey in Appendix C				
Team reviewed and agreed to data recorded on form? (CIRCLE, and EXPLAIN if "No")	Yes	No	Reviewed by initials: <u>ASC</u> <u>SMC</u> _____		
	Notes:				

Appendix D

Site Plan

