Initial Study and Draft Mitigated Negative Declaration

Grading Permit Vegetation Restoration APN 120-035-003

Grading Permit GP2023-09C

1/24/2024

Prepared By

Del Norte County
Community Development Department
Planning Division
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Exhibits and Appendices Follow

Project Information Summary

1. Project Title: Grading Permit Vegetation Restoration APN 120-035-003
Grading Permit

2. Lead Agency Name and Address: Del Norte County
Planning Commission
981 H Street, Suite 110
Crescent City, CA 95531

3. Contact Person and Phone Number: Maia Mello
(707) 464-7254
mmello@co.del-norte.ca.us

4. Project Location and APN: 701 Willow St, Crescent City, CA 95531
APN: 120-035-003

5. Project Sponsor's Name and Address: Brian Nickens
682 Mill Valley Pkwy
Redding, CA 96003

6. County Land Use: Urban Residential (2-6 du/acre)

7. County Zoning: Zone District R-1, B6 (residential, 6000 sq. ft. min. lot size)

8. Description of Project:

Brian Nickens, owner of the project parcel, conducted grading and major vegetation removal at APN 120-035-003 in Del Norte County without the benefit of a grading permit. The grading and vegetation removal occurred prior to 2023. This project includes review of an after-the-fact grading permit with recommended revegetation and monitoring.

APN 120-035-003 is located on an unimproved roadway easement called Willow St in Crescent City, California (Del Norte County). The parcel is zone R-1 (residential) with a B-6 overlay (minimum lot size of 6000 sq. ft.). The General Plan Land Use designation for this area is Urban Residential (2-6 dwelling units per acre). The parcel is approximately 1.2 acres in size and is heavily wooded. The areas to the west and to the south have been developed with residences at the same density as Mr. Nicken's parcel is zoned for. To the north lay the Marhoffer Creeks Special Study Area. East of Mr. Nicken's parcel are more heavily wooded lots like Mr. Nicken's was originally. The parcel is in the California Coastal Zone.

As a requirement of the grading permit application and after the unpermitted grading and vegetation removal were conducted, a biological assessment, wetland delineation and botanical surveys were conducted by Frank Galea (Galea Biological Consulting) and Kyle Wear (botanist) respectively. Mr. Galea's report defined the parcel's wooded canopy as Sitka spruce with occasional occurrences of shore pine throughout.

The clearing and grading occurred over an area approximately 70' (north/south) by 47' (east/west) near the southern end of the parcel. California Department of Fish and Wildlife was consulted pursuant to Del Norte County Code and provided guidance for a mitigation and monitoring plan that was later completed by Frank Galea and included revegetation with native species. The revegetation plan will use only native species (red

elderberry, cascara, evergreen huckleberry, sword fern, and salal. The revegetation would occur during late fall or winter, during a period of assured rainfall to increase the likelihood of the planting's survival. The plan also requires a 90% success rate by the end of year one. If the applicant cannot achieve that rate, additional plantings would be required and another year of monitoring would be required until the success rate of 90% is reached.

9. Surrounding Land Uses and Settings:

Immediately to the north of the project parcel, the General Plan Land Use designation is Resource Conservation Area (RCA). The areas to the south, east and west are all designated Urban Residential (2-6 du per acre).

10. Required Approvals: Grading Permit entitlement by the Del Norte Planning Commission.

11. Other Approval (Public Agencies): N/A

12. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?

Native American tribes, traditionally and culturally affiliated with the project area have been notified of the project application completion and the beginning of the AB 52 consultation period pursuant to PRC §21080.3.1. Notification of the beginning of the AB 52 consultation period was provided 12/7/2023. No requests for consultation pursuant to PRC §21080.3.1 were received.

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" without mitigation as indicated by the checklist on the following pages. All mitigation measures are provided in the Mitigation Monitoring and Reporting Program.

☐	Aesthetics	☐	Agriculture and Forestry Resources	☐	Air Quality
☒	Biological Resources	☒	Cultural Resources	☐	Energy
☐	Geology/Soils	☐	Greenhouse Gas Emissions	☐	Hazards & Hazardous Materials
☐	Hydrology / Water Quality	☐	Land Use / Planning	☐	Mineral Resources
☐	Noise	☐	Population / Housing	☐	Public Services
☐	Recreation	☐	Transportation	☒	Tribal Cultural Resources
☐	Utilities / Service Systems	☐	Wildfire	☐	Mandatory Findings of Significance

Determination

On the basis of this initial evaluation:

☐	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
☒	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
☐	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
☐	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
☐	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

_____ _____

Maia Mello Date

Planner, Del Norte County Community Development Department

Environmental Checklist

1. Aesthetics

Except as provided in Public Resources Code Section 21099, would the project:	**Potentially Significant Impact**	**Less Than Significant Impact with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or public views of the site and its surroundings? (Public views are those that are experienced from publically accessible vantage points). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

2. Agriculture and Forest Resources

Would the project:	**Potentially Significant Impact**	**Less Than Significant Impact with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☒	☐
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Discussion of Impacts

d. The revegetation of the parcel will be further discussed in section 4 of the checklist. Biologist Frank Galea has indicated in his biological assessment report that most of what was removed during the unpermitted grading/vegetation removal was cascara. Few if any Sitka spruce were removed during the unpermitted grading. The loss of forest land is less than significant through mitigation. No future development of the property is being proposed by this application.

3. Air Quality

Would the project:	**Potentially Significant Impact**	**Less Than Significant Impact with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☐	☒
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒
d) Result in other emissions (such as those leading to odors or dust) adversely affecting a substantial number of people?	☐	☐	☐	☒

4. Biological Resources

Would the project:	**Potentially Significant Impact**	**Less Than Significant Impact with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan?	☐	☐	☐	☒

Discussion of Impacts

a. Although the parcel is within the range for the American Porcupine, the obscure bumble bee, and the Northern red-legged frog (all state species of special concern), there is not preferred habitat for any at the project site. The American Porcupine could potentially forage in wooded areas of the parcel and there is sufficient remaining habitat for that to occur according to Frank Galea's biological Assessment. The obscure bumblebee does not have appropriate habitat on the parcel as it prefers open meadows and fields "where flowers are abundant" ('Nickens Biological Assessment', Galea Biological Consulting, September 2022). The northern red-legged frog prefers habitat like that found on the far northern edge of the parcel but with the project site being over 100 yards away from that habitat area, Mr. Galea opines that the frog would not be found at the project site.

b. According to Mr. Galea's report, the Sitka/Shorepine forest likely meets the definitions of Environmentally Sensitive Habitat Area (ESHA) and Sensitive Natural Community (SNC) "because the Sitka spruce and shore pine community type is rare in California" ('Mitigation Planting for Nickens Property, Marhoffer Creek Drainage, Del Norte County' by Frank Galea, Galea Biological Consulting).

Because the grading occurred without benefit of permits or environmental review ESHA and the SNC at the project site and it is not known exactly what species of vegetation were removed by the unpermitted grading, it is difficult to know the exact number of Sitka or other rare plant that were affected. It is acknowledged by Mr. Galea that at least one Sitka appears to have been removed (as well as numerous alder) and that the community of vegetation at the impacted site was Environmentally Sensitive Habitat Area (ESHA). This project intends to remedy and mitigate impacts to ESHA by following Frank Galea's plan for revegetation of the impacted are with native species plantings (see 'Mitigation Planting for Nickens Property, Marhoffer Creek Drainage, Del Norte County' in the document attachments). In the plan, the applicant proposes to hand plant 25 plants and 10 trees in and around the affected area (of the following varieties: red elderberry, cascara, evergreen huckleberry, sword fern, alder, and salal). "Plantings would occur during the late fall or winter, during a period where rainfall is assured, to increase the probability of planting success" ('Mitigation Planting for Nickens Property, Marhoffer Creek Drainage, Del Norte County' by Frank Galea, Galea Biological Consulting).

It should also be noted that many of the Sitka spruce on the parcel surrounding the project area are encapsulated with invasive English Ivy. The revegetation plan includes a recommendation from biologist Frank Galea to remove the ivy from the existing trees on the parcel which will increase the health and longevity of the Sitka there.

c. Although the Marhoffer Creek Special Study Area (MCSSA) and wetlands associated with the MCSSA are located on or very near the northwestern corner of the property over 100' away, impacts to the wetland are believed to be less than significant due to any further disruption of the area from the replanting activities.

d. The project location is very close to MCSSA, a known wildlife rich riparian and marsh habitat. The project will be a small-scale hand re-planting of 25 plants of a native variety. The project is not believed to have any impact on or interfere with migration. There is a probability that the wetlands of the MCSSA provide feeding and resting areas for some of the birdlife utilizing the nearby rookery at Castle Rock. The project site is located more than 100' away from the wetland and dense urban residential development located to the west and south of the project parcel have not been linked to decrease in the success of the rookery. At the time of the writing of the Del Norte County General Plan's Coastal element, "the rookery at Castle Rock [was] considered one of the most significant coastal rookeries in California."

e. The Del Norte County General Plan Coastal Element mirrors the California Coastal Act in its protection of Environmentally Sensitive Habitat Area (ESHA) to include Sitka spruce and shore pine forest. The project is to remediate grading violations that occurred without the benefit of permits. Had permits been sought, a thorough review of the project in light of whether it met standards for protection of ESHA under the Coastal Element would have occurred. As it is, this project seeks to replace some of the ESHA and sensitive natural community that was lost during the unpermitted grading.

f. There are provisions for protection of the Marhoffer Creek Special Study Area in the Coastal Element of the Del Norte County General Plan. No activities proposed in the 'Mitigation Planting for Nickens Property, Marhoffer Creek Drainage Del Norte County' plan completed by Frank Galea for this project is in conflict with the special provisions for protection of the MCSSA.

Mitigation Measure BIOL-1

Permit conditions will reflect requirements of the mitigation and monitoring plan for revegetation with native species (by hand planting) and removal of invasive species at the parcel (English ivy) in accordance with written planting plan provided by Frank Galea for this project.

Timing/Implementation: Condition recommended at local public hearing.
Enforcement: County Community Development Department
Monitoring: Within 12 months of planting, 90% of plantings must be viable. A report by a qualified professional provided to the county will document the success rate after 12 months of monitoring. If the benchmark cannot be achieved, it must be replanted until a 12 month period after planting achieves 90% viability success.

5. Cultural Resources

Would the project:	**Potentially Significant Impact**	**Less Than Significant Impact with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

Discussion of Impacts

a-c. The project parcels are located in the Aboriginal Territory of several local tribes (Elk Valley Rancheria and Tolowa Dee-ni' Nation). All development projects in areas of significance to local tribes will contain an inadvertent discovery condition to protect resources that may be unearthed during ground disturbing activities.

See 'Tribal Cultural Resources' section for further discussion of Tribal Cultural Resources Impacts.

Mitigation Measure CULT-1

An inadvertent discovery condition shall be added to the Coastal Development Permit stating that in the event of archeological or cultural resources are encountered replanting, work shall be temporarily halted and a qualified

archaeologist, local tribes, and the County shall be immediately contacted. Workers shall avoid altering the materials and their context until a qualified professional archaeologist, in collaboration with the local tribes has evaluated the situation and provided appropriate recommendations. Project personnel shall not collect any resources.

Timing/Implementation: Condition recommended at local public hearing.
Enforcement: County Community Development Department
Monitoring: N/A

6. Energy

Would the project:	**Potentially Significant Impact**	**Less Than Significant Impact with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☐	☒
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

7. Geology and Soils

Would the project:	**Potentially Significant Impact**	**Less Than Significant Impact with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☒
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒

8. Greenhouse Gas Emissions

Would the project:	**Potentially Significant Impact**	**Less Than Significant Impact with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☐	☒
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

9. Hazards and Hazardous Materials

Would the project:	**Potentially Significant Impact**	**Less Than Significant Impact with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☒
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☒	☐
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☒	☐	☒
g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

Discussion of Impacts

e. This project is situated approximately one mile from the Del Norte County Regional Airport. No safety hazard or excessive noise will occur during the revegetation.

10. Hydrology and Water Quality

Would the project:	**Potentially Significant Impact**	**Less Than Significant Impact with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) result in substantial erosion or siltation on-or off-site?	☐	☐	☒	☐
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☒	☐
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional source of polluted runoff; or	☐	☐	☒	☐
iv) impede or redirect flood flows?	☐	☐	☐	☒
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable ground water management plan?	☐	☐	☐	☒

Discussion of Impacts

a. The project area is flat and has already seen native recruitment in the span of time between the unpermitted grading and vegetation removal and now. Runoff from the disruption of soil to complete the revegetation plan will be minimal and will constitute a less than significant impact to water quality of surface water in the Marhoffer Creek Special Study Area to the northwest of the project site.

c. No impervious surfaces are planned in this project. A drainage immediately west of the project site would be sufficient to funnel any increased temporary runoff due to the vegetation removal safely away from the site. Native plant recruitment has already begun in the affected area which contributes to lessening any runoff due to loss of the plant life in the area from the unpermitted grading. The Marhoffer Creek wetland on the northwestern corner of the property is identified in the Coastal Element of the Del Norte County General Plan of being capable of "absorb[ing] storm impacts during periods of heavy rainfall" and "retain[ing] water during dry seasons" (pg. 112 of Del Norte County General Plan Coastal Element 1983 LCP). A resource like the MCSSA is credited with being able to filter sediment and regulate surface and subsurface water flow. Any additional runoff from the replanting of the project area would constitute a less than significant on the MCSSA and surrounding parcels.

d. The parcel is partially in the tsunami run-up zone but due to the elevation at the project site, the project area is likely not. Additionally, there are no pollutants that could be released in the event of project inundation as this is parcel is raw land.

11. Land Use and Planning

Would the project:	**Potentially Significant Impact**	**Less Than Significant Impact with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation of an agency adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

12. Mineral Resources

Would the project:	**Potentially Significant Impact**	**Less Than Significant Impact with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

13. Noise

Would the project:	**Potentially Significant Impact**	**Less Than Significant Impact with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☒
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

14. Population and Housing

Would the project:	**Potentially Significant Impact**	**Less Than Significant Impact with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

15. Public Services

Would the project:	**Potentially Significant Impact**	**Less Than Significant Impact with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

16. Recreation

Would the project:	**Potentially Significant Impact**	**Less Than Significant Impact with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

17. Transportation

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☐	☒
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision(b)?	☐	☐	☐	☒
c) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d) Result in inadequate emergency access?	☐	☐	☐	☒

18. Tribal Cultural Resources

Would the project:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☒	☐	☐
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Discussion of Impacts

a. The project parcels are located in the Aboriginal Territory of several local tribes (Elk Valley Rancheria and Tolowa Dee-ni' Nation). All development projects in areas of significance to local tribes will contain an inadvertent discovery condition to protect resources that may be unearthed during ground disturbing activities. No cultural resources are known to exist on-site. The County records were searched for known cultural sites in the general project vicinity, and although some are within the general area, none are specifically known about on this parcel. Notice was provided to the two tribes traditionally culturally affiliated with the project area and no comment was given with regard to cultural resources. Additionally, cultural staff from the Tolowa-Dee-ni' Nation is a voting member of the County Environmental Review Committee which reviews projects and makes CEQA recommendations. While resources are not known to exist on-site, the possibility of an inadvertent discovery is always possible during construction or other implementation activities associated with the project. In this case, mitigation measures included as TRIB-1 assigned to the project will ensure that any resources located on-site will be properly treated as to not cause a significant impact.

Mitigation Measure TRIB-1

An inadvertent discovery condition shall be added to the Grading Permit stating that in the event of archaeological or cultural resources are encountered during construction, work shall be temporarily halted and a qualified archaeologist, local tribes, and the County shall be immediately contacted. Workers shall avoid altering the materials and their context until a qualified professional archaeologist, in collaboration with the local tribes has evaluated the situation and provided appropriate recommendations. Project personnel shall not collect any resources.

Timing/Implementation: Condition recommended at local public hearing.
Enforcement: County Community Development Department
Monitoring: N/A

19. Utilities and Service Systems

Would the project:	**Potentially Significant Impact**	**Less Than Significant Impact with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☐	☒
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the providers existing commitments?	☐	☐	☐	☒
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☐	☒
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☐

20. Wildfire

Would the project:	**Potentially Significant Impact**	**Less Than Significant Impact with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water	☐	☐	☐	☒

sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

21. Mandatory Findings of Significance

Would the project:	**Potentially Significant Impact**	**Less Than Significant Impact with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

a. The grading and vegetation removal that occurred without the benefit of a grading permit did impact environmentally sensitive habitat area however the applicant seeks to remedy impacts by revegetating and removing invasive species on his parcel. California Department of Fish and Wildlife staff assisted with review of the site and recommendations for creating a healthy community in the place of the lost vegetation. The mitigation measures will be monitored for a minimum period of 12 months to ensure planting success and invasive species removal. Conditions recommended by staff will ensure that permit approval occurs only if the applicant agrees to restoring the damaged area.

b. Cumulative impacts are less than significant as native species planting and invasive species removal efforts will positively impact the health of the environmentally sensitive habitat area over time.

c. No impacts are expected to human beings from the proposed project are expected.

Mitigation Monitoring Plan

Mitigation Measure BIOL-1

Permit conditions will reflect requirements of the mitigation and monitoring plan for revegetation with native species (by hand planting) and removal of invasive species at the parcel (English ivy) in accordance with written planting plan provided by Frank Galea for this project.

Timing/Implementation: Condition recommended at local public hearing.
Enforcement: County Community Development Department
Monitoring: Within 12 months of planting, 90% of plantings must be viable. A report by a qualified professional provided to the county will document the success rate after 12 months of monitoring. If the benchmark cannot be achieved, it must be replanted until a 12 month period after planting achieves 90% viability success.

Mitigation Measure CULT-1

An inadvertent discovery condition shall be added to the Coastal Development Permit stating that in the event of archeological or cultural resources are encountered replanting, work shall be temporarily halted and a qualified archaeologist, local tribes, and the County shall be immediately contacted. Workers shall avoid altering the materials and their context until a qualified professional archaeologist, in collaboration with the local tribes has evaluated the situation and provided appropriate recommendations. Project personnel shall not collect any resources.

Timing/Implementation: Condition recommended at local public hearing.

Enforcement: County Community Development Department

Monitoring: N/A

Mitigation Measure TRIB-1

An inadvertent discovery condition shall be added to the Grading Permit stating that in the event of archeological or cultural resources are encountered during construction, work shall be temporarily halted and a qualified archaeologist, local tribes, and the County shall be immediately contacted. Workers shall avoid altering the materials and their context until a qualified professional archaeologist, in collaboration with the local tribes has evaluated the situation and provided appropriate recommendations. Project personnel shall not collect any resources.

Timing/Implementation: Condition recommended at local public hearing.

Enforcement: County Community Development Department

Monitoring: N/A

Engineering Division
Grading Permit Application

981 H Street, Suite 110
Crescent City, CA 95531
707-464-7229

Today's Date:	10 - 11 - 22
APN:	120 - 035 - 003
Property Owner's Name(s):	Brian Nickens
Site Address:	701 Willow Street, Crescent City, Ca 95531
Mailing Address:	682 Mill Valley Parkway, Redding Ca. 96003
Landline/Cell/Fax:	
Applicant/Agent's Name:	DKM + Horrocks
Mailing Address:	P.O. Box 1307, Anderson, Ca 96007
Landline/Cell/Fax:	(530) 365 - 5610
Brief Project Description:	Tree & vegetation clearing for single family residence

*** DO NOT SUBMIT THE APPLICATION OR SUPPORTING MATERIALS ELECTRONICALLY ***

Will this permit application support any existing or future cannabis activity? ☐ Yes ☒ No

Vegetation Removal:	☒ Yes	☐ No	
Tree Removal [1]:	☒ Yes	☐ No	[1] A form of Vegetation Removal.
Cut/Fill:	☐ Structural	☐ Non-Structural	☒ Neither
Depth of Cut:	☒ Less than 5 ft	☐ 5 ft or Greater	
Slope of Cut:	☒ 2:1 (x:y) or Less	☐ Greater than 2:1 (x:y)	
Depth of Fill:	☒ Less than 1 ft	☐ 1ft to Less than 3 ft	☐ 3 ft or Greater
Slope of Fill:	☒ 5:1 (x:y) or Less	☐ Greater than 5:1 (x:y)	
Volume of Material:	☐ Less than 500 cy	☐ 500 cy or Greater	
Surface Area to be Graded:	_____	☐ sf	☐ acres
Supporting Materials:	☐ Detailed Project Description	☒ Assessor's Parcel Map	☒ Deed
	☒ Plot Plan	☒ Project Plans	☐ Engineer's Estimate at PW
	☐ CAL FIRE Harvesting Forms	☐ SRA Forms (County)	☐ _____
	☒ Biological Assessment	☐ Wetland Delineation	☐ _____

* Assessor's Parcel Map: A copy on 11" x 17" paper or as provided to the applicant by the Del Norte County Assessor's Office.
* Deed: A copy of the recorded document available to the applicant in the Del Norte County Recorder's Office.
* Plot Plan: A scaled drawing showing all property lines, grading areas, roads, structures, ditches, culverts, swales, fences, septic tanks, leach fields, etc.

I declare under penalty of perjury that this application and all the foregoing are true and correct.

Property Owner or Applicant/Agent

10-31-22
Date

PERMIT #: 2023-09

PLANNING DIVISION:

Zoning:	☐ Consistent	☐ Inconsistent	
* Provide Zoning designation in this area of this form if it is not located on another form in the file.			
General Plan Land Use:	☐ Consistent	☐ Inconsistent	
* Provide General Plan Land Use designation in this area of this form if it is not located on another form in the file.			
Coastal Zone:	☐ Yes	☐ No	
CCC Coastal Zone Map:	☐ Local Jurisdiction	☐ Local Appeals Jurisdiction	☐ State Jurisdiction
Is the project subject to CEQA?:	☐ Yes	☐ No	
Division Comments:			
Recommendation:	☐ Project with conditions is consistent with the Codes/Policies of the Planning Division. ☐ Project as proposed is inconsistent with Codes/Policies of the Planning Division.		

ENGINEERING DIVISION:

Division Comments:	
Recommendation:	☐ Project with conditions is consistent with the Codes/Policies of the Engineering Division. ☐ Project as proposed is inconsistent with Codes/Policies of the Engineering Division.

DECISIONS:

Permit Approval Process:	☐ Planning Commission	☐ Over the Counter	☐ Not Required
Final Permit Status:	☐ Approved Locally:	☐ Denied:	☐ Withdrawn:
	☐ Appealed to CCC:	☐ Approved by CCC:	☐ Denied by CCC:

Engineering Division		Plannning Division	
Reviewer's Initials:	Date:	Reviewer's Initials:	Date:
	Receipt #:	Date:	Fee:
Engineering Division:			
Plan Check Fee:			
Inspection Fee:			
Application/Issuance Fee:	389253	4|3|23	$620.00
Planning Division:			
CEQA Fee:	389253	4|3|23	$500.00
Application Fee:	389253	4|3|23	$415.00
Issued By:	Issuance Date:	Expiration Date:	Total Fee:
Date Issued Permit Finaled:	Date Issued Permit Expired:	Final Sign-Off	

PERMIT #: 2023-09

Jon, Per your recommendation here are the fees for the grading permit only application for 701 Willow Street APN:120-035-003

Thanks

Brian Nicken
530-646-6577
bknickens@gmail.com

Re: Jon Olson, PE 76667 County Engineer

Jon, Here is the grading permit application.

I hope there is a way to get back into compliance without restoring the entire site. To my understanding everything removed thus far is small poplar and ivy with the exception of a juniper tree that Jacob Sedgley mentioned. I am happy to replace that one. I am distraught over this.

Thanks for your help

Brian Nickens
682 Mill Valley Pkwy
Redding, Ca. 96003
bknickens@gmail.com
530-646-6577

Dear Del Norte County,

This letter is a brief description of my vision for the residential lot parcel APN 120-035-003-000 and a brief story about how I discovered Crescent City.

Spring of 2020 I discovered Crescent City, Pebble Beach and South Beach while alone in my van on a personal getaway/quest for surf. Finding Pebble Beach was totally accidental. I was coming down the coast from Brookings using google earth to locate potential waves. I noticed Pebble Beach from the arial view was facing the right direction for summer swells and looked sheltered enough from the wind to have a generally smooth surface. Ripe geography for surfing. My discovery did not disappoint. As I came in from the Washington Ave approach the sun was shining and the ocean was pure glass and the waves were chest high really well shaped. I spent the next two days alone, surfing and relaxing. The surf community was generally friendly and easy going. I even made a couple friends.

I few weeks later I brought my wife back and we had a similar experience together. We decided we would like to find a way to make this our second home. We also have 6 grandchildren who all live in the Redding area near us. We thought Crescent City would be a great place for them to come relax and enjoy the ocean too. This project is a legacy project with a goal of handing down to the next generation.

You must understand, I am an ocean lover. I love clean beaches and salty air. One time I assemble a group of 70 people and led them on a camping trip to Baja where I had discovered a beautiful secluded beach that was unfortunately filled with trash and debris littered across the sand for a quarter mile. I had discovered the beach a year prior and was sad to see such a beautiful stretch of sand with so much trash. Our mission was to clean the entire stretch of beach. Armed with bio trash bags, gloves, metal detectors and hand squeeze trash pickers we formed a line that stretched from the shoreline to the parallel dirt road. In two days we scrubbed that beach perfectly clean. We removed every single piece of glass, plastic and metal, food stuffs, diapers etc.... 100's of bags of trash were removed and disposed of properly. We camped there for a week. When we left that beach it was perfectly clean.

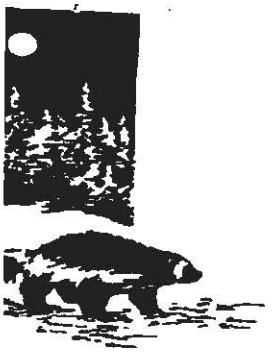
I share this story so you can understand the kind of people my wife and I are. We like to leave things in better condition than before.

In regards to what we want to build. It will be relatively small. Somewhere in the 12 to 1500 s.q. foot range. We want the structure to be humble and not too tall. Big enough to spend time there with a grandkid or two surfing, kayaking and fishing. There is a good chance you might even find me cruising the shoreline picking up trash and glass.

I hope this project works out and we become neighbors some day.

Thanks for your time and for all that you do serving Crescent City.

Brian Nickens
530-646-6577
bknickens@gmail.com



GALEA BIOLOGICAL CONSULTING

200 Raccoon Court Crescent City California 95531
Tel: 707-218-6039 E-mail: frankgalea@charter.net

BIOLOGICAL ASSESSMENT FOR SINGLE HOME DEVEOPMENT, APN #, DEL NORTE COUNTY

Submitted to: Brian Nickens

Prepared by: Frank Galea, Certified Wildlife Biologist
E-mail: frankgalea@charter.net

Galea Biological Consulting
200 Raccoon Court
Crescent City, CA 95531

Submitted: September, 2022

By:

TABLE OF CONTENTS

1.0 SUMMARY 1

A biological assessment was prepared for Brian Nickens (Applicant) for a property located on Keller Avenue in Del Norte County (Figure 1). The Applicant wishes to build a single-family residence on a one-acre, undeveloped property. Galea Biological Consulting (GBC) Incorporated was contracted to provide a general biological assessment to determine the potential impacts of the project on sensitive wildlife species, including federally or state listed species, and species of special concern. Additionally, GBC conducted a review of habitats within and adjacent to the project area to determine the location of any wetlands or watercourses which may be present and to ensure that such habitats were not impacted.

The property contained wetlands towards the northwest corner of the property, and stands of Sitka spruce (*Picea sitchensis*) with occasional shore pine (*Pinus contorta var. contorta*) throughout. These trees are not very large and would best be described as mid-seral. The timbered stand may meet the definition of Environmentally Sensitive Habitat Area (ESHA) in the Coastal Act both because the Sitka spruce and shore pine community type is rare in California.

The project is being proposed within the Marhoffer Creek Special Study Area, which has special protections attributed to it by Del Norte County.

As the Applicant proposes to only build one single family home on one acre, this project should have no significant impacts upon any sensitive or rare species.

2.0 INTRODUCTION

2.1 Project Description

The Applicant plans to improve a small portion of an undeveloped, one-acre property and build a single-family residence. This would include improving an access road approximately 100 feet to the property, plus installment of a well and septic system. The project area has been successfully perked for a septic.

Although much of the property is densely wooded, the first 73 feet off of Keller contains an opening approximately 70 feet wide with no spruce and few shore pine, which is where the Applicant plans to build a home. The Applicant, therefore, does not need to remove any larger, mature trees in order to construct a home.

2.2 Environmental Setting

The property is located to the north of Pebble Beach Drive, on Keller Avenue. Immediately west of the property is a large home and landscaped property. To the north, east and south are stands of mid-seral Sitka spruce forest. The Marhoffer Creek Special Study Area is located to the north.

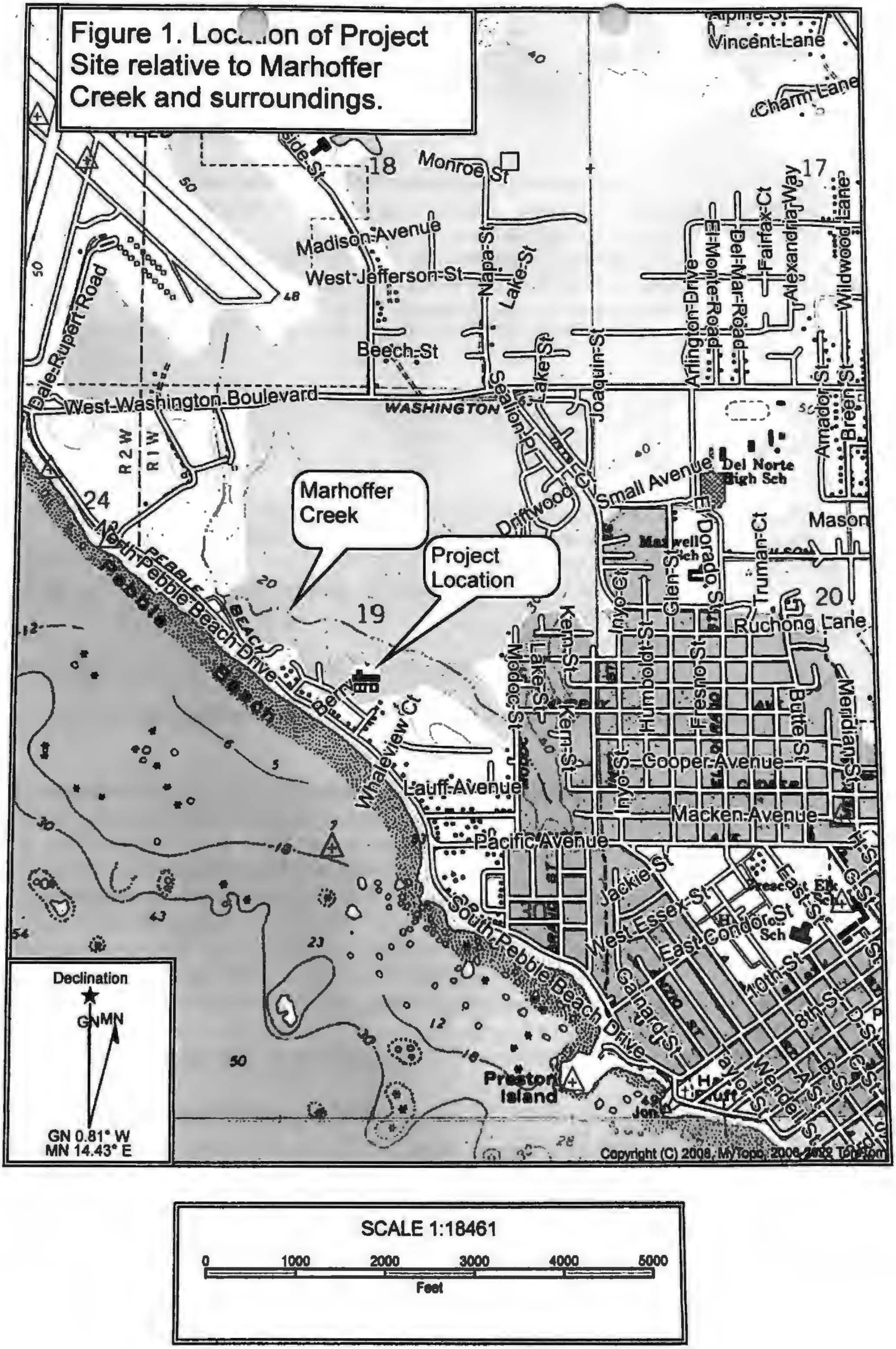

Marhoffer Creek
Project Location
Vincent Lane
Charm Lane
Monroe St
Madison Avenue
West Jefferson St
Napa St
Lake St
Beech St
Dale Rupert Road
West Washington Boulevard
WASHINGTON
Sealion Pl
Joaquin St
Arlington Drive
El Monte Road
Del Mar Road
Fairfax Ct
Alexandria Way
Wildwood Lane
Amador St
Breen St
Del Norte High Sch
Small Avenue
Driftwood Ct
Mason
Truman Ct
Ruchong Lane
El Dorado St
Glen St
Inyo Ct
Humboldt St
Fresno St
Butte St
Meridian St
Kern St
Modoc St
North Pebble Beach Drive
Pebble Beach
Berry
Whaleview Ct
Lauff Avenue
Cooper Avenue
Macken Avenue
Pacific Avenue
Jackie St
West Essex St
East Condor St
Gainard St
South Pebble Beach Drive
10th St
8th St
Preston Island
R 2 W
R 1 W
24
18
17
19
20
Declination
GN MN
GN 0.81° W
MN 14.43° E
Copyright (C) 2008, MyTopo, 2006-2012 TomTom
SCALE 1:18461
0
1000
2000
3000
4000
5000
Feet

Figure 1. Location of Project Site relative to Marhoffer Creek and surroundings.

2.3 Physical Environment

The climate of northern California is characterized as Mediterranean, with cool, wet winters and warm, dry summers with frequent fog. Along the coastline, proximity to the Pacific Ocean produces high levels of humidity and results in abundant fog and fog drip precipitation. The maritime influence diminishes with distance from the coast, resulting in lesser amounts of fog, drier summer conditions and more variable temperatures. Annual precipitation in the project watershed ranges from 60 - 150 inches occurring primarily as rain during the winter months. Air temperatures measured in the Crescent City area vary from 41°F to 67°F annually.

3.0 METHODS

3.1 Records Search

A records search of the California Department of Fish and Wildlife's (CDF&W) Natural Diversity Data Base (September, 2022) was conducted to determine if special-status plant or animal species had been previously reported near the project area. Listed and sensitive wildlife species potentially occurring within two miles of the project area are presented in Table 1.

Special-Status Species and Significant Natural Communities.

The following special-status species and sensitive community types were considered in this evaluation:

- Species that are listed, or designated as candidates for listing, as threatened or endangered under the federal Endangered Species Act;
- Species that are listed, or designated as candidates for listing as rare (plants), threatened, or endangered under the California Endangered Species Act;
- Wildlife species listed by the CDF&W as species of special concern or fully protected species;
- Communities designated by the CDFW to be "significant" natural communities;
- Plant species on List 1A, List 1B, and List 2, in the California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California;
- Species that meet the definition of rare or endangered under the California Environmental Quality Act (under Section 15380 of CEQA, a species not included on any formal list "shall nevertheless be considered rare or endangered if the species can be shown to meet the criteria" for listing); and
- Taxa of special concern by local agencies.

3.2 Regulatory Context

The project is located within the geographic range of several special- status plant and wildlife species. Biological resources on the site may be subject to agency jurisdictions and regulations, as described below.

(a) U.S. Fish and Wildlife Service (USFWS). The USFWS has jurisdiction over species listed as threatened or endangered under the federal Endangered Species Act (ESA). The ESA protects listed species from "take," broadly defined as to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." An activity is defined as a "take" even if unintentional or accidental. An endangered plant or wildlife species is one that is considered in danger of becoming extinct throughout all, or a significant portion of its range. A threatened species is one that is likely to become endangered within the foreseeable future. In addition to endangered and threatened species, the USFWS has a list of candidate species, which are those for which the USFWS currently has enough information to support a proposal for listing. Section 9 of the ESA and its applicable regulations restrict certain activities with respect to endangered and threatened plants. However, these restrictions are less stringent than those applicable to fish and wildlife species. These provisions prohibit the removal of, malicious damage to, or destruction of any listed plant species "from areas under federal jurisdiction." Listed plants may not be cut, dug up, damaged or destroyed, or removed from any other area (including private lands) in knowing violation of a State law or regulation.

(b) Raptors & Migratory Bird Treaty Act (MBTA). The MBTA (16 United States Code [USC] 703) enacts the provisions of treaties between the United States, Great Britain, Mexico, Japan, and the Soviet Union and authorized the U.S. Secretary of the Interior to protect and regulate the taking of migratory birds. The MBTA sets seasons and bag limits for hunted species and protects migratory birds, their occupied nests, and their eggs (16 USC 703, 50 CFR 21, 50 CFR 10).

(c) U.S. Army Corps of Engineers. Under Section 404 of the Clean Water Act, the U.S. Army Corps of Engineers is responsible for regulating the discharge of fill material into waters of the U.S. Waters of the U.S. and their lateral limits are defined in 33 CFR (Code of Federal Regulations) Part 328.3 (a) and include streams that are tributary to navigable waters and their adjacent wetlands. Wetlands that are not adjacent to waters of the U.S. are termed "isolated wetlands" and may be subject to U.S. Army Corps of Engineers jurisdiction.

(d) California Department of Fish and Wildlife (CDF&W). The CDF&W has jurisdiction over threatened or endangered species that are formally listed by the State under the California Endangered Species Act (CESA). The CESA is similar to the federal Endangered Species Act both in process and substance; it is intended to provide additional protection to threatened and endangered species in California.

The CESA does not supersede the federal Endangered Species Act, but operates in conjunction with it. Species may be listed as threatened or endangered under both acts (in which case the provisions of both State and federal laws would apply) or under only one act. The California endangered species

laws prohibit the taking of any plant listed as threatened, endangered, or rare. In California, an activity on private lands (such as development) will violate Section 9 of the Endangered Species Act if a plant species, listed under both State and federal endangered species laws, is intentionally removed, damaged, or destroyed. Under the State Fish and Game Code, the CDF&W also has jurisdiction over species that are designated as "fully protected." These species are protected against direct impacts. The CDF&W maintains informal lists of species of special concern, which are broadly defined as plants and wildlife that are of concern to CDF&W because of population declines and restricted distributions, and/or they are associated with habitats that are declining in California. These species, as well as threatened and endangered species, are inventoried in the California Natural Diversity Database.

The CDF&W also exerts jurisdiction over the bed and banks of watercourses according to the provisions of Section 1600 to 1616 of the Fish and Game Code. The Department requires a Streambed Alteration Permit for the fill or removal of any material from any natural drainage. CDF&W's jurisdiction extends to the top of banks and may include the outer edge of riparian vegetation canopy cover.

(e) California Native Plant Society (CNPS). The CNPS has developed lists of plants of special concern in California. A CNPS List IA plant is a species, subspecies, or variety that is considered to be extinct. A List 1B plant is considered rare, threatened, or endangered in California and elsewhere. A List 2 plant is considered rare, threatened, or endangered in California, but is more common elsewhere. A List 3 plant is a species for which CNPS lacks necessary information to determine if it should be assigned to a list or not. A List 4 plant has a limited distribution in California. All List 1 and List 2 plant species meet the requirements of Section 1901, Chapter 10 (Native Plant Protection Act) or Sections 2062 and 2067 (California Endangered Species Act) of the CDF&G Code, and are eligible for State listing. Therefore, List 1 and 2 species should be considered under CEQA. Very few List 3 and List 4 plants are eligible for listing, but may be locally important, and their listing status could be elevated if conditions change.

(f) CEQA Guidelines, Section 15380. Although threatened and endangered species are protected by specific federal and State statutes, the CEQA Guidelines in Section 15380(b) provide that a species not included on the federal or State lists of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definitions in the federal Endangered Species Act and the CDFG Code. This section was included in the CEQA Guidelines primarily to deal with situations in which a public lead agency is reviewing a project that may have a significant effect on a species that has not yet been listed by either the USFWS or CDFW. Thus, CEQA provides a lead agency with the ability to protect a species from a project's potential impacts until government agencies have an opportunity to designate the species as protected, if warranted.

(g) Regional Water Quality Control Board. Pursuant to Section 401 of the Clean Water Act, projects that apply for a U.S. Army Corps of Engineers permit for discharge of dredge or fill material, and projects that qualify for a Nationwide Permit, must obtain water quality certification from the Regional Water Quality Control Board (RWQCB) that the project will uphold State water

quality standards. Alternatively, the RWQCB may elect to notify an applicant that the State may issue Waste Discharge Requirements in lieu of a Section 401 certification.

(h) California Coastal Commission. The California Coastal Commission (CCC) is a state regulatory agency whose primary role is the protection of coastal resources. This project is located within the coastal appeal zone, therefore CCC protection measures would apply.

(i) Marhoffer Creek Special Study Area. The Marhoffer Creek drainage has been recognized as sensitive habitat due to it's proximity and direct drainage into the ocean. The Del Norte County Local Coastal Plan (LCP) includes the following provisions for developments within the Marhoffer Creek drainage.

Marhoffer Creek Special Study Area (MCSSA)

1. Performance standards shall be developed and implemented which will guide development adjacent to upland marsh areas identified in the Marhoffer Creek study so as to permit utilization of land areas compatible with other policies while providing adequate maintenance of the subject marsh area.

2. A buffer strip shall be maintained in natural conditions around the Marhoffer Creek wetlands where adjacent land uses are found incompatible with the productivity or maintenance of the wetlands.

3. New development adjacent to the Marhoffer Creek wetlands shall not result in adverse levels of additional sediment, runoff, noise, wastewater or other disturbances.

4. Snags shall be maintained with the Marhoffer Creek wetland for their value to wildlife.

5. No motorized vehicle traffic shall be permitted within the Marhoffer Creek wetlands except for agriculture and forestry.

6. Riparian vegetation along the course of Marhoffer Creek and its branch streams shall be maintained for their qualities of wildlife habitat and stream buffer zones.

7. In areas where the boundary of the Marhoffer Creek wetland is in doubt a detailed survey of a parcel and the location of the wetland shall be required to determine the suitability of said parcel for dwelling or other building site and sewage disposal system before a permit is issued.

8. The pasturelands in the Marhoffer Creek area provide valuable habitat for wildlife and therefore should be main- tamed in their existing use as agricultural grazing.

9. Vegetation removal in the Marhoffer Creek wetland shall be limited to that necessary to maintain the free flow of the drainage courses and only when excessive impediment creates flooding hazards on adjacent lands.

10. The County should encourage and support educational programs in schools, park programs and community organizations which seek to increase public awareness and understanding of sensitive habitats and the need for their protection.

3.3 Field Investigation

A field investigation of the project area was conducted in May of 2021. All potential wildlife habitats within the project area and within 1.3 mile around the project area were assessed for their potential for listed wildlife species. Certified Wildlife Biologist Frank Galea conducted the field review. The entire property was searched for potential wetlands. Trees were searched with high-power binoculars for nests. An informal botanical survey was conducted during review

4.0 RESULTS AND POTENTIAL IMPACTS

4.1 Records Search

The CDF&W Natural Diversity Data Base (CNDDB, 2022) provided a summary of those federal and state-listed and sensitive wildlife species and their mapped locations (Figure 2), reported to have occurred at least once within two miles of the project site.

A list of those sensitive or listed animal species potentially occurring in the vicinity of the project area is presented in Table 1, including the common and scientific names for each. The listing status of each species and if potential habitat (as determined by GBC, based upon a review of habitat available within the project area) was located within or near the projeet area is also indicated in Table 1.

4.2 Field Investigation

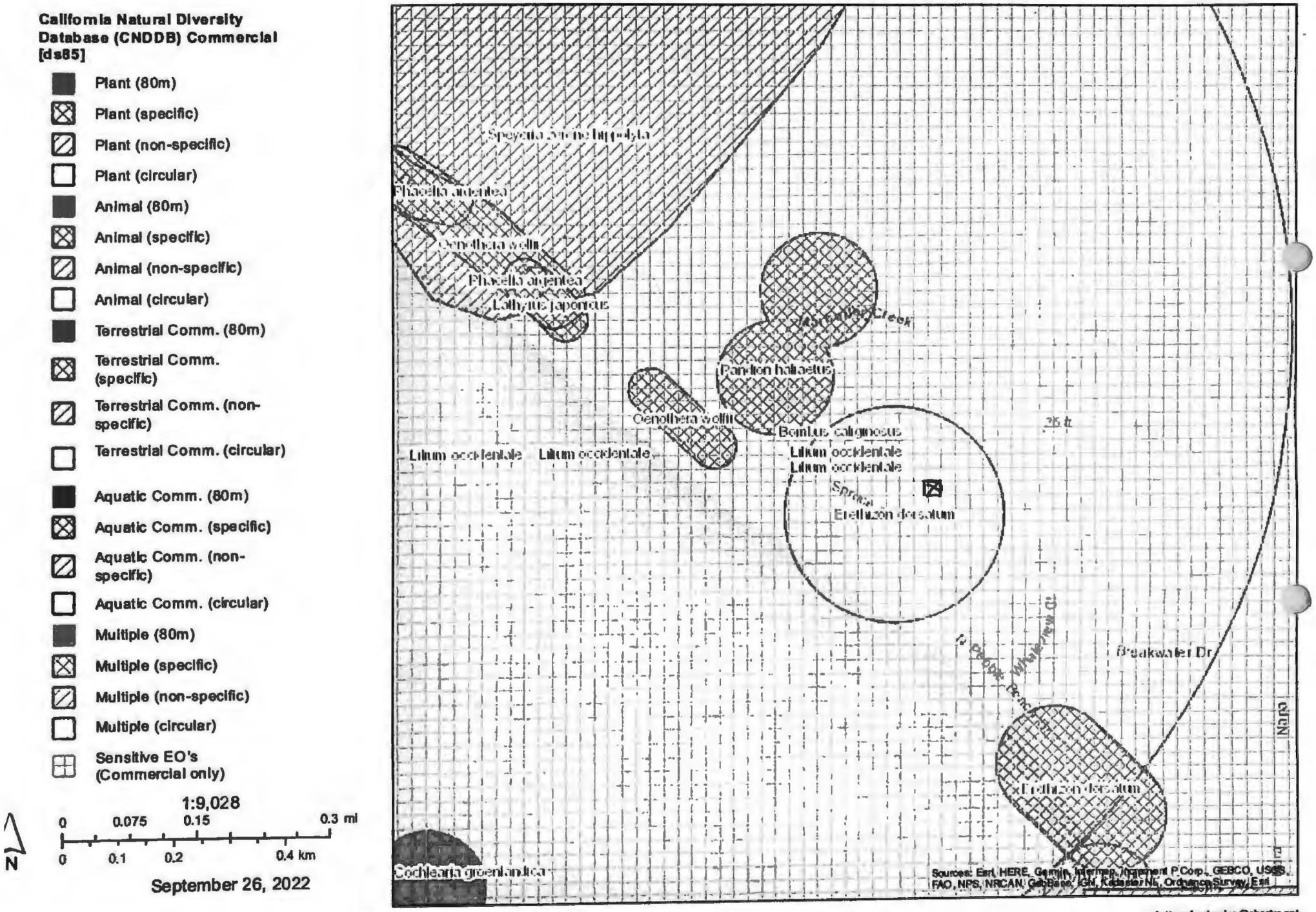
The project site on the property is upland habitat with a mid-seral Sitka spruce forest, which included some shore pine. Cascara (*Rhamnus purshiana*) grew abundantly with the spruce. The entire site was heavily infested with English Ivy (*Hedera helix*), including growing on almost all trees, almost to the point of completely encapsulating the trees.

The project site was flat, while the property north of the site sloped downward from south to north. Immediately west of the project flat the ground sloped down into a gully, covered in ivy. Red elderberry (*Sambucus racemose*), swordfern (*Polystichum munitum*) and salal (*Gaultheria shallon*) was evident through the ivy.

Map of Project Area

California Natural Diversity Database (CNDDB) Commercial [ds85]

- Plant (80m)
- Plant (specific)
- Plant (non-specific)
- Plant (circular)
- Animal (80m)
- Animal (specific)
- Animal (non-specific)
- Animal (circular)
- Terrestrial Comm. (80m)
- Terrestrial Comm. (specific)
- Terrestrial Comm. (non-specific)
- Terrestrial Comm. (circular)
- Aquatic Comm. (80m)
- Aquatic Comm. (specific)
- Aquatic Comm. (non-specific)
- Aquatic Comm. (circular)
- Multiple (80m)
- Multiple (specific)
- Multiple (non-specific)
- Multiple (circular)
- Sensitive EO's (Commercial only)



1:9,028

0 0.075 0.15 0.3 mi

0 0.1 0.2 0.4 km

N

September 26, 2022

Author: frankgalea@charter.net
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4.3 Habitat Analysis and Impact Assessment for Fish and Wildlife

Table 1 shows there were no records of threatened or endangered wildlife species in or near the project area. The following is an analysis of sensitive species potentially present and an assessment of their potential to be impacted by this project.

Table 1. Sensitive Wildlife Species Occurring or with Potential to Occur Within the Region of the Project Area
(From CNDDB 2022 Quad search, and GBC sources)

Common Name	Latin Name	Federal Status	State Status	Breeding Habitat in Project Area?	Forage Habitat in Project Area?
MAMMALS					
American Porcupine	*Erethizon dorsatum*	None	CSC	Yes	Yes
INVERTEBRATES					
Obscure bumble bee	*Bombus caliginosus*	NL	CSC	No	No
AMPHIBIANS					
Northern red-legged frog	*Rana aurora aurora*	NL	CSC	Yes	Yes

Codes:

Federal Status
- FE Federally endangered
- FT Federally threatened
- FC Federal candidate for listing
- FSC Federal species of concern
- NL Not Listed

State Status
- CE California endangered
- CT California threatened
- CCE California candidate for endangered listing
- CSC California species of concern (CDFW)
- CFP California fully protected

American Porcupine - The porcupine is a California species of concern. The porcupine is not uncommon over most of its range, which in northern California includes most conifer forests and mixed-conifer woodlands. It occurs locally primarily in second-growth forests. While the porcupine can forage within the timbered stands of this property, the location is not preferred habitat. This project would have no impact on the porcupine as very few trees would be removed, and the remainder of the one-acre parcel would essentially be preserved as future habitat for this species.

Obscure bumblebee - The CNDDB noted the potential presence of the obscure bumble bee. Although mapped in the CNDDB, the obscure bumble bee is not listed with other rare bumble bees as a species of special concern on the CDFW website. This native species uses open meadows and fields where flowers are abundant. Habitat for this species is not present near or on the property.

Northern red-legged frog - The northern red legged frog was relatively common in riparian areas and ponds over most of non-desert areas of California. Loss of habitat and predation by non-native frogs has reduced or eliminated populations in southern and central California, but not the in northwest. It is designated as a Species of Special Concern by the California Department of Fish and Game. Although this species is not a protected species in Del Norte County and is locally relatively abundant, population levels are not doing well within the remainder of its range.

In Del Norte County the red-legged frog is a relatively common species in a wide range of habitats. This species breeds in moist areas, requiring standing water. It feeds on a variety of invertebrates, and can forage in wet fields, backyards, and in woodlots. There is no potential for the red-legged frog to occur within the project site, although potential habitat may be located on the far north side of the property

Black-tailed deer (*Odicoileus hemionus*), black bear (*Ursus americanus*), osprey (*Pandion haliaetus*) and other local species are known in the area. No heron or egret rookeries are known of nearby and none were observed during field surveys. These birds typically are found roosting and nesting near large, open areas, such as pastures. No osprey were heard or observed during field surveys.

4.4 Sensitive Plants and Plant Communities

The plants on the California Native Plant Society Inventory list 1B and 2 are considered rare, endangered, and threatened plants pursuant to Section 15380 of the California Environmental Quality Act (CEQA). The plants on these lists meet the definitions under the Native Plant Protection Act and/or the California Endangered Species Act of the California Department of Fish and Game Code and are eligible for state listing.

Botanical surveys were conducted by Kyle Wear, and his report is attached as Appendix B.

Spruce / shore pine forest

The property contains an intact stand of coastal spruce/ shore pine forest. According to state agencies, the location of this occurrence of the spruce association of this forest type at the geographic edge of its distribution (northern California) equates to these trees likely having a genetic structure different from the more central populations to the south. The relatively rare genes harbored by these populations may help the species cope with environmental shifts such as those resulting from the current global warming and concomitant climate change. The stand therefore may meet the definition of Environmentally Sensitive Habitat Area (ESHA) in the Coastal Act both because the Sitka spruce and shore pine community types are rare in California.

The Applicant has chosen to build a home within a clear area located at the "front" (south side) of the one-acre property, right up to the edge of Keller Avenue. Although development would occur within the spruce/shore pine stand, impacts to the stand from development would be minimal. Placement of the building is at a location which is least impactful to sensitive resources. The remainder of the property would remain intact and undeveloped.

This level of development is minimal to the potential use of the property, and maintains the highest amount of spruce/shore pine forest. The remainder of the one-acre property of spruce/shore pine forest would remain intact with this level of development.

4.5 Wetland Habitats

The proposed building site on the property was high and dry. A few common horsetail (*Equisetum arvense*) were observed 57 feet northwest of the proposed home site. Common horsetail are a facultative species, meaning they grow equally well in wetland and upland habitats. As there were no other wetland indicative species near the horsetails, and there were only a few, this was not indicative of a wetland. However, a patch of small -fruited bulrush (*Scirpus microcarpus*), an obligate wetland species, was observed approximately 50 feet farther to the west, on another property. This wetland was just over 100 feet distant. This provides a non-development buffer greater than 100 feet between wetlands and the proposed homesite. No other wetlands were observed within 100 feet of the project site.

4.6 Justification for Reduced ESHA Buffers

Normally, the California Coastal Commission requires a 100-foot buffer between development and ESHAs. The following is an analysis and justification for a reduced buffer to the spruce / shore pine ESHA, using these criteria:

1). Biological significance of adjacent lands: The proposed project is located at the northeastern edge of a subdivision of large homes and properties. There is a large home with landscaped property to the immediate west. Additional, undeveloped properties are located to the immediate east. Lands to the north and east have biological significance as they are spruce forest.

2). Sensitivity of species to disturbance: There is very little habitat for sensitive species on or near the property. The site is adjacent to an existing neighborhood. The property consists primarily of Sitka spruce forest, which has little potential for sensitive wildlife species. There are, therefore, no sensitive species which would be subject to disturbance.

3). Susceptibility of parcel to erosion: The proposed project site is located on relatively flat ground with little potential for erosion, as there is dense vegetation all around the edges of the proposed building site. It would be advisable to utilize a silt retention fence along the north, east and west sides of the building site during development to prevent any erosion occurring during building

4). Use of natural topographic features to located development. The building site is located on a high, flat area, immediately adjacent to the access road. No other natural topographic features are available to minimize impacts as the ground here is relatively flat.

5). Use of existing cultural features to locate buffer zones: No cultural features are available to buffer potential impacts.

6). Lot Configuration: The proposed home site will be located on the extreme south end of a 1-acre property, adjacent to an access road. The more sensitive resources, if present, would be located on the northernmost section of the property. Therefore, the lot is being used to the most least-impactful way considering location of the proposed building versus biological resources.

7). Type and scale of development proposed: Applicants are proposing a single-family home on 1 acre. This would be the least impactful development which could occur in this property.

5.0 STAFF QUALIFICATIONS

Habitat assessment and report writing for this project was conducted by Principal Biologist, Frank Galea. Frank is the primary Biological Consultant and owner of Galea Biological Consulting, established in 1989. Frank is certified as a Wildlife Biologist through the Wildlife Society. Frank's qualifications include a Master of Science Degree in Wildlife Management from Humboldt State University and a Bachelor of Science in Zoology from San Diego State University. Frank has been assessing habitat and conducting field surveys for Threatened and Endangered species in Del Norte County for over 30 years. Frank has taken an accredited class on wetland delineation through the Wetland Training Institute, and has successfully completed a Watershed Assessment and Erosion Treatment course through the Salmonid Restoration Federation.

APPENDIX A

CNDDB SEARCH RESULTS

CNDDB Quad Species List 100 [illegible]ords.

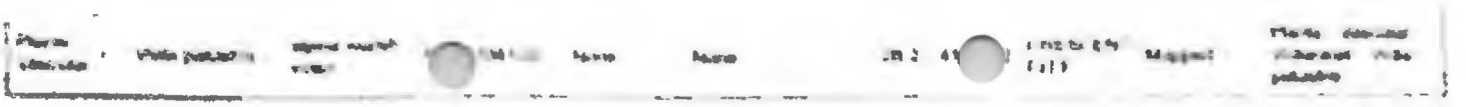
[illegible]	[illegible] Name	[illegible] Name	Element [illegible]	Federal Status	State Status	CDFW SSC or FP	[illegible] Plant Rank	Quad Code	Quad Name	Data Status	Taxonomic Sort
Animals - Amphibians	Plethodon elongatus	Del Norte salamander	AAAAD12050	None	None	WL	-	4112472	CRESCENT CITY	Unprocessed	Animals - Amphibians - Plethodontidae - Plethodon elongatus
Animals - Amphibians	Rana aurora	northern red-legged frog	AAABH01021	None	None	SSC	-	4112472	CRESCENT CITY	Mapped and Unprocessed	Animals - Amphibians - Ranidae - Rana aurora
Animals - Amphibians	Rhyacotriton variegatus	southern torrent salamander	AAAAJ01020	None	None	SSC	-	4112472	CRESCENT CITY	Mapped and Unprocessed	Animals - Amphibians - Rhyacotritonidae - Rhyacotriton variegatus
Animals - Birds	Circus hudsonius	northern harrier	ABNKC11011	None	None	SSC	-	4112472	CRESCENT CITY	Mapped	Animals - Birds - Accipitridae - Circus hudsonius
Animals - Birds	Elanus leucurus	white-tailed kite	ABNKC06010	None	None	FP	-	4112472	CRESCENT CITY	Mapped and Unprocessed	Animals - Birds - Accipitridae - Elanus leucurus
Animals - Birds	Brachyramphus marmoratus	marbled murrelet	ABNNN06010	Threatened	Endangered	-	-	4112472	CRESCENT CITY	Mapped	Animals - Birds - Alcidae - Brachyramphus marmoratus
Animals - Birds	Cerorhinca monocerata	rhinoceros auklet	ABNNN11010	None	None	WL	-	4112472	CRESCENT CITY	Mapped and Unprocessed	Animals - Birds - Alcidae - Cerorhinca monocerata
Animals - Birds	Fratercula cirrhata	tufted puffin	ABNNN12010	None	None	SSC	-	4112472	CRESCENT CITY	Mapped and Unprocessed	Animals - Birds - Alcidae - Fratercula cirrhata
Animals - Birds	Ptychoramphus aleuticus	Cassin's auklet	ABNNN08010	None	None	SSC	-	4112472	CRESCENT CITY	Unprocessed	Animals - Birds - Alcidae - Ptychoramphus aleuticus
Animals - Birds	Branta hutchinsii leucopareia	cackling (=Aleutian Canada) goose	ABNJB05035	Delisted	None	WL	-	4112472	CRESCENT CITY	Mapped	Animals - Birds - Anatidae - Branta hutchinsii leucopareia
Animals - Birds	Ardea alba	great egret	ABNGA04040	None	None	-	-	4112472	CRESCENT CITY	Unprocessed	Animals - Birds - Ardeidae - Ardea alba
Animals - Birds	Ardea herodias	great blue heron	ABNGA04010	None	None	-	-	4112472	CRESCENT CITY	Mapped and Unprocessed	Animals - Birds - Ardeidae - Ardea herodias
Animals - Birds	Botaurus lentiginosus	American bittern	ABNGA01020	None	None	-	-	4112472	CRESCENT CITY	Unprocessed	Animals - Birds - Ardeidae - Botaurus lentiginosus
Animals - Birds	Nycticorax nycticorax	black-crowned night heron	ABNGA11010	None	None	-	-	4112472	CRESCENT CITY	Mapped and Unprocessed	Animals - Birds - Ardeidae - Nycticorax nycticorax
Animals - Birds	Charadrius nivosus nivosus	western snowy plover	ABNNB03031	Threatened	None	SSC	-	4112472	CRESCENT CITY	Mapped and Unprocessed	Animals - Birds - Charadriidae - Charadrius nivosus nivosus
Animals - Birds	Falco peregrinus anatum	American peregrine falcon	ABNKD06071	Delisted	Delisted	FP	-	4112472	CRESCENT CITY	Unprocessed	Animals - Birds - Falconidae - Falco peregrinus anatum
Animals - Birds	Riparia riparia	bank swallow	ABPAU08010	None	Threatened	-	-	4112472	CRESCENT CITY	Unprocessed	Animals - Birds - Hirundinidae - Riparia riparia
Animals - Birds	Hydrobates furcatus	fork-tailed storm-petrel	ABNDC04010	None	None	SSC	-	4112472	CRESCENT CITY	Mapped and Unprocessed	Animals - Birds - Hydrobatidae - Hydrobates furcatus
Animals - Birds	Pandion haliaetus	osprey	ABNKC01010	None	None	WL	-	4112472	CRESCENT CITY	Mapped and Unprocessed	Animals - Birds - Pandionidae - Pandion haliaetus

Animals - Birds	Poecile atricapillus	black-capped chickadee	ABP[illegible]01010	None	None	WL	-	41[illegible]72	CRESCENT CITY	Unprocessed	Animals - Birds - Paridae - Poecile atricapillus
Animals - Birds	Pelecanus occidentalis californicus	California brown pelican	ABNFC01021	Delisted	Delisted	FP	-	4112472	CRESCENT CITY	Unprocessed	Animals - Birds - Pelecanidae - Pelecanus occidentalis californicus
Animals - Birds	Strix occidentalis caurina	Northern Spotted Owl	ABNSB12011	Threatened	Threatened	-	-	4112472	CRESCENT CITY	Mapped	Animals - Birds - Strigidae - Strix occidentalis caurina
Animals - Birds	Selasphorus rufus	rufous hummingbird	ABNUC51020	None	None	-	-	4112472	CRESCENT CITY	Unprocessed	Animals - Birds - Trochilidae - Selasphorus rufus
Animals - Fish	Acipenser medirostris pop. 2	green sturgeon - northern DPS	AFCAA01032	None	None	SSC	-	4112472	CRESCENT CITY	Unprocessed	Animals - Fish - Acipenseridae - Acipenser medirostris pop. 2
Animals - Fish	Eucyclogobius newberryi	tidewater goby	AFCQN04010	Endangered	None	-	-	4112472	CRESCENT CITY	Mapped and Unprocessed	Animals - Fish - Gobiidae - Eucyclogobius newberryi
Animals - Fish	Spirinchus thaleichthys	longfin smelt	AFCHB03010	Candidate	Threatened	-	-	4112472	CRESCENT CITY	Unprocessed	Animals - Fish - Osmeridae - Spirinchus thaleichthys
Animals - Fish	Entosphenus tridentatus	Pacific lamprey	AFBAA02100	None	None	SSC	-	4112472	CRESCENT CITY	Unprocessed	Animals - Fish - Petromyzontidae - Entosphenus tridentatus
Animals - Fish	Oncorhynchus clarkii clarkii	coast cutthroat trout	AFCHA0208A	None	None	SSC	-	4112472	CRESCENT CITY	Mapped and Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus clarkii clarkii
Animals - Fish	Oncorhynchus kisutch pop. 2	coho salmon - southern Oregon / northern California ESU	AFCHA02032	Threatened	Threatened	-	-	4112472	CRESCENT CITY	Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus kisutch pop. 2
Animals - Fish	Oncorhynchus mykiss irideus pop. 1	steelhead - Klamath Mountains Province DPS	AFCHA0209D	None	None	SSC	-	4112472	CRESCENT CITY	Unprocessed	Animals - Fish - Salmonidae - Oncorhynchus mykiss irideus pop. 1
Animals - Insects	Bombus caliginosus	obscure bumble bee	IIHYM24380	None	None	-	-	4112472	CRESCENT CITY	Mapped	Animals - Insects - Apidae - Bombus caliginosus
Animals - Insects	Bombus occidentalis	western bumble bee	IIHYM24250	None	None	-	-	4112472	CRESCENT CITY	Mapped and Unprocessed	Animals - Insects - Apidae - Bombus occidentalis
Animals - Insects	Limnephilus atercus	Fort Dick limnephilus caddisfly	ITRI15020	None	None	-	-	4112472	CRESCENT CITY	Mapped	Animals - Insects - Limnephilidae - Limnephilus atercus
Animals - Insects	Coenonympha tullia yontocketi	Yontocket satyr	IILEPN6035	None	None	-	-	4112472	CRESCENT CITY	Mapped	Animals - Insects - Nymphalidae - Coenonympha tullia yontocketi
Animals - Insects	Speyeria zerene hippolyta	Oregon silverspot butterfly	IILEPJ6087	Threatened	None	-	-	4112472	CRESCENT CITY	Mapped and Unprocessed	Animals - Insects - Nymphalidae - Speyeria zerene hippolyta
Animals - Mammals	Erethizon dorsatum	North American porcupine	AMAFJ01010	None	None	-	-	4112472	CRESCENT CITY	Mapped and Unprocessed	Animals - Mammals - Erethizontidae - Erethizon dorsatu
Animals - Mammals	Enhydra lutris nereis	southern sea otter	AMAJF09012	Threatened	None	FP	-	4112472	CRESCENT CITY	Unprocessed	Animals - Mammals - Mustelidae - Enhydra lutris nereis

Animals - Mammals	Martes caurina humboldtensis	Humboldt marten	AMAJF01012	Threatened	Endangered	SSC	-	4112472	CRESCENT CITY	Mapped	Animals - Mammals - Mustelidae - Martes caurina humboldtensis
Animals - Mammals	Eumetopias jubatus	Steller sea lion	AMAJC03010	Delisted	None	-	-	4112472	CRESCENT CITY	Mapped	Animals - Mammals - Otariidae - Eumetopias jubatus
Animals - Mammals	Corynorhinus townsendii	Townsend's big-eared bat	AMACC08010	None	None	SSC	-	4112472	CRESCENT CITY	Unprocessed	Animals - Mammals - Vespertilionidae - Corynorhinus townsendii
Animals - Mollusks	Monadenia fidelis pronotis	rocky coast Pacific sideband	IMGASC7032	None	None	-	-	4112472	CRESCENT CITY	Mapped and Unprocessed	Animals - Mollusks - Bradybaenidae - Monadenia fidelis pronotis
Animals - Mollusks	Juga chacei	Chace juga	IMGASK4180	None	None	-	-	4112472	CRESCENT CITY	Mapped	Animals - Mollusks - Pleuroceridae - Juga chacei
Animals - Mollusks	Pomatiopsis chacei	marsh walker	IMGASJ9030	None	None	-	-	4112472	CRESCENT CITY	Mapped	Animals - Mollusks - Pomatiopsidae - Pomatiopsis chacei
Animals - Reptiles	Emys marmorata	western pond turtle	ARAAD02030	None	None	SSC	-	4112472	CRESCENT CITY	Mapped	Animals - Reptiles - Emydidae - Emys marmorata
Community - Terrestrial	Coastal and Valley Freshwater Marsh	Coastal and Valley Freshwater Marsh	CTT52410CA	None	None	-	-	4112472	CRESCENT CITY	Mapped	Community - Terrestrial - Coastal and Valley Freshwater Marsh
Community - Terrestrial	Coastal Brackish Marsh	Coastal Brackish Marsh	CTT52200CA	None	None	-	-	4112472	CRESCENT CITY	Mapped	Community - Terrestrial - Coastal Brackish Marsh
Community - Terrestrial	Northern Coastal Salt Marsh	Northern Coastal Salt Marsh	CTT52110CA	None	None	-	-	4112472	CRESCENT CITY	Mapped	Community - Terrestrial - Northern Coastal Salt Marsh
Plants - Lichens	Sulcaria spiralifera	twisted horsehair lichen	NLT0042560	None	None	-	1B.2	4112472	CRESCENT CITY	Mapped	Plants - Lichens - Alectoriaceae - Sulcaria spiralifera
Plants - Lichens	Calicium adspersum	spiral-spored gilded-head pin lichen	NLT0005640	None	None	-	2B.2	4112472	CRESCENT CITY	Mapped	Plants - Lichens - Caliciaceae - Calicium adspersum
Plants - Vascular	Sagittaria sanfordii	Sanford's arrowhead	PMALI040Q0	None	None	-	1B.2	4112472	CRESCENT CITY	Mapped	Plants - Vascular - Alismataceae - Sagittaria sanfordii
Plants - Vascular	Glehnia littoralis ssp. leiocarpa	American glehnia	PDAPI13011	None	None	-	4.2	4112472	CRESCENT CITY	Unprocessed	Plants - Vascular - Apiaceae - Glehnia littoralis ssp. leiocarpa
Plants - Vascular	Antennaria suffrutescens	evergreen everlasting	PDAST0H0S0	None	None	-	4.3	4112472	CRESCENT CITY	Unprocessed	Plants - Vascular - Asteraceae - Antennaria suffrutescens
Plants - Vascular	Hesperevax sparsiflora var. brevifolia	short-leaved evax	PDASTE5011	None	None	-	1B.2	4112472	CRESCENT CITY	Mapped and Unprocessed	Plants - Vascular - Asteraceae - Hesperevax sparsiflora var. brevifolia
Plants - Vascular	Packera bolanderi var. bolanderi	seacoast ragwort	PDAST8H0H1	None	None	-	2B.2	4112472	CRESCENT CITY	Mapped	Plants - Vascular - Asteraceae - Packera bolanderi var. bolanderi
Plants - Vascular	Pyrrocoma racemosa var. congesta	Del Norte pyrrocoma	PDASTDT0F4	None	None	-	2B.3	4112472	CRESCENT CITY	Mapped	Plants - Vascular - Asteraceae - Pyrrocoma racemosa var. congesta
Plants - Vascular	Cardamine nuttallii var. gemmata	yellow-tubered toothwort	PDBRA0K0R3	None	None	-	3.3	4112472	CRESCENT CITY	Mapped	Plants - Vascular - Brassicaceae - Cardamine nuttallii var. gemmata

Plants - Vascular	Cochlearia groenlandica	Greenland cochlearia	PDBR[illegible]S020	None	None	-	2B.3	4112[illegible]	CRESCENT CITY	Mapped	Plants - Vascular - Brassicaceae - Cochlearia groenlandica
Plants - Vascular	Erysimum concinnum	bluff wallflower	PDBRA160E3	None	None	-	1B.2	4112472	CRESCENT CITY	Mapped and Unprocessed	Plants - Vascular - Brassicaceae - Erysimum concinnum
Plants - Vascular	Carex arcta	northern clustered sedge	PMCYP030X0	None	None	-	2B.2	4112472	CRESCENT CITY	Mapped	Plants - Vascular - Cyperaceae - Carex arcta
Plants - Vascular	Carex lenticularis var. limnophila	lagoon sedge	PMCYP037A7	None	None	-	2B.2	4112472	CRESCENT CITY	Mapped	Plants - Vascular - Cyperaceae - Carex lenticularis var. limnophila
Plants - Vascular	Carex lyngbyei	Lyngbye's sedge	PMCYP037Y0	None	None	-	2B.2	4112472	CRESCENT CITY	Mapped	Plants - Vascular - Cyperaceae - Carex lyngbyei
Plants - Vascular	Carex praticola	northern meadow sedge	PMCYP03B20	None	None	-	2B.2	4112472	CRESCENT CITY	Mapped	Plants - Vascular - Cyperaceae - Carex praticola
Plants - Vascular	Carex sheldonii	Sheldon's sedge	PMCYP03CE0	None	None	-	2B.2	4112472	CRESCENT CITY	Unprocessed	Plants - Vascular - Cyperaceae - Carex sheldonii
Plants - Vascular	Carex viridula ssp. viridula	green yellow sedge	PMCYP03EM5	None	None	-	2B.3	4112472	CRESCENT CITY	Mapped	Plants - Vascular - Cyperaceae - Carex viridula ssp. viridula
Plants - Vascular	Empetrum nigrum	black crowberry	PDEMP03020	None	None	-	2B.2	4112472	CRESCENT CITY	Mapped	Plants - Vascular - Empetraceae - Empetrum nigrum
Plants - Vascular	Hosackia gracilis	harlequin lotus	PDFAB2A0D0	None	None	-	4.2	4112472	CRESCENT CITY	Unprocessed	Plants - Vascular - Fabaceae - Hosackia gracilis
Plants - Vascular	Lathyrus delnorticus	Del Norte pea	PDFAB25070	None	None	-	4.3	4112472	CRESCENT CITY	Unprocessed	Plants - Vascular - Fabaceae - Lathyrus delnorticus
Plants - Vascular	Lathyrus japonicus	seaside pea	PDFAB250C0	None	None	-	2B.1	4112472	CRESCENT CITY	Mapped	Plants - Vascular - Fabaceae - Lathyrus japonicus
Plants - Vascular	Lathyrus palustris	marsh pea	PDFAB250P0	None	None	-	2B.2	4112472	CRESCENT CITY	Mapped and Unprocessed	Plants - Vascular - Fabaceae - Lathyrus palustris
Plants - Vascular	Ribes laxiflorum	trailing black currant	PDGRO020V0	None	None	-	4.3	4112472	CRESCENT CITY	Unprocessed	Plants - Vascular - Grossulariaceae - Ribes laxiflorum
Plants - Vascular	Phacelia argentea	sand dune phacelia	PDHYD0C070	None	None	-	1B.1	4112472	CRESCENT CITY	Mapped and Unprocessed	Plants - Vascular - Hydrophyllaceae - Phacelia argentea
Plants - Vascular	Romanzoffia tracyi	Tracy's romanzoffia	PDHYD0E030	None	None	-	2B.3	4112472	CRESCENT CITY	Mapped and Unprocessed	Plants - Vascular - Hydrophyllaceae - Romanzoffia tracyi
Plants - Vascular	Pinguicula macroceras	horned butterwort	PDLNT01040	None	None	-	2B.2	4112472	CRESCENT CITY	Mapped	Plants - Vascular - Lentibulariaceae - Pinguicula macroceras
Plants - Vascular	Lilium bolanderi	Bolander's lily	PMLIL1A010	None	None	-	4.2	4112472	CRESCENT CITY	Unprocessed	Plants - Vascular - Liliaceae - Lilium bolanderi
Plants - Vascular	Lilium occidentale	western lily	PMLIL1A0G0	Endangered	Endangered	-	1B.1	4112472	CRESCENT CITY	Mapped and Unprocessed	Plants - Vascular - Liliaceae - Lilium occidentale
Plants - Vascular	Lycopodium clavatum	running-pine	PPLYC01080	None	None	-	4.1	4112472	CRESCENT CITY	Unprocessed	Plants - Vascular - Lycopodiaceae - Lycopodium clavatum
Plants - Vascular	Sidalcea malachroides	maple-leaved checkerbloom	PDMAL110E0	None	None	-	4.2	4112472	CRESCENT CITY	Mapped	Plants - Vascular - Malvaceae - Sidalcea malachroides

Plants - Vascular	Sidalcea malviflora ssp. patula	Siskiyou checkerbloom	PDMAL110F9	None	None	-	1B.2	4112472	CRESCENT CITY	Mapped	Plants - Vascular - Malvaceae - Sidalcea malviflora ssp. patula
Plants - Vascular	Sidalcea oregana ssp. eximia	coast checkerbloom	PDMAL110K9	None	None	-	1B.2	4112472	CRESCENT CITY	Mapped and Unprocessed	Plants - Vascular - Malvaceae - Sidalcea oregana ssp. eximia
Plants - Vascular	Monotropa uniflora	ghost-pipe	PDMON03030	None	None	-	2B.2	4112472	CRESCENT CITY	Mapped and Unprocessed	Plants - Vascular - Monotropaceae - Monotropa uniflora
Plants - Vascular	Lysimachia europaea	arctic starflower	PDPRI0A020	None	None	-	2B.2	4112472	CRESCENT CITY	Mapped	Plants - Vascular - Myrsinaceae - Lysimachia europaea
Plants - Vascular	Abronia umbellata var. breviflora	pink sand-verbena	PDNYC010N4	None	None	-	1B.1	4112472	CRESCENT CITY	Mapped	Plants - Vascular - Nyctaginaceae - Abronia umbellata var. breviflora
Plants - Vascular	Oenothera wolfii	Wolf's evening-primrose	PDONA0C1K0	None	None	-	1B.1	4112472	CRESCENT CITY	Mapped and Unprocessed	Plants - Vascular - Onagraceae - Oenothera wolfii
Plants - Vascular	Cypripedium montanum	mountain lady's-slipper	PMORC0Q080	None	None	-	4.2	4112472	CRESCENT CITY	Unprocessed	Plants - Vascular - Orchidaceae - Cypripedium montanum
Plants - Vascular	Listera cordata	heart-leaved twayblade	PMORC1N060	None	None	-	4.2	4112472	CRESCENT CITY	Unprocessed	Plants - Vascular - Orchidaceae - Listera cordata
Plants - Vascular	Castilleja ambigua var. ambigua	johnny-nip	PDSCR0D401	None	None	-	4.2	4112472	CRESCENT CITY	Unprocessed	Plants - Vascular - Orobanchaceae - Castilleja ambigua var. ambigua
Plants - Vascular	Castilleja litoralis	Oregon coast paintbrush	PDSCR0D012	None	None	-	2B.2	4112472	CRESCENT CITY	Mapped	Plants - Vascular - Orobanchaceae - Castilleja litoralis
Plants - Vascular	Anthoxanthum nitens ssp. nitens	vanilla-grass	PMPOA35041	None	None	-	2B.3	4112472	CRESCENT CITY	Mapped	Plants - Vascular - Poaceae - Anthoxanthum nitens ssp. nitens
Plants - Vascular	Calamagrostis crassiglumis	Thurber's reed grass	PMPOA17070	None	None	-	2B.1	4112472	CRESCENT CITY	Mapped	Plants - Vascular - Poaceae - Calamagrostis crassiglumis
Plants - Vascular	Gilia capitata ssp. pacifica	Pacific gilia	PDPLM040B6	None	None	-	1B.2	4112472	CRESCENT CITY	Mapped and Unprocessed	Plants - Vascular - Polemoniaceae - Gilia capitata ssp. pacifica
Plants - Vascular	Gilia millefoliata	dark-eyed gilia	PDPLM04130	None	None	-	1B.2	4112472	CRESCENT CITY	Mapped and Unprocessed	Plants - Vascular - Polemoniaceae - Gilia millefoliata
Plants - Vascular	Eriogonum nudum var. paralinum	Del Norte buckwheat	PDPGN08498	None	None	-	2B.2	4112472	CRESCENT CITY	Mapped	Plants - Vascular - Polygonaceae - Eriogonum nudum var. paralinum
Plants - Vascular	Potamogeton foliosus ssp. fibrillosus	fibrous pondweed	PMPOT030B1	None	None	-	2B.3	4112472	CRESCENT CITY	Mapped	Plants - Vascular - Potamogetonaceae - Potamogeton foliosus ssp. fibrillosus
Plants - Vascular	Primula pauciflora	beautiful shootingstar	PDPRI030D0	None	None	-	4.2	4112472	CRESCENT CITY	Unprocessed	Plants - Vascular - Primulaceae - Primula pauciflora
Plants - Vascular	Moneses uniflora	woodnymph	PDPYR02010	None	None	-	2B.2	4112472	CRESCENT CITY	Mapped	Plants - Vascular - Pyrolaceae - Moneses uniflora
Plants - Vascular	Horkelia sericata	silky horkelia	PDROS0W0N0	None	None	-	4.3	4112472	CRESCENT CITY	Unprocessed	Plants - Vascular - Rosaceae - Horkelia sericata
Plants - Vascular	Sanguisorba officinalis	great burnet	PDROS1L060	None	None	-	2B.2	4112472	CRESCENT CITY	Mapped	Plants - Vascular - Rosaceae - Sanguisorba officinalis



APPENDIX B

INITIAL BOTANICAL RESULTS

Kyle S. We.
Botanical Consultant

(707) 601-1725
wearkyle@gmail.com

September 28, 2022

Galea Biological
200 Racoon Court
Crescent City, CA 95531

RE: Botanical Survey for Nickens APN: 122-030-069

Frank,

I completed the late-season botanical survey on APN: 120-035-003 off Spruce Street in Crescent City on July 19, 2022. No special status plants were observed on the parcel. Although degraded by a significant infestation of English ivy, the forest on the parcel is consistent with Sitka spruce forest and woodland (*Picea sitchensis* Forest and Woodland Alliance). Sitka spruce forest is considered a special status natural community by the California Department of Fish and Wildlife and an Environmentally Sensitive Habitat Area (ESHA) by the California Coastal Act. An additional spring survey is needed to complete the survey and final report. This will occur in April or May 2023.

Please contact me if you have any questions or need additional information.

Sincerely,

Kyle Wear

Kyle Wear

Botanical Survey Results

Nickens APN: 120-035-003

Prepared by:

Kyle Wear
Botanical Consultant
wearkyle@gmail.com
(707) 601-1725

Prepared for:

Galea Biological
200 Racoon Court
Crescent City, CA 95531

Date:

August 2023

TABLE OF CONTENTS

1. INTRODUCTION

This report was prepared to provide information on botanical resources on APN: 120-035-003 near Pebble Beach. Populations of rare, threatened, or endangered plants, their habitat, and special status natural communities are considered Environmentally Sensitive Habitat Area (ESHA) under Del Norte County's local coastal program (LCP) and the California Coastal Act (CCA). The applicant proposes to develop a single-family residence of the property.

2. DEFINITIONS

2.1. ESHA

The CCA Defines ESHA as:

> *"...any area in which plant or animal life ar their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments."*

2.2. Special Status Plants

Special status plants include those listed as rare, threatened, or endangered under the federal Endangered Species Act (ESA), the California Endangered Species Act (CESA), and those with considered to meet the criteria of rare or endangered under California Environmental Quality Act (CEQA) Guideline §15380 (d). In practice, plants with CRPRs of 1A, 1B, 2A, and 2B are considered to meet the criteria. Plants with CRPRs of 3 and 4 are generally not considered to meet the criteria or warrant special consideration unless there are special attributes of the population.

2.3. Special Status Natural Communities

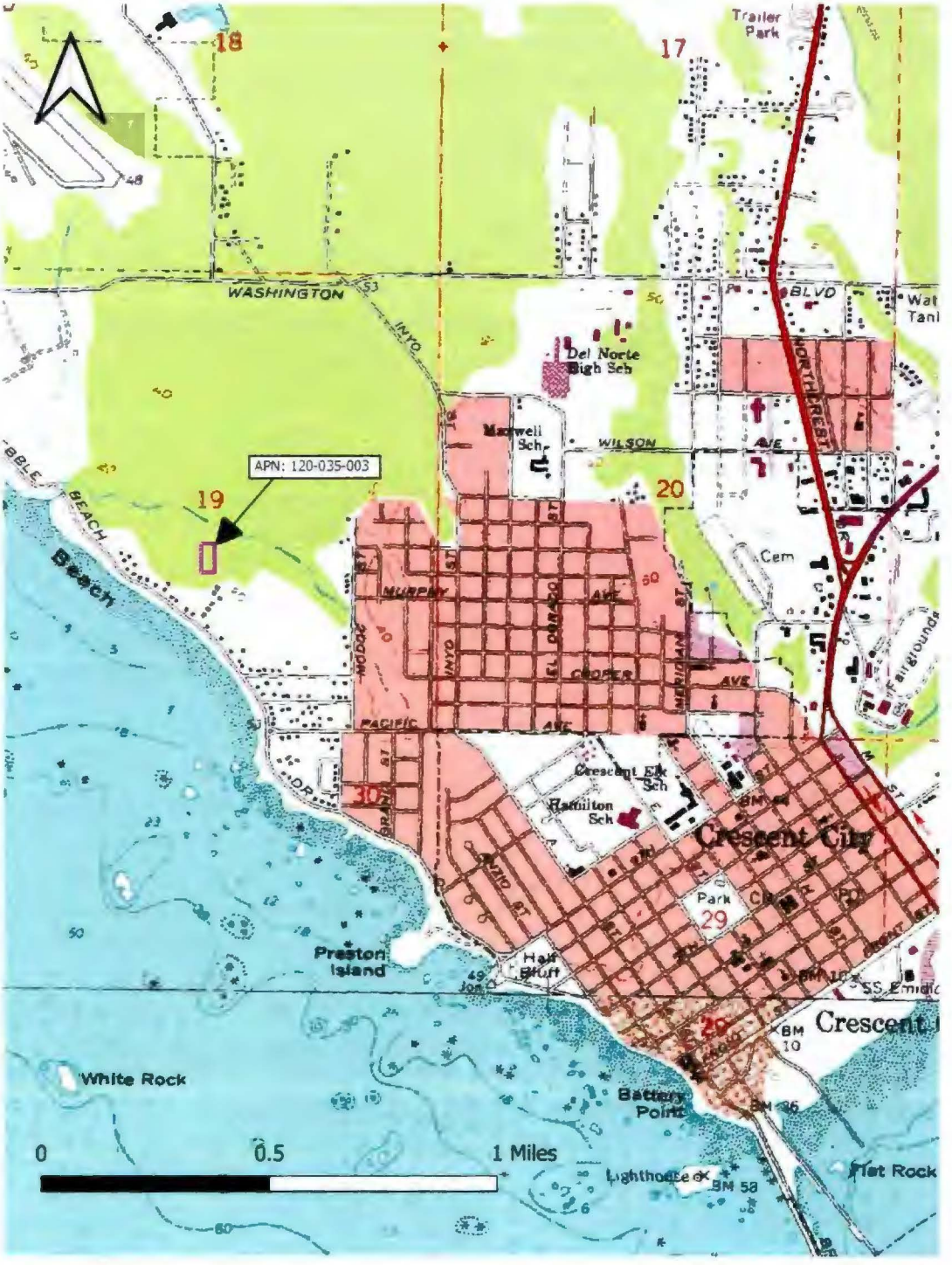
Special status plant communities are communities with limited distribution that may be vulnerable to environmental impacts. Natural communities are assigned global (G) and state (S) rarity rankings using NatureServe's Heritage Methodology. The classification and ranking of California vegetation is an ongoing process. Membership rules for natural communities and their rarity rankings can change as more information becomes available. Updated information on California natural communities, including rarity rankings, is provided in *A Manual of California Vegetation Online Edition* (California Native Plant Society (CNPS) 2023a). CDFW considers natural communities with ranks of S1-S3 to be special status. These natural communities need to be addressed in the environmental review process of CEQA and its equivalents and in most cases are considered ESHA in the coastal zone.

3. ENVIRONMENTAL SETTING

3.1. Project Location

The approximately 1.2-acre parcel is located approximately 0.5 miles west of Crescent City on the Crescent City USGS quadrangle in Del Norte County (Figure 1).

Figure 1. Location Map.



3.2. Soil, Topography, and Hydrology

The soil on the terrace and slope above Marhoffer Creek is mapped as Halfbluff-Tepona-Urban Land; the soil on the lower terrace along the creek is mapped as Typic Fluvaquents (United States Department of Agriculture, Natural Resource Conservation Service (USDA, NRCS) 2023). Halfbluff-Tepona-Urban Land composed of marine deposits from sedimentary rock. Typic Fluvaquents is composed of alluvium from mixed sources.

The southern part of the parcel is a relatively flat terrace that drops to the north to a lower terrace along the creek. The elevation ranges from approximately 14 to 45 feet above sea level.

3.3. Vegetation

The parcel includes a canopy of Sitka spruce (*Picea sitchensis*). The understory includes substantial infestation of English Ivy (*Hedera helix*), which is also growing in the canopy. Native plants in the understory include salal (*Gaultheria shallon*) and sword fern (*Polystichum munitum*). Vegetation clearing occurred in the southern portion of the parcel sometime between the two site visits. Wetlands along base of the slope associated with Marhoffer Creek include stands of skunk cabbage (*Lysichiton americanum*), slough sedge (*Carex obnupta*), and giant horsetail (Equisetum telmateia).

4. METHODS

4.1. Scoping

A list of special status plants that could potentially occur in the project area was generated by consulting the *California Natural Diversity Database* (CDFW 2023a, 2023b, 2023c) and the CNPS *Inventory of Rare and Endangered Plants* (CNPS 2023b) (Table 1). Typically, special status plant scoping lists for botanical survey reports are generated by a "nine quad. search," however because of the vast botanical resources of Del Norte County, the scoping was limited to the Crescent City quadrangle and adjacent quadrangles along the coast, which included Smith River and Sister Rocks to omit much of the diversity that occurs inland on serpentine soil and higher elevation montane habitat, that is not expected along the immediate coast.

A list of special status natural communities along the northern California coast was compiled from the *A Manual of California Vegetation Online Edition* (CNPS 2023a) (Appendix A).

4.2. Survey

The survey was conducted by Kyle Wear, M.A. on July 19, 2022, and May 17, 2023. Mr. Wear has over 25 years of experience conducting botanical surveys and wetland delineations in northern California.

The survey followed methods outlined in *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW 2018). All plants were identified to the taxonomic level necessary to determine whether they are special status. Plant taxonomy generally follows *The Jepson Manual Vascular Plants of California, Second Edition*

Table 1. Scoping List.

Scientific Name **Common Name**	**Listing Status**	**Blooming Period**	**Habitat**	**Potential to Occur in Project Area**
Abronia umbellata var. breviflora pink sand-verbena	1B.1	Jun-Oct	Coastal dunes	None-no habitat
Angelica lucida sea-watch	4.2	Apr-Sep	Coastal bluff scrub, Coastal dunes, Coastal scrub, Marshes and swamps (coastal salt)	Moderate-wetland
Antennaria suffrutescens evergreen everlasting	4.3	Jan-Jul	Lower montane coniferous forest (serpentinite)	None-no habitat
Anthoxanthum nitens ssp. nitens vanilla-grass	2B.3	Apr-Jul	Meadows and seeps (mesic)	Moderate-wetland
Arctostaphylos nortensis Del Norte manzanita	4.3	Feb	Chaparral, Lower montane coniferous forest-Serpentinite (often)	None-no habitat
Arnica spathulata Klamath arnica	4.3	May-Aug	Lower montane coniferous forest (serpentinite)	None-no habitat
Calamagrostis crassiglumis Thurber's reed grass	2B.1	May-Aug	Coastal scrub (mesic), Marshes and swamps (freshwater)	Moderate-wetland
Calicium adspersum spiral-spored gilded-head pin lichen	2B.2		Lower montane coniferous forest, North Coast coniferous forest-Often restricted to old-growth bark of conifers that are over 200 years in age	None-no habitat
Cardamine angulata seaside bittercress	2B.2	(Jan)Mar-Jul	Lower montane coniferous forest, North Coast coniferous forest-wet areas-Streambanks	Unlikely-maybe in wetland, but usually riparian habitat along streams
Cardamine nuttallii var. gemmata yellow-tubered toothwort	3.3	Apr-May(Jun)	Lower montane coniferous forest, North Coast coniferous forest-Serpentinite	None-no habitat
Carex arcta northern clustered sedge	2B.2	Jun-Sep	Bogs and fens, North Coast coniferous forest (mesic)	Moderate-wetland
Carex lenticularis var. limnophila lagoon sedge	2B.2	Jun-Aug	Bogs and fens, Marshes and swamps, North Coast coniferous forest-shores, beaches-Gravelly (often)	Moderate-wetland
Carex lyngbyei Lyngbye's sedge	2B.2	Apr-Aug	Marshes and swamps (brackish, freshwater)	Moderate-wetland
Carex praticola northern meadow sedge	2B.2	May-Jul	Meadows and seeps (mesic)	Moderate-wetland
Carex serpenticola serpentine sedge	2B.3	Mar-May	Meadows and seeps (mesic, serpentinite)	None-no habitat
Carex sheldonii Sheldon's sedge	2B.2	May-Aug	Lower montane coniferous forest (mesic), Marshes and swamps (freshwater), Riparian scrub	None-no habitat, higher elevation
Carex viridula ssp. viridula green yellow sedge	2B.3	(Jun)Jul-Sep(Nov)	Bogs and fens, Marshes and swamps (freshwater), North Coast coniferous forest (mesic)	Moderate-wetland

Scientific Name Common Name	Listing Status	Blooming Period	Habitat	Potential to Occur in Project Area
Castilleja ambigua var. ambigua johnny-nip	4.2	Mar-Aug	Coastal bluff scrub, Coastal prairie, Coastal scrub, Marshes and swamps, Valley and foothill grassland, Vernal pools (margins)	Unlikely-not typical habitat
Castilleja litoralis Oregon coast paintbrush	2B.2	Jun	Coastal bluff scrub, Coastal dunes, Coastal scrub-Sandy	None-no habitat
Chrysosplenium glechomifolium Pacific golden saxifrage	4.3	Feb-Jun	North Coast coniferous forest, Riparian forest- Roadsides (sometimes), Seeps (sometimes), Streambanks	Moderate-wetland margin
Cochlearia groenlandica Greenland cochlearia	2B.3	May-Jul	Coastal bluff scrub (basaltic sea stacks)	None-no habitat
Cypripedium californicum California lady's-slipper	4.2	Apr-Aug(Sep)	Bogs and fens, Lower montane coniferous forest- Seeps, Serpentinite (usually), Streambanks	Unlikely-not typical habitat
Cypripedium montanum mountain lady's-slipper	4.2	Mar-Aug	Broadleafed upland forest, Cismontane woodland, Lower montane coniferous forest, North Coast coniferous forest	Unlikely-not typical habitat
Darlingtonia californica California pitcherplant	4.2	Apr-Aug	Bogs and fens, Meadows and seeps-Mesic, Seeps (usually), Serpentinite (usually)	None-no habitat
Dicentra formosa ssp. oregana Oregon bleeding heart	4.2	Apr-May	Lower montane coniferous forest (serpentinite)	None-no habitat
Empetrum nigrum black crowberry	2B.2	Apr-Jun	Coastal bluff scrub, Coastal prairie	None-no habitat
Eriogonum nudum var. paralinum Del Norte buckwheat	2B.2	Jun-Sep	Coastal bluff scrub, Coastal prairie	None-no habitat
Erysimum concinnum bluff wallflower	1B.2	Feb-Jul	Coastal bluff scrub, Coastal dunes, Coastal prairie	None-no habitat
Gilia capitata ssp. pacifica Pacific gilia	1B.2	Apr-Aug	Chaparral (openings), Coastal bluff scrub, Coastal prairie, Valley and foothill grassland	None-no habitat
Gilia millefoliata dark-eyed gilia	1B.2	Apr-Jul	Coastal dunes	None-no habitat
Glehnia littoralis ssp. leiocarpa American glehnia	4.2	May-Aug	Coastal dunes	None-no habitat
Hesperevax sparsiflora var. brevifolia short-leaved evax	1B.2	Mar-Jun	Coastal bluff scrub (sandy), Coastal dunes, Coastal prairie	None-no habitat
Horkelia sericata silky horkelia	4.3	Jun-Aug	Chaparral, Lower montane coniferous forest-Clay, Serpentinite	None-no habitat
Hosackia gracilis harlequin lotus	4.2	Mar-Jul	Broadleafed upland forest, Cismontane woodland, Closed-cone coniferous forest, Coastal bluff scrub, Coastal prairie, Coastal scrub,	Moderate-access road

Scientific Name **Common Name**	**Listing Status**	**Blooming Period**	**Habitat**	**Potential to Occur in Project Area**
			Marshes and swamps, Meadows and seeps, North Coast coniferous forest, Valley and foothill grassland-Wetlands-Roadsides	
Iris bracteata Siskiyou iris	3.3	May-Jun	Broadleafed upland forest, Lower montane coniferous forest-Serpentinite	None-no habitat
Iris innominata Del Norte County iris	4.3	May-Jun	Lower montane coniferous forest (serpentinite)	None-no habitat
Lathyrus delnorticus Del Norte pea	4.3	Jun-Jul	Lower montane coniferous forest, North Coast coniferous forest-Serpentinite (often)	None-no habitat
Lathyrus japonicus seaside pea	2B.1	May-Aug	Coastal dunes	None-no habitat
Lathyrus palustris marsh pea	2B.2	Mar-Aug	Bogs and fens, Coastal prairie, Coastal scrub, Lower montane coniferous forest, Marshes and swamps, North Coast coniferous forest-Mesic	High-wetland
Lilium bolanderi Bolander's lily	4.2	Jun-Jul	Chaparral, Lower montane coniferous forest-Serpentinite	None-no habitat
Lilium occidentale western lily	1B.1, CE, FE	Jun-Jul	Bogs and fens, Coastal bluff scrub, Coastal prairie, Coastal scrub, Marshes and swamps (freshwater), North Coast coniferous forest (openings)	Moderate-wetland, nearby CNDDB records, wetland currently likely to overgrown with woody vegetation
Listera cordata heart-leaved twayblade	4.2	Feb-Jul	Bogs and fens, Lower montane coniferous forest, North Coast coniferous forest	Moderate-forest understory
Lycopodium clavatum running-pine	4.1	Jun-Aug(Sep)	Lower montane coniferous forest (mesic), Marshes and swamps, North Coast coniferous forest (mesic)-Edges (often), Openings, Roadsides	High-forest understory
Lysimachia europaea arctic starflower	2B.2	Jun-Jul	Bogs and fens, Meadows and seeps-Coastal	Moderate-wetland
Mitellastra caulescens leafy-stemmed mitrewort	4.2	(Mar)Apr-Oct	Broadleafed upland forest, Lower montane coniferous forest, Meadows and seeps, North Coast coniferous forest-Mesic, Roadsides (sometimes)	Moderate-maybe wetland, usually along streams
Moneses uniflora woodnymph	2B.2	May-Aug	Broadleafed upland forest, North Coast coniferous forest	Moderate-forest understory, probably too much English ivy
Monotropa uniflora ghost-pipe	2B.2	Jun-Aug(Sep)	Broadleafed upland forest, North Coast coniferous forest	Moderate-forest understory, usually - on Douglas-fir
Oenothera wolfii Wolf's evening-primrose	1B.1	May-Oct	Coastal bluff scrub, Coastal dunes, Coastal prairie, Lower montane	Unlikely-no habitat

Scientific Name Common Name	Listing Status	Blooming Period	Habitat	Potential to Occur in Project Area
			coniferous forest-Mesic (usually), Sandy	
Oxalis suksdorfii Suksdorf's wood-sorrel	4.3	May-Aug	Broadleafed upland forest, North Coast coniferous forest	Moderate-understory, likely too much ivy
Packera bolanderi var. bolanderi seacoast ragwort	2B.2	(Jan-Apr)May-Jul(Aug)	Coastal scrub, North Coast coniferous forest- Roadsides (sometimes)	Unlikely-maybe, access roadcut
Phacelia argentea sand dune phacelia	1B.1, PT	Jun-Aug	Coastal dunes	None-no habitat
Pinguicula macroceras horned butterwort	2B.2	Apr-Jun	Bogs and fens (serpentinite)	None-no habitat
Pityopus californicus California pinefoot	4.2	(Mar-Apr)May-Aug	Broadleafed upland forest, Lower montane coniferous forest, North Coast coniferous forest, Upper montane coniferous forest-Mesic	Moderate-forest understory, likely too much ivy
Pleuropogon refractus nodding semaphore grass	4.2	(Feb-Mar)Apr-Aug	Lower montane coniferous forest, Meadows and seeps, North Coast coniferous forest, Riparian forest-Mesic	Moderate-wetland margin
Polemonium carneum Oregon polemonium	2B.2	Apr-Sep	Coastal prairie, Coastal scrub, Lower montane coniferous forest	Unlikley-not typical habitat
Potamogeton foliosus ssp. fibrillosus fibrous pondweed	2B.3	Unk	Marshes and swamps (shallow freshwater)	Unlikely-maybe wetland, no open standing water observed
Primula pauciflora beautiful shootingstar	4.2	Apr-Jun	Great Basin scrub, Meadows and seeps, Pinyon and juniper woodland-Mesic	None-no habitat
Pyrrocoma racemosa var. congesta Del Norte pyrrocoma	2B.3	Aug-Sep	Chaparral, Lower montane coniferous forest- Serpentinite	None-no habitat
Ribes laxiflorum trailing black currant	4.3	Mar-Jul(Aug)	North Coast coniferous forest-Roadsides (sometimes)	Moderate-access road
Romanzoffia tracyi Tracy's romanzoffia	2B.3	Mar-May	Coastal bluff scrub, Coastal scrub-Rocky	None-no habitat
Sabulina howellii Howell's sandwort	1B.3	Apr-Jul	Chaparral, Lower montane coniferous forest-Xeric-Serpentinite	None-no habitat
Sagittaria sanfordii Sanford's arrowhead	1B.2	May-Oct(Nov)	Marshes and swamps (shallow freshwater)	Moderate-wetland
Sanguisorba officinalis great burnet	2B.2	Jul-Oct	Bogs and fens, Broadleafed upland forest, Marshes and swamps, Meadows and seeps, North Coast coniferous forest, Riparian forest-Serpentinite (often)	High-wetland
Sidalcea malachroides maple-leaved checkerbloom	4.2	(Mar)Apr-Aug	Broadleafed upland forest, Coastal prairie, Coastal scrub, North Coast coniferous forest, Riparian woodland-Disturbed areas (often)	Moderate-access road, wetland margin

Scientific Name **Common Name**	**Listing Status**	**Blooming Period**	**Habitat**	**Potential to Occur in Project Area**
Sidalcea malviflora ssp. patula Siskiyou checkerbloom	1B.2	(Mar)May -Aug	Coastal bluff scrub, Coastal prairie, North Coast coniferous forest- often roadcuts- Roadsides (often)	Unlikely-not typical habitat
Sidalcea oregana ssp. eximia coast checkerbloom	1B.2	Jun-Aug	Lower montane coniferous forest, Meadows and seeps, North Coast coniferous forest	Unlikely-not typical habitat
Silene scouleri ssp. scouleri Scouler's catchfly	2B.2	(Mar-May)Jun-Aug(Sep)	Coastal bluff scrub, Coastal prairie, Valley and foothill grassland	None-no habitat
Sulcaria spiralifera twisted horsehair lichen	1B.2		Coastal dunes (SLO Co.), North Coast coniferous forest (immediate coast)- Usually on conifers.	Moderate-spruce branches
Usnea longissima Methuselah's beard lichen	4.2		Broadleafed upland forest, North Coast coniferous forest- On tree branches; usually on old growth hardwoods and conifers	Moderate-spruce branches
Viola langsdorffii Langsdorf's violet	2B.1	May-Jul	Bogs and fens (coastal)	Moderate-wetland
Viola palustris alpine marsh violet	2B.2	Mar-Aug	Bogs and fens (coastal), Coastal scrub (mesic)	Moderate-wetland

Listing Status Codes

Endangered Species Act (ESA	California Endangered Species Act (CESA)
FE-Federally Endangered	CE-California Endangered
FT-Federally Threatened	CT-California Threatened
FR-Federally Rare	CR-California Rare

California Rare Plant Ranks

1A-Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere
1B- Plants Rare, Threatened, or Endangered in California and Elsewhere
2A- Plants Presumed Extirpated in California, But Common Elsewhere
2B-California Rare Plant Rank 2B: Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
3-Review List: Plants about which more information is needed
4-Watch List: Plants of limited distribution

Threat Ranks

0.1-Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2-Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
0.3-Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

(Baldwin et. al. 2012), however the plant list may include more recent name changes. Plant communities were classified according to *A Manual of California Vegetation Online Edition* (CNPS 2023b).

The survey was timed to coincide with when plants on the scoping list with potential to occur in the project would be identifiable (generally, but not necessarily during the blooming period) and when other common plants would be identifiable so that a comprehensive floristic plant list of the project area could be compiled.

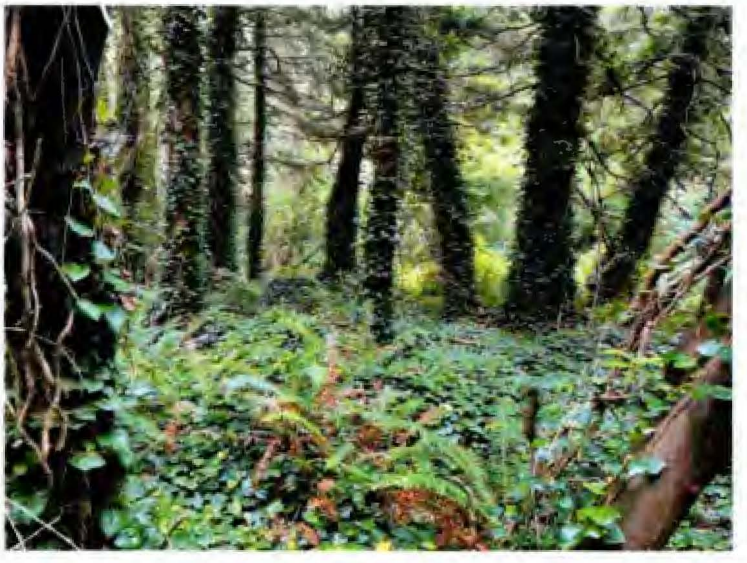
5. RESULTS AND DISCUSSION

5.1. Special Status Plants

No special status plants were recorded observed on the survey. A list of plants observed is provided in Table 2.

5.2. Special Status Natural Communities

The forest on the parcel meets the membership rules for Sitka spruce forest and woodland (*Picea sitchensis* Forest & Woodland Alliance). A special status natural community with a state rarity rank of S2. The membership rules require only that Sitka spruce is greater than 50% relative cover in the canopy (CNPS 2023a).



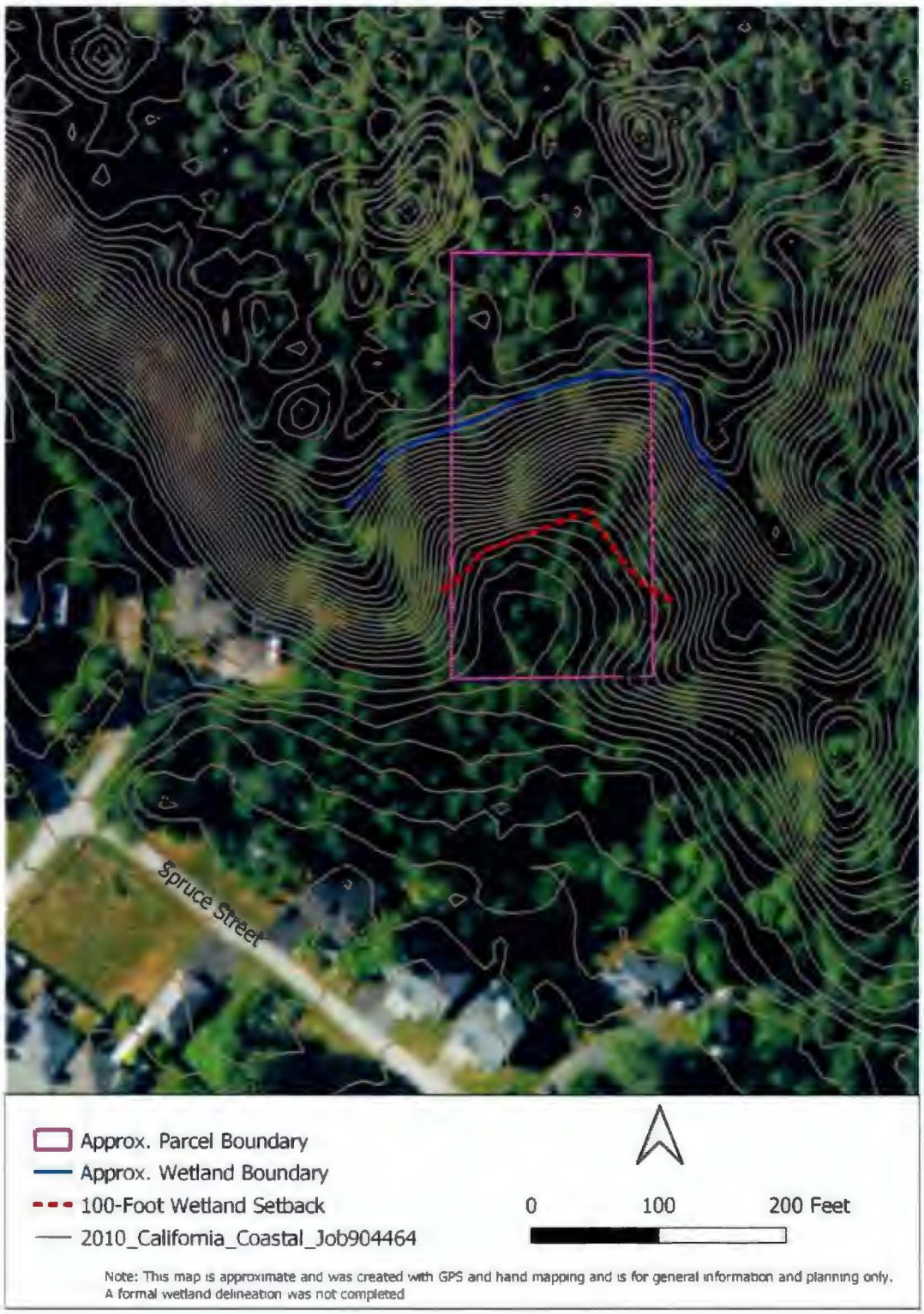
The absolute cover of English ivy is often 100% or higher accounting for the ivy in the canopy. English ivy has a California Invasive Plant Council (CAL-IPC) rating of "High" indicating it has severe ecological impacts on physical processes, plant and animal communities, and vegetation structure (CAL-IPC 2023). On the parcel, English ivy is outcompeting the native understory vegetation for light, water, and nutrients. In the canopy, it covers the branches and decreases photosynthesis and adds weight that adds to the risk of windthrow. It is also preventing new recruitment of spruce and other native plants and impacting natural succession. The forest currently provides little if any potential habitat for rare or endangered plants. Thus, the forest on the parcel is not consistent with the ESHA definition, which would require that it be rare or especially valuable because of a special role in the ecosystem that could be easily disturbed or degraded by humans.

The wetlands in the northern part of the parcel are ESHA under the LCP and CCA. A formal wetland delineation was not conducted as part of this report (Figure 2).

Table 2. Plant List.

Scientific Name	Common Name
Abies grandis	grand fir
Allium triquetrum	escaped ornamental onion
Alnus rubra	red alder
Athyrium filix-femina	lady fern
Baccharis pilularis	coyote brush
Bellis perennis	English daisy
Bromus sp.	brome grass
Cardamine oligosperma	western bittercress
Carex obnupta	slough sedge
Claytonia sibirica	Siberian candyflower
Cotneaster panosa	cotoneaster
Cotoneaster franchetii	cotoneaster
Dactylis glomerata	orchard grass
Digitalis purpurea	foxglove
Elymus glaucus ssp. *glaucus*	blue wildrye
Epilobium ciliatum	northern willow herb
Equisetum telmateia ssp. *braunii*	giant horsetail
Festuca arundinacea	tall fescue
Frangula pushiana	cascara
Galium sp.	bedstraw
Gaultheria shallon	salal
Holcus lanatus	common velvet grass
Ilex aquifolium	English holly
Lysichiton americanum	skunk cabbage
Maianthemum dilatatum	false lily-of-the-valley
Marah fabaceus	California man-root
Morella californica	wax myrtle
Oemleria cerasiformis	oso berry
Picea sitchensis	Sitka spruce
Plantago lanceolata	English plantain
Polystichum munitum	sword fern
Rubus armeniacus	Himalayan blackberry
Rubus parviflorus	thimbleberry
Rubus ursinus	California blackberry
Sambucus racemosa var. *racemosa*	red elderberry
Stachys ajugoides	hedge nettle
Vaccinium ovatum	evergreen huckleberry
Vicia gigantea	giant vetch
Vicia sativa	vetch

Figure 2. Wetland Map.



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APPENDIX A Special Status Natural Community Scoping List

Scientific name	Common name	Global rarity	State rarity
Abies grandis	Grand fir forest	G4	S2.1
Abronia latifolia - Ambrosia chamissonis	Dune mat	G3	S3
Acer macrophyllum	Bigleaf maple forest and woodland	G4	S3
Acer negundo	Box-elder forest and woodland	G5	S3
Aesculus californica	California buckeye groves	G3	S3
Allium spp. - Streptanthus spp. - Hesperolinon spp. Serpentinite	Onion - twistflower - dwarf-flax serpentinite rock outcrop	G2G3	S2S3
Alnus viridis	Sitka alder thickets	G5	S3?
Alopecurus geniculatus	Water foxtail meadows	G3?	S3?
Arctostaphylos (bakeri, montana)	Baker's or Mt. Tamalpais manzanita chaparral	G3	S3
Arctostaphylos (canescens, manzanita, stanfordiana)	Hoary, common, and Stanford manzanita chaparral	G3	S3
Arctostaphylos glandulosa	Eastwood manzanita chaparral	G4	S3
Arctostaphylos (nummularia, sensitiva) - Chrysolepis chrysophylla	Glossy leaf manzanita - Golden chinquapin chaparral	G2	S2
Bolboschoenus maritimus	Salt marsh bulrush marshes	G4	S3
Bromus carinatus - Elymus glaucus	California brome - blue wildrye prairie	G3	S3
Calamagrostis nutkaensis	Pacific reed grass meadows	G4	S2
Calocedrus decurrens	Incense cedar forest and woodland	G4	S3
Carex (aquatilis, lenticularis)	Water sedge and lakeshore sedge meadows	G5	S3
Carex barbarae	White-root beds	G2?	S2?
Carex lyngbyei	Lyngbye's sedge swathes	GNR	S1
Carex nudata	Torrent sedge patches	G3	S3
Carex obnupta - Oenanthe sarmentosa - Scirpus microcarpus	Slough sedge - Water-parsley - Small-fruited bulrush marsh	G4	S3
Ceanothus (oliganthus, tomentosus)	Hairy leaf - woolly leaf ceanothus chaparral	G3	S3
Chamaecyparis lawsoniana	Port Orford cedar forest and woodland	G3	S3.1
Corylus cornuta var. californica	Hazelnut scrub	G3	S2?
Darlingtonia californica	California pitcher plant fens	G4?	S3
Deschampsia cespitosa - Festuca rubra Brackish Salt Marsh	Tufted hairgrass - Red fescue brackish salt marsh	GNR	S2
Deschampsia cespitosa - Hordeum brachyantherum - Danthonia californica	Coastal tufted hair grass - Meadow barley - California oatgrass meadow	GNR	S3
Diplacus aurantiacus	Bush monkeyflower scrub	G3	S3?
Equisetum (arvense, variegatum, hyemale)	Field horsetail - scouringrush horsetail - variegated scouringrush wet meadow	GNR	S3S4

Scientific name	Common name	Global rarity	State rarity
Eriophyllum staechadifolium - Erigeron glaucus - Eriogonum latifolium	Seaside woolly-sunflower - seaside daisy - buckwheat patches	G3	S3
Festuca idahoensis - Danthonia californica	Idaho fescue - California oatgrass grassland	GNR	S3
Frangula californica - Rhododendron occidentale - Salix breweri	California coffeeberry - western azalea scrub - Brewer's willow	G3	S3
Frankenia salina	Alkali heath marsh	G4	S3
Fraxinus latifolia	Oregon ash groves	G4	S3.2
Glyceria Ã—occidentalis	Northwest manna grass marshes	G3?	S3?
Grindelia (stricta)	Gum plant patches	G2G3	S2S3
Hesperocyparis (pigmaea, abramsiana, macrocarpa, goveniana)	California coastal cypress woodland	G2	S2
Hesperocyparis (sargentii, macnabiana)	Ultramafic cypress woodland	G3	S3
Heterotheca (oregona, sessiliflora)	Goldenaster patches	G3	S3
Hydrocotyle (ranunculoides, umbellata)	Mats of floating pennywort	G4	S3?
Isoetes (bolanderi, echinospora, howellii, nuttallii, occidentalis)	Quillwort beds	G3	S3?
Juglans hindsii and Hybrids	Hindsâ€™s walnut and related stands	G1	S1.1
Juncus (effusus, patens) - Carex (pansa, praegracilis)	Soft and western rush - Sedge marshes	G4?	S3S4
Juncus (oxymeris, xiphioides)	Iris-leaf rush seeps	G2?	S2?
Lasthenia glaberrima - Eleocharis macrostachya	Smooth goldfields - pale spike rush vernal pool bottoms	G2	S2
Leymus cinereus - Leymus triticoides	Ashy ryegrass - Creeping wildrye turfs	G3	S3
Leymus mollis	Sea lyme grass patches	G4	S2
Lupinus chamissonis - Ericameria ericoides	Silver dune lupine - mock heather scrub	G3	S3
Mimulus guttatus - Cirsium spp. - Stachys spp.	Common monkey flower - thistle - hedgenettle seeps	GNR	S3
Nassella spp. - Melica spp.	Needle grass - Melic grass grassland	G3G4	S3S4
Notholithocarpus densiflorus	Tanoak forest	G4	S3.2
Nuphar lutea	Yellow pond-lily mats	G5	S3?
Picea sitchensis	Sitka spruce forest and woodland	G5	S2
Pinus contorta ssp. contorta	Beach pine forest and woodland	G5	S3
Pinus muricata - Pinus radiata	Bishop pine - Monterey pine forest and woodland	G3	S3.2
Platanus racemosa - Quercus agrifolia	California sycamore - coast live oak riparian woodlands	G3	S3
Populus fremontii - Fraxinus velutina - Salix gooddingii	Fremont cottonwood forest and woodland	G4	S3.2

Scientific name	Common name	Global rarity	State rarity
Populus trichocarpa	Black cottonwood forest and woodland	G5	S3
Quercus garryana (tree)	Oregon white oak woodland and forest	G4	S3
Quercus lobata	Valley oak woodland and forest	G3	S3
Quercus lobata Riparian	Valley oak riparian forest and woodland	G3	S3
Quercus wislizeni - Quercus chrysolepis (shrub)	Canyon live oak - Interior live oak chaparral	G4	S3S4
Rhododendron columbianum	Western Labrador-tea thickets	G4	S2
Rubus spectabilis - Morella californica	Salmonberry - Wax myrtle scrub	G4	S3
Ruppia (cirrhosa, maritima)	Ditch-grass or widgeon-grass mats	G4?	S2
Salix gooddingii - Salix laevigata	Goodding's willow - red willow riparian woodland and forest	G4	S3
Salix hookeriana - Salix sitchensis - Spiraea douglasii	Coastal dune willow - Sitka willow - Douglas spiraea thickets	G4	S3
Salix lucida ssp. lasiandra	Shining willow groves	G4	S3.2
Sarcocornia pacifica (Salicornia depressa)	Pickleweed mats	G4	S3
Schoenoplectus (acutus, californicus)	Hardstem and California bulrush marshes	GNR	S3S4
Schoenoplectus americanus	Common Three-square marsh	G5	S3.2
Scirpus microcarpus	Small-fruited bulrush marsh	G4	S2
Sedum spathulifolium	Coast Range stonecrop draperies	G4?	S3
Selaginella (bigelovii, wallacei)	Bushy spikemoss mats	G4	S3
Sequoia sempervirens	Redwood forest and woodland	G3	S3
Sparganium (angustifolium)	Mats of bur-reed leaves	G4	S3?
Spartina foliosa	California cordgrass marsh	G3	S3.2
Stuckenia (pectinata) - Potamogeton spp.	Pondweed mats	G3G5	S3?
Trifolium variegatum	White-tip clover swales	G3?	S3?
Tsuga heterophylla	Western hemlock forest	G5	S2
Umbellularia californica	California bay forest and woodland	G4	S3
Vaccinium uliginosum	Bog blueberry wet meadows	G4	S3
Vitis arizonica - Vitis girdiana	Wild grape shrubland	G3	S3
Zostera (marina, pacifica) Pacific Aquatic	Eelgrass beds	GNR	S3

Global (G) Rankings

G1 = Less than 6 viable element occurrences (EOs) OR less than 1,000 individuals OR less than 2,000 acres.

G2 = 6-20 EOs OR 1,000-3,000 individuals OR 2,000-10,000 acres.

G3 = 21-80 EOs OR 3,000-10,000 individuals OR 10,000-50,000 acres.

G4 = Apparently secure; this rank is clearly lower than G3 but factors exist to cause some concern; i.e., there is some threat, or somewhat narrow habitat.

G5 = Population or stand demonstrably secure to ineradicable due to being commonly found in the world

State (S) Rankings

S1 = Less than 6 EOs OR less than 1,000 individuals OR less than 2,000 acres

- S1.1 = very threatened
- S1.2 = threatened
- S1.3 = no current threats known

S2 = 6-20 EOs OR 1,000-3,000 individuals OR 2,000-10,000 acres

- S2.1 = very threatened
- S2.2 = threatened
- S2.3 = no current threats known

S3 = 21-80 EOs or 3,000-10,000 individuals OR 10,000-50,000 acres

- S3.1 = very threatened
- S3.2 = threatened
- S3.3 = no current threats known

S4 = Apparently secure within California; this rank is clearly lower than S3 but factors exist to cause some concern; i.e. there is some threat, or somewhat narrow habitat.

S5 = Demonstrably secure to ineradicable in California.

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ADDENDUM TO BIOLOGICAL ASSESSMENT FOR NICKENS SINGLE-FAMILY HOME DEVEOPMENT, APN # 120-035-003, DEL NORTE COUNTY

A biological assessment (BA) had been completed for this project in September of 2022. This addendum provides additional information regarding this project.

The proposed project would be a single-family home to be built on the south end of the property, just north of the access road. The house site is relatively elevated compared to the surrounding terrain.

The 2022 BA noted that potential wetlands were located west of the property at least 100 feet away, however an exact measurement was not possible as the potential wetlands were on another property. To clarify the distance from the proposed house project, a laser range finder was used to accurately measure the distance without having to enter the adjoining property. From the edge of the raised flat where the house is proposed (which is actually closer to the potential wetlands that where the actual house would be), the distance was found to be 117 feet. Therefore, a buffer of well over 100 feet would exist between the proposed house site and the nearest potential wetlands.

It should be noted that the "wetlands" as described were actually just a small patch of small -fruited bulrush (*Scirpus microcarpus*), which are growing at this small, specific location due to a small drainage channel at this location. While this might constitute a wetland due to vegetation and hydrology, it would be a non-functional wetland due to its very small size.

The proposed house site is located near a spruce stand, which constitutes an Environmentally Sensitive Habitat Area (ESHA) in the Coastal Act. To mitigate for a reduced buffer to the ESHA (as there is no alternative but a reduced buffer in this case) the Applicant could mitigate by controlling the large amount of invasive English ivy growing on the property.

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MITIGATION PLANTING FOR NICKENS PROPERTY, MARHOFFER CREEK DRAINAGE, DEL NORTE COUNTY

A biological assessment has prepared for Brian Nickens (Applicant) for a property located on Keller Avenue in Del Norte County. The Applicant wishes to build a single-family residence on a one-acre, undeveloped property. The County of Del Norte is requesting mitigation for vegetation removal which occurred prior to obtaining a permit.

The property contained wetlands towards the northwest corner of the property, and stands of Sitka spruce (*Picea sitchensis*) with occasional shore pine (*Pinus contorta var. contorta*) throughout. These trees are not very large and would best be described as mid-seral. The timbered stand may meet the definition of Environmentally Sensitive Habitat Area (ESHA) in the Coastal Act both because the Sitka spruce and shore pine community type is rare in California.

Prior to vegetation removal, there was an area in the south end of the property which was relatively free of spruce and pine, was relatively open and consisted primarily of cascara. This was the area most impacted by vegetation removal. The area impacted by tree and vegetation removal occurred within the ESHA. While some spruce may have been removed, most of the trees and vegetation removed were cascara.

Mitigation

Currently a cleared area approximately 70 feet deep (south to north) and 47 feet wide is available on the property. The Applicant proposes to plant red elderberry (*Sambucus nigra*), cascara (*Frangula purshiana*), evergreen huckleberry (*Vaccinium ovatum*), sword fern (*Polystichum munitum*) and salal (Gaultheria shallon), as recommended by the California Department of Fish and Wildlife.

The Applicant proposes to plant 25 plants of the species described above (depending upon availability), within the cleared area and within open areas immediately adjacent to the cleared area (as shown in Figure 1). The planting as proposed would mitigate for the removed vegetation while still allowing for the Applicant to be able to utilize a very small portion of his overall property, as shown in Figure 2.

Planting would only occur during the late fall or winter, during a period where rainfall is assured, to increase the probability of planting success. As rainfall is relatively high during winters in Del Norte County, mitigation plantings is usually very successful.
The Applicant would be responsible to ensure that a 90 percent success rate of planting is achieved at

the end of one year after planting. If plantings are unsuccessful at a rate higher of 10 percent or more, the Applicant would be responsible to re-plant additional trees or shrubs the next winter.

The entire site was heavily infested with English Ivy (*Hedera helix*), including growing on almost all trees, almost to the point of completely encapsulating the trees. The Applicant proposes to cut the ivy at the base of the trees on his property, thereby killing the foliage growing up into the tree and preventing the ivy from creating berries, which are then eaten and spread by birds. The Applicant would also control the ivy on his property and, where allowed, on neighboring properties, as is feasible. If the ivy is not controlled, it will eventually kill most of the trees present on the property.

The Applicant proposes to mitigate tree and brush removal by re-planting recommended species, and by removing and controlling invasive English ivy. The end result would likely be the continuation of a stand of Sitka spruce with an understory of native plants, instead of a stand totally infested with ivy to the detriment of the spruce stand.

Figure 1. Approximate locations for vegetation planting, represented by dots, Nickens property. Circle areas are planting locations in natural openings outside of impacted area. Square area is approximation of 70'X47' cleared area at south end of property. Scale: 1 square = 3 feet.

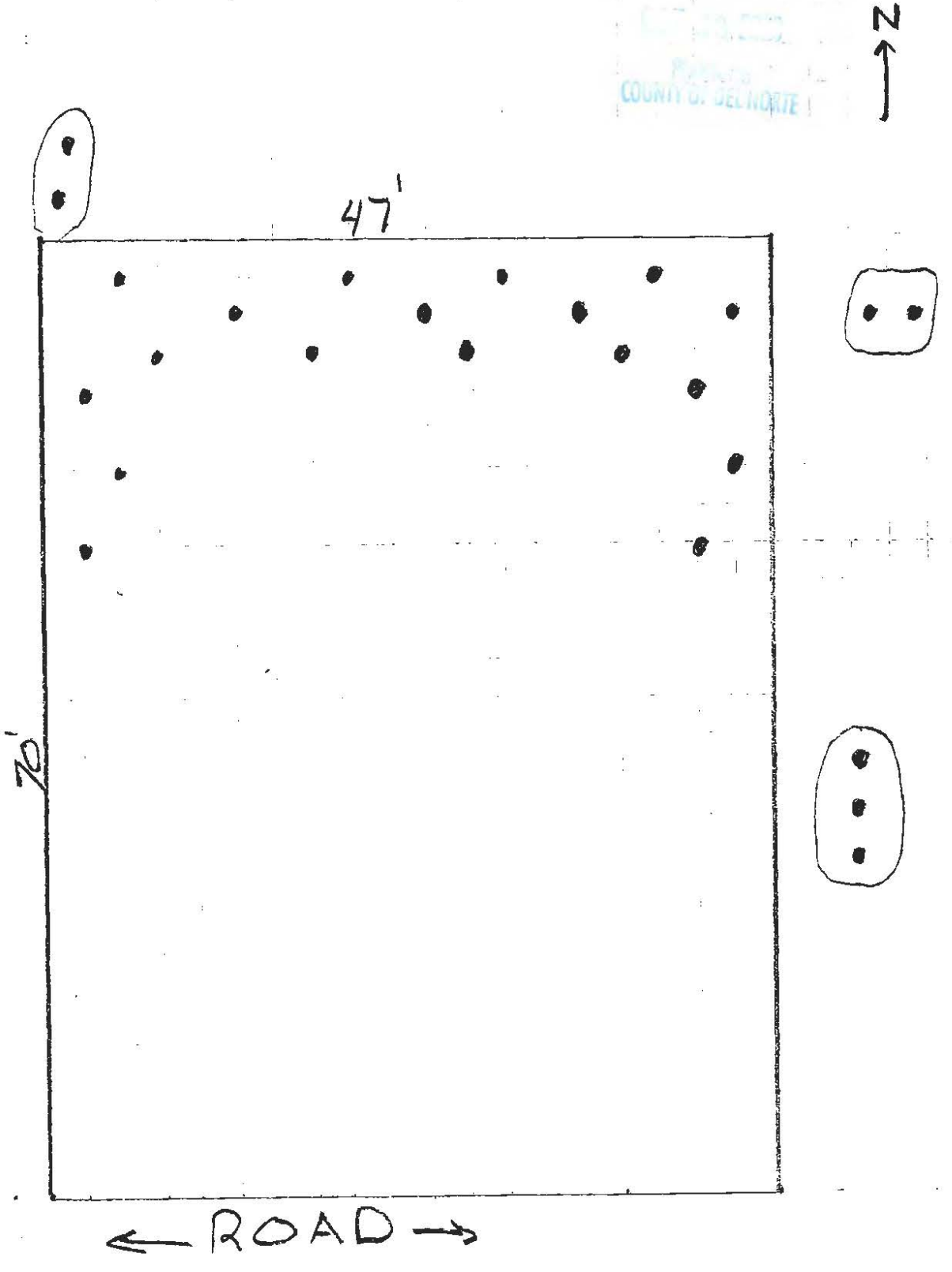

Figure 2. Map of entire Nickens property (159' x 335') with impacted area shown in relative scale. Scale: 1 square = 10 feet.