# Exhibit F



# ED MERCURIO, BIOLOGICAL CONSULTANT

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Nadia Amador, Associate Planner Monterey County Resource Management Agency 1441 Schilling Place, 2<sup>nd</sup> Floor Salinas, California 93901

September 15, 2017

RE: Biological survey update for the Barwick Property, 15360 Plaza Serena, Salinas, California 93907. APN 129-096-034-000.

Dear Ms. Amador,

I conducted an update survey for the Barwick Property on August 31, 2017. Designer Gisela Moreno, you and Jaqueline Onciano from Monterey County Planning and lawyer Christine Kemp met me on the property, provided the revised site plan and showed me all areas associated with the proposed development.

I walked the areas where development is proposed with you, Jagueline Onciano and Christine Kemp on August 31, 2017. I surveyed the entire property on foot September 5, 2017. The information for the attached map of sensitive species locations was gathered at that time. This map indicates approximate positions that have not been verified by land surveying.

Please consult my original biological survey dated November 4, 2016, including lists of plants and wildlife, for a complete description of the property and project areas. ROAD WIDENING

We walked the access road for the project and discussed potential impacts to sensitive plant species Pajaro manzanita (Arctostaphylos pajaroensis) and Hooker's manzanita (Arctostaphylos hookeri ssp.hookeri), which are both present in places close to the existing road's edges. We came to the same conclusions that were arrived at in an analysis of impacts to sensitive plant species from road development for the original biological survey. They are:

- 1. There should be enough room to avoid having to remove any of the sensitive plant species by widening the road on the opposite side from where plants are located. (Please see the attached map of sensitive plant species locations) Some trimming of plants may be required. At the time that the road is land surveyed for construction, the final determination will be made as to whether any of the plants will need to be removed.
- 2. All sensitive plants that could potentially be impacted by road construction will be surrounded by orange construction fencing prior to the start of construction.
- 3. If it is determined that any of the sensitive plants will have to be removed they will be replaced with two of local origin (2:1 mitigation). I recommend transplanting, if possible.

- Any transplanted Pajaro or Hooker's manzanitas will also be supplemented with one additional plant of local origin.
- Chances of impacts to the plants will be less if the road is gravel surfaced and is not paved.

### HOME CONSTRUCTION

The proposed position of the home on the property has not changed significantly from the site plan used for the original biological survey. The largest area of continuous central maritime chaparral on the property, containing Pajaro manzanita, Hooker's Manzanita and Monterey ceanothus (Ceanothus rigidus), is located north of the proposed home site (Please see map).

From our August 31, 2017 analysis of the position of the home as it appears on the new site plan compared with the locations of sensitive plants in that area, no removal of sensitive plants should be necessary, although some trimming may be necessary. All sensitive plants that could potentially be impacted by home construction will be surrounded by orange construction fencing prior to the start of construction.

### LEACH FIELD

The configuration of the leach field has changed somewhat from what was present on the original site plan. No sensitive plant species were observed within the area of the leach field. Some Pajaro manzanitas and Hooker's manzanitas are located near the general perimeter of the leach field, but should not be adversely affected by its presence. Please see the attached map of sensitive species locations and keep in mind that this map indicates approximate positions that have not been verified by land surveying.

## CONSERVATION EASEMENT OR SCENIC EASEMENT

The conservation or scenic easement shown on the current site plan contains only a small portion of the central maritime chaparral present on the property. Instead, the configuration of the easement should be changed to primarily include the areas of central maritime chaparral habitat (which includes Pajaro manzanita, Hooker's Manzanita and Monterey ceanothus) as shown on the attached map of sensitive species locations.

### **EUCALYPTUS**

The Barwick Property was historically a Eucalyptus plantation. There are many plantations of this Australian species in north Monterey County. The presence of Eucalyptus degrades the quality of the habitat and seriously diminishes the numbers and vigor of sensitive species growing under them. Removal of Eucalyptus trees from the areas of central maritime chaparral habitat as shown on the attached map of sensitive species locations would greatly enhance the growing environment for the sensitive plant species present there. Removal is desirable, but it is not mandatory. Removal of Eucalyptus trees also lowers the fire danger as well as lowering the danger for limb and tree falling.

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Although not a native plant, the presence of a small number of Eucalyptus in areas where sensitive plant species are not present (around one tree per three acres) can have some positive biological

value in serving as preferred perching, roosting and possible nesting sites for raptors. Any Eucalyptus retained for this purpose should be in areas with no understory containing sensitive plant species. Landmark (unusually large) individuals of even non-native tree species are protected. In the case of Eucalyptus, to be considered a landmark individual, it would have to be 36 inches or greater in diameter at breast height. No landmark individuals of Eucalyptus were observed on my surveys of the Barwick Property and none were reported by arborist Frank Ono.

# CONDITIONS FOR APPROVAL - MITIGATIONS, AS PRESENTED IN ORIGINAL BIOLOGICAL SURVEY REPORT BUT REVISED TO CONFORM TO THIS UPDATE

- A preconstruction survey for the presence of sensitive wildlife that could potentially be impacted by construction activities will be conducted ten days prior to the start of the work. If construction or tree trimming begins between April 1 and August 31, the survey will also include breeding birds.
- 2. All healthy native trees and shrubs on the property will be protected from all impacts that may occur before, during and after construction. This includes protection from direct damage to the branches and roots of the plants, deposition or removal of soil around the plants and compaction of soil around the plants through vehicle use. Care will be taken to make sure that the soil levels within driplines, and especially around the trunks of native trees and shrubs, are not altered and to make sure that drainage slopes away from trunks. These plants should be marked by orange construction fencing, if necessary, during the installation of the new developments to make their locations obvious.
- 3. Less than one third of branches will be removed from any native tree or shrub that may need to be trimmed. Less than one third of area under the dripline of any native tree or shrub should be paved. Coast live oaks should not be trimmed from February through May. There should be no pavement closer than four feet from the trunks of trees unless permeable pavement is used in these areas and surface roots are deep enough to allow paving without their extensive removal.
- 4. Storage and staging areas for construction will be on already cleared land and will not be on or close to areas of natural habitat.
- Most of the property other than the areas impacted by development will remain in its current natural state.
- 6. Conservation easements or scenic easements will be dedicated to preserve sensitive habitat areas on the property, which include the ridge top and north slope areas of central maritime chapairal north of the proposed home site and the area north of the proposed driveway just west of the home site. Please see attached map of sensitive species locations.
- 7. Eight coast live oaks will be planted to replace the six mature coast live oaks to be removed from around the home site area as directed by arborist Frank Ono.

- 8. Measures will be taken to maximally protect and preserve all Pajaro manzanitas and Hooker's manzanitas on or near the areas to be developed. All Pajaro manzanitas and Hooker's manzanitas in areas that could be impacted by development will be marked by orange construction fencing prior to the start of construction. If it is determined that any Pajaro manzanitas or Hooker's manzanitas will have to be removed they will be replaced with two of local origin (2:1 mitigation). I recommend transplanting of the ones present, if possible. Any transplanted Pajaro manzanitas will also be supplemented with one additional one.
- 9. It is recommended that all landscaping and restoration plantings on the property be composed primarily of native plants of local origin. Other native plants and drought tolerant, fire resistant plants with similar requirements to our native vegetation may also be planted immediately around the home. All other restoration plantings will be plants native to the area, preferably of local origin. A native plant seed mix from stock of local origin will be used to restore impacted native understory and ground cover as well as for erosion control. Many suitable plants for drought-tolerant landscaping in our local area are listed on pamphlets and websites available from the Monterey County Resource Management Agency, the Monterey Peninsula Water Management District and other agencies as well as native plant nurseries.
- 10. Invasive exotic plants will, as much as possible, be removed from the property. The invasive exotics observed to be on the Barwick Property on my survey are: Hottentot Fig (Carpobrotus edulis), French Broom (Genista monspessulana), Pampas Grass (Cortaderia jubata), Monterey pine (Pinus radiata) and Blue Gum Eucalyptus (Eucalyptus globulus).
- 11. Perimeter fencing, if present, will be of a type to allow wildlife to cross. Wire fencing should have a clearance of eighteen inches between the ground and the first wire and can be any height. Board fencing can be of any height and should have at least two panels on a side, or every ten feet, with at least fifteen inches between boards.
- 12. Curbs at the edges of roads, parking areas, or driveways, will be low and have rounded contours, to allow amphibians, reptiles, invertebrates and other small animals to cross them easily.

I recommend Elkhorn Native Plant Nursery in Moss Landing (831-763-1207, elkhornnursery.com), Central Coast Wilds of Santa Cruz (831-459-0656, centralcoastwilds.com), and Rana Creek Nursery in Carmel Valley (831-659-3820, ranacreekdesigns.com) as sources for native plants of local origin including erosion control seed mixes and plantings and for recommendations on planting and maintaining plants. Native grass mulches and hay bales are recommended and can also be obtained from these sources.

### **RECOMMENDATIONS ON THE PROJECT**

With the successful implementation of the conditions for approval listed above and in the update, impacts to biological values on the Barwick Property should be at a level of insignificance and in compliance with the regulations and standards of the Monterey County Resource Management

Agency and state and federal agencies concerned with the maintenance of habitat quality and protection of biological resources.

Please contact me if you have any questions.

Best regards,

Ed Mercurio,

Biological Consultant

# APPROXIMATE LOCATIONS OF AREAS OF CENTRAL MARITIME CHAPARRAL AND OF ISOLATED INDIVIDUAL PAJARO MANZANITAS AND HOOKER'S MANZANITAS ON THE BARWICK PROPERTY

By Ed Mercurio, September, 2017

