

#### **GOAL 4 Forest Lands**

Goal 4 requires the conservation of forest land for forest uses. Forest land is defined by Statewide Planning Goal 4 as lands suitable for commercial forest uses including adjacent and nearby lands which are necessary to permit forest operations or practices and other forested lands that maintain soil, air, water and fish and wildlife resources.

The subject property is composed of approximately 67 percent Class V and VI nonresource soils. The soil descriptions and Table 6 Woodland Management and Productivity within The Soil Survey of Lane County Area, Oregon, attached as Exhibit "N", do not list Cloquato, Oxley, or Sifton soils as being suited for the production of Douglas-fir or any other fir or deciduous tree species. In 1997, Lane County revised the agricultural capability and forest ratings of many soils. The Sifton unit is rated as having a forest capability of 182 cubic feet per acre per year. This designation appears to be an error based on the low water holding capacity of the soil, droughty conditions and a lack of irrigation. These conditions have been documented by Mr. Kitzrow's onsite soil analysis. There is no evidence that the property ever supported commercial forest uses. Further, if the subject property cannot support a filbert orchard it cannot support commercial forest species. The subject property is not suitable for forest uses.

The second part of the test inquires into whether the subject property must be kept in a resource designation in order to permit forest operations or practices on adjacent or nearby lands. There are no forest lands located on adjacent or nearby lands. The closest forest lands are located approximately one-half mile away and separated by the community of Walterville to the north and the McKenzie River to the south.

Therefore, based on an analysis of the factors discussed above and earlier in this statement, the site is not forest land required for conservation by Goal 4, and an exception to Goal 4 is not required.

#### **GOAL 5 Open Spaces, Scenic and Historic Areas and Natural Resources**

Goal 5 requires the conservation of open space and protection of natural and scenic resources that include cultural, historic, scenic and wilderness area characteristics. The goal, as amended by OAR 660-23-000, contains policies and procedures for a variety of resources which are listed below. The administrative rule requires the county to inventory and evaluate the location, quality and quantity of certain natural resources.

The county must address Goal 5 when an acknowledged plan and zoning designation is proposed for amendment. If no conflicting uses are identified, the inventoried resources shall be preserved. If conflicting uses are identified, the economic, social, environmental and energy consequences of the conflicting uses shall be determined and programs developed to achieve the goal. The Goal 5 conflict resolution process is not required for Goal 5 resources that are not on an acknowledged

Goal 5 inventory. Therefore, Goal 5 requires whether any of the following Goal 5 resources inventoried in the acknowledged county plan.

The following Goal 5 resources are addressed in an inventory done as part of a Countywide legislative planning process: Federal wild and scenic rivers, Oregon scenic waterways, approved Oregon recreational trails, natural areas, wilderness areas, mineral and aggregate resources, energy sources, historic resources, open space, and scenic views and sites. The subject property is not listed on any county inventory for these resources.

The Goal 5 resources that are listed below have been determined to be site-specific, given the requirements of each resource.

**Water Resources:** The subject property is served by an existing well. Groundwater will be the source for domestic water supply for up to six single-family residences on the subject property. The subject property is not listed by Lane Manual 13.010 as being located within a water quantity or quality limited area. Attached to this application, as Exhibit "O", is a Well Log Report conducted by EGR and Associates of 111 wells located in Sections 27 and 28. The EGR report indicates the mean and median well production in Section 27 is 22 gpm and 20 gpm, and 32 gpm and 30 gpm in Section 28, respectively. The report concludes the local aquifer is capable of serving the proposed residential density for domestic purposes. This exhibit is not attached to this application due to its length, but is available for review at the Land Management Division.

**Riparian Resources:** The *Flora and Fauna Working Paper and Addendum* inventories riparian resources. Riparian areas are inventoried to include all lands within 100 feet of the banks of a Class I stream. There are no Class I streams on the subject property or within 100 feet of it.

**Wetland Resources:** The National Wetland Inventory (NWI) mapping for the county is being used as the inventory of wetland resources. NWI map WALTERVILLE 3, attached as Exhibit "P", indicates there are no wetland resources located on the subject property.

**Big Game Resources:** The Wildlife Inventory, Marcola Quad, attached as Exhibit "Q", indicates the subject property is located within an Impacted Big Game Range. There are no county inventories or specific site evidence that indicates the property is necessary to be preserved for wildlife to meet the requirements for food, water, shelter, reproduction, wildlife migration corridors, big game range, nesting or roosting sites.

## **GOAL 6      Air, Water and Land Resource Quality**

Goal 6 is intended to maintain and improve the quality of the air, water and land resources of the State. This Goal is generally implemented during the comprehensive planning process. As it pertains to site-specific development, it requires that adequate protection measures are taken to assure the retention of air, water and land quality.

The subject property will be served by individual on-site sanitation systems. As a condition of any land divisions and prior to residential development, each parcel will be required to gain approval of an on-site sanitation system in accordance with DEQ rules.

**GOAL 7 Areas Subject to Natural Disasters or Hazards**

Goal 7 is intended to protect life and property from natural hazards. FIRM Panel 1190, attached as Exhibit "R", indicates the subject property is located within a Zone AE 100 year floodplain where base flood elevations have been determined and portions on the terrace within a Zone X, determined to be outside a 500 year floodplain. Any future residential development will be subject to establishing floor elevations one foot above the established floodplain elevation, where applicable. No other natural hazards have been identified by county inventories or a site view of the subject property.

**GOAL 8 Recreational Needs**

This goal addresses the recreational needs of Oregon residents and visitors. Provisions of this goal are appropriately implemented by a legislative process as part of periodic review of the comprehensive plan. The proposed change from E-30 Exclusive Farm Use to RR-5 Rural Residential has no impact on Goal 8.

**GOAL 9 Economy of the State**

The purpose of Goal 9 is to diversify and improve the economy of the State. This goal is primarily applicable to commercial and industrial development and is not pertinent to this application.

**GOAL 10 Housing**

Goal 10 is intended to provide for the housing needs of the citizens of the State. This plan amendment request will facilitate the construction of housing on the site; however, it's primarily implemented through provisions of the Rural Comprehensive Plan.

**Goal 11 Public Facilities and Services**

The purpose of Goal 11 is to provide for the planning and development of public facilities and services in a timely, orderly and efficient manner, in order to support rural and urban development. The subject property is rural land and will remain rural land after approval of this request. The RCP Goal 11 Policy 6 (e)(k) describes the minimum level of services for Nonresource lands. The subject property receives the following services and facilities that are consistent with county policy.

Fire	McKenzie Rural Fire Protection District
Police	Lane County Sheriff
Schools	Springfield School District #19
Sewer	Individual septic systems
Water	Individual wells
Access	McKenzie Highway (State)
Electricity	Lane Electric
Telephone	Qwest Communications
Solid Waste	Glenwood Solid Waste Transfer Site

A full range of rural services presently exists to serve the proposed rural residential development on the site. No additional public facilities and services are required to serve the proposed residential use of the subject property.

**Goal 12            Transportation**

Goal 12 is intended to provide and encourage a safe, convenient and economical transportation system. This goal is implemented through the Goal 12 Rule, OAR 660-12), adopted in 1991. The Rule specifically addresses amendments to an acknowledged comprehensive plans and implementing regulations. OAR 660-12-060(1) provides that any such amendments that “significantly affect a transportation facility shall assure that allowed land uses are consistent with the identified function, capacity, and level of service of the facility.” To determine what constitutes a significant affect, OAR 660-12-060(2) requires an evaluation of whether the amendment: 1) changes the functional classification of an existing or proposed transportation facility, 2) changes standards implementing a functional classification system, 3) allows types or levels of land uses which would result in levels of travel or access which are inconsistent with the the functional classification of a transportation facility, or 4) would reduce the level of service of the facility below the minimum acceptable level identified in the TSP.

The subject property is served by the McKenzie Highway, a State road designated as a principal arterial. The Oregon Department of Transportation staff was consulted regarding the proposed use of the property and indicated a consolidated access approach onto the McKenzie Highway would not appear to conflict with the use or functional classification of the highway. The road has ample capacity to accommodate five additional residences, and is within the acceptable level of service established by the county and state.

**Goal 13            Energy Conservation**

This Goal is most appropriately addressed at the comprehensive planning phase, and as such is not directly applicable to this plan amendment request.

**Goal 14            Urbanization**

The purpose of Goal 14 is to provide for the orderly and efficient transition from rural to urban land use.

Goal 14 prohibits urban uses on rural lands. The proposed amendment and zone change to allow five acre rural residential parcels does not constitute an urban density or is located within an urban growth boundary or urban transition area. All lands located outside of an acknowledged urban growth boundary and not subject to a Goal 14 exception are considered rural lands, per 1000 Friends of Oregon v. DLCD (Curry County), 301 Or 447, 498-501, 724 P 2d 268 (1986). The proposed five acre density is consistent with the lowest Rural Residential density allowed by the county's zoning district for Nonresource lands.

**Goals 15 - 19**

The Goals are not applicable to this plan amendment request, as they are geographically oriented to specific areas and resources that are not present on the subject property.

**B. LANE CODE PLAN AMENDMENT CRITERIA**

**16.400(6)(h): Method of Adoption and Amendment.**

**(iii) The Board may amend or supplement the Rural Comprehensive Plan upon making the following findings:**

**(aa) For Major and Minor Amendments as defined in LC 16.400(8)(a) below, the Plan component or amendment meets all applicable requirements of local and state law, including Statewide Planning Goals and Oregon Administrative Rules.**

This proposal would amend the RCP from Agriculture Land to Nonresource Land. The applicant has provided findings that address the applicable requirements of the Lane Code, RCP policies, and Statewide Planning Goals.

**(bb) For Major and Minor Amendments as defined in LC 16.400(8)(a) below, the Plan amendment or component is:**

**(i-i) necessary to correct an identified error in the application of the Plan; OR**

This plan amendment identifies an error in the RCP, where the site was designated Agriculture Land. Evidence has shown this designation is inconsistent with County plan policies and Statewide planning goal requirements for the designation and protection of the site as agriculture land.

**(iv-iv) necessary to provide for the implementation of adopted Plan policy or elements; OR**

This plan amendment implements RCP Goal 2, Policy 26, which provides for designating lands that are not farm or forest land as rural residential when the site does not meet the definition of farm or forest land as provided by Statewide Planning Goals 3 and 4. As previously stated, the site does not qualify as farm or forest land requiring protection by the statewide planning goals, and therefore qualifies as nonresource land.

**(v-v) otherwise deemed by the Board, for reasons briefly set forth in its decision, to be desirable, appropriate or proper.**

Based upon reasons discussed in this statement, the applicant submits that it is desirable, appropriate and proper to designate this 30 acre parcel as Nonresource Land. Rural residential development is appropriately directed to areas like this site, which are severely limited or precluded from any substantial resource use. This action relieves the strain of similar development on other county lands that are more suitable for farm and forest resource use.

**(cc) For Minor Amendments as defined in LC 16.400 (8)(a), the Plan amendment or component does not conflict with adopted Policies of the Rural Comprehensive Plan, and if possible, achieves policy support.**

This plan amendment request identifies various policies that support this amendment. No policies have been identified that directly conflict with this request.

Goal 2, Policy 16 provides that property that is not farm or forest lands may be designated rural residential upon a factual demonstration that the subject property is not farm or forest land as defined by Goals 3 and 4; does not require an exception; does not create a small, isolated nonresource tract that would be incompatible with surrounding farm and forest land; and is consistent with other plan policies. As previously addressed, the subject property is not farm or forest land as defined by Goals 3 and 4, and therefore does not require an exception. The subject property is bordered on the north by the community of Walterville. To the east, south and west are lands zoned E-30, however, these parcels are of limited size and transition into RR-2 zoned lands approximately 750 feet to the northeast and RR-5 zoned lands located approximately 272 feet to the south.

The proposed rural residential use is consistent with the following RCP policies.

Goal 2, Policy 17 provides rural development densities for nonresource lands shall be one residence per five or ten acres upon consideration of:

a) the existing development pattern of any adjacent committed areas;

There are no committed lands adjacent to the property. This nonresource request is subject to the specific conditions of the subject property. The subject property is located in the greater Walterville area that contains broad pockets of RR-2 and RR-5 zoned parcels. The property is not isolated or surrounded by a large area of exclusive farm use zoned lands. The proposed RR-5 zoning is consistent with the overall land residential land use pattern in the area.

b) subsurface sewage disposal suitability:

The subject property has soils generally suitable for subsurface sewage disposal systems to support the proposed residential density of one dwelling per five acres. Prior to any further development of the property individual sanitation site inspections will be required.

c) domestic water supply availability:

The Well Log Report prepared by EGR and Associates, and attached as Exhibit "O", has been addressed water availability under the Goals portion of this application. The report determined adequate water is available to serve the proposed density.

d) access:

Access to the subject property is provided by the McKenzie Highway 126.

e) public services:

The public services and facilities available to serve the subject property have been previously addressed. These services are adequate to serve the proposed residential density and are consistent with Goal 11, Public Facilities and Services Policy 6(k)(and (e)).

f) lack of natural hazards: and

FIRM Panel 1190 indicates portions of the subject property are located within a Zone AE 100 year floodplain with a base flood elevation of 580 feet established through the approximate middle of the property. Other portions are designated Zone X, areas of 500 year flood, areas of 100 year flood with average depths of less than one foot or areas protected by levees. USGS topography indicates the subject property has an elevation of 580 feet, however the small scale will require on-site verifications. Any development within this area will be subject to subsequent review and approval of a floodplain development permit and establishment of minimum floor elevations where required.

g) effect on resource lands.

This provision has been previously addressed under the Goals statement, above.

Goal 5, Water Resource Policies 3 and 5 require adequate water supplies to support proposed development, and application of a plan designation and zoning consistent with groundwater aquifer capacities. As stated earlier, Water Well Report prepared by a registered geologist has determined adequate groundwater exists to support the density of rural residential development planned for the site. The site is not located within a water quantity or quality limited area as identified by Lane Code 13.010.

**(dd) For Minor Amendments as defined in Lane Code 16.400(8)(a), the Plan amendment or component is compatible with the existing structure of the Rural Comprehensive Plan, and is consistent with the unamended portions or elements of the Plan.**

The proposed Plan amendment is consistent with the RCP intent to choose between competing uses. As previously stated, this amendment is consistent with RCP policies that provide for designating lands that do not have a farm or forest capability as nonresource land. Approval of this amendment is consistent with unamended portions or elements of the Plan.

### **C. LANE CODE 16.400(8) ADDITIONAL AMENDMENT PROVISIONS**

**(a) Amendments to the Rural Comprehensive Plan shall be classified according to the following criteria: (i) Minor Amendment. An amendment limited to the Plan Diagram only and, if requiring an exception to the Statewide Planning Goals, justifies the exception solely on the basis that the resource land is already built upon or is irrevocably committed to other uses not allowed by an applicable goal.**

This request proposes an amendment of the Plan diagram from Agriculture Land to Nonresource Land. SCS soil mapping indicates the majority of the site consists of soils with no farm or forest capability, and therefore qualifies as a Minor Amendment. No goal exceptions are required.

**(c) Minor amendment proposals initiated by an applicant shall provide adequate documentation to allow complete evaluation of the proposal to determine if the findings required by LC 16.400(6)(h)(iii) above can be affirmatively made. Unless waived in writing by the Planning Director, the applicant shall supply documentation concerning the following:**

**(i) A complete description of the proposal and its relationship to the Plan.**

The required description has been previously provided. The proposed use of the site is for rural residential development. The Nonresource designation is applied to the site through an evaluation that it does not qualify as farm or forest land as described herein.



**(ii) An analysis responding to each of the required findings of LC 16.400(6)(h)(ii) above.**

The required analysis is addressed above.

**(iii) An assessment of the probable impacts of implementing the proposed amendment, including the following:**

**(aa) Evaluation of land use and patterns of the area of the amendment;**

This evaluation has been previously provided.

**(bb) Availability of public and/or private facilities and services to the area of the amendment, including transportation, water supply and sewage disposal;**

The public services and facilities available to serve the subject property have been previously identified. In summary, the property will be served by individual septic systems and individual wells. All other necessary services, including police and fire protection, are available.

**(cc) Impact of the amendment on proximate natural resources, resource lands or resource sites including a Statewide Planning Goal 5 "ESEE" conflict analysis where applicable;**

The RCP does not identify any historic, archaeological or sensitive wildlife habitat sites on or near the site. The County's wildlife inventory indicates the site is located within an Impacted Big Game Range. The Lane Code and RCP do not have any special requirements for wildlife protection in an impacted range area. The National Wetland Inventory does not identify any jurisdictional wetlands on the subject property. Therefore, an ESEE analysis is not applicable to this amendment request.

**(dd) Natural hazards affecting or affected by the proposal;**

Natural hazards, namely a 100 year floodplain on a portion of the property, has been previously discussed.

**(ee) For a proposed amendment to a nonresidential, nonagricultural or nonforest designation, an assessment of employment gain or loss, tax revenue impacts and public service/facility costs, as compared to equivalent factors for the existing uses to be replaced by the proposal;**

This standard does not apply, as the proposed amendment is for a residential designation.

**(ff) For a proposed amendment to a nonresidential, nonagricultural or nonforest designation, an inventory of reasonable alternative sites now appropriately designated by the Rural Comprehensive Plan, within the jurisdictional area of the Plan and located in the general vicinity of the proposed amendment;**

This standard does not apply, as the proposed amendment is for a residential designation.

**(gg) For a proposed amendment to a Nonresource designation or a Marginal Lands designation, an analysis responding to the criteria for the respective request as cited in the Plan document entitled, "Working Paper: Marginal Lands" (Lane County, 1983). Lands may be designated as NON-RESOURCE/NON-EXCEPTION LAND upon submission of satisfactory factual information to support the following findings:**

**1. The land is not composed of existing or potential forest lands which are suitable for the commercial production of wood fiber products.**

The site is not capable or suitable for commercial production of wood fiber as discussed under Goal 4, above.

**2. The land is not needed for watershed protection.**

As discussed under Goals 4 and 5, the subject property is not needed to be retained in a Agriculture or Forest designation in order to protect the watershed.

**3. Designation of the land as NON-RESOURCE/NON-EXCEPTION LAND will not adversely affect management of the land for big game range or other wildlife, fish or waterfowl habitat.**

The site is inventoried as Impacted Big Game Range. The RCP has not designated the site as within a sensitive fish or wildlife area, nor has it been identified as necessary for special protection of wildlife, fish or water fowl habitat.

**4. No extreme soil or climatic conditions exist to the extent to require maintenance of existing vegetative cover to a degree not provided by the NON-RESOURCE/NON-EXCEPTION designation.**

There are no extreme soil or climatic conditions present that would require maintenance of existing vegetation.

**5. The land is not located in an agricultural or urban area and provided needed urban buffers, wind breaks, wildlife and fisheries habitat,**

**livestock habitat, scenic corridors or recreational uses.**

The RCP does not identify or inventory the subject property as providing any of the listed functions.

**6. The land is predominately Class V - VIII soils as identified in the Soil Capability Classification system of the U.S. Soil Conservation Service.**

The majority of soils on the site are classified as Class V and VI. See Exhibit "P", Soils Report by Gary Kitzrow, M.S. Growing Soils.

**7. The land is not suitable for farm use or grazing taking into account soil fertility, climatic conditions, existing land use patterns, technological and energy inputs required, or accepted farming practices.**

The subject property is not suitable for forage or grazing as discussed in Paul Day's report attached as Exhibit "L".

**8. Designation of the land as AGRICULTURAL LAND is not necessary to permit farm practices to be undertaken on adjacent or nearby lands.**

See discussion under Goal 3 above. The subject property is not needed to be kept in an Agricultural designation in order to allow farm practices on adjacent or nearby lands. The only commercial farm operation is a beet crop grown to the east and south. This area is separated by an escarpment that physically divides the subject property from the crop lands. The proposed residential development will not interfere with the continued agricultural use of these adjacent lands.

#### **D. ZONE CHANGE CRITERIA LC 16.252**

This application requests a change from E-30 Exclusive Farm Use zoning to RR-5 Rural Residential zoning. This section is generally redundant with the criteria and facts that are relevant to the previously addressed RCP policies, plan amendment criteria and the Statewide Planning Goals.

**(2) Criteria. Zonings, rezonings, and changes in the requirements of this Chapter shall be enacted to achieve the general purpose of this Chapter and shall not be contrary to the public interest. In addition, zonings and rezonings shall be consistent with the specific purposes of the zone classification proposed, applicable to Rural Comprehensive Plan elements and components, and Statewide Planning Goals for any portion of Lane County which has not been acknowledged for compliance with the Statewide Planning Goals by the Land Conservation and Development Commission. Any zoning or rezoning may be effected**

**by Ordinance or Order of the Board of County Commissioners, the Planning Commission or the Hearings Official in accordance with the procedures in this section.**

**General Purposes of Chapter 16:** The purpose of Chapter 16 of the Lane Code is to provide and coordinate regulations concerning development in the County, and to implement the Lane County RCP. LC 16.003 includes 14 broadly worded purpose statements that include a provision to insure that development is commensurate with the character and physical limitations of the land.

Rezoning the site from E-30 to RR-5 implements the proposed plan amendment from Agriculture Land to Nonresource Land. The public interest is appropriately served by recognizing that the site is not agricultural land, nor is it required for protection by Statewide Goals 3 or 4. Rural residential development, such as what is proposed for the site, is oriented to land with no viable farm or forest capability and to sites that serve to infill existing rural residential areas, thereby removing the pressure to develop bonafide agricultural lands. The proposed rural residential use of the property implements the general purpose of LC 16.

**Purpose of Rural Residential Zone:** The Rural Residential zoning district is intended to provide opportunities for people to live in a rural area; allow primary and accessory residential uses that are compatible with primary residential uses; and implement RCP policies related to nonresource lands. The proposed zone change is consistent with the above purpose statements and properly implements the requested amendment.

**Rural Comprehensive Plan Criteria:** The policies of the RCP serve as the basis of the Plan, by directing land use decisions and fulfilling the mandates of the LCDC statewide planning goals. Goal 2, Land Use Planning Policy 26 explicitly provides that land use designations shall be implemented by specific zoning districts. Upon approval of the requested Plan designation, this policy supports concurrent adoption of the Rural Residential implementing zoning.

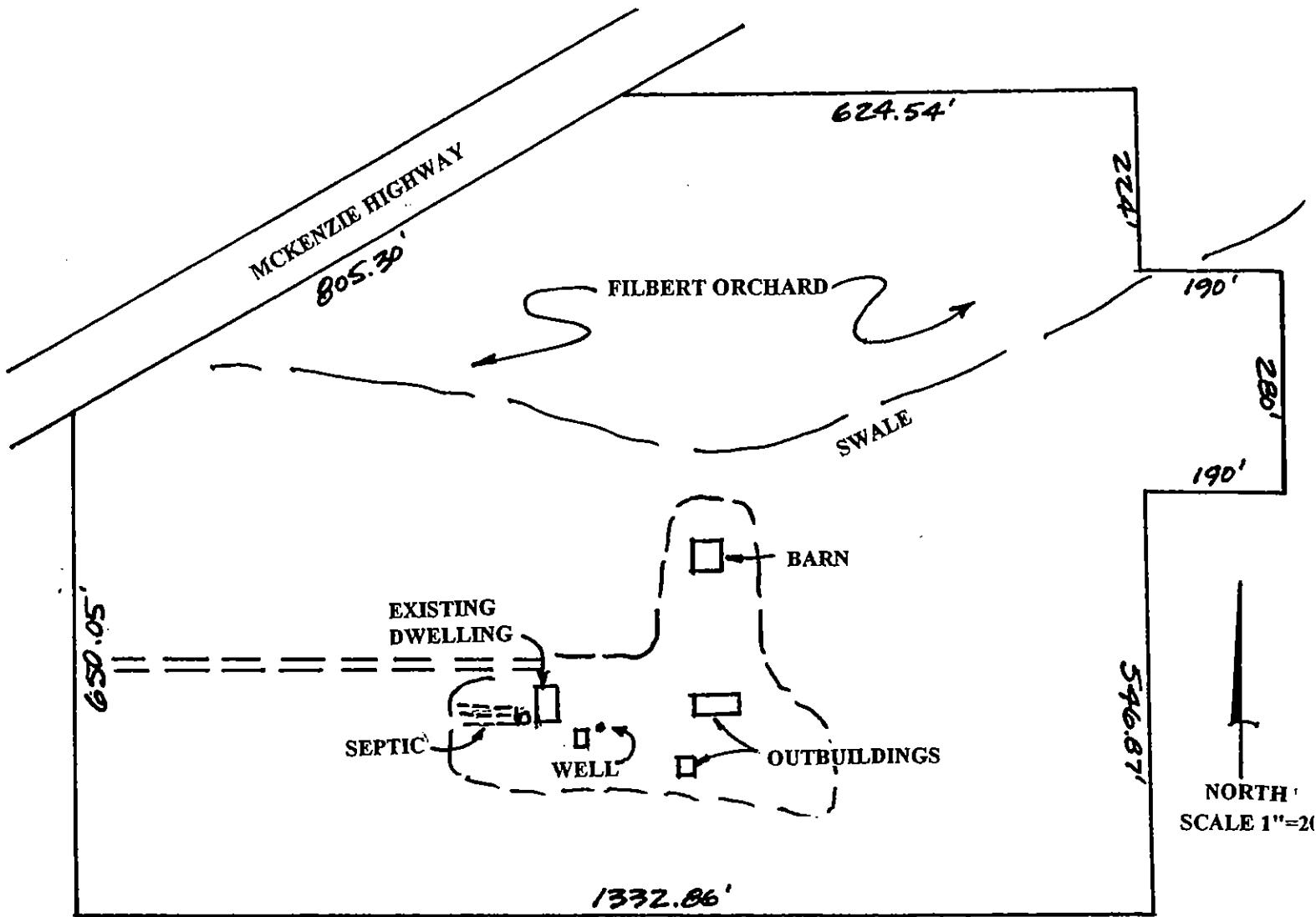
This application corrects an error in the Plan and is consistent with the intent and purposes of the RCP and County policies, as addressed herein.

## **V. CONCLUSION**

This request for a minor plan amendment and rezoning addresses and satisfies all applicable standards. The request is consistent with and receives policy support from the RCP and the implementing RR-5 zone. The applicant finds the request will have no significant adverse impact on existing or planned uses in the area. The applicant requests the Planning Commission and Board of Commissioners approve this application based on the findings provided herein.

**VI. EXHIBITS**

Exhibit "A"	Plot Plan
Exhibit "B"	Aerial Photographs
Exhibit "C"	Property Photographs
Exhibit "D"	Assessor's Maps
Exhibit "E"	Rural Addressing Maps
Exhibit "F"	USGS Topography
Exhibit "G"	Legal Lot Verification
Exhibit "H"	NRCS Soils Map Sheet # 78 and Soil Descriptions
Exhibit "I"	Gary Kitzrow Soils Report
Exhibit "J"	Applicant's Statement of Farm History
Exhibit "K"	Filbert Production Records
Exhibit "L"	Paul Day Forage/Grazing Report
Exhibit "M"	Soil Survey Table 5
Exhibit "N"	Soil Survey Table 6
Exhibit "O"	EGR and Associates Well Log Report (on file at Land Management Division)
Exhibit "P"	National Wetland Inventory
Exhibit "Q"	Big Game Range Inventory
Exhibit "R"	FIRM Panel 1190
Exhibit "S"	Water Rights Letter
Exhibit "T"	Zoning Plot #525
Exhibit "U"	Correspondence/Letters of Support



**PLOT PLAN**

June 28, 2001

MAP 17-01-28 TAX LOT 700

**Applicant:** David Grant  
 39040 McKenzie Highway  
 Springfield, OR 9747

**Owners:** Jack and Beverly Grant  
 319 Country Club Road  
 Eugene, OR 97401

**Agent:** Harry A. Taylor  
 Land Use Consultant  
 P.O. Box 1420  
 Veneta, OR 97487

EXHIBIT "A"

1-2000

2-28

BLM

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19-77 2-27

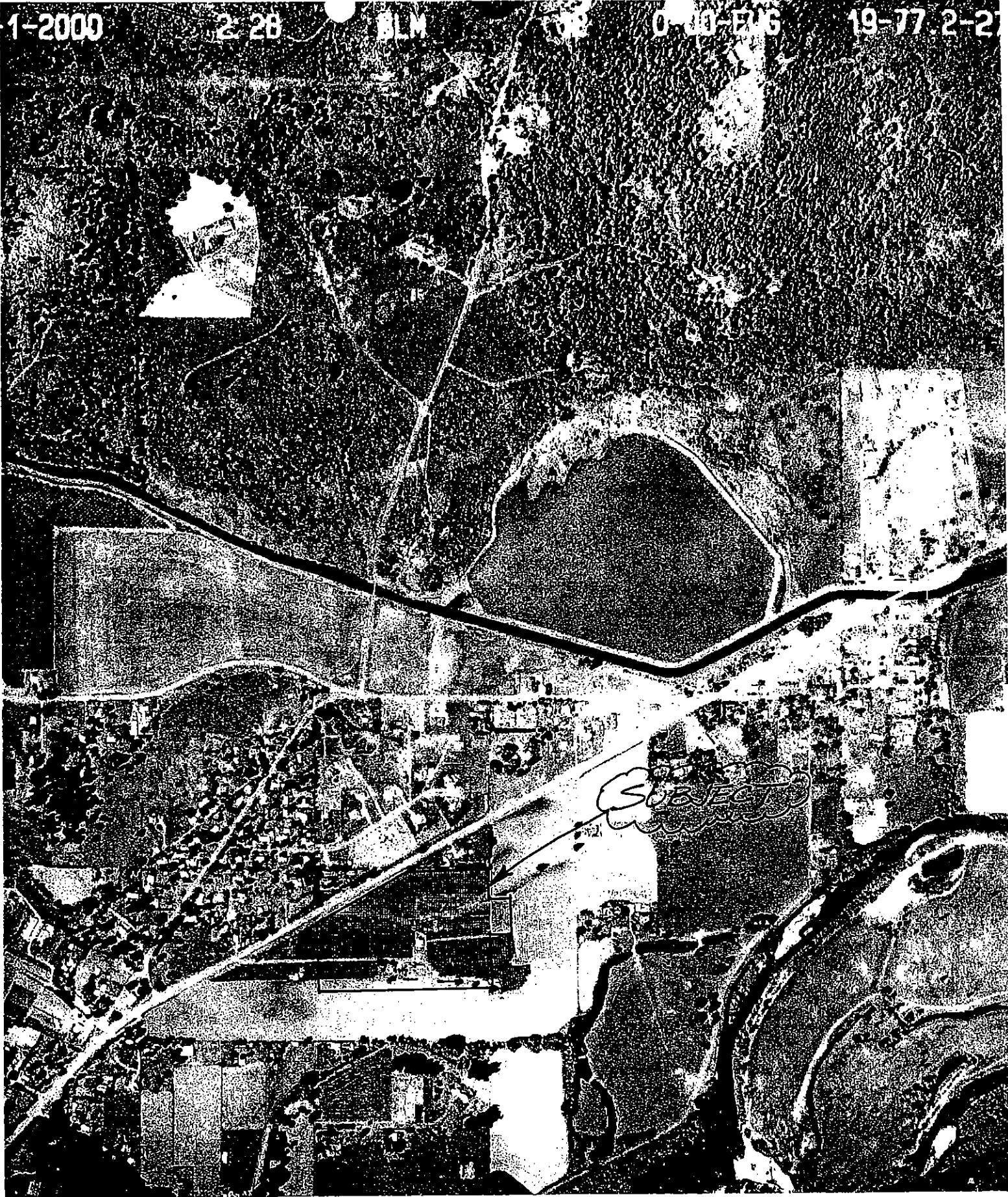


EXHIBIT "B"

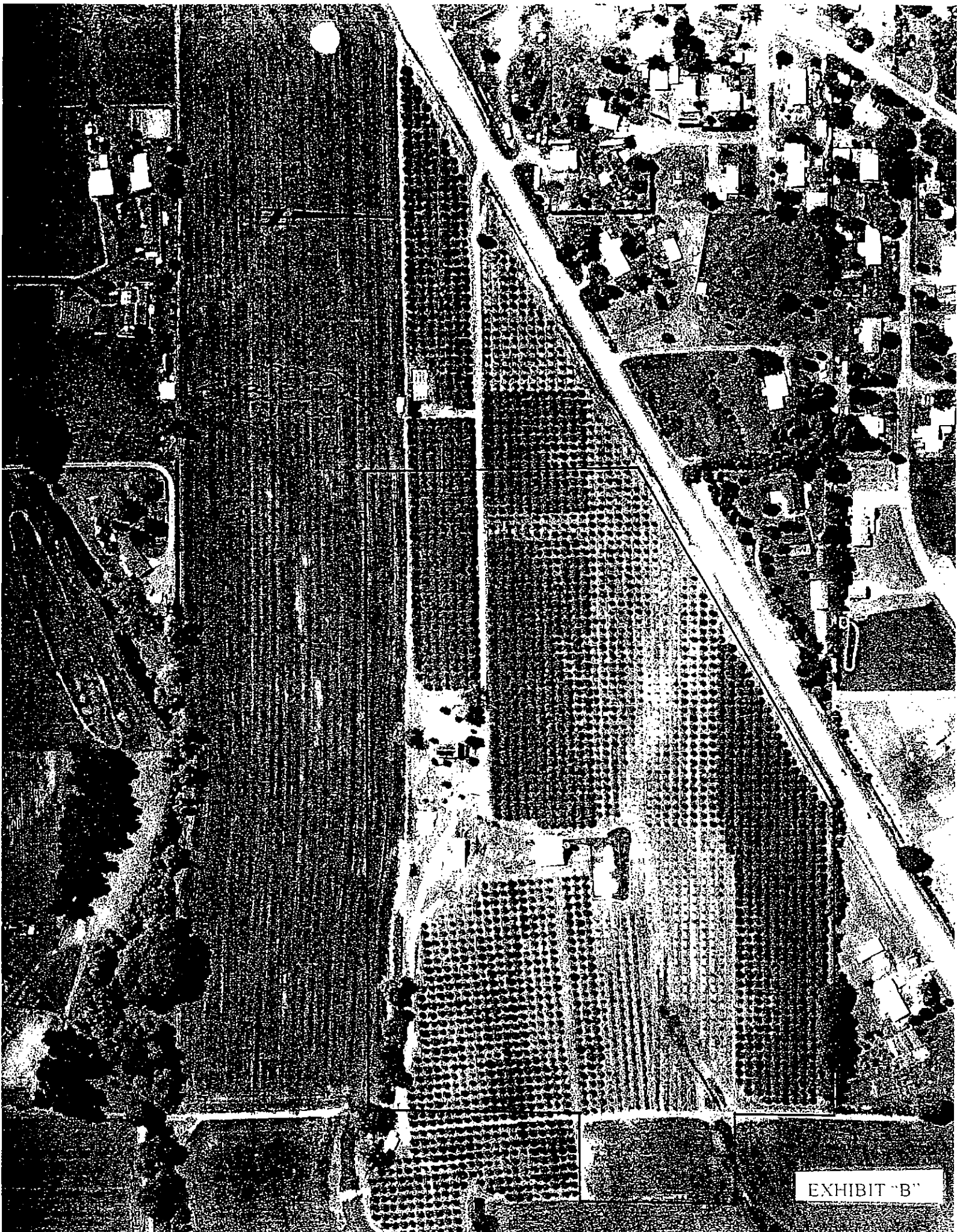


EXHIBIT "B"





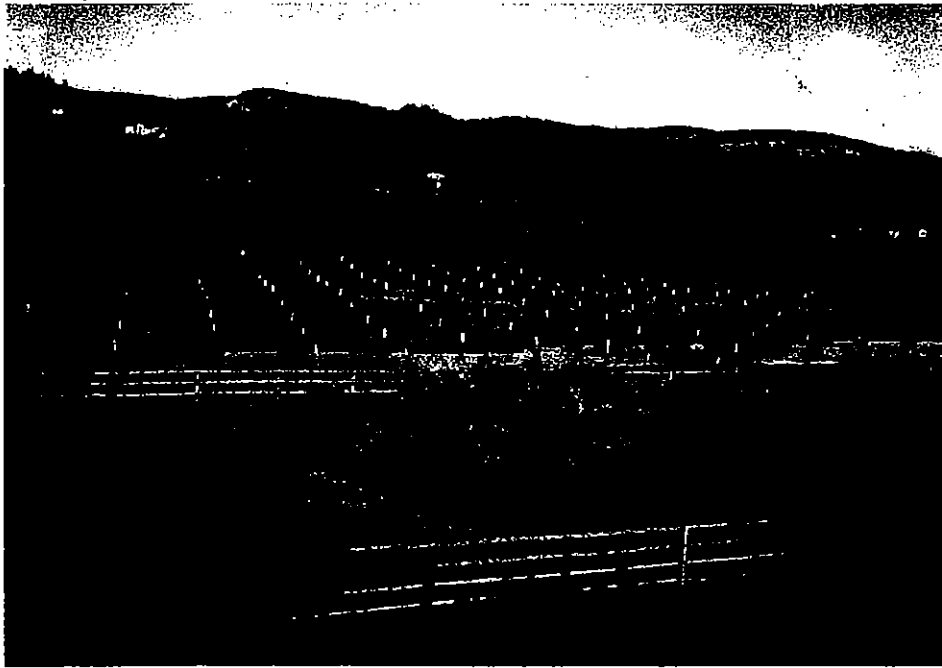
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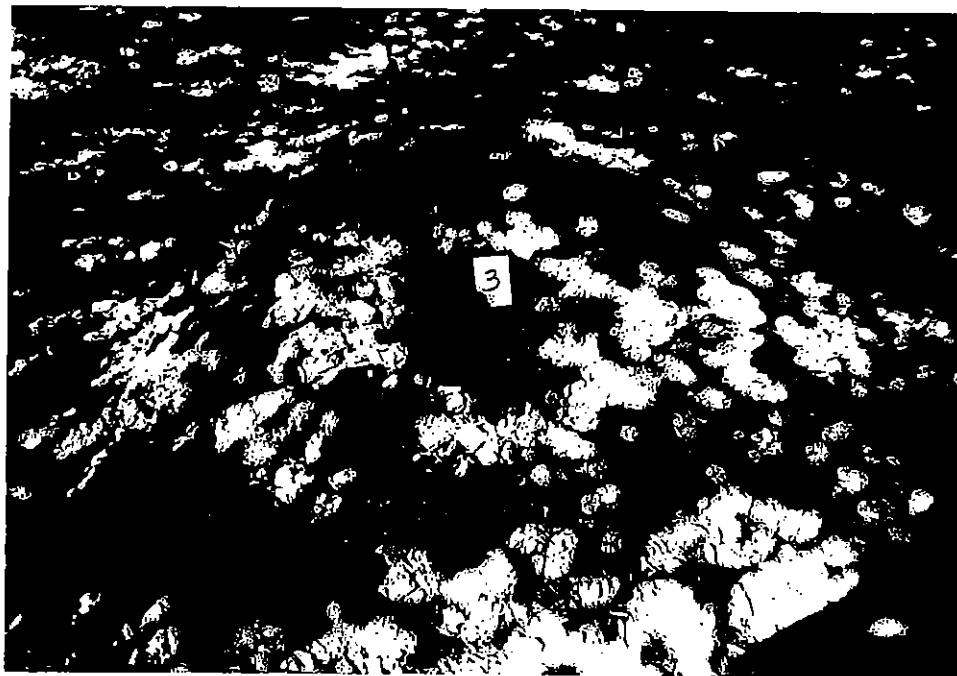
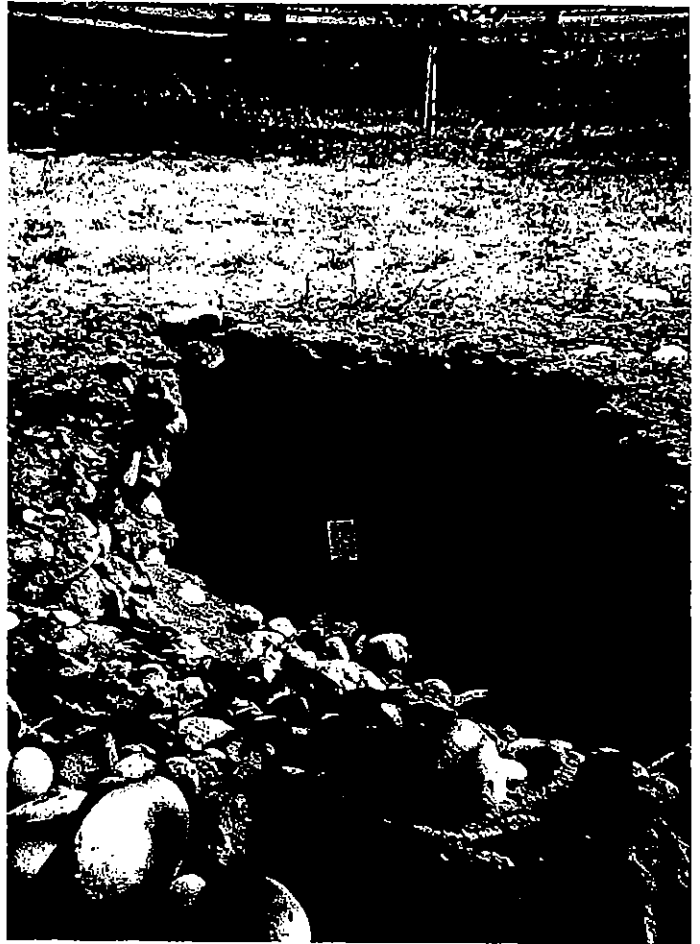


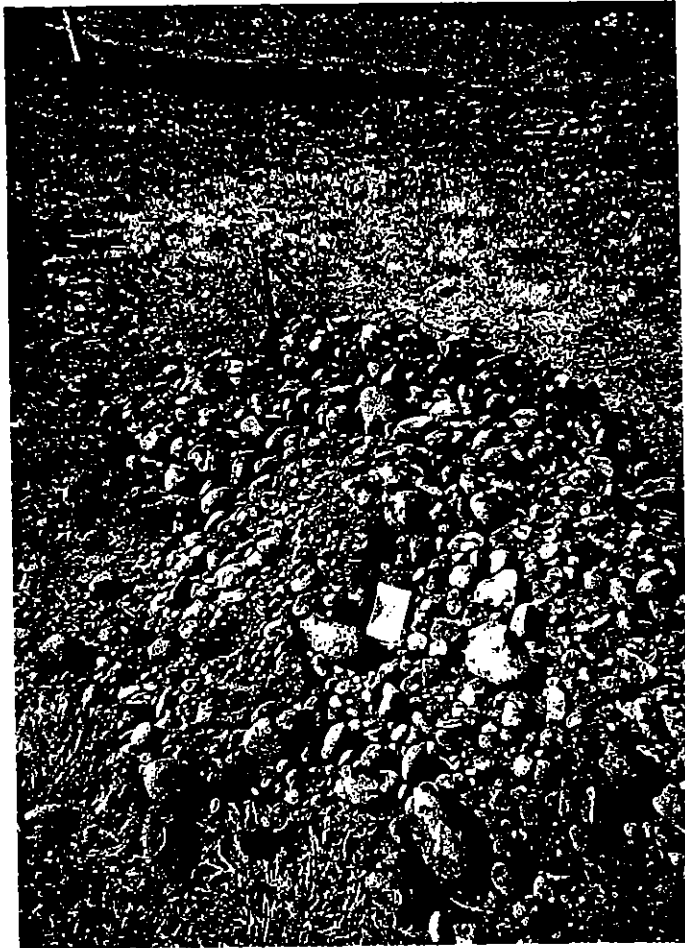
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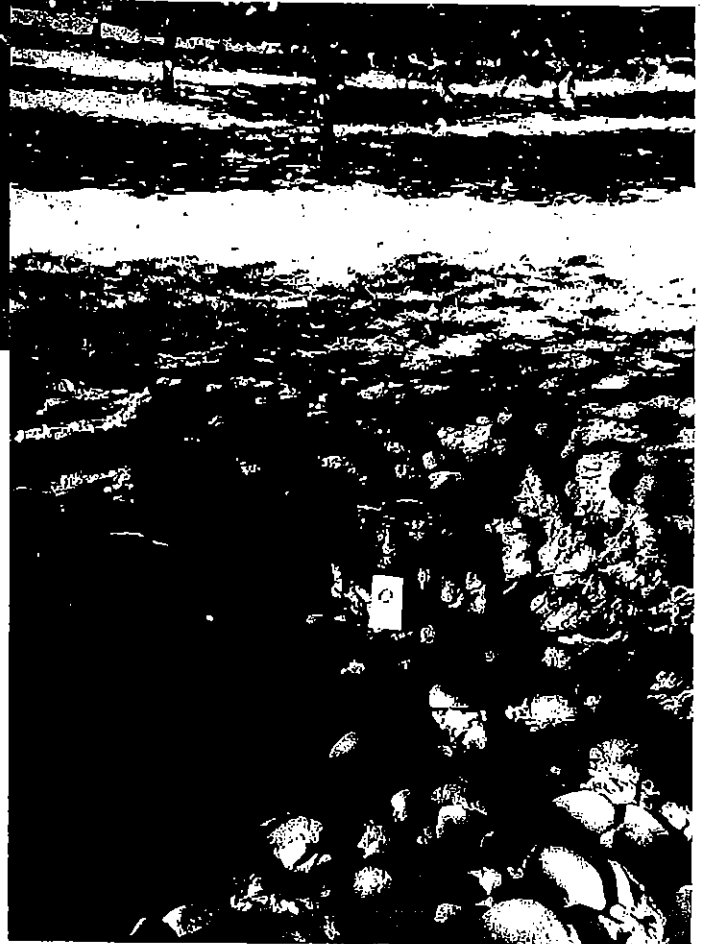


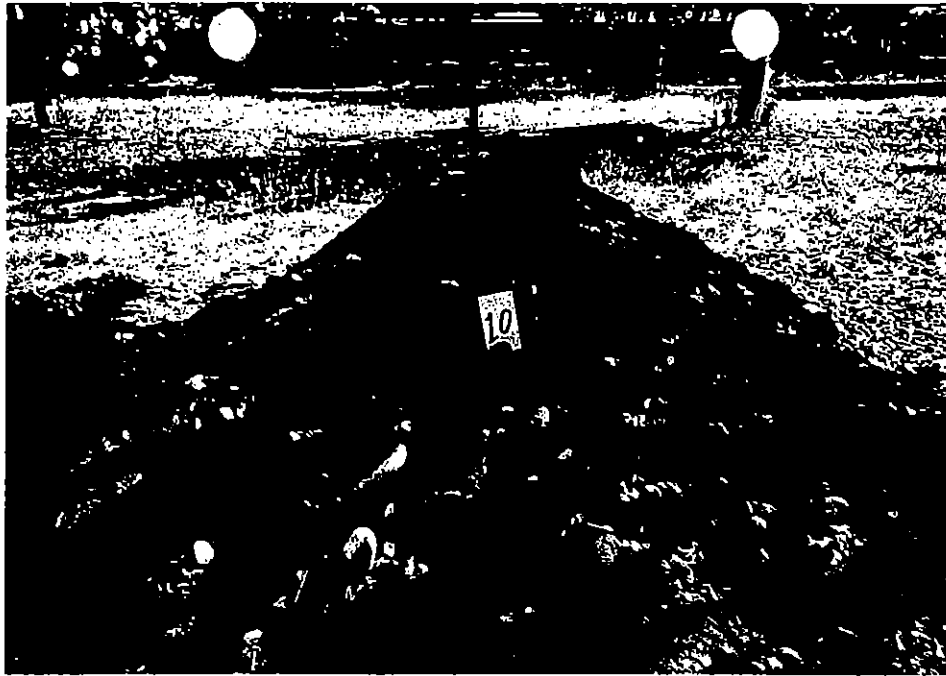
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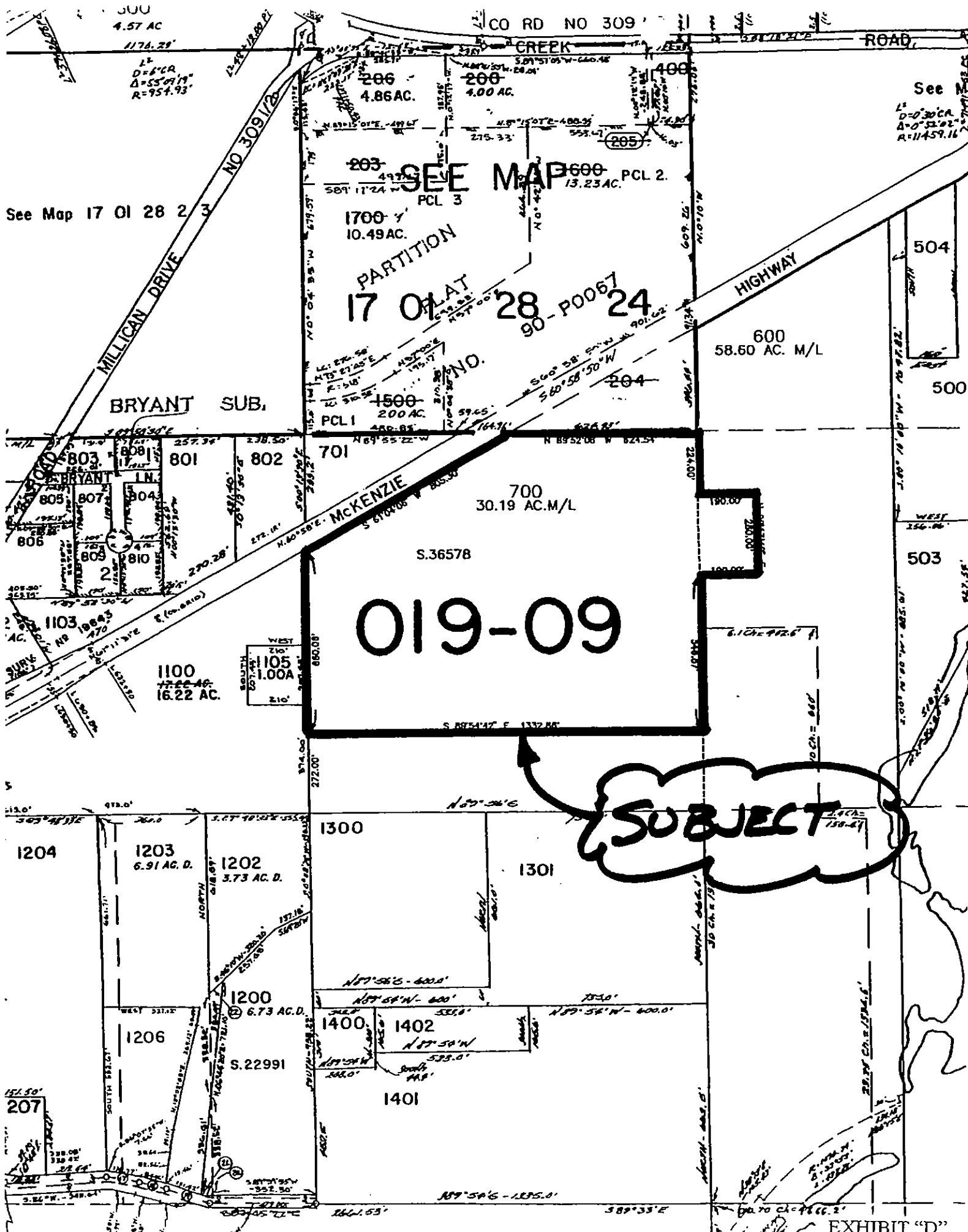












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**SUBJECT**

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EXHIBIT "D"

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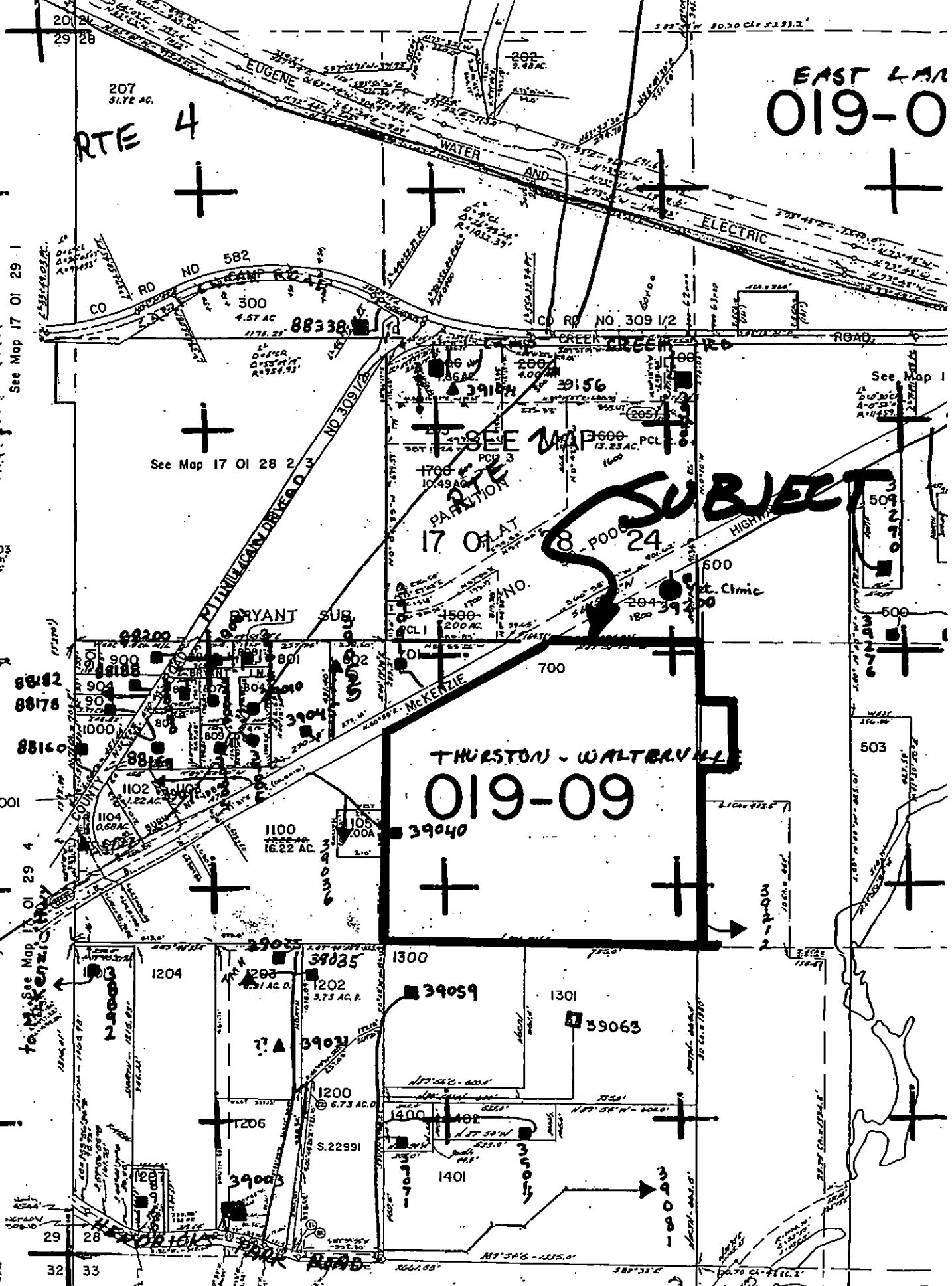
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- BRYANT SUB
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- 2. N 00° 00' 00" 301.0'
- 3. S 89° 15' 00" 408.2'
- 4. S 64° 00' 00" 118.2'
- 5. S 89° 15' 00" 301.0'
- 6. S 00° 00' 00" 118.2'

- 1. N 879,384
- 2. E 1,389,507

- 1. N 879,384
- 2. E 1,389,507

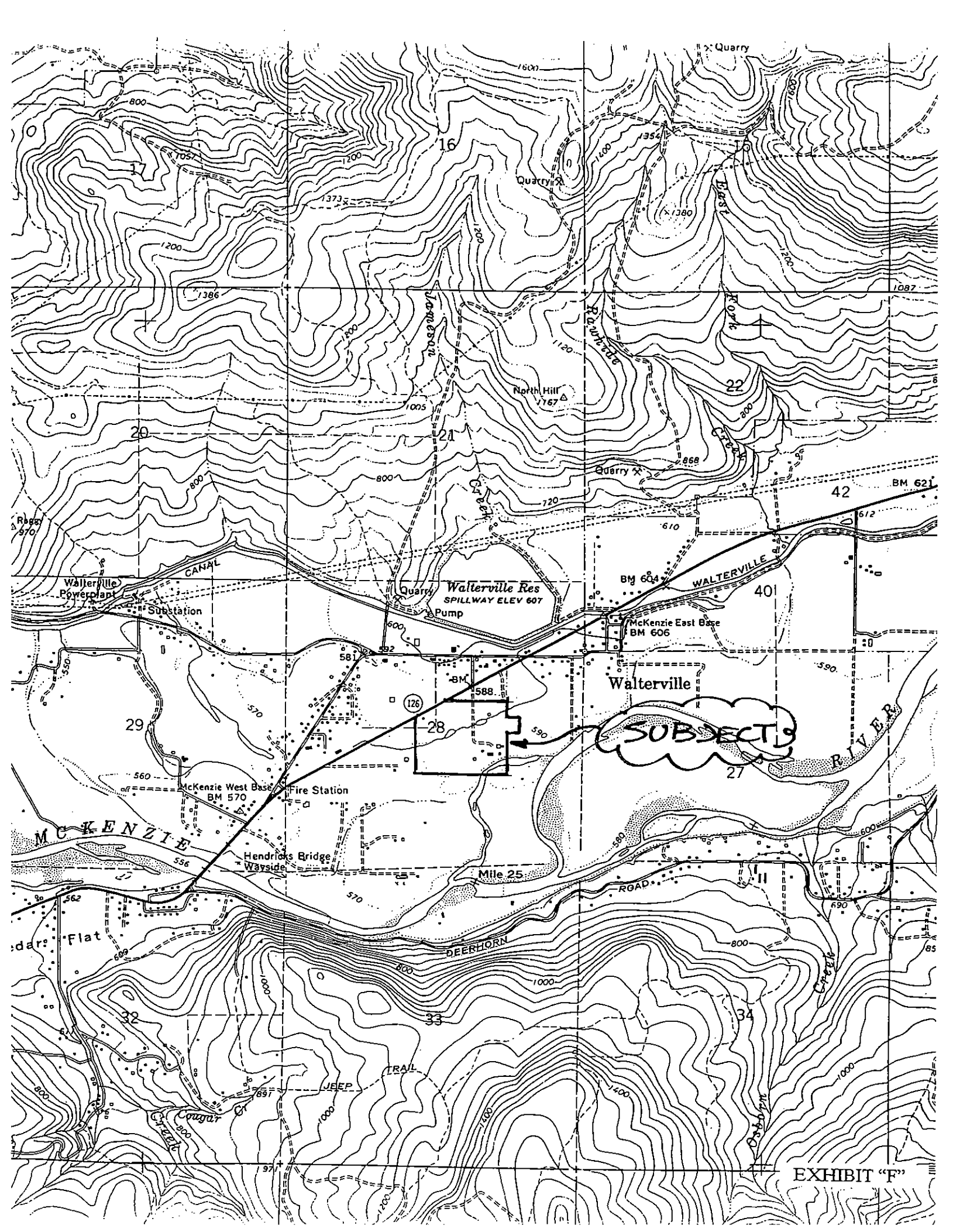
- 1. N 879,384
- 2. E 1,389,507



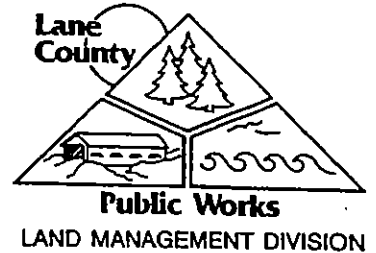
See Map 17 OI 29 - 4

See Map 17 OI 33

EXHIBIT "E"



SUBJECTS



Date: APRIL 1, 2001

APPLICANT: HARRY TAYLOR  
P.O. BOX 1420  
VENETA, OR. 97487

OWNER: DAVID GRANT  
39040 MCKENZIE HWY  
SPRINGFIELD, OR. 97478

PA: 00-0565

RE: Report and Verification of a Legal Lot

Tax Map: 17-01-2800 Taxlot: 700 (REVISED 30.19 ACRE)  
PARCEL

A more exact description by reference to Deed or Land Sales Contract  
is DEED 2499-2/98104080.

Based upon the Findings provided in this report, the above referenced property  
constitutes a legal lot, which means:

1. Ownership to this property may be conveyed with the assurance that such a conveyance would not require approval by Lane County land division regulations; and
2. Lane County recognizes this property as a legally separate unit of land for the purposes of development. Development would still be subject to applicable zoning, sanitation, access and building regulations.

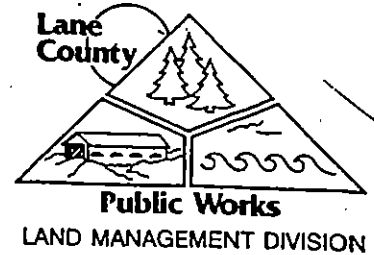
#### Findings

1. The subject property was created as a separate parcel on DEC. 28 1998.  
See attached instruments DEED 2499-2/98104080
2. The creation of the subject property as a separate parcel complied with all effective land division, zoning and comprehensive plan regulations, and it therefore constitutes a legal lot:

#### a. Land division regulations:

When the subject parcel was created, there were not land division regulations in effect to govern its creation. Lane County did not adopt applicable regulations for this kind of division until \_\_\_\_\_.

There were land division regulations in effect governing the creation of this parcel, and the creation of this parcel was specifically exempted by these regulations from compliance because THIS IS A PROPERTY LINE ADJUSTMENT THAT IS ALLOWED PER ORS CHAPTER 92 OF TWO LEGAL LOTS, SEE PA # 0682-93 AND DEED 800-2/7631332 (DATED 5/24/1974)



b. Zoning regulations:

- [ ] When the subject parcel was created, there were no zoning regulations in effect at this time. The zoning for this property was adopted on \_\_\_\_\_.
- [✓] When the subject parcel was created, there were the following zoning regulations in effect which the parcel complied with because THE ORIGINAL AND REVISED PARCEL EXCEEDS THE EPU 30 ZONE, 30 ACRE MINIMUM, BEING A REVISED 30.19 ACRES.

c. Additional Comments:

THE REQUIREMENTS OF THE STATE LAW FOR PROPERTY LINE ADJUSTMENTS, PER O.R.S. CHAPTER 92 HAS BEEN COMPLETED. SEE RECORDED DEED ON P.E.L. 2009-12/08104080 AND RECORDED SURVEY MAP ON CAP# 30518 BOTH COPIES ENCLOSED. MCKENZIE HIGHWAY & LIMITED ACCESS STATE HIGHWAY PROVIDES ACCESS.

"This is a preliminary indication that the above referenced property, as further designated on the enclosed map, is a legal lot. The decision that this property constitutes a legal lot will be made at the time of the first permit or application action where a legal lot is required. If the boundaries of this legal lot have changed at the time of a permit or application which requires a legal lot, a new Legal Lot Verification will be required."

Sincerely,

A large, stylized handwritten signature in black ink, appearing to read "D. G. Nickell".

D. G. NICKELL P.L.S.O.  
Engineering Associate  
541-682-3989

ATTACHMENTS

CC: TRS File

12-30-98

98104080

Until a change is requested,  
send all tax statements to:  
Jack A. Grant  
Beverly J. Grant  
1927 Fircrest Drive  
Eugene, OR 97403

After recording, return to:  
Laurence E. Thorp  
644 N. "A" Street  
Springfield, OR 97477  
C/O 8&J/Barristers Aide Service

25-  
10-  
20-

LOT LINE ADJUSTMENT DEED

The parties to this transfer are JACK A. GRANT and BEVERLY J. GRANT, husband and wife, Grantor, and JACK A. GRANT and BEVERLY J. GRANT, husband and wife, Grantee.

This Deed is intended to adjust the boundary line between two parcels of property owned by Grantor to comply with Lane County Land Use regulations and the provisions of ORS 92.190(4). The last recorded documents pertaining to such parcels were:

Parcel 1: Deeds recorded at Reel No. 800R, Reception Nos. 318829, 318830, and 318831 recorded on June 25, 1976.

Parcel 2: Deeds recorded at Reel No. 800R, Reception Nos. 7613832, 7613833, and 7613834, all recorded on June 25, 1976.

The description of the two parcels following such lot line adjustment are set forth in Exhibits "A" and "B" attached hereto and by this reference incorporated herein as though fully set forth. The new common boundary line between such parcels is set forth in Exhibit "C" attached hereto.

For purposes of accomplishing this lot line adjustment, Grantor bargains, sells, transfers and conveys to Grantee all of Grantor's right, title and interest in and to the parcels of property described in Exhibits "A" and "B" attached hereto.

1989DEC.30'98#08REC 25.00

1989DEC.30'98#08FF UNR 10.00

The true consideration for this conveyance is: Other Value

THIS INSTRUMENT WILL NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY APPROVED USES.

1989DEC.30'98#08ALNT FLWD 20.00

12-30-98

58104080

DATED this 28 day of December, 1998.

GRANTOR:

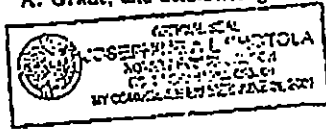
GRANTEE:

Jack A. Grant  
Jack A. Grant  
Beverly J. Grant  
Beverly J. Grant

Jack A. Grant  
Jack A. Grant  
Beverly J. Grant  
Beverly J. Grant

STATE OF OREGON, County of Lane) ss.

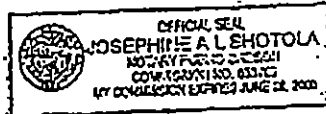
Personally appeared before me this 28 day of December, 1998 the above-named Jack A. Grant, and acknowledged the foregoing instrument to be his voluntary act and deed



Josephine A. L. Shotola  
Notary Public for Oregon  
My commission expires: 6/28/2000

STATE OF OREGON, County of Lane) ss.

Personally appeared before me this 28 day of December, 1998 the above-named Beverly J. Grant and acknowledged the foregoing instrument to be her voluntary act and deed.



Josephine A. L. Shotola  
Notary Public for Oregon  
My commission expires: 6/28/2000

11/11/2000

12-30-98

98104080

CHARLES W. GUILÉ & ASSOCIATES, Co.  
LAND SURVEYING

22 CENTENNIAL LOOP  
EUGENE, OREGON 97401  
TELEPHONE 343-4413

REGISTERED  
LAND SURVEYOR  
TELEPHONE 541-741-0619

Description for Dave Grant  
Revised Tax Lot 600  
Map No. 17-01-28

Beginning at the point of intersection of the North-South center line of Section 28, Township 17 South, Range 1 West of the Willamette Meridian with the Southerly right of way line of the McKenzie Highway; thence North 69° 58' East along said Southerly right of way line to a point 640.0 feet East of aforesaid North-South center line; thence South parallel with said North-South center line to the right bank of the McKenzie River; thence Westerly along said right bank to a point on the North-South center line of said Section 28, if extended Southerly; thence North along said center line to the Place of Beginning, in Lane County, Oregon.

EXCEPT THEREFROM: Beginning at the Stone monument marking the Center Section corner of Section 28, Township 17 South, Range 1 West of the Willamette Meridian; thence along the east line of the Northeast one-quarter of the Southwest one-quarter of said Section 28, South 0° 13' 40" East 224.00 feet to the TRUE POINT OF BEGINNING; thence continue South 0° 13' 40" East 280.00 feet; thence North 89° 46' 20" East 190.00 feet; thence North 0° 13' 40" West 280.00 feet; thence South 89° 46' 20" West 190.00 feet to the TRUE POINT OF BEGINNING, in Lane County, Oregon.

The bearings used herein are based on that survey being Lane County Surveyors File (CSF) Index No. 29330.

ALSO: The South 272.00 feet of the Northeast one-quarter of the Southwest one-quarter (NE1/4 SW1/4) of Section 28, Township 17 South, Range 1 West of the Willamette Meridian, in Lane County, Oregon.

[This description is based upon record data and not from a field survey by this firm and contains 53.0 acres based on the original acreage assessed by Lane County.]

EXHIBIT A  
\_\_\_\_\_ OF \_\_\_\_\_

December 16, 1998  
94-61  
94061D04.wpd

REGISTERED  
PROFESSIONAL  
LAND SURVEYOR

OREGON  
MAY 4, 1999  
CHARLES W. GUILÉ  
472

*Charles W. Guile*  
EXP. DATE 6/30/1999

54352



12-30-98

98104080

CHARLES W. GUILLE & ASSOCIATES, Co.  
LAND SURVEYING

82 CENTENNIAL LOOP  
EUGENE, OREGON 97401  
TELEPHONE 343-0884

RESIDENCE  
ELMIRA, OREGON  
TELEPHONE 843-1173

Description for Dave Grant  
Revised Tax Lot 700  
Map No. 17-01-28

The Northeast one-quarter of the Southwest one-quarter (NE1/4 SW1/4) of Section 28, Township 17 South, Range 1 West of the Willamette Meridian, in Lane County, Oregon EXCEPT THEREFROM that portion lying Northwest of the Southeasterly line of the McKeanie Highway.

FURTHER EXCEPT THEREFROM the South 272.00 feet of the Northeast one-quarter of the Southwest one-quarter (NE1/4 SW1/4) of Section 28, Township 17 South, Range 1 West of the Willamette Meridian, in Lane County, Oregon.

ALSO: Beginning at the Stone monument marking the Center Section corner of Section 28, Township 17 South, Range 1 West of the Willamette Meridian; thence along the east line of the Northeast one-quarter of the Southwest one-quarter of said Section 28, South 0° 13' 40" East 224.00 feet to the TRUE POINT OF BEGINNING; thence continue South 0° 13' 40" East 280.00 feet; thence North 89° 46' 20" East 190.00 feet; thence North 0° 13' 40" West 280.00 feet; thence South 89° 46' 20" West 190.00 feet to the TRUE POINT OF BEGINNING, in Lane County, Oregon.

The bearings used herein are based on that survey being Lane County Surveyors File (CSF) Index No. 29330.

[This description is based upon record data and not from a field survey by this firm and contains 30.14 acres based on the original acreage assessed by Lane County.]

EXHIBIT     B      
              1     OF     1    

December 16, 1998  
94-61  
94061D03.wpd

REGISTERED  
PROFESSIONAL  
LAND SURVEYOR

*Charles W. Guille*

OREGON  
MAY 6, 1988  
CHARLES W. GUILLE  
472

EXP. DATE 6/30/1999

(700)

2499

12-30-98

98104080

EXHIBIT C

Beginning at the stone monument marking the Center Section corner of Section 28, Township 17 South, Range 1 West of the Willamette Meridian; thence south along the east line of the northeast quarter of the southwest quarter of Section 28, south 0°13'40" east 224 feet; thence north 89°46'20" east 190 feet; thence south 0°13'40" east 280 feet; thence south 89°46'20" west 190 feet; thence south along the east line of said northeast quarter of the southwest quarter to a point 272 feet north of the southeast corner of the northeast quarter of the southwest quarter; thence west parallel to the south line of the northeast quarter of the southwest quarter to the west line thereof.

State of Oregon  
County of Lane -- ss.  
I, the County Clerk, in and for the said  
County, do hereby certify that the within  
instrument was received for record at

'98 DEC 30 AM 11:08

Reel 2499R

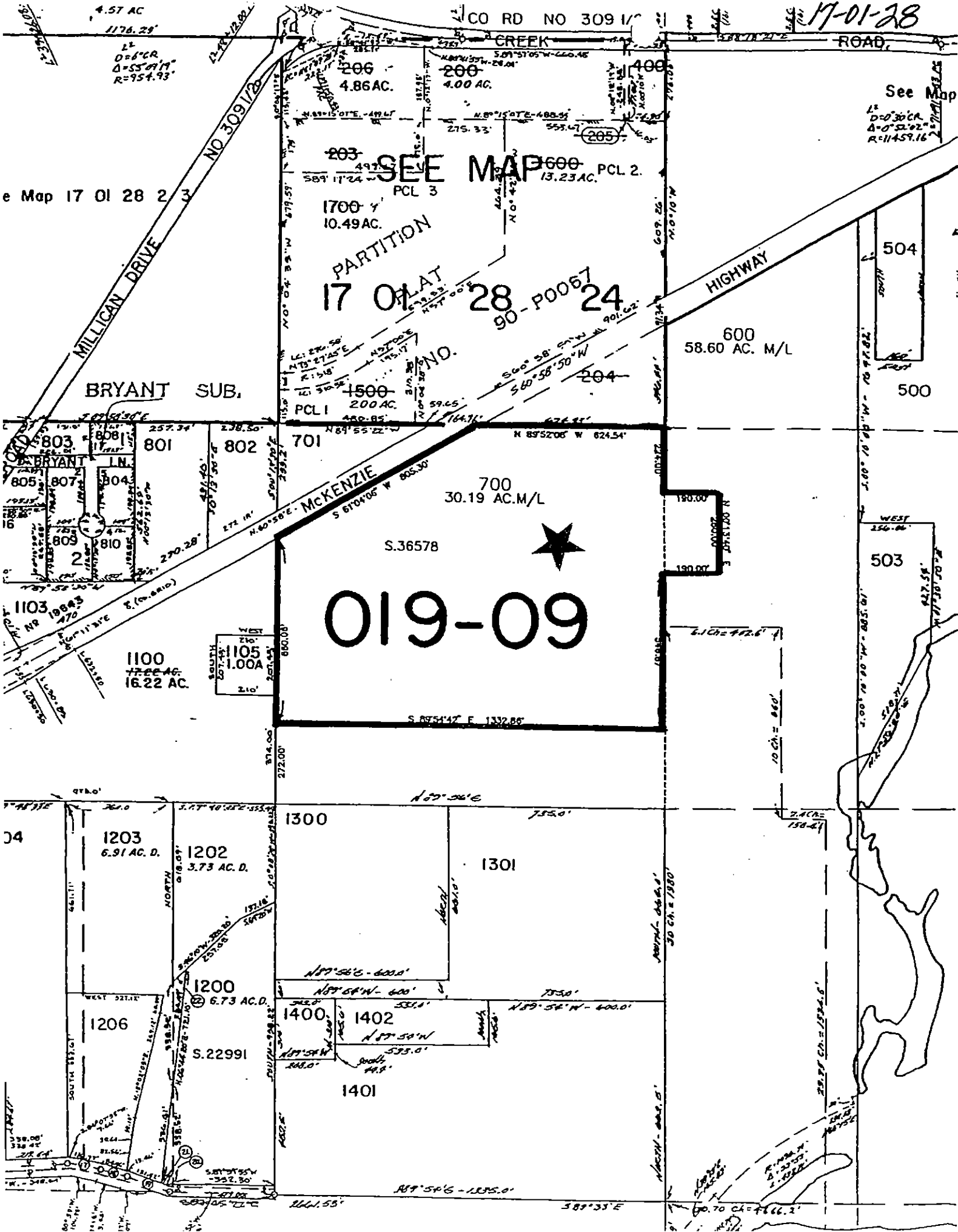
Lane County OFFICIAL Records  
Lane County Clerk

By: David S. [Signature]  
County Clerk

EXHIBIT C  
OF 1



17-01-28



e Map 17 01 28 2 3

See Map  
L<sup>2</sup> D=230' CR  
A=0° 52' 02"  
R=11459.16

SEE MAP 600 PCL 2  
13.23 AC.

PARTITION  
17 01 28

28-PO067  
90-PO067

NO. 1500  
200 AC.  
PCL 1

600  
58.60 AC. M/L

700  
30.19 AC. M/L

S.36578  
★  
019-09

1100  
17.22 AC.  
16.22 AC.

1105  
1.00 AC.  
210'

24

1203  
6.91 AC. D.

1202  
3.73 AC. D.

1300

1301

1200  
6.73 AC. D.

1206

S.22991

1400

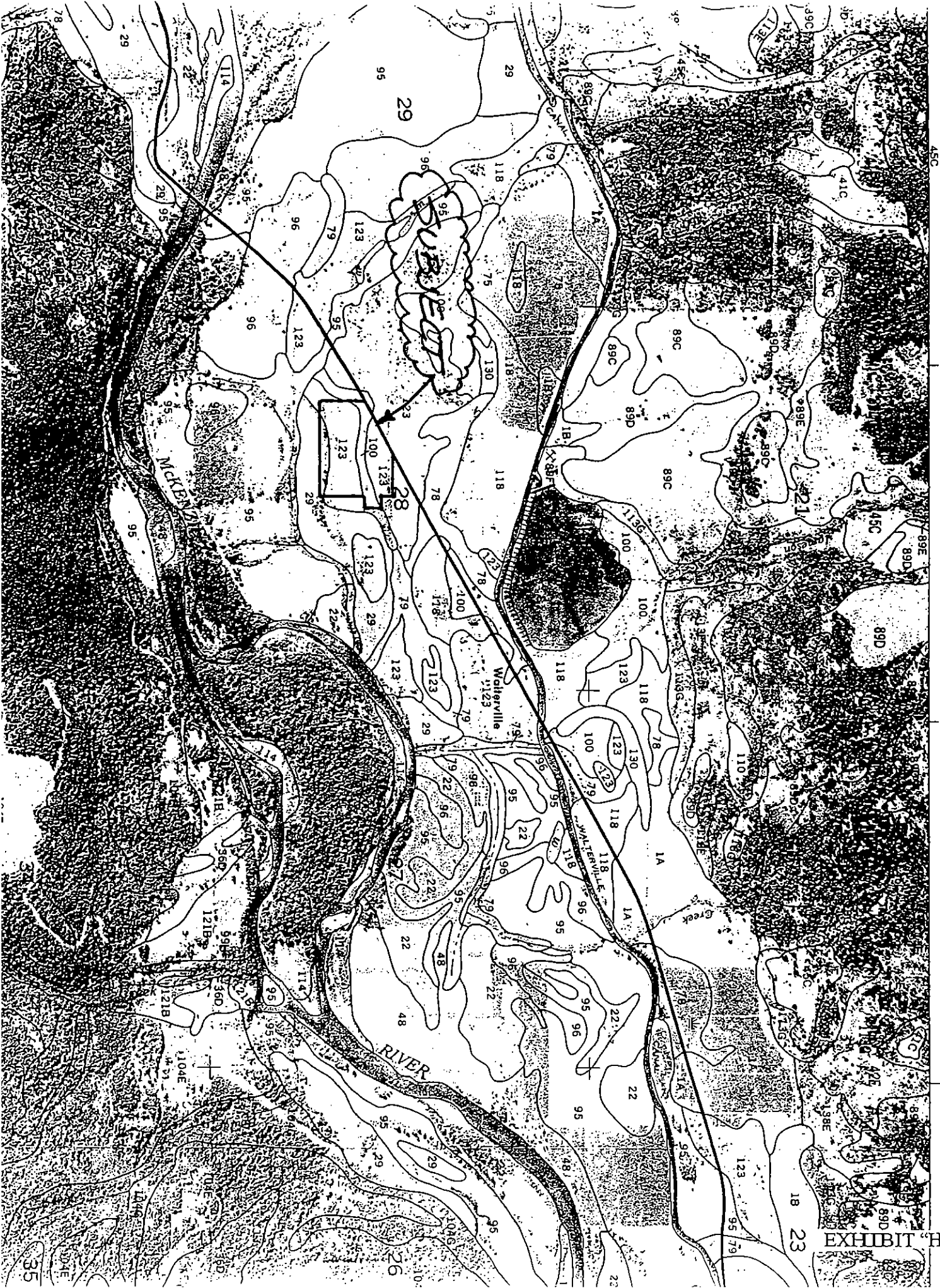
1402

1401

N 87° 54' 6" - 1235.0'

S 87° 33' E

60.70 CH = 466.2'



Included in this unit are small areas of Hazelair, Philomath, Steiwer, Willakenzie, and Witzel soils and Rock outcrop. Included areas make up about 15 percent of the total acreage. The percentage varies from one area to another.

Permeability of this Chehulpum soil is moderate. Available water capacity is about 2 to 4 inches. Water supplying capacity is 6 to 13 inches. Effective rooting depth is 10 to 20 inches. Runoff is rapid, and the hazard of water erosion is high.

This unit is used for wildlife habitat and some livestock grazing.

Slope limits access by livestock and results in overgrazing of the less sloping areas. Grazing should be delayed until the soil in this unit is firm and the more desirable forage plants have achieved sufficient growth to withstand grazing pressure.

If this unit is used for recreational development, the main limitations are steepness of slope and shallow depth to rock. Slope limits the use of areas of this unit mainly to a few paths and trails, which should extend across the slope. Cuts and fills should be seeded or mulched.

If this unit is used for homesite development, the main limitations are shallow depth to rock and steepness of slope. Cuts needed to provide essentially level building sites can expose bedrock. Topsoil can be stockpiled and used to reclaim areas disturbed during construction. Only the part of the site that is used for construction should be disturbed. In summer, irrigation is needed for lawn grasses, shrubs, vines, shade trees, and ornamental trees.

This map unit is in capability subclass VIe.

**29—Cloquato silt loam.** This deep, well drained soil is on flood plains. It formed in recent mixed alluvium. Slope is 0 to 3 percent. Areas are elongated in shape and are 3 to 100 acres or more in size. The vegetation in areas not cultivated is mainly Douglas-fir, black cottonwood, bigleaf maple, Oregon white oak, western swordfern, and creambush oceanspray. Elevation is 290 to 800 feet. The average annual precipitation is 40 to 60 inches, the average annual air temperature is 52 to 54 degrees F, and the average frost-free period is 165 to 210 days.

Typically, the surface layer is very dark grayish brown silt loam about 14 inches thick. The next layer is very dark grayish brown silt loam about 19 inches thick. The upper 17 inches of the substratum is dark brown silt loam, and the lower part to a depth of 60 inches or more is multicolored sand.

Included in this unit are small areas of Chapman, Chehalis, McBee, and Newberg soils. Included areas make up about 15 percent of the total acreage.

Permeability of this Cloquato soil is moderate. Available water capacity is about 9 to 14 inches. Water supplying capacity is 19 to 26 inches. Effective rooting depth is 40 to 60 inches or more. It is limited by the

sandy substratum. Runoff is slow, and the hazard of water erosion is slight. The soil is subject to occasional, very brief periods of flooding from November to March.

This unit is used mainly for row crops, small grain, hay, and pasture. It is also used as homesites and for recreation.

This unit is suited to all climatically adapted crops. In summer, irrigation is required for maximum production of most crops. Sprinkler irrigation is a suitable method of applying water. Use of this method permits even, controlled application of water, reduces runoff, and minimizes the risk of erosion.

Returning all crop residue to the soil and using a cropping system that includes grasses, legumes, or grass-legume mixtures help to maintain fertility and tilth. Grain and grasses respond to nitrogen; legumes respond to phosphorus and lime; and vegetables and berries respond to nitrogen, phosphorus, and potassium. Streambank cutting, erosion caused by overflow, and sedimentation can be reduced by maintaining adequate plant cover.

This unit is suited to hay and pasture. Proper stocking rates, pasture rotation, and restricted grazing during wet periods help to keep the pasture in good condition and to protect the soil from erosion and compaction.

This unit is suited to recreational development. Protection from flooding is needed.

If this unit is used for homesite development, the main limitation is the hazard of occasional flooding. Roads and streets should be located above the expected flood level.

This unit is in capability subclass IIw.

**30—Cloquato-Urban land complex.** This map unit is on flood plains. Slopes are 0 to 3 percent. Areas are elongated in shape and are 3 to 50 acres in size. The native vegetation is mainly Douglas-fir, black cottonwood, bigleaf maple, Oregon white oak, western swordfern, and creambush oceanspray. Elevation is 300 to 800 feet. The average annual precipitation is about 40 to 60 inches, the average annual air temperature is 52 to 54 degrees F, and the average frost-free period is 165 to 210 days.

This unit is 40 percent undisturbed Cloquato silt loam, 5 percent disturbed Cloquato silt loam, and 40 percent Urban land. The components of this unit are so intricately intermingled that it was not practical to map them separately at the scale used.

Included in this unit are small areas of Chapman, Chehalis, McBee, and Newberg soils. Included areas make up about 15 percent of the total acreage.

The undisturbed Cloquato soil is deep and well drained. It formed in recent mixed alluvium. Typically, the surface layer is very dark grayish brown silt loam about 14 inches thick. The next layer is very dark grayish brown silt loam about 19 inches thick. The upper 17 inches of the substratum is dark brown silt loam, and the

The soils in this unit generally are gravelly, silty, or loamy and are stratified. Depth ranges from 20 to 60 inches or more.

Included in this unit are small areas of Malabor, Salkum, and Veneta soils on adjacent terraces in valleys that receive 40 to 60 inches of rainfall. Also included are small areas of Blachly, Cupola, Jimbo, and Lint soils in mountainous areas that receive more than 60 inches of rainfall and small areas of Rock outcrop. The percentage varies from one area to another.

Permeability, effective rooting depth, available water capacity, and water supplying capacity of these soils are highly variable. Runoff is rapid, and the hazard of water erosion is high.

Most areas of this unit are used for wildlife habitat, timber production, and recreation. A few areas are used for pasture.

If this unit is used for pasture, the main limitations are slope and the hazard of erosion. Proper stocking rates, pasture rotation, and restricted grazing during wet periods help to keep the pasture in good condition and to protect the soil from erosion.

The main concerns in producing and harvesting timber are accessibility and difficulty of operating equipment because of slope. Construction of roads causes slumping, particularly in the steeper areas. Highlead or other cable logging systems generally should be used in the larger areas of this unit. Tractor methods of harvesting timber are difficult to use because of slope.

If this unit is used for homesite or recreational development, the main limitation is steepness of slope. Cutbanks and foundations may be unstable.

This map unit is in capability subclass VIe.

**100—Oxley gravelly silt loam.** This deep, somewhat poorly drained soil is in concave areas on terraces. It formed in mixed gravelly alluvium. Slope is 0 to 3 percent. Areas are elongated in shape and are 3 to 200 acres in size. The vegetation in areas not cultivated is mainly Oregon ash, Oregon white oak, hazelnut, western brackenfern, rose, forbs, and grasses. Elevation is 300 to 700 feet. The average annual precipitation is 40 to 60 inches, the average annual air temperature is 52 to 54 degrees F, and the average frost-free period is 165 to 210 days.

Typically, the surface layer is very dark brown gravelly silt loam about 17 inches thick. The next layer is dark brown gravelly clay loam about 6 inches thick. The upper 12 inches of the subsoil is dark grayish brown and brown, mottled very gravelly clay loam, and the lower 6 inches is grayish brown, mottled very gravelly loam. The substratum to a depth of 60 inches or more is gray extremely gravelly sandy loam. In small areas near Springfield, the substratum is stratified silty clay loam and fine sandy loam, and in some areas the substratum is gravelly sand and is above a depth of 40 inches.

Included in this unit are small areas of Coburg, Courtney, Salem, and Sifton soils. Included areas make up about 15 percent of the total acreage.

Permeability of this Oxley soil is moderately slow. Available water capacity is about 3.0 to 6.5 inches. Effective rooting depth is 25 to 50 inches. It is limited by the extremely gravelly substratum and a high water table that is at a depth of 6 to 18 inches from November to May. Runoff is slow. The hazard of water erosion generally is slight, but it is moderate along drainageways during periods of heavy runoff from winter storms.

This unit is used mainly for pasture, hay, and grass seed crops. It is also used for small grain, row crops, and homesites. It is used for housing subdivisions in areas where municipal sewers are provided.

If this unit is used for cultivated crops, the main limitations are the gravelly surface layer, which interferes with the close tillage of young row crops, and the seasonal high water table, which limits suitability to shallow-rooted or water-tolerant perennials in undrained areas. Deep open drains or tile drains generally can be used to lower the water table below the root zone quickly enough to permit growth of perennial crops that are less water-tolerant. In some areas, however, the extremely gravelly substratum restricts deep penetration of roots and creates droughtiness in summer. In summer, irrigation is required for maximum production of most crops. Crops respond to nitrogen.

If this unit is used for hay and pasture, the main limitation is the seasonal high water table. Only those hay and pasture plants that tolerate a seasonal high water table are suitable for use in undrained areas. Use of proper stocking rates, pasture rotation, and restricted grazing during wet periods helps to keep the pasture in good condition and to protect the soil from compaction.

If this unit is used for homesite development, the main limitations are the seasonal high water table, moderately slow permeability, and wetness. Because of these limitations, buildings need perimeter drains to prevent the accumulation of water, resulting in structural damage. In summer, irrigation is required for lawn grasses, shrubs, vines, shade trees, and ornamental trees.

This map unit is in capability subclass IIIw.

**101—Oxley-Urban land complex.** This map unit is in slightly concave areas on terraces. Slope is 0 to 3 percent. Areas are elongated or irregular in shape and are 3 to 40 acres in size. The native vegetation is mainly Oregon white oak, Oregon ash, hazelnut, western brackenfern, rose, and grasses. Elevation is 350 to 700 feet. The average annual precipitation is 40 to 60 inches, the average annual air temperature is 52 to 54 degrees F, and the average frost-free period is 165 to 210 days.

This unit is 30 percent relatively undisturbed Oxley gravelly silt loam, 15 percent disturbed Oxley gravelly silt loam, and 40 percent Urban land. The components of

for Douglas-fir is 162. The potential production per acre is 10,320 cubic feet from an even-aged, fully stocked stand of trees 60 years old or 96,720 board feet (International rule, one-eighth-inch kerf) from an even-aged, fully stocked stand of trees 80 years old.

Because the soil is sticky when wet, most planting and harvesting equipment can be used only during dry periods. Seedling mortality may be high in summer because of droughtiness. Undesirable plants limit natural or artificial reforestation unless site preparation and maintenance are intensive. Reforestation can be accomplished by planting Douglas-fir and western hemlock seedlings.

This unit is a good source of roadfill. The surface and subsoil should be retained for reclamation of borrow areas.

This unit is suited to recreational development such as camp and picnic areas and paths and trails. Small stones restrict the use of the unit for playgrounds.

If this unit is used for homesite development, the main limitation is the water table that may rise to within 3.5 feet of the surface during periods of high streamflow caused by heavy rainfall. Flooding may occur for brief periods in some areas when runoff is heavy. Dikes and channels that have outlets to bypass floodwater can be used to protect buildings and onsite sewage disposal systems from flooding.

This map unit is in capability subclass IIIs.

**123—Sifton gravelly loam.** This deep, somewhat excessively drained soil is on terraces. It formed in gravelly alluvium containing volcanic ash in the upper part. Slopes are 0 to 3 percent. Areas are irregular to somewhat oval in shape, are slightly convex, and are 3 to 45 acres in size. The vegetation in areas not cultivated is mainly shrubs, forbs, and grasses. Elevation is 300 to 800 feet. The average annual precipitation is 40 to 60 inches, the average annual air temperature is 52 to 54 degrees F, and the average frost-free period is 165 to 210 days.

Typically, the surface layer is black and very dark brown gravelly loam about 15 inches thick. The subsoil is dark yellowish brown very gravelly loamy coarse sand about 7 inches thick. The substratum to a depth of 60 inches or more is dark yellowish brown and very dark grayish brown very gravelly sand. In some areas the surface layer is loam.

Included in this unit are small areas of Salem and Oxley soils. Included areas make up about 10 percent of the total acreage.

Permeability of this Sifton soil is very rapid. Available water capacity is about 3 to 6 inches. Effective rooting depth is 15 to 30 inches. It is limited by the very gravelly substratum. Runoff is very slow, and the hazard of water erosion is slight.

This unit is used mainly for pasture, orchards, small grain, and vegetables. It is also used as small acreage homesites and for urban development.

This unit is suited to a wide variety of irrigated crops. It is limited mainly by droughtiness. In summer, irrigation is required for production of most crops.

Fertilization and irrigation require careful management. Frequent and light applications of fertilizer and water are needed because of the coarse texture of the soil and the low available water capacity. The gravelly surface layer hinders cultivation and harvesting of root crops, but it allows intensive use of the soil for berries, beans, or pasture without damage by compaction.

This unit is suited to hay and pasture. Use of lime, nitrogen, and phosphorus promotes good growth of forage plants. Proper grazing practices, weed control, and fertilizer are needed to ensure maximum quality of forage. In most years, supplemental irrigation is also needed.

The main limitations of this unit for homesite and urban development are small stones and the very rapidly permeable substratum. If the soil in this unit is used as a base for roads and streets, topsoil can be mixed with the underlying very gravelly sand substratum to increase its strength and stability. In summer, irrigation is required for lawns, shrubs, and trees unless drought-tolerant species are selected.

This map unit is in capability subclass IVs.

**124D—Slickrock gravelly loam, 3 to 25 percent slopes.** This deep, well drained soil is on toe slopes, side slopes, and slump benches on uplands in the Coast Range. It formed in colluvium and residuum derived from sandstone. Areas are irregular in shape and are 3 to 100 acres in size. The vegetation in areas not cultivated is mainly Douglas-fir, western hemlock, western redcedar, red alder, vine maple, salal, and western swordfern. Elevation is 50 to 2,500 feet. The average annual precipitation is 70 to 120 inches, the average annual air temperature is 48 to 52 degrees F, and the average frost-free period is 145 to 200 days.

Typically, the surface is covered with a mat of leaves, needles, and twigs about 5 inches thick. The surface layer is very dark brown and very dark grayish brown gravelly loam about 13 inches thick. The upper part of the subsoil is dark brown and brown gravelly loam about 27 inches thick, and the lower part is yellowish brown very cobbly loam about 15 inches thick. Weathered, fractured sandstone is at a depth of 55 inches. Depth to bedrock ranges from 40 to 60 inches.

Included in this unit are small areas of Astoria, Blachly, Bohannon, and Preacher soils. Also included are Slickrock soils that have slopes of more than 25 percent. Included areas make up about 15 percent of the total acreage.

Permeability of this Slickrock soil is moderate. Available water capacity is about 7 to 10 inches. Water



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# GROWING SOILS

January 24, 2000  
Providing Quality Soils Information to  
Pacific Northwest Landowners Since 1979

David Grant  
RE: Walterville, OR  
Tax Lot 700, S.W. 1/4 Section 28, T17S, R1W 30.14 acres

An Order I intense soil inventory was completed on January 17, 2000. A summary of all soil, landform and agronomic information is provided under separate cover. This report shows soil profile and photo information, soil delineations and resource verses non-resource mapping units. This inventory showed 11.2 acres or 37 percent of the tax lot is to be classified as non-resource. This includes rubbly units (123), converted lands for homesite, road and right-of way zones and the poorly drained, rubbly 100 unit found in the swale position. See the report for a detailed analysis of this property. This report is an addendum to the original report and makes note of the importance of the 123 Sifton gravelly loam unit which is stated in the Lane County Soil Survey Report as being Capability Class IVs. As summarized in the original report, the 123 unit tabulated as resource was listed as marginal for agricultural production. The exact Sifton soil found on the subject property is slightly different than the modal Sifton series. Major differences include: 1). no loam textures are noted in any soil profile described for this property; conversely, textures are coarse loamy sand to sandy loam with 8 to 12% clay and 35 to 70% gravels and cobbles 2). water tables are often perched; 3). no ash intrusion or medial properties are documented. These are all crucial to utility for this series. Most important are numbers 1 and 3 above. These two properties relate directly to water holding capacities. The series concept for Sifton reports water holding capacities in the solum (A and B horizon) totaling 3 to 6 inches. Considering the lower fraction of clay coupled with a lack of ash intrusion show the true water holding capacity to be lower than assessed for the series (likely 1 1/2 to 2").

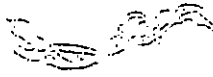
The above distinctions for Sifton series, stating a lower water holding capacity, is crucial for Capability Class determination. No water rights are noted for the subject property. In order for the Sifton soil to perform at the production levels stated for Class IVs, supplemental water is needed. Since supplemental water is absent, it is quite likely the 123 (non-rubbly) units which currently support spindly, non-commercial filbert trees will fall in Capability Class V or VI. During the growing season, these soils will be very dry with almost no available water in the soil volume (less than 2" of H<sub>2</sub>O) which could be slowly released at a future date when needed. This fact is critical in assessing Capability Class. The stated Class IVs for Sifton is for an irrigated unit of which the subject property is not. I would propose that the 123 units, not already removed from resource designation, be down graded to a Class V based upon a very low water holding capacity and a non-irrigated status. This would change the percentage of non-resource from 37% to approximately 67%.

Please call with questions,

  
Gary A. Kitzrow, M.S.

Certified Professional Soil Scientist/Soil Classifier

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# GROWING SOILS

Providing Quality Soils Information to  
Pacific Northwest Landowners Since 1979

January 24, 2000

David Grant

RE: Tax Lot 700, S.W. 1/4, Section 28, T17S, R1W  
Walterville, OR

Seventeen soil and landform descriptions were completed on January 17, 2000. Landforms are considered primary and secondary stream terraces with associated terrace escarpments and concave swales. Slopes are less than 2% except in the escarpment area. The purpose of the field visit was to verify the soil mapping units and delineations on the property which is 30.14 acres. Current vegetation includes mostly producing filberts with some areas of saplings and areas of dying or spindly pre-commercial nut trees. No irrigation rights are declared for this property according to the owner.

Soils series mapped by the USDA-NRCS include the Sifton gravelly loam IVs (123), Cloquato silt loam IIw (29), and Oxley gravelly silt loam IIIw(100). Sifton soils are most prevalent and include most of the filbert operation. Cloquato series mapped in the southerly section is intensively cultivated and is used for row crops. Oxley soils are mapped in the swale which is located between the state route and the homestead access road. The Cloquato and Oxley units were not evaluated, however, the previous study and current work shows this site to be non-commercial and non-resource due to the dominance of standing water for more than 6 months of the year and extremely cobbly surface noted along the base of the swale bed. Cloquato units are assumed to be commercial and are included in the resource acreage fraction.

The focus of this inventory includes the 123 unit which is classified as monotaxa Sifton series. The 123 units are noted as Capability Class IVs. These soils are somewhat excessively drained with less than or equal to 3" of available water holding capacity. Modal Sifton soils have admixtures of ash in the upper 1 1/2 foot and texture as gravelly loam Epipedons are usually 15" thick. Subsoils are listed as very gravelly coarse sands.

## FIELD SOIL INVENTORY

A hallmark for much of the 123 unit on the parcel includes the high percentage of rock (cobbles and stones) on or near the surface in many locations within the study area. The following is a summary of the morphologies of soils found in the study area. Topsoils are not pachic in most locations but do meet the criteria for mollic at most locations tested. Topsoils are variable in rock content. In resource areas (stops 1-4,6,7,9,15) topsoils texture as very cobbly or gravelly coarse sandy loam to loamy sand with very friable consistence, weak fine granular structure and 10 to 14% clay. Rock content ranges from 35 to 50% with coarse gravels and fine

cobbles dominating the matrix. Subsoils (BC,Bw) are poorly defined, lack maturation and texture as very cobbly to extremely cobbly coarse loamy sand to sand with single grained structure, loose consistence and less than 12% clay. Rock content ranges from 40 to 75% by volume and is dominantly composed of gravels and cobbles with some stones noted. Substratas begin at greater than 55". Note that the upper solum (A+B horizon) is non-medial and non-andic and does not undergo thixotrophy. Ash admixtures are exceedingly low to absent at all stop tested.

Non-commercial (non-resource) locations, (stops 5, 8, 10-14, 16-17) include areas with rubbly surfaces with over 75% of the surface covered with gravels, cobbles or stones. In these areas topsoils are ochric and are 6 to 10" thick and texture as extremely cobbly sandy loam to loamy sand with 10 to 14% clay, friable to loose consistence and weak fine granular to single grained structure. Coarse fragment content ranges from 50 to 80% most of which cobbles and fine gravels with occasional stones. Subsoils are poorly defined, very rocky transitional (BC) horizons texturing as extremely gravelly or cobbly coarse loamy sand parting to sand. Structure is absent and consistence is loose. Rock content exceeds 50% and sometimes exceeds 70% and approaches fragmental. Clay contents are less than 10%. No ash or medial properties are noted at any of these stops. Perched water tables are also noted at many of these stops (8, 11-14) with current tables at 36 to 45 inches. Seasonal peaks are estimated at 30 to 40" for each of these stops.

The soils of the 123 unit with rubbly surfaces do not fit the Sifton series for the following reasons: 1). Soils are rubbly at the surface, 2). soils have ochric epipedons, 3). upper horizons have little or no ash or medial properties, 4). Soils do not texture as loam in any horizon, 5). soils belong to sandy skeletal family and not loamy skeletal, 6). many profiles are not freely drained and perch water.

For consideration of resource verses non-resource designation , areas with rubbly surfaces have been eliminated from resource status. These soils have poor utility since cultivation and harvesting is severly limited if not eliminated completely due to surface rock. Similarly, during much of the growing season these rubbly units are excessively drained with an estimated less than 2" of available water holding capacities. Hence these non-resource areas are a variant of Sifton series.

Other areas removed from resource status includes all out buildings, access roads, drainfields, highway easments. The Oxley unit (100) is non-resource since it is poorly drained, perches standing water throughout much of the growing season, and on this property shows rubbly surfaces intermixed with areas very near rubbly surfaces.

Excluding the areas summarized above, the remaining property is considered resource. Although a Capability Class of IV is cited for the Sifton unit (123) , it should be noted that this class is specified for and irrigated unit. It is possible and likely that the non-irrigated Sifton unit (such as that found on this subject property) may fit a lower Capability Class since this soil has a

very low water holding capacity. Since this property has no formal irrigation rights it is questionable as to whether or not this parcel (resource areas) can sustain many economic crops. An agricultural economic survey would be needed to compare the utility of other Sifton units in Lane County where irrigation rights are absent.

### SUMMARY

**FOR THE FOLLOWING SUBJECT PARCEL IT CAN BE CONCLUDED RUBBLY SURFACE UNITS (123 & 100) ARE NON-RESOURCE AND DO NOT SUSTAIN COMMERCIAL FILBERT PRODUCTION. ALSO IT CAN BE STATED THAT THE HOMESTEAD, OUT BUILDINGS, ROAD BASE AND COUNTY FRONTAGE EASMENT CAN BE EXCLUDED FROM THE RESOURCE ACREAGE. CONVERSELY, CLOQUATO (29) UNITS AND THE NON-RUBBLY SIFTON (123) UNITS ARE RESOURCE AND ARE CAPABLE OF COMMERCIAL AGRONOMIC SPECIES PRODUCTION. IT IS HOWEVER QUESTIONABLE IS THERE IS COMMERCIAL VALUE ON THE SIFTON UNITS WHERE IRRIGATION IS NOT SUSTAINABLE. IN SUMMARY, THE NON RESOURCE AREA TOTALS 11.2 ACRES OR 37 PERCENT OF THE ENTIRE ACREAGE. RESOURCE AREAS TOTAL 18.9 ACRES OR 63 PERCENT OF THE LAND FOUND ON THIS LEGAL PARCEL. I HEREBY CERTIFY THE THE ABOVE 11.2 ACRES TO BE NON-RESOURCE AND NOT CAPABLE OF PRODUCING COMMERCIAL FARM OR FOREST PRODUCTS.**



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## RELEVANT EDUCATION:

MASTERS OF SCIENCE UNIVERSITY OF WASHINGTON FOREST BIOLOGY  
THESIS: SLUDGE REUSE ON GLACIAL OUTWASH SOILS: LOAD RATES,  
LEACHATE CHEMISTRY/LYSIMETER ANALYSES; RENOVATION  
CAPACITIES AND GROWTH RESPONSE OF WESTERN RED CEDAR  
SEEDLINGS

BACHELORS OF SCIENCE CAL POLY SAN LUIS OBISPO SOIL SCIENCE

## CERTIFICATION:

ARCPACS: CERTIFIED PROFESSIONAL SOIL CLASSIFIER 1989 (Wetland mgmt)  
ARCPACS: CERTIFIED PROFESSIONAL SOIL SCIENTIST 1984 (Forest soils)  
ARCPACS: CERTIFIED PROFESSIONAL SOIL SPECIALIST 1984 (septic/muni waste)  
*Washington State DNR Registered Professional Watershed Analyst Level 2- Mass wasting  
and Surface Erosion Modules; Level 1- Riparian Zone, Salmon Habitat modules*

LCDC Certified to convert farm/Forest land into residential/commercial development

## PROFESSIONAL EXPERIENCE

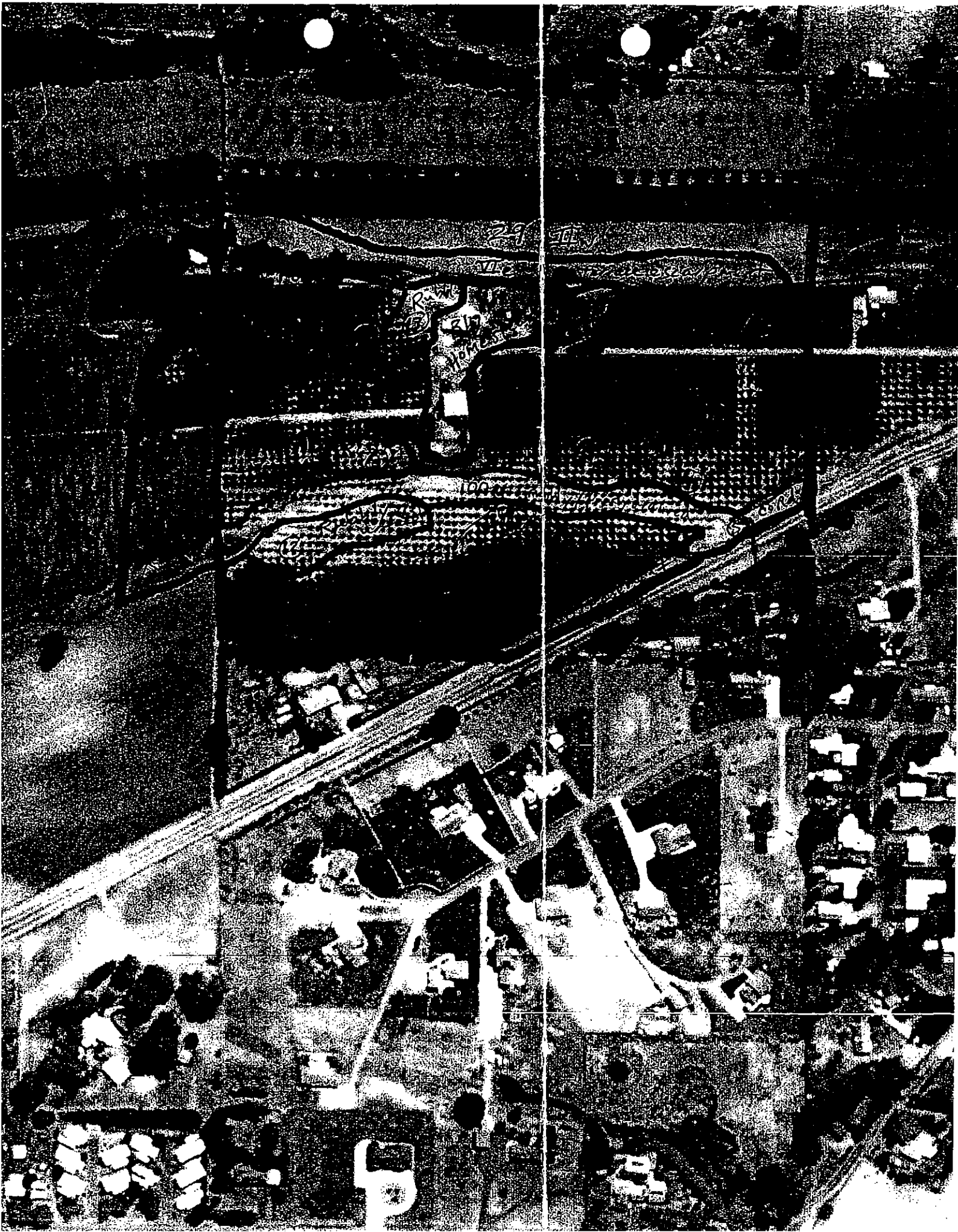
June 1987- Present Owner, GROWING SOILS. *Consulting soil scientists,  
watershed analysts and urban fringe environmental consultants. Category 1:*  
FOREST SOIL INVENTORY; SOIL EROSION AND LANDSLIDE PREDICTION  
ANALYZES and ECOLOGICAL UNIT INVENTORY; negotiated, executed and  
administered 5 large scale inventories for the USDA-Forest Service from 1988-  
1997 including the following: Mt Hood NF 42K ecological unit inventory on  
Middle fork of Clackamas R.; Stanislaus NF Soil ID landslide/ Erosion inventory and  
site index correlation for 35K block on Toulamie R.; Habitat typing and  
soil/ecological unit inventory for 38K block on Huron-Manistee NF  
lower peninsula, MI.; Chattahoochee NF soil/ site index inventory and MLRA  
delineation of Appalachian/Piedmont interface In North Georgia; Thomas Jefferson  
NF soil survey and site index correlation of 24K on Virginia/West Virginia border.

Completed 4 manuscripts for contracts with forestry and urban interpretations in conjunction with NCSS standards; WA -DNR WATERSHED ANALYSIS PEER REVIEWER FOR MASS WASTING AND SURFACE EROSION MODULES 1995-1997 Category 2: STORMWATER AND SEPTIC CERTIFICATION for plat development for 63 subdivisions in the Southern Puget trough between Tacoma and Centralia, WA. Hallmarks include: 1) detailed order 1 soil inventory with backhoe pit exposure to 8 to 14 feet with detailed soil classification of profiles for soil permeability, drainage, percolation watertable topography and runoff potentials. Detailed comparisons of contrasting microstrata within matrix for glaciated landscapes. Reinforcement and quantification of soil field classification with Double ring and falling head analyzes. Category 3: WETLAND DELINEATION AND MITIGATION, riparian zone assessments and watershed analysis for areas undergoing land use changes or current logging shows with salmon habitat involvement. Land use conversion wetland surveys. Category 4: LCDC Land conversion studies for homesite development

SOUTHERN OREGON LANDFORM and SOIL MANAGEMENT EXPERIENCE

1982-1987                      USDA -SCS      Soil scientist, Douglas County, Oregon. Mapped 330K acres to NCSS standards and order 2 and 1 detail. Developed empirical tables for soil survey manual used today in Douglas County to define the risks of mass slope failure and erosion to salmon bearing streams of forest soils managed for Douglas fir harvest. Empirical soil temperature research with frigid/mesic zone establishment using plant indicator species for Douglas, Jackson and Josephine Counties. Site index correlation for 6 timber habitat types and 115 soil series and crop potential studies. Identified and established 6 new series and conducted international Vertisol field review.

**Land use conversion inventories** for the greater Roseburg area under which there is a conversion of land from agricultural and forest use to residential and commercial applications. Hallmarks included interfacing with LCDC personnel, mandates and requirements for proper zoning. Septic use, wetland impacts and determination of Agriculture potential for specified parcels.



SOIL PROFILE DOCUMENTATION SHEET

Job Name Grant Date 1/18/00  
 Stop No. 1 Location 150' W of Corral - 8  
 Slope 41 Elevation \_\_\_\_\_ Landform terrace  
 Geology/Genesis Recent Alluvium  
 Vegetation Fruit orchard (Pine)

BRIEF PROFILE DESCRIPTION

Horiz	Depth	Moist Color	Mott	Text Clay%	Struct	Frag	Ball Hold	Rib bon	Con sist	Andic Smear	Indur Cem	Perm in/hr	Sat Intake
A <sub>1</sub>	0-9	2	LS 12	VCB	1/2	40%	om 6%	No	A	Vfr		212	moderate
A <sub>2</sub>	9-21	4	CLSC 10	XCB	1/2	70%	om 3%	No	A	Loose		210	rapid
BC	21-42	7.5	CLSC 10	XCB	SG	75%	10.9%	No	<0	Loose			
							1/2 strong						

REMARKS  
 Residual - Not enough rock on surface  
 Podic Epipedon  
 A<sub>1</sub> rounded cobbles + stones  
 A<sub>2</sub> = rd cobbles, approaches fragmental  
 BC = Udroughly w/ elongation - Non  
 commercial

photo  
1/18/00

entia, Podic



SOIL PROFILE DOCUMENTATION SHEET

Job Name Grant Date 1/17/02  
 Stop No 2 Location 90' SW #1 ridge crest  
 Slope 41 Elevation \_\_\_\_\_ Landform terrace (1)  
 Geology/Genesis Grant Alluvium  
 Vegetation F. 4 but

BRIEF PROFILE DESCRIPTION

Horiz	Depth	Moist Color	Mott Clay%	Text	Struct	Frag	Ball Hold	Fib- bon	Con- sist	Andic Smear	Indur Cem	Ferm in/hr	Sat Intake
A <sub>1</sub>	0-4	10YR <sup>2/1</sup>	14 XCB	SL	fr	60CB	om 7%	No	fr	weak		R=24 6-20	rapid
BC <sub>1</sub>	11-27	10YR <sup>4/3</sup>	14 X9r	SL	fr	30CB	om <1%	No	fr			R=712 1-20	mod rapid
BC <sub>2</sub>	27-57	10YR <sup>4/3</sup>	14 XCB	SL	fr	30CB	om <1%	No	fr			R=24 6-20	mod

REMARKS B = der R - bly surface - Barely brown  
A = Non fragmental  
BC<sub>1</sub> = hi C bldes (CB)  
BC<sub>2</sub> = ↓ Rock

289

CLASSIFICATION \_\_\_\_\_ FAMILY Sa Skel  
 SOIL DRAINAGE CLASS U EX SOIL ERODIBILITY INDEX 14 SERIES \_\_\_\_\_  
 HYDROLOGIC GROUP A DEPTH TO MOTTLES > 5" EFFECTIVE ROOTING DEPTH 13" Absolute

SOIL PROFILE DOCUMENTATION SHEET

Job Name Grant Date 1/18/00 Proj  
 Stop No 3 Location 100' W #2 / 110' S Swale  
 Slope 1.5% Elevation \_\_\_\_\_ Landform terrace 145ft  
 Geology/Genesis Recent Alluvium  
 Vegetation F. forest

BRIEF PROFILE DESCRIPTION

Horiz	Depth	Moist Color	Mott	Text Clay%	Struct	Frag	Ball Hold	Rib- bon	Con- sist	Smear	Com in/hr	Intake
A <sub>1</sub>	0-3	10YR 2/1	✓	SL-12 VCB	lsy	40	om 8% Yes	✓	Vfr			rapid
A <sub>2</sub>	3-21	10YR 3/1	✓	LS-8 VCB	S6	47	om 2% No	✓	loose			"
BC	21-62	10YR 5/4	✓	CSL6 XCB	S6	85	LCB No	✓	to v firm			rapid

Weak silica or iron cement below 55'

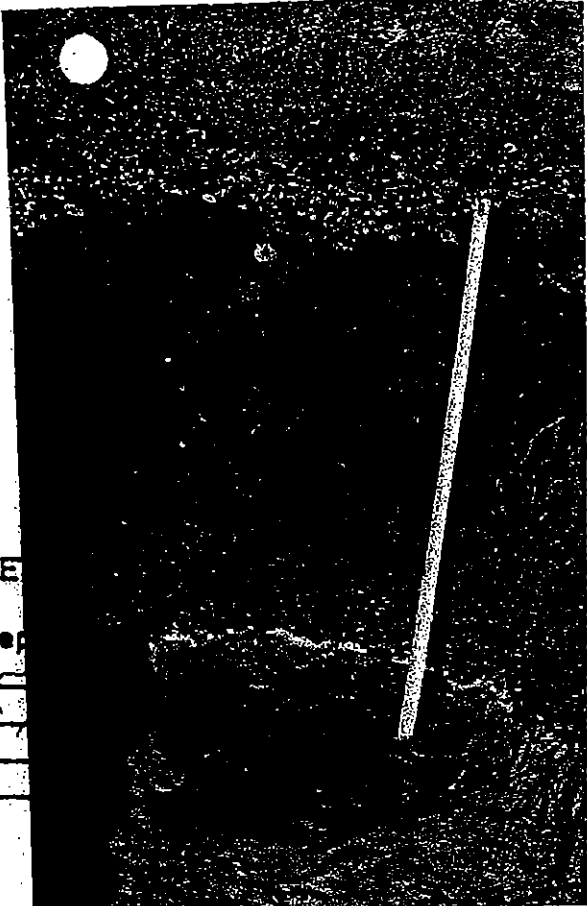
A<sub>1</sub> = mostly coarse gravel

REMARKS Non-Rubby - Resouces  
extremely Dry - low H<sub>2</sub>O holding  
BC = fragmental < 10' soil  
requires - irrigation for best crops

CLASSIFICATION \_\_\_\_\_ FAMILY Lo sKefed

SOIL PROFILE DOCUMENTATION SHEET

Job Name Grant Date 11/15/43 Prof  
 Stop No 4 Location 120 NW # 3 / 80' S of SW  
 Slope 1% Elevation \_\_\_\_\_ Landform 2<sup>nd</sup> terrace  
 Geology/Genesis Recent Alluvium  
 Vegetation Filberts (stunted)



BRIEF PROFILE DESCRIPTION

Horiz	Depth	Moist Color	Mott Clay%	Text	Struct	Frag	Ball Hold	Rib-bon	Con-sist	Andic Smear	Indur Cem	Ferm in/hr	Sat Intake
A <sub>1</sub>	0-10	10YR 1/1	L17 VCB	Hgr	4 <sup>set</sup> 4 <sup>set</sup>	Yes	1"	fr				$\bar{x} = 22$ 6-2	rapid
A <sub>2</sub>	10-21	10YR 3/2	S214 XCB	Hgr	65	Yes	1"	fr				$\bar{x} = 47$ 2-6	mod
BC	21-38	7.5YR 1/1	L512 XCB	L:gr + TS		No		fi				$\bar{x} = 104$ 6-20	mod
X <sub>g</sub>	38-55	10YR 4/2 7.5YR 2/1	S25 LD XCB		70	No		fi				$\bar{x} = 41$	mod slow

(mcs)

REMARKS Non-Rubblly - Resource soil  
Podic Eppped  
mottled + gleyed below - 38"  
A - Non Fragmental

CLASSIFICATION \_\_\_\_\_ FAMILY L. Skeletal

Non Resource  
SOIL PROFILE DOCUMENTATION SHEET

Job Name Grant Date 1/17/00 Pr  
 Stop No 5 Location near Hwy / Extreme West  
 Slope 2° Elevation \_\_\_\_\_ Landform terrace  
 Geology/Genesis Recent Alluvium  
 Vegetation Great Filberts

BRIEF PROFILE DESCRIPTION

Horiz	Depth	Moist Color	Mott Clay%	Text	Struct	Frag	Ball Hold	Rib- bon	Con- sist	Other	Com	min	in	in	in	in
A	0-8	10YR/2	LS 10 #	XCB	1-5	85	om 1/2	14	fr							R=10t hard
AB	8-14	10YR/3	LS 10 #	XCB	mass	85	om 2/4	#	fi							R=12t slw
BCg	14-39	2.5Y/4	LS #	XCB	mass	85		#	vf							R=1 vslw
Cg	39+	4	LS #	XCB	mass	75		#	vf							R=1 vslw

Remarks  
 \* 1st stop  
 \* 2nd stop  
 \* 3rd stop  
 \* 4th stop  
 \* 5th stop

Rubblly surface + SWPP  
 massive No structure  
 below 12"  
 non commercial Ag  
 1 to 1/2 AC Rubble

Big Drop  
 off in  
 percent  
 per cm

CLASSIFICATION \_\_\_\_\_ FAMILY Lo Skel

SOIL PROFILE DOCUMENTATION SHEET

Job Name Grant Date 11/17/03 Pr  
 Stop No. 6 Location 130' SE of Barn  
 Slope 10% Elevation \_\_\_\_\_ Landform terrace (2')  
 Geology/Genesis Recent Alluvium  
 Vegetation Shrubland

BRIEF PROFILE DESCRIPTION

Horiz	Depth	Moist Color	Mott	Text Clay%	Struct	Frag	Ball Hold	Rib- bon	Con- sist	Smear	Cam	m/hr	Intake
A	0-7	10y <sup>2</sup> /1	✓	SL XCB 14%	50CB	om 6%	Yes	1/4"					moder
AB	7-11	10y <sup>4</sup> /3	✓	SL XCB 11%	30CB	om 2%	No	1/4"					"
BC	11-44	10y <sup>5</sup> /4	○	LS XCB 5BK	20gr								"
BC <sub>2</sub>	44-12	11	○	LS XCB 56	50CB								"

*(all less than 12% clay)*

Non Fragmental  
 Resonance / Non Rubbly

REMARKS  
 (S) *Swick to excessively drained requires irrigation*  
 9/10 *Very low H<sub>2</sub>O holding*

CLASSIFICATION \_\_\_\_\_ FAMILY Sandy, Ketch

SOIL PROFILE DOCUMENTATION SHEET

Job Name Grant Date 1/17/60  
 Stop No 7 Location 92' NE # 6 road  
 Slope 2.6° Elevation \_\_\_\_\_ Landform undulating  
 Geology/Genesis Recent Alluvium  
 Vegetation Filberts stunted

BRIEF PROFILE DESCRIPTION

Horiz	Depth	Moist Color	Moist Clay%	Text	Struct	Frag	Ball Hold	Rib-bon	Consist		
A	0-6	10y/2	SL 4	XCB	HR	on 2%			fr		
A2	6-12	10y/2	SL 12	XCB	SBK 75	on 1%			fr		repul
Bc	12-49	10y/2	SL 10	XCB	v	6b	11	8	fr		"

*Borders fragmental*

REMARKS Recent - 5 rod commercial filbert  
Borders Rubbly + Borders fragmental  
slightly shy

HRIL

CLASSIFICATION \_\_\_\_\_ FAMILY Sandy Silt  
 SOIL DRAINAGE CLASS SL EXSOIL ERODIBILITY INDEX .17 SERIES \_\_\_\_\_  
 HYDROLOGIC GROUP A DEPTH TO MOTTLES 45% EFFECTIVE ROOTING DEPTH Z<sub>0</sub> Absolute  
 DEPTH CURRENT H2O TABLE 9' EST DEPTH SEASONAL HIGH H2O TABLE 7'  
 DEPTH TO TILL \_\_\_\_\_ TYPES \_\_\_\_\_

Non Resource

SOIL PROFILE DOCUMENTATION SHEET

Job Name Grant-Walkerville Date 1/17/00 Pr  
Stop No 8 Location 751 NE of Corral  
Slope 2% Elevation \_\_\_\_\_ Landform undulating  
Geology/Genesis Recent Alluvium - clay  
Vegetation Filbert mid successional

BRIEF PROFILE DESCRIPTION

Horiz	Depth	Moist Color	Mott	Text Clay%	Struct	Frag	Ball Hold	Rib- bon	Con- sist	Smear	Cem	nr/hr	Intake
A	0-11	10y/2.8	X	CBL1	lfy	80CB	no	g	fr			R=212	v rapid
BC	11-21	10y/1.5	X	CBL5	med	90CB	om	1%	Loose			R=220	rapid
BC	21-59	10y/1.0	X	CBSL	med	70CB						R=212	

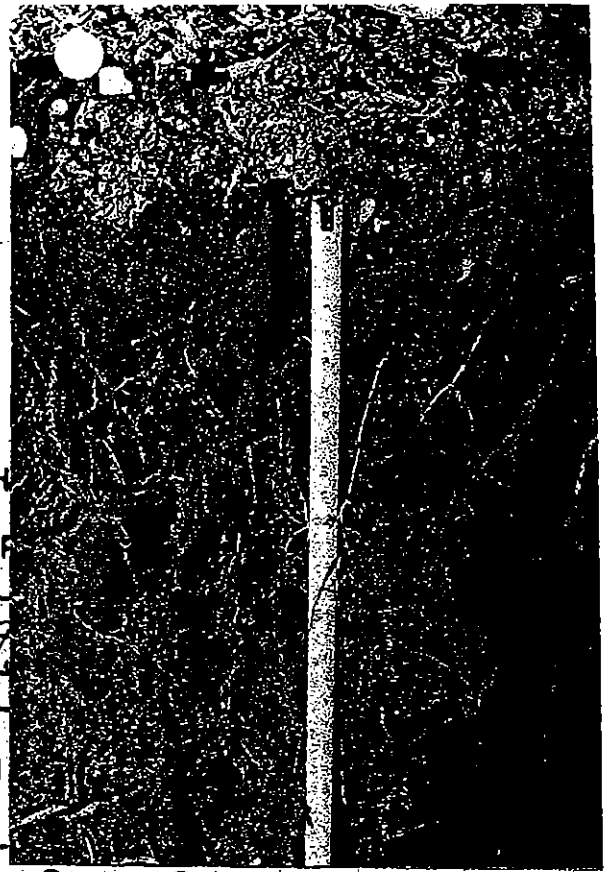
XCB top to bottom

REMARKS Rubblly surface  
Fragmental upper 24"  
Non Resource / Non Commercial  
Area comprises .39 AC  
v droughty

CLASSIFICATION \_\_\_\_\_ FAMILY fragmental  
SOIL DRAINAGE CLASS Dx SOIL FERTILITY INDEX \_\_\_\_\_

SOIL PROFILE DOCUMENTATION SHEET

Job Name Grant - walfordville Date 1/17/07  
 Stop No. 1 Location mid stream 100' from  
 Slope 2 1/2 Elevation \_\_\_\_\_ Landform undulating  
 Geology/Genesis Recent Alluvium (level)  
 Vegetation Felbert



BRIEF PROFILE DESCRIPTION

Horiz	Depth	Moist Color	Mott Clay%	Text Clay%	Struct	Frag	Ball Hold	Rib- bon	Con- sist	Smear	Cem	in/hr	Intake
A	0-8	10y/2/0-0	L	XCB	1/2	55	om 4"	2"	fr			R=1+	mod
Bw	8-19	2.5y/2/3	SL	XCB	1/2	58	om 1"	1"	fc			R=4+	"
Bw	2 19-29	7.5y/2/4	L	XCB	1/2	45		1/2"	fc			R=2+	"
C	29-55	2.5y/2/4	L	XCB	1/2	45		0	vfc			R=2+	clay
												R=	
												R=	
												R=	

REMARKS Resource but drainage problem  
Surface not Rubby but area borders rubbles  
C = mottled but not gleyed

CLASSIFICATION \_\_\_\_\_ FAMILY LoSkel  
 SOIL DRAINAGE CLASS Mw SOIL ERODIBILITY INDEX 1.7 SERIES \_\_\_\_\_  
 HYDROLOGIC GROUP B DEPTH TO MOTTLES 29" EFFECTIVE ROOTING DEPTH \_\_\_\_\_ Absolute  
 DEPTH CURRENT H2O TABLE 4.41 EST DEPTH TO SEASONAL WATER TABLE \_\_\_\_\_



Non Resource  
SOIL PROFILE DOCUMENTATION SHEET

Job Name CRD Date 1/18/00  
 Stop No 10 Location near plant Area  
 Slope 1% Elevation \_\_\_\_\_ Landform Convex  
 Geology/Genesis recent Alluvium  
 Vegetation spindly filbert seedling



BRIEF PROFILE DESCRIPTION

Non tiller

Horiz	Depth	Moist Color	Mott	Text Clay%	Struct	Frag	Ball Hold	Rib-bon	Consist	Andic Smear	Indur Cem	Ferm m/hr	Sat Intake
A	0-8	10y/2	XCB	LS	14y	80% com	3% yes	14	fr			8-10	mod
Bw	8-21	10y/4	XCB	LS	14s/1	40% com	14% yes	9	fi			8-10	"
BC	21-44	10y/2	Xgr	LS	"	35% com	40% no		fi			8-10	"
Cg	44-25	10y/1	XCB	LS	"	40% com	50% "	"	loose			8-10	slow
				21% clay									

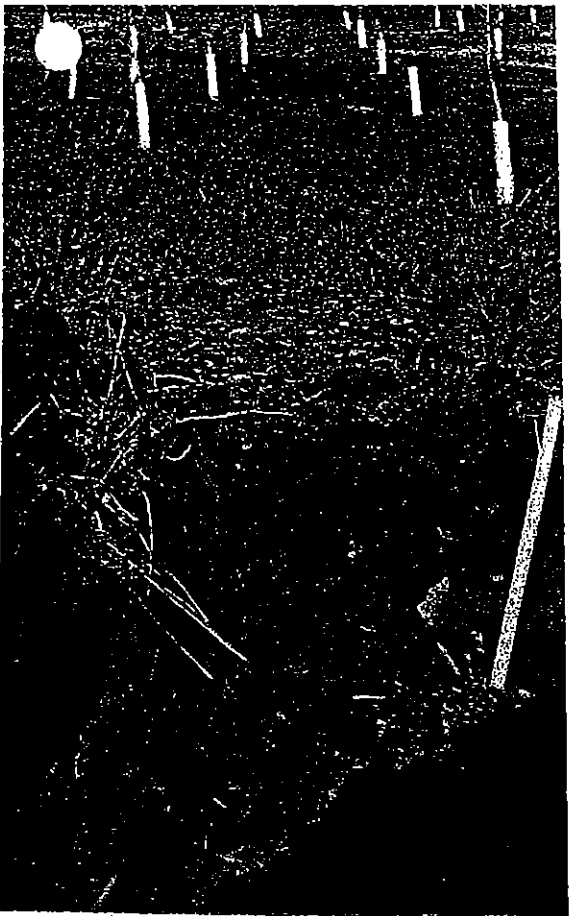
REMARKS

Non Resource - Rubbly surface

fragments upper 18"  
medium clay

3 crop failure of filberts - Non Commercial

0.21 AC NR



Non Resource  
SOIL PROFILE DOCUMENTATION SHEET

Job Name Grant Date 11/15/00  
 Stop No. 11 Location 70' Above formal swale  
 Slope 2% Elevation \_\_\_\_\_ Landform Concave - to  
 Geology/Genesis Altman  
 Vegetation \_\_\_\_\_

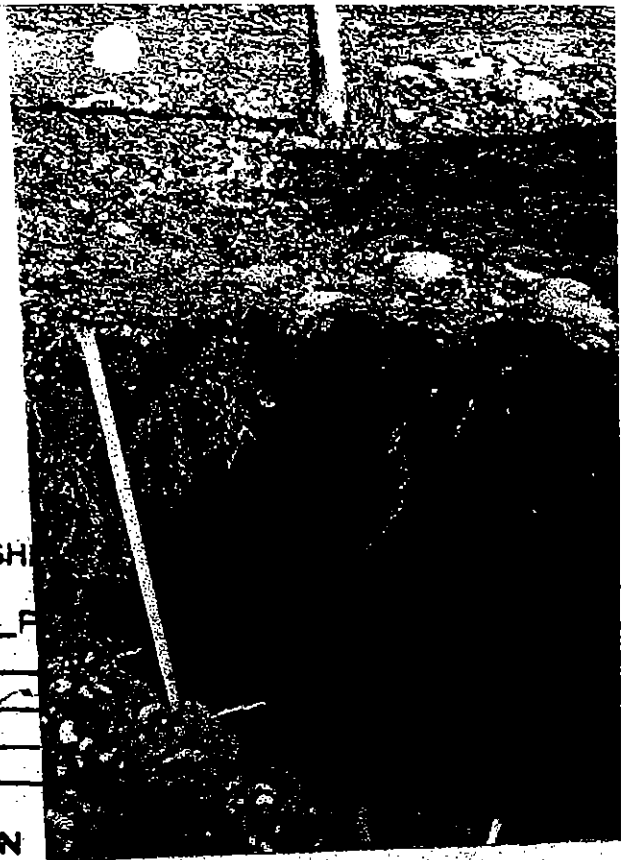
BRIEF PROFILE DESCRIPTION

Horiz	Depth	Moist Color	Mott	Text Clay%	Struct	Frag	Ball Hold	Rib- bon	Con- sist	Andic Smear	Indur Cem	Ferm in/hr	Sat Intake
A	19-24	7.5YR 3/2	LS	XCB	1/2	TT	om Yes	11	fr			R=2/2	mod
B	24-29	7.5YR 5/6	L	XCB	1/2	NO	om No	11	fi			R=1-2	"
RC	24-29	7.5YR 4/4	LS	XCB	11	NO		11	fi			R=2/1	" slow
C	29-55	7.5YR 4/3	L	XCB	11	NO		11	fi			R=1-2	"
		7.5YR 2/1											

poor site

OK Cambic development but Altman reworked

REMARKS gley below 27" / fragmented / Rubble  
Non Resource  
Severe drainage pattern  
impaired root distribution 2° to  
perched H<sub>2</sub>O table



Non Resource

SOIL PROFILE DOCUMENTATION SHEET

Job Name Grant Date 11/18/00  
 Stop No 12 Location Swale at Hwy 100 (Deer Creek)  
 Slope 2% Elevation \_\_\_\_\_ Landform terrace crest  
 Geology/Genesis Alluvium  
 Vegetation Dry grass / Fescue

BRIEF PROFILE DESCRIPTION

Horiz	Depth	Moist Color	Mott	Text Clay%	Struct	Frag	Ball Hold	Rib- bon	Con- sist	Andic Smear	Indur Cam	Ferm m/hr	Sat Intake
A	0-8	10y2/10	EXCB	HL	Hgr	85	cm 4 <sup>oh</sup>	1"	fv			R=14	mod
A <sub>2</sub>	8-13	10y2/10	EXCB	HL	Hgr	70	cm 2 <sup>oh</sup>	1"	fi			R=21	mod sh
BW	13-20	7.5y2/10	EXCB	LS	ll	75			fi			R=24	slan
BC <sub>g</sub>	20-54	7.5y2/10 10y2/10	2D XCB	SL	ll	70			fi			R=22	vslan
												R=	
												R=	
												R=	

mostly cobbles

(fine cobbles)

Probably not Non Fragmental

unquestionably Non Resource  
 Roughly surface of impeded drainage  
 imbedded roots - Decadent trees  
 poor operability 2" stones on surface

60-1.1 Ac

2/1/02

CLASSIFICATION

FAMILY Lo S K 10/11

Non Resource

SOIL PROFILE DOCUMENTATION SHEET

Job Name Grant/Walbridgeville Date 11/17/00  
Stop No 13 Location Between Swale & Hwy  
Slope \_\_\_\_\_ Elevation \_\_\_\_\_ Landform \_\_\_\_\_  
Geology/Genesis \_\_\_\_\_  
Vegetation \_\_\_\_\_

BRIEF PROFILE DESCRIPTION

Horiz	Depth	Moist Color	Mott Clay%	Text	Struct	Frag	Ball Hold	Rib- bon	Con- sist
A1	0-9	10YR 2/1	SL	XCB	1/2	10/5	8 CB on 8 1/2	1 1/2	mod
A2	9-16	10YR 3/2	12	XCB	1/2	10/5	4 CB on 3 1/2	1	mod
A3	16-24	10YR 4/2	10	XCB	1/2	10/5	4 CB on 2 stones	1	sl an

Non Resource

Pochic epipedon Rubble

REMARKS

Continuation Rubble unit from prior stop

Non commercial

Border fragment

Close to 2 Ac NR surface Rubble

CLASSIFICATION \_\_\_\_\_ FAMILY Lu Skelet  
SOIL DRAINAGE CLASS mod SOIL ERODIBILITY INDEX \_\_\_\_\_ SERIES \_\_\_\_\_  
HYDROLOGIC GROUP B DEPTH TO MOTTLES 22 EFFECTIVE ROOTING DEPTH Absolute



Nor Reg

SOIL PROFILE DOCUMENT

Job Name Cant Date \_\_\_\_\_  
 Stop No. 14 Location 40' from house  
 Slope 2% Elevation \_\_\_\_\_ Landform concave terrace  
 Geology/Genesis Althaus  
 Vegetation Stunted Filbert - 40% caliper for Age group

BRIEF PROFILE DESCRIPTION

Horiz	Depth	Mdist Color	Mott	Text Clay%	Struct	Frag	Ball Hold	Rib- bon	Con- sist	Andic Smear	Indur Com	Perm in/hr	Sat Intake
A	0-6	10YR 4/1	XCB	L17	ltfg	20	om		fr			R	mod
Bw	6-19	10YR 4/1	XCB	SL18	"	6T	om		fl			R	"
BC	19-44	Varied	XCB		SBK	60			"			R	slow
BC	44-57				mass	mass			Lo-4			R	vs
						clay						R	

VP 20 Red from Redoximorphic features NOT pedogenesis

REMARKS Note Root drop of the p4 Rubble land

Small Rubby Area  
Area .25 AC

28/07 Hot table approx 71  
Shallow Not!!

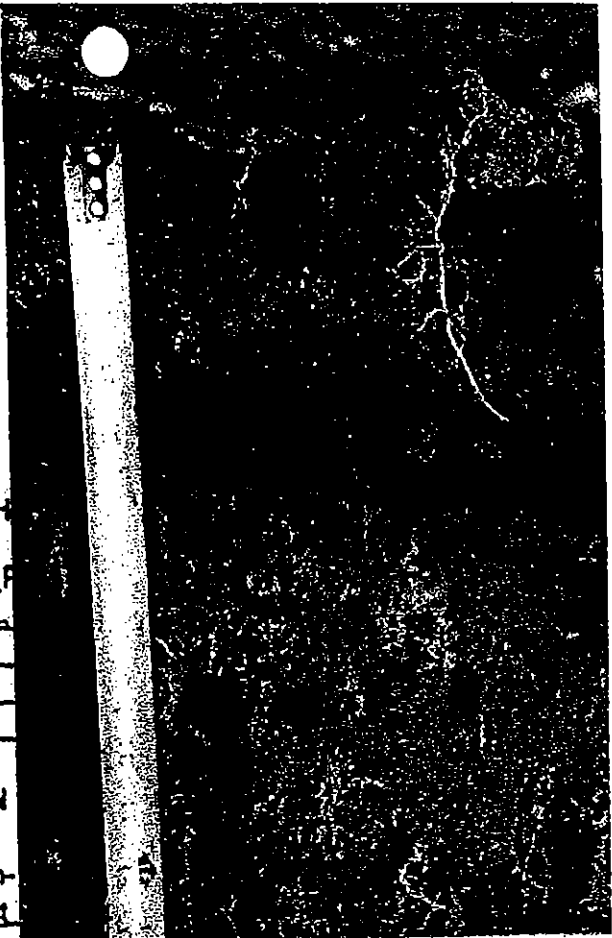
CLASSIFICATION \_\_\_\_\_ FAMILY \_\_\_\_\_

SOIL PROFILE DOCUMENTATION SHEET

Job Name Grant Date 1/18/63  
 Stop No. 15 Location med orchard 1/2 between  
 Slope 1.6 Elevation \_\_\_\_\_ Landform \_\_\_\_\_  
 Geology/Genesis Alluvium recent  
 Vegetation \_\_\_\_\_

BRIEF PROFILE DESCRIPTION

Horiz	Depth	Moist Color	Mott Clay%	Text	Struct	Frag	Ball Hold	Rib-pon	Con-sist	R <sub>f</sub>	Notes
A	0-6	light	5	xgr	1fg-60		om 6.6 Ver	11	fr	1.2	mod
B <sub>1</sub>	6-17	4/3	25	xCB	1H8K50		om 1.6 no	11	fi	2.2	"
B <sub>2</sub>	17-32	4/3	52	xCB	1K8K60		"	24	fi	2.4	"
B <sub>3</sub>	32-59	4/4	45	xCB	86	55	"	20	fi	2.2	"



Note Big Root Drip @ 21"

Low solution = V draughty

REMARKS Barely Resourse  
North & fully  
freely drained

fulbert & Standard Deviator  
firm cables for Age group

CLASSIFICATION \_\_\_\_\_ FAMILY to 5K6  
 SOIL DRAINAGE CLASS W2 SOIL ERODIBILITY INDEX 14 SERIES \_\_\_\_\_  
 Absolute

Rubby

SOIL PROFILE DOCUMENT

Job Name Grant Date \_\_\_\_\_  
 Stop No. 16 Location \_\_\_\_\_  
 Slope 1% Elevation \_\_\_\_\_ Landform \_\_\_\_\_  
 Geology/Genesis Recent Alluvium  
 Vegetation \_\_\_\_\_

BRIEF PROFILE DESCRIPTION

Horiz	Depth	Moist Color	Mott	Text Clay%	Struct	Frag	Ball Hold	Rib-bon	Consist	Andic Smear	Indur Cem	Ferm in/hr	Sat Intake
A	0-7	10yR/2	+	SL XCB	lfr	65	om 3% Yes	+	fv			R=26	mod ryp
Bw	7-14	10yR/3	+	SL XCB	lfr	60	om 1/2% No	+	fr			R=24	mod
BC	14-39	10yR/2	+	SL XCB	ll	60	No	+	fi			R=26	mod
												R=	
												R=	
												R=	
												R=	
												R=	
												R=	

NO H<sub>2</sub>O up to 60"

REMARKS

Rubble Localized

Same as # 11

H<sub>2</sub>O + dot No mottle

NO water table  
But rubby on top

CLASSIFICATION \_\_\_\_\_ FAMILY LoSkal  
 OIL DRAINAGE CLASS SWEX SOIL ERODIBILITY INDEX 17 SERIES \_\_\_\_\_  
 HYDROLOGIC GROUP A DEPTH TO MOTTLES 44" EFFECTIVE ROOTING DEPTH 20 Absolute  
 DEPTH CURRENT H<sub>2</sub>O TABLE 75-80" EST DEPTH TO PERMANENT WATERTABLE \_\_\_\_\_

1/10/00  
SOIL PROFILE DO

Job Name Grant  
 Stop No. 17 Location near shed  
 Slope 2 Elevation \_\_\_\_\_ Landform \_\_\_\_\_  
 Geology/Genesis \_\_\_\_\_  
 Vegetation \_\_\_\_\_

BRIEF PROFILE DESCRIPTION

Horiz	Depth	Moist Color	Mott	Tex Clay%	Struct	Frag	Ball Hold	Rib- bon	Con- sist	Andic Smear	Indur Cem	Ferm m/hr	Sat Intake
A	0-8	10y4	A	XCB	4g-6g	60	om	14	fv			R=4-8	mod
B <sub>0</sub>	8-11	4	A	XCB	1HBL	70	om	4	f			R=	mod
B <sub>C</sub>	11-27	2.5y4/4y4	1D	XCB	4	55	om	8	f			R=	slow
B <sub>G</sub>	27-51	11	2D	XCB	4	65	om	8	vh			R=<1	v slow
												R=	
												R=	
												R=	

discontinuity  
 coarse grained  
 + fine cobbles

REMARKS Rubblly surface  
near site  
3 planting failure  
gley below 27"  
No roots below  
20"

CLASSIFICATION \_\_\_\_\_ FAMILY \_\_\_\_\_  
 SOIL DRAINAGE CLASS SW PD SOIL ERODIBILITY INDEX \_\_\_\_\_ SERIES \_\_\_\_\_  
 HYDROLOGIC GROUP B DEPTH TO MOTTLES 20 EFFECTIVE ROOTING DEPTH 10" Absolute  
 DEPTH CURRENT H2O TABLE \_\_\_\_\_ EST DEPTH SEASONAL HIGH H2O TABLE \_\_\_\_\_



1981: Planted an additional 4 acres of mint, bringing the total up to 40 acres of mint. I went ahead and planted the next five acres with filberts, Block C. No good top soil, and extra rock quickly developed problems. The price of mint oil dropped that year to \$9.00 a pound.

1982: Planted another five acres of mint for a total of 45 acres of mint. Also at that time, I had planted 15 of the 30 acres in filberts. A remaining 15 acres of bad farm land was left, so I kept clearing, trying to get something to be planted in Block D. Rodakowski was still trying to convince me that nothing would be able to be planted in that area. Rodney Chase, a local farmer, also told me that my trees would never make it in the long run. Since the trees were given to me at no cost, I continued my attempt to harvest the filbert trees in that area. Trees were also replaced in Block C.

That summer, I harvested 45 acres of mint, but the price dropped to \$7.50 per pound. By this time I was out of money and still owed the bank. I took out a personal loan and a disaster loan just to get by.

1983: I planted the remaining 15 acres of fertile bottom land with mint that winter, making a total of 60 acres. I also expanded irrigation and rights to cover the 60 acres, at the same time I was trying to get the rest of the 15 acres of bad ground to be planted with trees. I had to replace many trees and lost many trees in Blocks C and D. Hand picked filberts sold for \$135.00.

Summer of '83, I harvested 60 acres of mint at 65 pounds per acre on average. The price of the mint went back to \$10.00. Still, I kept clearing ground hoping for the best.

1984: Now having 60 acres of mint with irrigation rights and a irrigation system, I'm finally able to sustain. I kept clearing the ground and eventually put the rest of the 15 acres into filbert. The mint was harvested and I broke even yielding \$40,000. I had grossed \$550.00 with the filbert harvest.