Timberland Resource Consultants

165 South Fortuna Boulevard, Suite 4 Fortuna, CA 95540
707-725-1897 • fax 707-725-0972

May 21, 2018

Morgan Stoft
PO Box 190
Garberville, CA 95560

Dear Morgan Stoft,

The following is an evaluation of potential timberland conversion on cannabis cultivation sites and associated areas included in the Humboldt County Cannabis Permit Application (Apps #11885) for APN 216-083-003. Please accept this letter as the RPF's written report required by Humboldt County Code, Ordinance No. 2559 (Commercial Medical Marijuana Land Use), Section 55.4.10 (j), sited below.

"Alternately, for existing operations occupying sites created through prior unauthorized conversion of timberland, if the landowner has not completed a civil or criminal process and/or entered into a negotiated settlement with CALFIRE, the applicant shall secure the services of a registered professional forester (RPF) to evaluate site conditions and conversion history for the property and provide a written report to the Planning Division containing the RPF's recommendation as to remedial actions necessary to bring the conversion area into compliance with provisions of the Forest Practices Act. The Planning Division shall provide CAL-FIRE written Notice of Availability of the RPF's report. If CAL-FIRE takes no action within ten (10) days of the notice of availability, the report recommendations shall become final."

Timberland Resource Consultants (TRC) inspected and evaluated the cultivation site and associated areas contained within the application on May 15, 2018 and May 19, 2018. The RPF exercised due diligence in reviewing all sites and available resources to fully assess potential timberland conversion and consequential impacts. This report evaluates the cultivation sites and associated areas for timber operations only. The scope of this report does not include: all other land alteration (such as grading, construction, and other permit-regulated activities), all property features and sites unrelated to cultivation activities, or any proposed, planned, or absent cultivation-related project sites. All findings are summarized in the report below.

Project Location

APN: 216-083-003
Acreage: 91 acres
Legal Description: S ½ of SE 1/4 of Section 31
Township 4 South, Range 5 East,
Humboldt Base & Meridian, Humboldt County
Located on USGS 7.5' Quadrangle: Harris, CA
Humboldt County Zoning: Unclassified
Site Address: 4244 Bell Springs Road Harris Ca
Landowner/Timber Owner: Morgan Stoft Dba Ag/Farming

The project is located in Humboldt County, in the Harris area. on the property known as 4244 Bell Springs Road Harris (see General Location Map). Access to the property is from Bellus Road. From the junction of Bell Springs Road and Bellus Road, drive approximately 0.60 miles west on Bellus Road to property.

Parcel Description & Timber Harvest History

Note: The property background has been summarized using personal accounts of the current landowner, digital orthographic quadrangle (DOQ) imagery, Humboldt County Web GIS, CAL FIRE Watershed Mapper v2, and Historic Aerials. To avoid speculation and maintain relevancy, the property background focuses mainly on the past 10-15 years.

The property consists of two stand types: Second growth tanoak and Douglas-fir resulting from the last major timber harvest and Douglas-fir, madrone, and tanoak in-growth. Review of 1968 aerial imagery suggest that the majority of the property was in state of transition from grassland/oak woodlands to brush, hardwoods, and scattered conifers. In general, the ridge tops were open grassland, which transitioned to brush and hardwoods mid-slope, and then to Douglas-fir and hardwoods in the creek bottoms. Within the vicinity of the three cultivation sites there were few to no old growth Douglas-fir stumps confirming much of the upslope areas naturally succeeded from grassland/oak woodland to conifer/hardwood forests.

There are no signs of more recent ground disturbance or changes in stand structure or composition suggesting additional logging entries have occurred since the original harvest. Moreover, none have been recorded by Cal Fire (Watershed Mapper v2 http://egis.fire.ca.gov/watershed_mapper/). The current landowner, Morgan Stoft Dba Ag/Farming purchased the property from Edward Orem in 2006.

Project Description

Three cultivation areas and associated area were inspected during the field assessment within APN 216-083-003. The following table lists the inspected sites and their acreages; see detailed site descriptions below.

Cultivation Site/Associated Area	Total Acreage	Converted?	Converted Acreage
CA #1	0.64	Yes	0.64
CA #2	0.16	Yes	0.16
CA #3	0.62	Yes	0.62
CA #4 (proposed)	0.34	Yes	0.34
TOTAL	1.76		1.76

CA #1

Review of aerial imagery reveals that the cultivation site was formally a grassy opening surrounded by brush and hardwood in-growth in 1968. CA #1's upper-most flat was developed between 1998 and 2005 and resembled a log landing. The site was slightly expanded between 2005-2009. In 2012, the two U-shaped terraces located below the upper flat (essentially cut and fill roads the ring the site) were constructed. From 2012 to present the fill slopes have been slowly growing over with Douglas-fir seedlings, hardwood saplings, manzanita, ceanothus, and other brush species. The cultivation activities observed impede the use of this space for current timber growth and harvesting; in this way, the landowner has effectively converted the single use of this space from timber production to cannabis cultivation. Please note that all cultivation at this site is proposed to be relocated to CA#4. During the inspection no cultivation was occurring and the site completely cleaned of cultivation related materials.

CA #2

Review of aerial imagery reveals that the cultivation site was established between 2014 and 2015. The cultivation activities observed impede the use of this space for current timber growth and harvesting; in this way, the landowner has effectively converted the single use of this space from timber production to cannabis cultivation. Please note that all cultivation at this site is proposed to be relocated to CA#4. During the inspection no cultivation was occurring, but the site still contains cultivation related materials.

Project Description (Cont.)

CA #3
Review of aerial imagery reveals that the cultivation site was established between 2006 and 2009. The site was slightly expanded between 2012-2014, and then once again (north and northeast) between 2014 and 2016. The cultivation activities observed impede the use of this space for current timber growth and harvesting; in this way, the landowner has effectively converted the single use of this space from timber production to cannabis cultivation.

CA #4 - Proposed Cultivation Site
Review of aerial imagery reveals that the cultivation site was established between 2006 and 2009. The site was expanded in small increments between 2009-2014, which included the construction of the residence between 2010 and 2012. It appears that brush and trees were harvested on the periphery of the site between 2014-2016 but no stumps removed. The cultivation activities observed impede the use of this space for current timber growth and harvesting; in this way, the landowner has effectively converted the single use of this space from timber production to cannabis cultivation.

Timberland Conversion Summary
TRC observed approximately 1.60 acres of unauthorized timberland conversion for cultivation-related purposes. This total does not exceed the three-acre conversion exemption maximum.

Limitations and Considerations for Timberland Conversion Activities

Watercourses and Water Resources
14CCR 1104.1(a)(2)(F): "No timber operations are allowed within a watercourse and lake protection zone unless specifically approved by local permit (e.g., county, city)."

No conversion areas exist within Watercourse and Lake Protection Zones (WLPZ) or Equipment Exclusion Zones (EEZs) on the property. Conversion activities have not impacted water resources.

Slash, Woody Debris, and Refuse Treatment
14 CCR 914.5(b): "Non-biodegradable refuse, litter, trash, and debris resulting from timber operations, and other activity in connection with the operations shall be disposed of concurrently with the conduct of timber operations."
14CCR 1104.1(a)(2)(D) – Treatment of Slash and Woody Debris
1) *Unless otherwise required, slash greater than one inch in diameter and greater than two feet long, and woody debris, except pine, shall receive full treatment no later than April 1 of the year following its creation, or within one year from the date of acceptance of the conversion exemption by the Director, whichever comes first.*
2) *All pine slash three inches and greater in diameter and longer than four feet must receive initial treatment if it is still on the parcel, within 7 days of its creation.*
3) *All pine woody debris longer than four feet must receive an initial treatment prior to full treatment.*
4) *Initial treatment shall include limbing woody debris and cutting slash and woody debris into lengths of less than four feet, and leaving the pieces exposed to solar radiation to aid in rapid drying.*
5) *Full treatment of all pine slash and woody debris must be completed by March 1 of the year following its creation, or within one year from the date of acceptance of the conversion exemption by the Director, whichever comes first.*
6) *Full slash and woody debris treatment may include any of the following:*
    a) *Burying;*
    b) *Chipping and spreading;*
    c) *Piling and burning; or*
    d) *Removing slash and woody debris from the site for treatment in compliance with (a)-(b). Slash and woody debris may not be burned by open outdoor fires except under permit from the appropriate fire protection agency, if required, the local air pollution control district or air quality management district. The burning must occur on the property where the slash and woody debris originated.*
7) *Slash and woody debris, except for pine, which is cut up for firewood shall be cut to lengths 24 inches or less and set aside for drying by April 1 of the year following its creation. Pine slash and woody debris*

which is cut up for firewood shall be cut to lengths 24 inches or less and set aside for drying within seven days of its creation.

8) *Any treatment which involves burning of slash or woody debris shall comply with all state and local fire and air quality rules.*

Minor slash and woody debris exists along the eastern boundary of CA #3 and CA #4 that requires treatment. Minor slash occurs at the bottom of CA#1, which is "windrowed" at the base of the lowest terrace at the toe of the fill-slope. The slash is not mixed and/or buried in fill material and therefore is in compliance with 14CCR 923.4(h), which states:

> *Waste organic material, such as uprooted stumps, cull logs, accumulations of limbs and branches, and unmerchantable trees, shall not be buried in logging road or landing fills. Wood debris or cull logs and chunks may be placed and stabilized at the toe of fill to restrain excavated soil from moving downslope.*

Slash at CA#1 is not required to be treated because its functioning as a filter windrow, and this site will be abandoned and re-stocked with conifers. There is existing conifer regeneration growing amongst and alongside the slash, which would be disturbed and/destroyed if slash treatment was to occur.

Biological Resources and Forest Stand Health

14 CCR 1104.1 (2)(H): "No sites of rare, threatened or endangered plants or animals shall be disturbed, threatened or damaged and no timber operations shall occur within the buffer zone of a sensitive species as defined in 14 CCR 895.1"

A query of the California Natural Diversity Database (CNDDB) on May 5, 2018 showed one observation of a sensitive, rare, threatened, or endangered species or species of special concern within a 0.7-mile radius biological assessment area (BAA) surrounding the cultivation sites and associated areas. Viburnum ellipticum or Oval-leaved viburnum was detected approximately 3,000 feet northeast of the property along Bell Springs Road. No sensitive, rare, threatened, or endangered species or species of special concern were observed during the TRC field assessment of the project area, though potential habitat may exist on the property.

The query of the CNDDB revealed no known Northern Spotted Owl (NSO) Activity Centers within a 0.7-mile radius BAA surrounding the cultivation sites and associated area. NSO habitat within the property is "foraging" with no nesting or roosting habitat observed.

No major forest health issues were observed during the field assessment. Though the property is located within Humboldt County, a Zone of Infestation (ZOI) for Sudden Oak Death (SOD), no symptoms, signs, or evidence of oak mortality were observed (*Oak Mortality Disease Control*). According to UC Berkeley's Mobile SOD Map, no trees have been sampled for SOD infection within a one-mile radius of the cultivation site and associated area. No risk assessment was made at the property. The conversion activities do not appear to have impacted forest health.

The conversion areas did not include late successional stands, late seral stage forests, or old growth trees. The conversion area did not include any trees that existed before 1800 A.D. and are greater than sixty (60) inches in diameter at stump height for Sierra or Coastal Redwoods, and forty-eight (48) inches in diameter at stump height for all other tree species.

Limitations and Considerations for Timberland Conversion Activities

Cultural Resources
14 CCR 1104.1 (2)(I): "No timber operations are allowed on significant historical or archeological sites."

No archeological sites were observed during the TRC field assessment. The RPF conducted pre-field research for the project's geographic location and closely surveyed the converted sites and surrounding undisturbed areas for presence or evidence of prehistoric or historic sites. The archaeological survey was conducted by Chris Carroll, a certified archaeological surveyor with current CALFIRE Archeological Training (Archaeological Training Course #575). The survey consisted of examining boot scrapes, rodent disturbances, natural and manmade areas of exposed soils, and road and cultivation site surfaces. Per 14 CCR 1104.2(2)(I), all required Native American tribes and organizations have been notified of the project location and are encouraged to respond with any information regarding archaeological sites, cultural sites, and/or tribal cultural resources within or adjacent to the project area.

Recommendations

In summary, a total of 1.76 acres of unauthorized timberland conversion has occurred within APN 216-083-003. This total does not exceed the three-acre conversion exemption maximum. The conversion activities conducted on the property do *not* comply with the California Forest Practice Act and the California Forest Practice Rules. The RPF recommends the following measures for the converted areas:

Cultivation Area #1: The landowner no longer cultivates cannabis at this site. The pre-existing cultivation at this site is proposed to be relocated to CA #4. The landowner shall re-stock this site per the attached Restocking Plan. Within two years following re-stocking, the landowner shall have an RPF certify that CA#1 meets the stocking standards of 14CCR 912.7. The upper flat associated with this site will likely be needed as a log landing to facilitate future timber operations. Therefore, outside of the required conifer re-stocking, the RPF recommends to leave the upper flat "as-is" with no physical decommissioning earthwork back to original contours.

Cultivation Area #2: The landowner no longer cultivates cannabis at this site. The pre-existing cultivation at this site is proposed to be relocated to CA #4. The landowner shall re-stock this site per the attached Restocking Plan. Within two years following re-stocking, the landowner shall have an RPF certify that CA#2 meets the stocking standards of 14CCR 912.7. This site will not be used for a log landing in the future. Consequently, CA#2 and the associated access road may be abandoned or decommissioned at the discretion of the Water Board or landowner's Third-Party representative.

Cultivation Area #3: Slash and woody debris treatment required.

Cultivation Area #4: Slash and woody debris treatment required.

Sincerely,

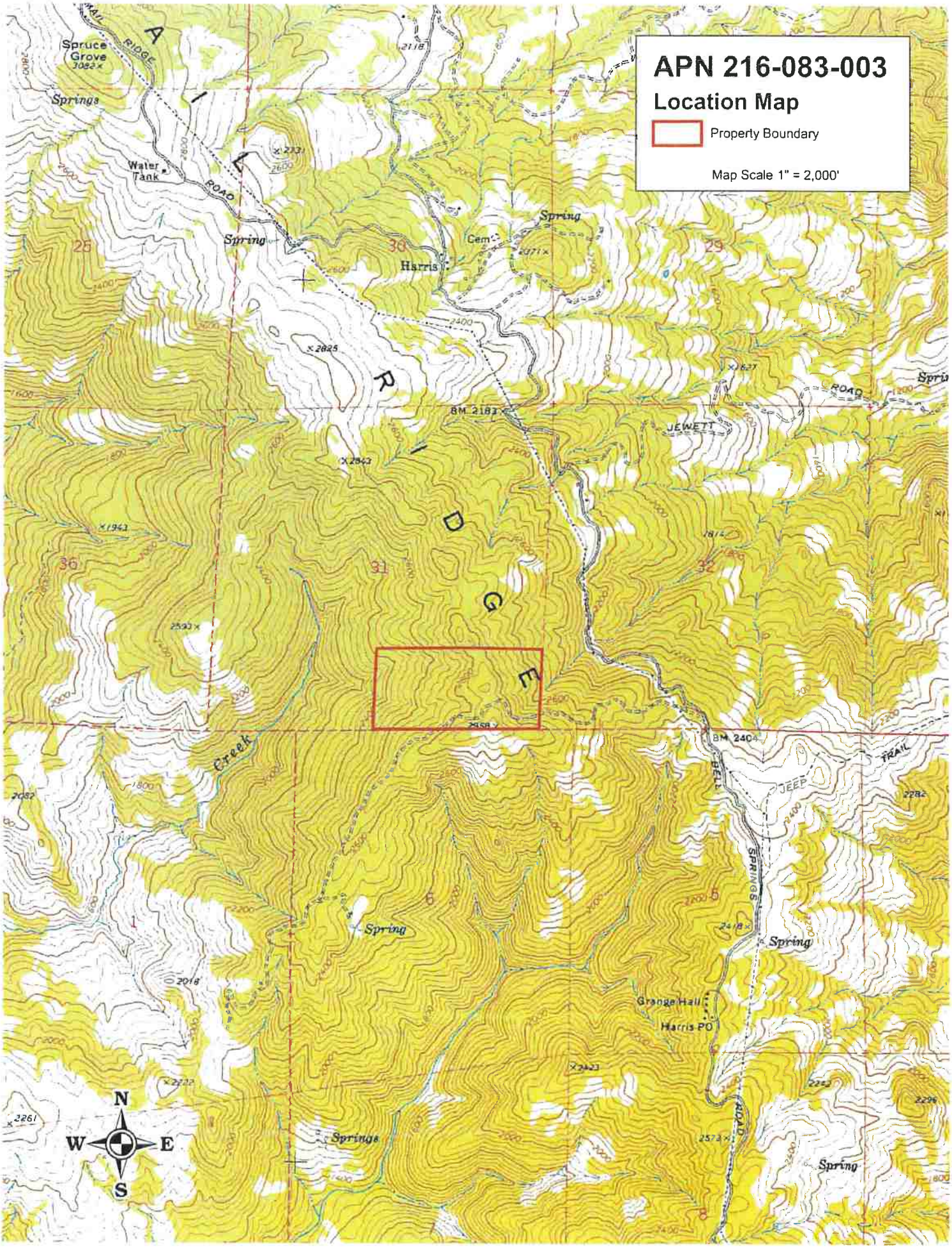
Chris Carroll, RPF #2628
Timberland Resource Consultants

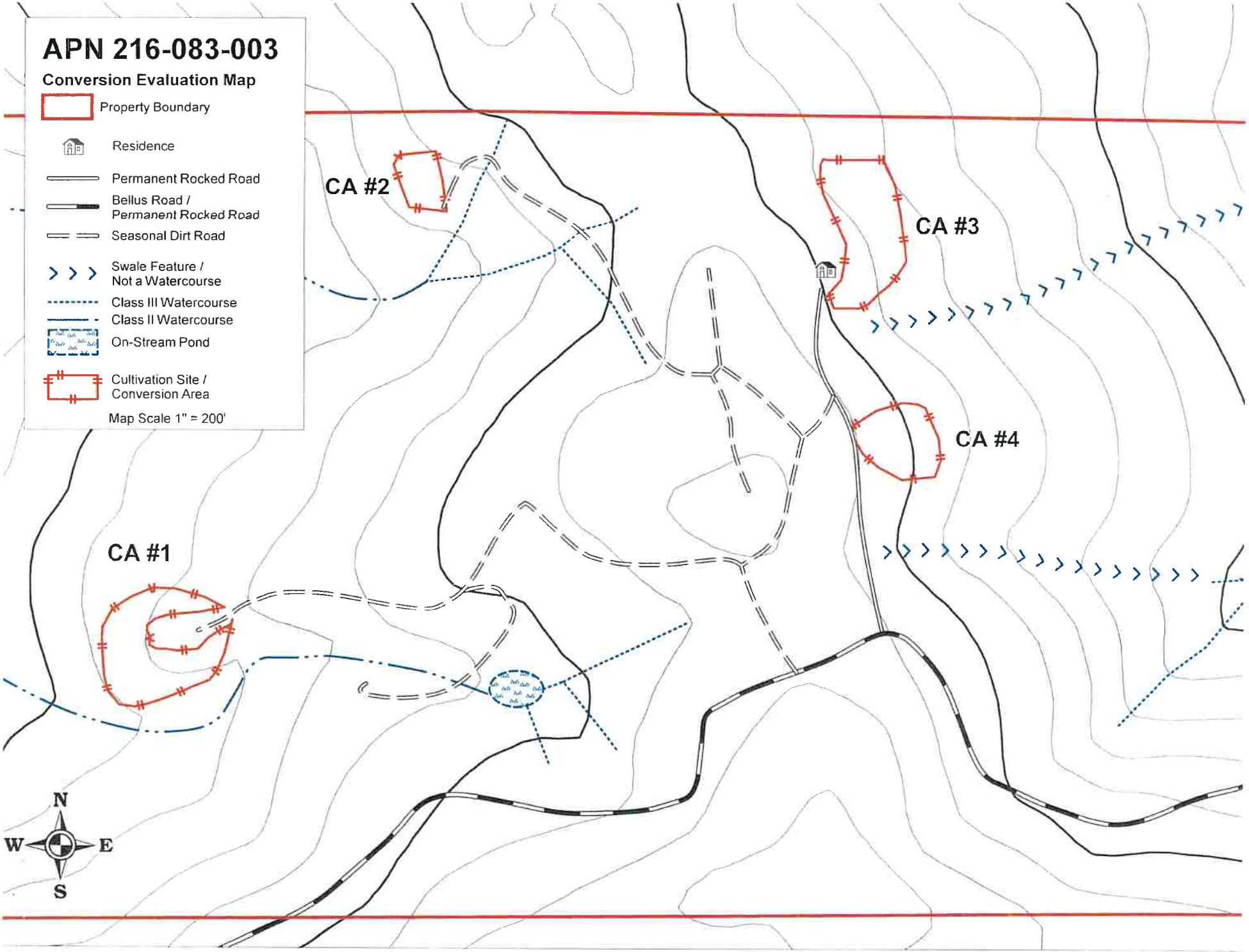
Pictures

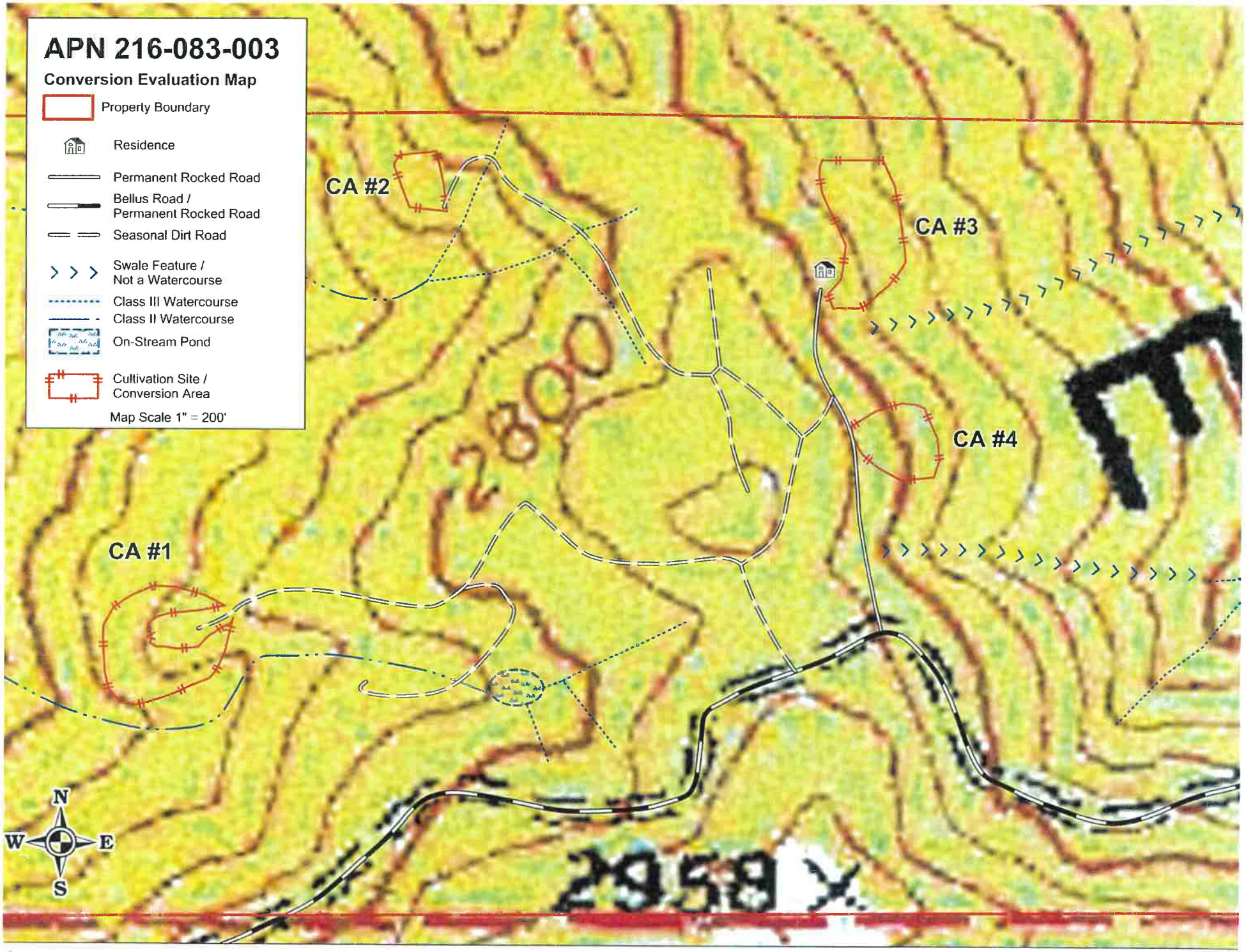
Picture 1: Cultivation Area #1. The lower-most terrace. As noted in the report the slash located at the base of fill shall not be removed. Photo date 5-15-2018.

Pictures

Picture 2: Cultivation Area #2. Photo date 5-15-2018.


APN 216-083-003
Location Map
Property Boundary
Map Scale 1" = 2,000'
RIDGE
TRAIL
Spruce Grove
Springs
Water Tank
ROAD
Spring
Harris
Cem
JEWETT
BM 2183
BM 2404
Creek
JEEP
SPRINGS
Grange Hall
Harris PO
N
W
E
S


APN 216-083-003
Conversion Evaluation Map
Property Boundary
Residence
Permanent Rocked Road
Bellus Road / Permanent Rocked Road
Seasonal Dirt Road
Swale Feature / Not a Watercourse
Class III Watercourse
Class II Watercourse
On-Stream Pond
Cultivation Site / Conversion Area
Map Scale 1" = 200'
CA #1
CA #2
CA #3
CA #4
N
W
E
S


APN 216-083-003
Conversion Evaluation Map
Property Boundary
Residence
Permanent Rocked Road
Bellus Road / Permanent Rocked Road
Seasonal Dirt Road
Swale Feature / Not a Watercourse
Class III Watercourse
Class II Watercourse
On-Stream Pond
Cultivation Site / Conversion Area
Map Scale 1" = 200'
CA #1
CA #2
CA #3
CA #4
2800
2958
N
W
E
S

Cultivation Area #1

Cultivation Area #3

Cultivation Area #4 - Proposed Site

Timberland Resource Consultants

RESTOCKING PLAN

FOR

APN 216-083-003

May 21, 2018

165 South Fortuna Blvd
Fortuna, CA 95540
707-725-1897
707-725-0972 Fax
trc@timberlandresource.com

Regeneration Plan

Site Preparation: Site preparation is a widely used method to facilitate the establishment of a desirable stand of trees. Site preparation activities remove or reduce competing vegetation, reduce or remove unwanted trees and logging debris, and prepare the soil to promote the growth and survival of desired tree species. There are many methods of site preparation that fall under either chemical or mechanical site preparation. The primary objective is to have an area suitable for planting and establishing a new stand of trees. If heavy equipment is available, the RPF recommends subsoiling/ripping the planted sites. Subsoiling/ripping is a mechanical site prep method for heavy soils on cutover or agricultural lands that have a compacted layer at or below the soil surface that limits root growth and development. Subsoiling/ripping increases aeration and water-holding capacity of compacted soils and breaks up root restricting hardpans and/or traffic pans.

Planting: The RPF recommends planting Douglas-fir seedlings at a spacing no less than 10 feet by 10 feet or 435 trees per acre. If deer browsing is expected (landowner's local knowledge), then the density can be slightly increased to account for mortality and/or damage. The area to be planted at CA #1 is approximately 0.64 acres in size, which shall require approximately 278 conifer seedlings to be planted. The area to be planted at CA #2 is approximately 0.16 acres in size, which shall require approximately 70 conifer seedlings to be planted.

Seedlings: Most conifer seedlings that come from the nursery are usually available in two forms; bareroot seedlings and containerized seedlings. Bareroot seedlings are essentially stock whose roots are exposed at the time of planting. Bareroot seedlings are grown in nursery seedbeds and lifted from the soil in which they are grown to be planted in the field. Containerized seedlings are grown in a variety of hard-walled vessels or in peat pots from seed. Given the conditions of the site and the higher survival rate associated with containerized stock, the RPF recommends using containerized seedlings if available. Seedling care and handling is extremely important to ensure post planting survival. For long-term storage (more than 3 days) store at 33-36 degrees Fahrenheit. For short-term storage (several hours to less than 3 days) store below 42 degrees Fahrenheit. At the planting site take care to not let the roots dry out and avoid exposure to the sun or warmer temperatures.

Planting Instructions:

1. Tree planting shall only occur in winter or early spring. Tree planting should not occur if the ground is frozen, or during unusually warm periods.
2. Dig a hole at least one inch deeper and wider than the seedling roots. If planting from a container, dig the hole an inch deeper and wider than the container.
3. Place the seedling into the hole taking care not to bend the taproot, or main vertical root, and cover with soil.
4. Pack the soil down firmly around the seeding to remove any air pockets.
5. See Appendix A-D for illustrations for correct planting techniques.

6. The RPF recommends acquiring conifer seedlings from Green Diamond Resource Company's nursery in Korbel. Contact Glen Lehar @ 707-668-4439. Indicate the elevation and geographic area of the planting site and he will recommend the appropriate stock.

Sincerely,

Chris Carroll, RPF# 2628
Timberland Resource Consultants

APPENDIX A

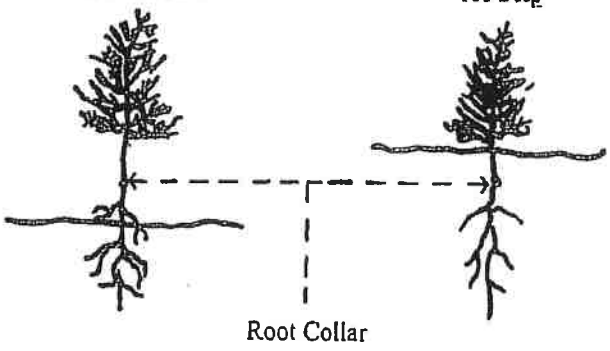
CORRECT METHOD OF SEEDLING PLANTING

- Soil firmly packed around roots.
- No air pockets.
- Roots straight with no J or L bends.
- Root collar at or slightly below ground level.
- Root not pruned.

ERROR IN PLANTING

Too shallow

Too Deep



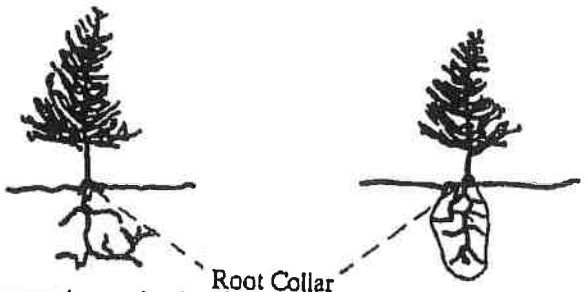
Root Collar

- Hole not deep enough.
- Root collar and upper roots exposed.
- Roots dry out.

- Hole is too deep.
- Root collar buried.

J or L Roots

Air Pockets



Root Collar

Hole is not deep enough — planting in rocky soil.

Roots cannot effectively take up water.

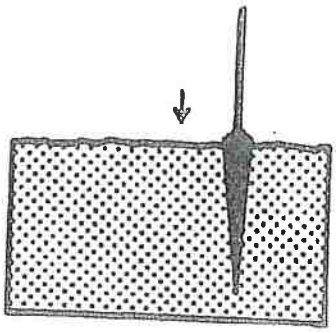
Tree not wind-firm.

- Soil not firmly packed around roots.
- Air pocket forms.
- Roots dry out.

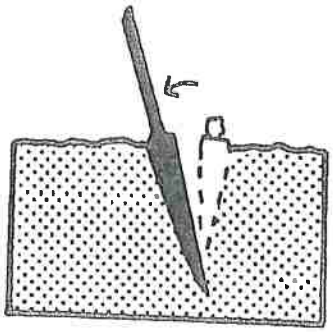
APPENDIX B

PLANTING WITH A FLAT BAR

1. Insert flat bar straight down.

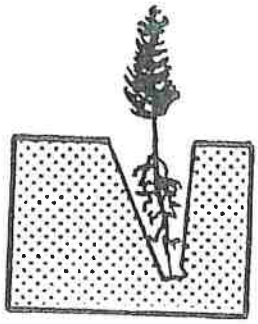


2. Pull flat bar backward to open hole.

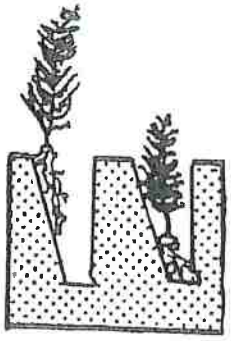


3. Remove flat bar and place seedling at correct depth with root collar at or slightly below ground level.

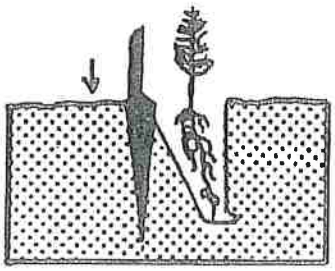
Correct



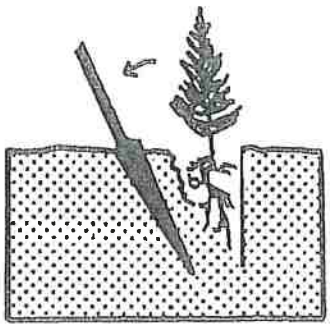
Incorrect



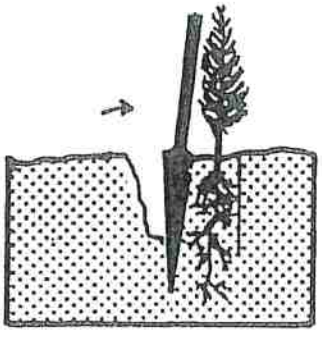
4. Insert flat bar straight down until flat bar footrest is level with ground.



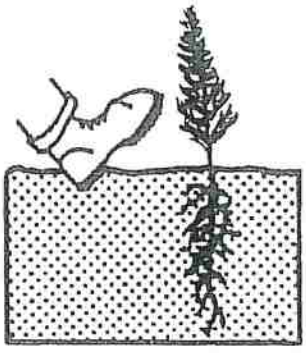
5. Pull flat bar backward to pack soil around lower part of seedling to eliminate air pockets.



6. Push flat bar forward to pack soil firmly against upper part of seedling.



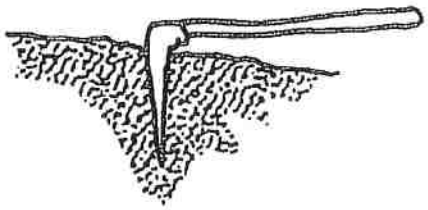
7. Remove flat bar and fill in last hole by firming with heel.



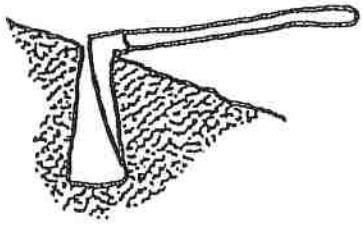
APPENDIX C

PLANTING WITH A HOE

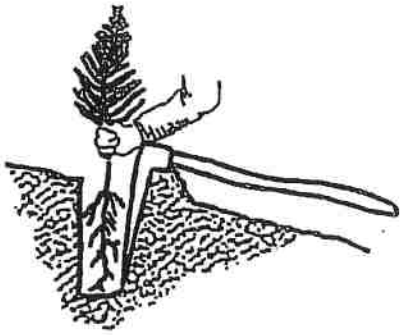
1. Swing hoe to get full penetration.



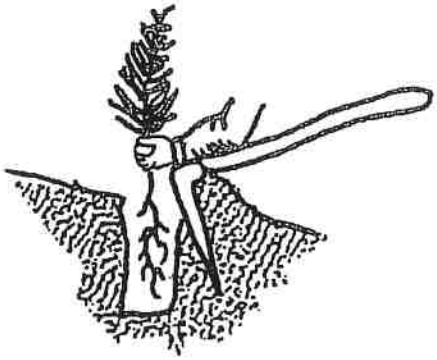
2. Lift handle and pull up to widen hole.



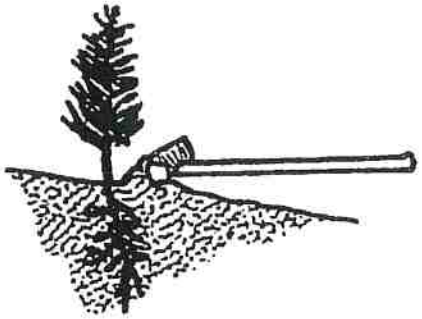
3. Place seedling while using hoe to hold back soil.



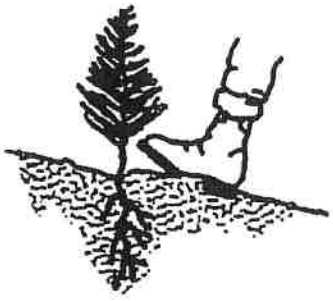
4. Use hoe to pack soil at bottom of hole.



5. Use hoe to pack soil at top hole.



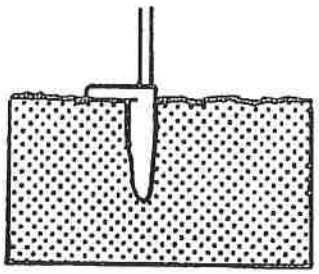
6. Firm soil around seedling with feet.



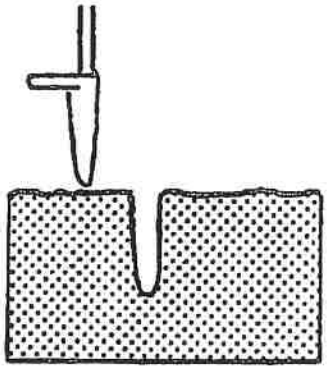
APPENDIX D

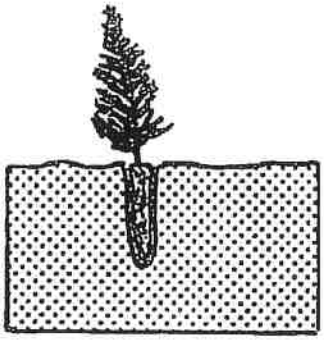
PUNTING WITH A PLUG BAR

1. Insert plug bar straight down until plug bar footrest is level with ground.



2 Remove plug bar and place seedling in hole.





3. Firm soil around seeding with heel of boot.