# SOIL MAPPING UNIT LEGEND

# Lane Soil Survey Area

| Мар          | Mapping Unit  | Site 1/        | Capabilit     |
|--------------|---|----------------|---------------|
| Symbol       | (Soil Name)   | _              | Class         |
| 1A, 2A       | CAMAS gravelly sandy loam,<br>occasionally flooded    | -              | ΙVω           |
| 1AU          | CAMAS-Urban Land Complex                              |                |               |
| 4A           | CLOQUATO silt loam                                    | III 2/         | ΙΙω           |
| 4AU          | CLOQUATO-Urban Land Complex                           |                | 110           |
| 5A           | PITS  |                |               |
| BA           | BEACHES   |                |               |
| 1DA          | NEWBERG fine sandy loam                               | III 2/         | ΙΙω           |
| טאמר         | NEWBERG-Urban Land Complex                            |                |               |
| 118          | NEWBERG loam<br>(Linn County = 12A Newberg silt loam) | III <u>2</u> / | ÏΙω           |
| 2DA          | BRALLIER muck   | -              | IVω           |
| 21A          | BRALLIER VARIANT muck                                 | · . ~          | V <b>ω</b>    |
| 30A          | CHEHALIS silty clay loam, occasionally flooded        | III <u>2</u> / | IIw           |
| 30AU         | CHEHALIS-Urban Land Complex                           |                | ,             |
| 31A          | CHAPMAN loam  | III 2/         | ĭ             |
| 31AU         | CHAPMAN-Urban Land Complex                            |                |               |
| 40A          | Mc8EE silty clay loam                                 | II <u>2</u> /  | LIú.          |
| 50A, 51Å     | WAPATO silty clay loam                                |                | ΙΙΙω          |
| 55A          | CONSER silty clay loam                                |                | IIIu          |
| 60A, 61A     | 8ASHAW çlay   |                | ΙVω           |
| 60AU         | BASHAW-Urban Land Complex                             |                |               |
| 72K          | DUNE LAND   |                | VIIIe         |
| 7.2KS        | WALDPORT fine sand, thin surface                      |                | VIIe          |
| 1/ Site Clas | ss is for Douglas fir                                 |                | - <del></del> |

<sup>1/</sup> Site Class is for Douglas-fir.

<sup>2/</sup> Suited but agricultural use primary.

| MAP<br>SYMBOL       | MAPPING UNIT<br>(SOIL NAME)                                  | SITE<br>CLASS  | CAPABIL ITY<br>CLASS |
|---------------------|--|----------------|----------------------|
| 75A .               | RIVERWASH  |                | VIIIw                |
| 76A <sup>)</sup>    | FLUVENTS, nearly level (alluvial land)                       |                | VIIw                 |
| 77K j               | TERRACE ESCARPMENT (Ochrepts & Umbrepts)                     | VIII           | <b>V</b> Ie          |
| 80A 1               | ABIQUA silty clay loam, 0-3% slopes                          | 111            | . I                  |
| 818                 | ABIQUA silty clay loam, 3-5% slopes                          | 111            | - IIe                |
| ADE                 | McALPIN silty clay loam                                      | II <u>2</u> /  | ĮΙω                  |
| . 100A              | WALDO silty clay loam  |                | ΙΊΙω                 |
| 110A, 223A<br>110AU | NATROY silty clay loam<br>NATROY-Urban Land Complex          |                | IVw                  |
| IIIA !              | NATROY silty clay  |                | IVω                  |
| 120A, 121A<br>120AU | PENGRA silt loam, 1-4% slopes<br>PENGRA-Urban Land Complex   |                | ΙΙΙω                 |
| 130A                | NEKOMA silt loam   | II             | ΙΙΙω                 |
| 135A                | WILLANCH fine sandy loam                                     | ·              | Ι <b>V</b> ω         |
| 140A                | _ BRENNER silty clay loam, 0-3% slopes                       |                | ΙΙΙω                 |
| 145A                | NESTUCCA silt loam   |                | ΙΙω                  |
| 150A                | NEHALEM silt loam  | II             | ΙΙω                  |
| 165B                | HAFLINGER-JIMBO Complex, 0-5% slopes                         | III            | VIs                  |
| 1668                | JIMBO-HAFLINGER Complex, 0-5% slopes                         | III            | IIIs                 |
| 203A (              | ฟฏฏDBURN silt loam   | III <u>2</u> / | IIw .                |
| 204A                | HECETA fine sand   | · ·            | · IVω·               |
| 205C<br>205CU       | WALDPORT fine sand, 0-12% slopes WALDPORT-Urban Land Complex | III <u>3</u> / | VIIe                 |
| 2060                | WALDPORT fine sand, 12–30% slopes                            | III <u>3</u> / | VIIe                 |
| 2 <b>07</b> H       | WALDPORT fine sand, 30-70% slopes                            | III <u>3</u> / | VIIe                 |
| 210 <b>C</b>        | CUPOLA cobbly loam, 3-12% slopes                             | IV.            | VIs                  |
| 2119                | CUPOLA cobbly loam, 12-30% slopes                            | IV             | VIs                  |

<sup>2/</sup> Suited but agricultural use primary.
3/ Where not exposed to prevailing onshore winds.

| MAP<br>SYMBOL  | MAPPING UNIT<br>(SOIL NAME)                 | SITE<br>CLASS    | CAPABILITY<br>CLASS • |
|----------------|---|------------------|-----------------------|
| 2148           | BANDON sandy loam, 0-7% slopes              | III <u>3</u> /   | IVs                   |
| 2150           | BANDON sandy loam, 7-12% slopes             | III <u>3</u> /   | IVe                   |
| 216D, 217H     | BANDON sandy loam, 12-50% slopes            | III <u>3</u> /   | VIe                   |
| 221A, 222A     | DAYTON silt loam, clay substratum           |                  | IVω                   |
| 225A           | YAQUINA loamy fine sand                     |                  | IVω                   |
| 225AU          | YAQUINA-Urban Land Complex                  |                  |                       |
| 230B           | BULLARDS-FERRELO loams, 0-7% slopes         | III              | IIIe                  |
| 2310           | BULLARDS-FERRELO loams, 7-12% slopes        | III              | IIle                  |
| 2320           | BULLARDS-FERRELO loams, 12-30% Slopes       | III              | IVe                   |
| 233F           | BULLARDS-FERRELO loams, 30-60% slopes       | III              | VIe                   |
| 234A           | HOLCOMB silty clay loam                     |                  | IIIw                  |
| 235B, 245B     | LINT silt loam, 0-7% slopes                 | II               | Ile                   |
| 2360           | LINT silt loam, 7-12% slopes                | II <u>3</u> /    | Ille                  |
| 2370           | LINT silt loam, 12-20% slopes               | II <u>3</u> /    | IVe                   |
| 238F           | LINT silt loam, 20-40% slopes               | II <u>3</u> /    | VIe                   |
| 240C           | NETARTS fine sand, 3-12% slopes             |                  | VIe                   |
| 241D           | NETARTS fine sand, 12-30% slopes            |                  | VIe                   |
| 25QD           | NESKOWIN silt loam, 12-20% slopes           |                  | IVe                   |
| 251F           | NESKOWIN silt loam, 20-40% slopes           |                  | VIe                   |
| 25 <u>/</u> 2K | NESKOWIN-SALANDER silt loams, 40-60% slopes |                  | VIIe                  |
| 256D, 255C     | HEMBRE silt loam, 5-25% slopes              | <sup>4†</sup> II | VIp                   |
| 257K           | HEMBRE silt loam, 25-60% slopes             | , TI             | VIe                   |
| 26DA           | MALABON silty clay loam                     | II <u>2</u> /    | I,                    |
| 26DAU          | MALABON-Urban Land Complex                  | _                |                       |
| 270A           | COBURG silty clay loam                      | III <u>2</u> /   | IΙω                   |
| 270AU          | COBURG-Urban Land Complex                   |                  | √.<br>•••             |
| 280A           | AWBRIG silty clay loam                      |                  | ΙVω                   |
| 280AU          | AWBRIG-Urban Land Complex                   |                  |                       |

<sup>2/</sup> Suited but agricultural use primary.
3/ Where not exposed to prevailing onshore winds.

| MAP<br>SYMBOL                                | MAPPING UNIT<br>(SOIL NAME)  | SITE           | CAPABILITY<br>CLASS |
|--|--|----------------|---------------------|
| 290A   | SALEM gravelly silt loam SALEM-Urban Land Complex  | III <u>2</u> / | IIs                 |
| 300A<br>300AU                                | OXLEY gravelly silt loam OXLEY-Urban Land Complex  |                | IΙΙω                |
| 31QA   | COURTNEY gravelly silty clay loam  |                | IVω                 |
| 322A, 320A                                   | SIFTON gravelly loam   |                | IIIs                |
| 3308<br>. i                                  | SALKUM silty clay loam, 2-8% slopes  | III <u>2</u> / | IIe                 |
| 331¢   | SALKUM silty clay loam, 8-16% slopes   | III <u>2</u> / | IIIe                |
| 335B 'i                                      | SALKUM silt loam, 2-6% slopes  | III <u>2</u> / | IIe                 |
| 350A 1                                       | NOTI loam  |                | ΙVω                 |
| 351Å   | LINSLAW loam   | •              | IIIw                |
| 360B   | VENETA loam, 0-7% slopes   | III <u>2</u> / | IIe                 |
| 361B   | VENETA VARIANT silt loam, 0-7% slopes  | III <u>2</u> / | IIe                 |
| 374C<br>374CU, 5208U                         | DIXONVILLE-PHILOMATH-HAZELAIR Complex, 3-12% URBAN LAND-HAZELAIR-DIXONVILLE Complex, 3-12%   |                | VIe                 |
| 375 <b>5, 5</b> 23 <b>C</b><br>375 <b>SU</b> | DIXONVILLE-PHILOMATH-HAZELAIR Complex, 12-35% DIXONVILLE-HAZELAIR-URBAN LAND Complex, 12-359 |                | VIe                 |
| 3808   | EILERTSEN silt loam  | II             | , IIe               |
| 385B   | JIMBO silt loam  | III            | I                   |
| 395B   | MEDA loam, 2-12% slopes  | II             | IIIe                |
| 406D   | DIXONVILLE silty clay loam, 12-30% slopes  | IV             | IVe                 |
| 407B   | MARCOLA cobbly silty clay loam, 257% slopes  | IV             | IVs                 |
| 408C   | DIXONVILLE silty clay loam, 3-12% slopes   | IV             | IIIe                |
| 409F   | DIXONVILLE silty clay loam, 30-50% slopes  | IV             | VIe                 |
| 411 c, 415C                                  | PHILOMATH cobbly silty clay, 3-12% slopes  |                | VIe                 |
| 4155, 417F<br>415SU                          | PHILOMATH cobbly silty clay, 12-45% slopes PHILOMATH-Urban Land Complex                      |                | VIe                 |
| 4160, 4165                                   | PHILOMATH silty clay, 3-12% slopes   |                | VIe                 |

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| MAP<br>SYMBOL       | MAPPING UNIT<br>(SDIL NAME)                  | SITE<br>CLASS | CAPABILITY<br>CLASS |
|---------------------|--|---------------|---------------------|
| 42DB, 425B          | NEKIA silty clay loam, 2-12% slopes          | III           | IIIe                |
| 4210, 4260          | NEKIA silty clay loam, 12-20% slopes         | III           | IIIe                |
| 422E, 422D,<br>427E | NEKIA silty clay loam, 20~30% slopes         | III           | IVe                 |
| 423F                | NEKIA silty clay loam, 30-50% slopes         | III           | VIe                 |
| 4308                | STEIWER loam, 3-12% slopes                   |               | IIIe                |
| 431C                | STEIWER loam, 12-20% slopes                  |               | IVe                 |
| 43 2E               | STEIWER loam, 20-50% slopes                  | V (nort       | _                   |
| 440S                | WITZEL very cobbly loam, 3-30% slopes        | slope<br>IV   | es)<br>VIIs         |
| 441K                | WITZEL very cobbly loam, 30-75% slopes       | v.            | VIIs                |
| 44 <b>5</b> 8       | SATURN clay loam                             | II            | IIIs                |
| 4468                | BRIEDWELL cobbly loam, 0-7% slopes           | III           | IIIe                |
| 450s                | KINNEY cobbly loam, 3-20% slopes             | İII           | VIe                 |
| , 451K              | KINNEY cobbly loam, 20-50% south slopes      | 111           | VIe                 |
| 451KN               | KINNEY cobbly loam, 20-50% north slopes      | II            | VIe                 |
| 452H.               | KINNEY cobbly loam, 50-70% south slopes      | III.          | VIIe                |
| 452HN               | KINNEY cobbly loam, 50-70% north slopes      | 11            | VIIe                |
| 4535, 6195          | KINNEY cobbly loam, slump, 3-30% slopes      | II            | VIe                 |
| 655S<br>460S        | BLACHLY-McCULLY clay loams, 3-30% slopes     | III           | VIe                 |
| 461K                | BLACHLY clay loam, 30-50% slopes             | III .         | VIe                 |
| 462H                | BLACHLY clay loam, 50-70% slopes             | III           | -VļĪle              |
| 461KN               | McCULLY clay loam, 30-50% slopes             | II            | VIe                 |
| 462HN               | McCULLY clay loam, 50-70% slopes             | II            | VIIe                |
| 4645                | BLACHLY silty clay loam, 3-30% slopes        | II .          | ·VIe                |
| 465K, 466K          | BLACHLY silty clay loam, 30-50% slopes       | II            | . VIe               |
| 469C                | RITNER cobbly silty clay loam, 2-12% slopes  | III           | IVs                 |
| 47114               | RITNER cobbly silty clay loam, 30-60% slopes | III           | VIIs                |
| 474E, 470S.<br>405C | RITNER cobbly silty clay loam, 12-30% slopes | III           | VIs                 |

| MAP  <br>SYMBOL            | MAPPING UNIT<br>(SOIL NAME)                   | S ITE<br>CLASS | CAPAB ILITY |
|----------------------------|---|----------------|-------------|
| 475C, 365B                 | PANTHER silty clay loam, 2-12% slopes         |                | VIw         |
| 475CU                      | PANTHER-Urban Land Complex, 2-12% slopes      |                |             |
| 4770                       | DUPEE silt loam, 3-20% slopes                 | IV             | IIIe        |
| 4808, 635C                 | BELLPINE silty clay loam, 3-12% slopes        | III            | Ille        |
| 481C, 636D                 | BELLPINE silty clay loam, 12-20% slopes       | III            | IIIe        |
| 482E, 637E                 | BELLPINE silty clay loam, 20-30% slopes       | III            | IVe         |
| 483F <sub>1</sub>          | BELLPINE silty clay loam, 30-50% slopes       | III            | VIe         |
| 484D, 638D                 | BELLPINE cobbly silty clay loam, 2-30% slopes | III            | IVe         |
| 4865                       | PEAVINE silty clay loam, 3-30% slopes         | ır.            | VIe         |
| 487K, 488H                 | PEAVINE silty clay loam, 30-60% slopes        | II             | VIe         |
| 4908                       | WILLAKENZIE clay loam, 2-12% slopes           | II             | IIIe.       |
| 4910                       | WILLAKENZIE clay loam, 12-20% slopes          | II             | IIIe        |
| 4920                       | WILLAKENZIE clay loam, 20-30% elopes          | II             | IVe         |
| 493F                       | WILLAKENZIE clay loam, 30-50% slopes          | II .           | VIe         |
| 496K                       | ATRING-ROCK OUTCROP Complex, 30-60% slopes    | IV             | VIIe        |
| 500 <b>C,</b> 500S         | CHEHULPUM silt loam, 3-12% slopes             |                | VIe         |
| 501E, 500S,                | CHEHULPUM silt loam, 12-40% slopes            |                | VIe         |
| 501F<br>515S, 510B,        | HULLT loam, 2-30% slopes                      | II             | IVe         |
| 511 <b>C,</b> 5120<br>516K | HULLT loam, 30-60% slopes                     | II             | VIe         |
| 5208                       | HAZELAIR silty clay loam, 2-7% slopes         |                | IIIe.       |
| 521C                       | HAZELAIR silty clay loam, 7-20% slopes        | IV             | IVe         |
| 525S ·                     | HUMMINGTON gravelly loam, 5-25% slopes        | III            | VIs         |
| 526K i                     | HUMMINGTON gravelly loam, 25-50% slopes       | III            | VIs         |
| 527 <sup>4</sup>           | HUMMINGTON gravelly loam, 50-75% slopes       | III            | VIIs        |
| 530S, 531S                 | MULKEY loam, 5-25% slopes                     | v              | VIe         |
| 5405                       | ASTORIA VARIANT silt loam, 3–30% slopes       | II             | VIe         |
| 541K                       | ASTORIA VARIANT silt loam, 30-60% slopes      | II             | VIe         |
| ,                          |   |                |             |

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| 1                  |  |               | •                   |
|--------------------|--|---------------|---------------------|
| MAP<br>SYMBOL      | MAPPING UNIT<br>(SOIL NAME)                    | SITE<br>CLASS | CAPABILITY<br>CLASS |
| 543H               | FORMADER-HEMBRE-KLICKITAT Complex, 50-80%      | II            | VIIe                |
| 5465               | ASTORIA silt loam, 5-30% slopes                | II            | VIe                 |
| 550B               | JORY silty clay loam, 2-12% slopes             | II            | IIe                 |
| 5510               | JORY silty clay loam, 12-20% slopes            | II            | IIIe                |
| 552E               | JORY silty clay loam, 20-30% slopes            | İI            | IVe '               |
| 5605               | HONEYGROVE silty clay loam, 3-25% slopes       | II            | V Ie                |
| 561K               | HONEYGROVE silty clay loam, 25-50% slopes      | ΙΙ            | VIe                 |
| 5,625              | FORMADER loam, 3-30% slopes                    | II            | VIe                 |
| 563K               | FORMADER loam, 30-60% slopes                   | II            | VIe                 |
| - 5660, 565B -     | FENDALL silt loam, 3-30% slopes                | III           | IVe                 |
| 568K, (567S)       | TAHKENITCH loam, 20-45% slopes                 | III ·         | VIe                 |
| 5 <mark>69H</mark> | TAHKENITCH loam, 45-75% slopes                 | III           | VIIe                |
| 57 <b>0\$</b>      | BOHANNON gravelly loam, 3-25% slopes           | III           | VIe                 |
| 5 <b>7</b> 1K      | BOHANNON gravelly loam, 25-50% slopes          | III           | VIe                 |
| 572H               | BOHANNON gravelly loam, 50-90% slopes          | III           | VIIe                |
| 5755               | PREACHER loam, 0-25% slopes                    | II            | VIe                 |
| 576K               | PREACHER loam, 25-50% slopes                   | II .          | VIe                 |
| 577H               | PREACHER-BOHANNON-SLICKROCK Complex, 50-75%    | IIIII         | VIIe                |
| 580S               | DIGGER gravelly loam, 10-30% slopes            | III           | VIe                 |
| 581K               | DIGGER gravelly loam, 30-50% slopes            | III           | . VIe               |
| 582H               | DIGGER-ROCK OUTCROP Complex, 50-85% slopes     | _ II (Digg    | er) VIIe            |
| 585S               | SLICKROCK gravelly loam, 3-25% slopes          | II            | VIe                 |
| 586K               | SLICKROCK gravelly loam, 25-50% slopes         | II            | VIe                 |
| 5905               | SALANDER silt loam, 12-30% slopes              |               | VIe                 |
| 600K               | KILCHIS stony loam, 30-60% slopes              | V             | VIş                 |
| 601H               | KILCHIS stony loam, 60-90% slopes, 60-90% slop | es V          | VIIs                |
| 6,165              | KLICKITAT stony loam, 3-30% slopes             | III .         | VIs                 |
| •                  |  |               |                     |

| MAP<br>SYMBOL | MAPPING UNIT<br>(SOIL NAME)                                | SITE<br>CLASS | CAPABILITY<br>CLASS |
|---------------|--|---------------|---------------------|
| 617K          | KLICKITAT stony loam, 30-50% south                         | III           | VIs                 |
| 617KN         | KLICKITAT stony loam, 30-50% north slopes                  | II .          | VIs                 |
| 618H          | KLICKITAT stony loam, 50-75% south slopes                  | III           | VIIs                |
| 618HN         | KLICKITAT stony loam, 50-75% north slopes                  | II            | VIIs                |
| 6205          | HEMBRE-KLICKITAT Complex, 3-30% slopes                     | IIIII         | VIe                 |
| 621K          | HEMBRE-KLICKITAT Complex, 30-60% slopes                    | IIIII         | VIe                 |
| 625\$         | HOLDERMAN extremely cobbly loam, 5-25% slopes              | IV            | , VIs               |
| 626K          | HOLDERMAN extremely cobbly loam, 25-50% slopes             | IV            | VIs                 |
| 627H          | HOLDERMAN extremely cobbly loam, 50-75% slopes             | IV            | VIIs                |
| 630\$         | CRUISER gravelly clay loam, 3-25% slopes                   | III           | VIe                 |
| 631K          | CRUISER gravelly clay loam, 25-50% slopes                  | III           | VIe                 |
| 632H          | CRUISER gravelly clay loam, 50-70% slopes                  | III           | VIIe                |
| 6405          | KEEL cobbly clay loam, 3-25% slopes                        | III           | VIe                 |
| 641K          | KEEL cobbly clay loam, 25-45% slopes                       | III           | VIe                 |
| 642H          | KEEL cobbly clay loam, 45-75% slopes                       | III           | VIIe                |
| 650S          | CUMLEY silty clay loam, 2-20% slopes                       | II            | VIe                 |
| 670S          | McDUFF clay loam, 3-25% slopes                             | III           | VIe                 |
| 671K          | McDUFF clay loam, 25-50% slopes                            | III           | VIe ·               |
| 672H          | McDUFF clay loam, 50-70% slopes                            | III           | VIle                |
| 690S, 620S    | MINNIECE silty clay loam, 0-8% slopes                      | IVIII         | VIw                 |
| 700K          | ROCK OUTCROP-KILCHIS Complex, 30-90% slopes                |               | PIIIV               |
| 700KX         | ROCK OUTCROP-WITZEL Complex, 10-70% slopes                 |               | VIIIs               |
| 701K, 702H    | WINBERRY very gravelly loam, 10-45% slopes                 | v             | VIIs                |
| 706K          | YELLOWSTONE-ROCK OUTCROP Complex, 10-60% slopes            |               | VIIIs               |
| LU .          | Water - bodies less than 40 acres or one-eighth mile wide. |               | ,                   |

Soil Conservation Service 954 13th Avenue West Eugene, OR 97402 Phone: 687-6436

Lane County

Map Symbol & Soil Name

374C DIXONVILLE-PHILOMATH-HAZELAIR COMPLEX, 3-12% slopes 375S, DIXONVILLE-PHILOMATH-HAZELAIR COMPLEX, 12-35% slopes 523C

11,480 22,890 Capability Class VIe

e = risk of erosion)

This unit typically occurs on the toeslopes of the foothills bordering the major valleys. The proportion of the component soils generally varies with the topography--Hazelair is typically the more dominant soil in concave positions, while Dixonville and Philomath are more dominant on convex positions.

374C consists of 30% Dixonville, 30% Philomath, 25% Hazelair, 15% other; 3755 consists of 35% Dixonville, 30% Philomath, 20% Hazelair, 15% other. (The occurrence of these patterns is so complex, mapping individual soils as separate units is not economically feasible except for very intensive uses.) Agriculture - native pasture; Urban - poor; Woodland - poor.

CLASSIFICATION Depth from USDA Texture Unified AASHTO Surface 374C Dixonville: Moderately deep and well drained. CL A-6 Very dark brown silty clay loam; 0-14 Inches Subscil is dark brown silty clay and cobbly clay. CH A-7 14-26 inches Bedrock is variegated dark brown, dark red, or yellowish brown. Philomath: Shallow and well drained. A-7 0-6 inches Very dark brown cobbly silty clay; CH Subsoil is very derk brown cobbly silty clay or cobbly clay. 6-14 inches Substratum is partially weathered basalt bedrock. Moderately deep and moderately well drained. Hazelair: Very dark brown silty clay loam; ML or CL A-6 0-11 inches Subsoil is dark brown silty clay loam. A-7 11-15 Inches Substratum is light olive brown mottled clay about 21 inches thick over weathered tuffs.

3755 Same as 374C except for steeper slopes.

s mapped, areas of 374C may include Panther, Ritner, Witzel soils and Rock Outcrop; 3755 may include small areas of witner and Witzel soils and Rock Outcrop.

Estimated Soil Properties (374C and 3755 unless otherwise noted)

Philomath Hazelair Dixonville Slow Very slow Permeability Slow 4-7 inches 2-3 inches 4-7 inches Water Capacity 12-20 inches •12-24 inches Rooting Depth 374C = 20-36 inches 3755 = 20-40 inches 374C = Medium; 375S = Rapid 374C = Medium; 375S = Rapid 374C = Mod. to Rapid; 375S = Rapid Water Erosion 374C = Moderate; 375S = High 374C = Moderate; 375S = High High 5.6-6.0 Medium acid 5.6-6.5 Medium to slightly acid 5.6-6.5 Medium to slightly pH Values acld Corresivity Steel = High; Concrete = Low Steel = High; Concrete = Mod. Steel = High; Concrete = Moderate 1-2 ft. - Perched Dec.-April Water Table None None 20-40 Inches 12-20 Inches 36 inches Bedrock Hydrologic Group C/D C/D C/D

\*Water is perched above the dense clay layer in winter and early spring months.

MAIN USE: 374C = Hay, pasture, homesites and woodland; 375S = Woodland, pasture and homesites.

OTHER USES: 374C = Recreation and wildlife habitat; 375S = wildlife habitat.

#### CROPS, PASTURE, WOODLAND - PREDICTED YIELDS

| MAP SYMOOL                                       | LAND           | PASTURE         | Clubert       | Carbf2           | COR LS TMAS | DOUGLAS-FIR   |
|--|----------------|-----------------|---------------|------------------|-------------|---------------|
|  | CAP.<br>CLASS. | AUM<br>MIRR 199 | 100s.4<br>198 | 1/               | 2/          | lito<br>Class |
| DIXONVILLE-<br>PHILOMATH-<br>HAZELAIR<br>COMPLEX |                |                 |               | ,                |             |               |
| 374C   | VIe            | 4               |               | Irr S            | 8/C         |               |
| 3755   | VIe            | 4               |               | Irr S <u>3</u> / | 8/D         |               |

- 1/ S = Satisfactory (irrigated). Elevation, slope and exposure are critical in determinism suitability. Elevation = 300-900 ft.; Exposure = SE, SW, W.
- $\mathbb{Z}^{f}$  B = Droughty, shallow, stony soil; C = wetness limits species; D = Excession state ( , +10%) for each outside the terms.

# : HAZARDS, LIMITATIONS - SUGGESTIONS FOR MANAGEMENT

When this soil is used for Hay and Pasture, the main limitations are highly plastic soils subject to compaction by live-stock or machinery when wet; droughty, shallow soils require summer irrigation, and very limited supplies of irrigation water are available. Uneven dates of maturity because of prolonged early season wetness on Hazelair and early drought on Philometh create additional problems on production of good quality hay. Slope limits use of equipment on steeper parts of 3755 units.

-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 erosion.

-Use of nitrogen and phosphate fertilizer promotes good growth of forage plants.

- -A soil test will help determine the amount of lime needed to correct acidity and the amount and kinds of fertilizer needed for the crop.
- -In most years, supplemental irrigation is also needed. Irrigation water can be applied by the sprinkler method. -The use of equipment is limited by cobbles on the surface and by slope.

This soil is poorly suited to the production of Coniferous Timber .

- An onsite investigation is recommended for woodland owners interested in intensive management.
- "The silty clay loam and cobbly silty clay texture of the surface layer limits the use of equipment.

-Spoil from excavations is subject to rill and gully erosion and to sloughing.

- -The low available water capacity generally reduces seedling survival in areas where understory plants are numerous. -Seedling survival may be improved by providing artificial shade for seedlilngs on south and west facing slopes.
- -Tractor methods of harvesting timber qenerally are suitable, but the soil may be compacted if it is wet and heavy equipment is used.
- Trees are commonly subject to windthrow during periods when the soil is excessively wet and winds are strong.
- -The Philomath portions of the unit are too shallow and droughty to support production of coniferous trees for timber.
  -Proper design of road drainage systems and care in placement of culverts help to control erosion.

-Machine planting is sometimes practical in dry years.

-Dixonville and Hazelair portions are capable of producing up to 1400 cubic feet of merchantable timber from an evenaged, fully stocked stand of Douglas-fir or ponderosa pine 30 years old, or 6300 cubic feet from a 60 year-old stand. HOWEVER, Douglas-fir is highly subject to root rot and windthrow on Hazelair portions of the unit after about 30 years.

When this unit is used for Recreational Development, the main limitations are compaction when wet, sticky surface soils, seepage, slopes and depth to rock.

When this unit is used for **Homesite Development**, the main limitations are depth to bedrock, wet soil conditions and high shrink-swell. Slope is an additional limitation on 3755.

. The deep cuts needed to provide essentially level building sites can expose bedrock.

- -Excavation for roads and buildings increases the hazard of erosion. The hazard of erosion is increased if the soil is left exposed during site development. In the steep areas (375S) only the part of the site that is used for construction should be disturbed.
- -Onsite sewage disposal systems often fail or do not function properly during periods of high rainfall because of the shallow depth to restrictive layers. (On 375S, slope is an additional limitation; effluent may surface downslope from absorption lines.)
- -Irrigation is required for lawn grasses, shrubs, vines, shade trees, and ornamental trees. Selection of adaptable vegetation is critical for the establishment of lawns, shrubs, trees and vegetable gardens.
- -Preserving the existing plant cover during construction helps to control erosion.
- -Topsoil can be stockpiled and used to reclaim ereas disturbed by cutting and filling.
- -Only on Dixonville, plans for homesite development should provide for the preservation of as many trees as possible.
- -Support and stability for buildings can be provided by placing footings on bedrock.
- -The effects of shrinking and swelling can be minimized by using proper engineering designs and by backfilling with material that has low shrink-swell potential.
- -Wetness can be reduced by installing drain tile around footings.
- -Cutbanks in the Hazelair soils need to be reinforced by retaining walls with proper drainage to prevent slumping when wet.

Septic Tank Absorption Field -

- Dixonville--A moderately deep clayey soil that has heavy clay at the 10 to 30 inch zone

  causing surface water tables. The subsoil or bedrock material is highly restrictive and, in most cases, there is no permeability of the rock contact at less than 40 inches.

  Philomath--A shallow clay soil that contacts moderately firm bedrock. Water flows are at the contact in periods of rainfall. Slope and soil depth are highly restrictive for absorbing effluent.
- Hazelair--Shallow clayey subsoil makes this soil very borderline for suitability. Deeper sites that have possible cutoff trench capability may be adapted to a fill cap for modification.

# SOIL INTERPRETATIONS RECORD

43E DIXONVILLE-PHILOMATH-HAZELAIR COMPLEX, 12 TO 35 PERCENT SLOPES
DIXONVILLE PART
DIXONVILLE SERIES CONSISTS OF HELL DRAINED SOILS FORMED IN FINE TEXTURED COLLUVIAL AND RESIDUAL MATERIALS FROM BASIC
IGNEOUS ROCK IN THE FOOTHILLS. TYPICALLY, THE SURFACE LAYER IS VERY DARK BROWN SILTY CLAY LOAM ABOUT 14 INCHES THICK.
THE SUBSOIL IS DARK BROWN SILTY CLAY AND COBBLY CLAY ABOUT 12 INCHES THICK. THE SUBSTRATUM IS MEATHERED BASIC ROCK.
THE SUBSOIL IS DARK BROWN SILTY CLAY AND COBBLY CLAY ABOUT 12 INCHES THICK. THE SUBSTRATUM IS MEATHERED BASIC ROCK
THE SUBSOIL IS DARK BROWN SILTY CLAY AND COBBLY CLAY ABOUT 12 INCHES. HEAN ANNUAL AIR TEMP IS 52 TO 54 DEGREES. FROST
FREE PERIOD IS 165 TO 210 DAYS.

| LEVATIONS ARE<br>REE PERIOD IS               | 165 TO 210 DA                   | 13.<br>                | ATED SOIL PR  |                                    | MEAN ANNUAL AIR TEMP 15 52 TU 34 DEGREES. FR  |            |
|--|---------------------------------|------------------------|---------------|------------------------------------|---|------------|
|  |                                 |                        | 1             | :F                                 | FRACTIPERCENT OF MATERIAL LESS !LIQUID :PL  | <br>AS-    |
| DEPTH!<br>(IN.): USD/                        | TEXTURE                         | : UNIFIED              | i AAS         | HTO :>                             | )3 IN THAN 3 PASSING SIEVE NO.   LIMIT ITE<br>(PCT): 4   10   40   200   INI                                  | CITY       |
| 0-14 SICL<br>14-26 C, CB-C<br>26 WB          | , sic                           | CH                     | A-6<br>A-7    |                                    | 0-10190-100 20-100 85-100 75-25 35-40 15<br>0-30175-100 70-100 65-100 60-95 50-80 30                          | -20<br>-50 |
| DEPTHICLAY IN                                | OIST BULK: PER                  | MEA-   AVAILABLE       | : SOIL 1      | SALINITY : S                       | SHRINK- LEROSIONIMIND LORGANIC: CORROSIVITY   | Y          |
|  | DENSITY ! BIL                   |                        | YIREACTION! ( | MMHOS/CH) I                        | SWELL IFACTORSIEROD.!MATTER !   |            |
| 0-14127-4011                                 | (G/CM3)   (IN<br>.30-1.50   0.6 | -2.0 : 0.18-0.21       | (PH)          | - PC                               | OTENTIAL! K   T   GROUP! (PCT)   STEEL   CONCL<br>ODERATE   .32   3   -   3-6   MODERATE   MODE<br>HIGH   .24 |            |
| 14-26 40-60 1                                | .30-1.60 10.06                  | -0.2   0.12-0.17       | 15.6-6.5      | -,                                 | HIGH -24  |            |
|  |                                 | 1                      |               | <u> </u>                           |   |            |
|  | FLOODING                        | : HIGH                 | MATER TABLE   | I CEHENTI                          | ED PAN I BEDROCK ISUBSIDENCE !HYD!POTE  | NT'L       |
|  | DURATION                        | IMONTHS (FT)           | KIND MONT     | HS :DEPTH!H                        | HARDNESS!DEPTH   HARDNESS!INIT.!TOTAL:GRP! FRO<br>! (IN)   !(IN) !(IN)   ACT                                  | ST         |
| FREQUENCY                                    | i DURATION                      | 1 1 26.0 1             | i             | 1 - 1                              | 120-40   S0FT   -       C     -   |            |
|  |                                 | FACILITIES             |               |                                    | CONSTRUCTION MATERIAL   |            |
|  |                                 | TO ROCK, PERCS SLOWLY  | ,SLOPE        |                                    | POOR-DEPTH TO ROCK, LOW STRENGTH  |            |
| SEPTIC TANK<br>ABSORPTION<br>FIELDS          |                                 |                        |               | ROADFILL                           | .  <br>   |            |
| SEMAGE<br>LAGOON<br>AREAS                    | SEVERE-DEPTH                    | TO ROCK, SLOPE         |               | SAND                               | IMPROBABLE-EXCESS FINES   |            |
| SANITARY<br>LANDFILL<br>(TRENCH)             | SEVERE-DEPTH                    | TO ROCK,SLOPE,TOO CL   |               | GRAVEL.                            | INPROBABLE-EXCESS FINES   |            |
| SANITARY<br>LANDFILL<br>(AREA)               | SEVERE-DEPTH                    | TO ROCK, SLOPE         |               | TOPSOIL                            | POOR-LARGE STONES, SLOPE  |            |
| DAILY  | POOR-DEPTH TO                   | ROCK, TOO CLAYEY, HAR  | D TO PACK     |                                    | HATER MANAGEMENT  |            |
| COVER FOR                                    |                                 |                        |               | POND<br>RESERVOIR                  | SEVERE-SLOPE  |            |
| `  | BUILDING SI                     | TE DEVELOPHENT         |               | II AREA                            | 1   |            |
| SHALLOM<br>EXCAVATIONS                       | SEVERE-SLOPE                    |                        |               | EMBANIOMENT<br>DIKES AND<br>LEVEES | D :   |            |
| DHELLINGS<br>HITHOUT<br>BASEMENTS            | SEVERE-SHRINK                   | C-SWELL, SLOPE         |               | EXCAVATED<br>PONDS<br>AQUIFER FE   | _ <b>:</b>  |            |
| DHELLINGS<br>NITH<br>BASEMENTS               | SEVERE-SLOPE,                   | SHRINK-SHELL           |               | DRAINAGE                           | DEEP TO MATER   |            |
| SMALL<br>COMMERCIAL<br>BUILDINGS             | SEVERE-SHRINK                   | C-SMELL, SLOPE         |               | IRRIGATIO                          | LARGE STONES, PERCS SLOWLY, DEPTH TO ROCK<br>ON   |            |
| LOCAL<br>ROADS AND<br>STREETS                | SEVERE-LOW ST                   | RENGTH, SLOPE, SHRINK- | SHELL         | TERRACEI<br>AND<br>DIVERSION       | 1   |            |
| LAMNS<br>LANDSCAPING<br>AND GOLF<br>FAIRMAYS | SEVERE-SLOPE                    |                        |               | GRASSET<br>HATERHAY                | LARGE STONES, SLOPE, DEPTH TO ROCK  |            |

| 3E   | DIXONAI     | LLE-PHILO      | H-HTAM                                  | AZEL/       | AIR C     | OMPLE    | EX, 12     |            |   |   |                     |                      |                       |           |          |             |                |                  |           | USDA-S     |
|------|-------------|----------------|---|-------------|-----------|----------|------------|------------|---|---|---------------------|----------------------|-----------------------|-----------|----------|-------------|----------------|------------------|-----------|------------|
| ,    | ÷           |                |   |             |           |          |            | RECE       | EATIC                                   | MAL D                                   | VELO                | PMEN                 |                       |           |          |             |                |                  |           |            |
| САМ  | P AREAS     | SEVERE-        | SLOPE                                   |             |           |          |            |            |   | PI                                      | _AYGR(              | OUND:                | i                     | VERE-S    | LOPE     |             |                |                  |           |            |
| PICN | IC AREAS    | SEVERE-        | SLOPE                                   |             |           |          |            |            |   |   | PATI<br>ANI<br>TRA  | D .                  | MOI                   | ERATE     | -SLOPE   |             |                | u                |           |            |
|      |             | CA             | PABILI                                  | TY AN       | D YII     | ELDS     | PER A      | CRE C      | OF CRO                                  | PS ANI                                  | PAST                | TURE                 | (HIG                  | 1 LEVE    | L MANA   | GEMEN       | <br>(T)        |                  |           |            |
|      |             |                |   | APA-        |           | FILBE    |            |            | STURE                                   |   |                     |                      | BARL                  |           | l WHE    |             | CORN,          | SWEET            | <br>[:    |            |
|      |             |                | ; _ B                                   | ILITY       |           | (TON     | <b>(8)</b> |            | (HUA)                                   | i                                       |                     |                      | (Bt                   | 1)        | HIN      | ITÉR<br>iu) | (то            |                  |           |            |
|      |             |                | IN:                                     | RRIIR       | R.IN      | IRR :    | IRR.       | INIRE      | : IRR                                   | . INI                                   | 88 : IF             | સ્ત.ઃ                | NIRR                  | IRR.      | INIRR    | IRR.        | INIRR          | IIRR.            | INIRR     | IIRR.      |
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|      |             |                |   |             |           | PO       |            |            |   | TAT SU                                  |                     |                      |                       |           |          | POTE        | ENTTAL A       |                  |           |            |
|      |             |                | GRAIN                                   | 816         | RASS      |          |            |            |   |   |                     |                      | HETLAN                | DISHAL    |          |             | IHOODLI        |                  |           | ANGEL      |
|      |             |                |   | 1 6         |           | l F      |            | 600        |   |   | 600                 |                      | V. POO                |           |          |             |                |                  |           | ILDLF.     |
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| 701  | CHIAL P     | RODUCTION<br>F | AVORAB                                  | LE YE       | ARS I     | m ( ) :  |            |            |   |   |                     |                      |                       |           |          |             |                |                  |           |            |

<sup>•</sup> SITE INDEX IS A SUMMARY OF 5 OR MORE MEASUREMENTS ON THIS SOIL.

#### SOIL INTERPRETATIONS RECORD

43E DIXONVILLE-PHILOMATH-HAZELAIR COMPLEX, 12 TO 35 PERCENT SLOPES
PHILOMATH PART
THE PHILOMATH SERIES CONSISTS OF SHALLOM, HELL DRAINED SOILS FORMED IN FINE TEXTURED COLLUVIAL AND RESIDUAL MATERIALS
FROM BASALT, THEY OCCUR IN THE FOOTHILLS, TYPICALLY THE SURFACE LAYER IS VERY DARK BROWN COBBLY SILTY CLAY ABOUT 6 INCHES
THICK, THE SUBSOIL IS VERY DARK BROWN COBBLY SILTY CLAY ABOUT 8 INCHES THICK, MEATHERED BASALT BEDROCK IS AT A DEPTH OF
14 INCHES, ELEVATION IS 300 TO 1800 FEET, MEAN ANNUAL PRECIP IS 40 TO 60 INCHES, MEAN ANNUAL AIR TEMP IS 52 TO 54
DEGREES, FROST FREE PERIOD IS 165 TO 210 DAYS.

| EGREES. FROS                                     | EVATION IS 300<br>T FREE PERIOD 1 | IS 165 TO 21   | O DAYS.           |                                  |                              |                |                      |                        |                    |                      | ·                       |
|--|-----------------------------------|----------------|-------------------|----------------------------------|------------------------------|----------------|----------------------|------------------------|--------------------|----------------------|-------------------------|
|  |                                   |                | ESTINA            | ATED SOIL PR                     | OPERTIES                     |                |                      |                        |                    |                      | <b>:</b>                |
|  | DA TEXTURE                        | UNIF           | TED               | AAS                              | нто                          | 1>3 II         | NI THAN 3            |                        | SIEVE N            | O. I LIMIT           |                         |
|  |                                   | - <del>-</del> |                   |                                  |                              |                |                      | 10 : 4                 |                    |                      | INDEX :                 |
| 0-6   CB-SIC<br>6-14   C, CB-<br>14   MB         | sic, c8-c                         | 검              |                   | A-7<br>A-7                       |                              | 15-30<br>0-30  | 0185-100<br>0190-100 | 75-90 70-<br>70-95 60- | -95 60-<br>-90 60- | 80 50-60<br>85 60-80 | 35-45<br>40-50          |
| !  |                                   | _i             |                   | <u> </u>                         |                              | <u></u>        |                      |                        |                    | i                    |                         |
| DEPTHICLAY I                                     | MOIST BULK! PE                    | -              | AILABLE           | I SOIL I                         |                              |                |                      |                        |                    | -                    |                         |
| (IN_) (PCT)                                      |                                   |                |                   | YIREACTION!                      |                              |                |                      |                        |                    | !                    |                         |
| 0-6   40-65                                      | 1.30-1.40   0.6                   | 6-2.0 I O.     | IN/IN)<br>14-0.17 | (PH)<br>15.6-6.5                 | -                            | : HIE          | н :.281              | T GROUP                | (PCT)<br>2-4       | MODERATE             | MODERATE                |
| 6-14 40-60                                       | 1.30-1.40 10.00                   | 6-0.2 0.       | 14-0.16           | 5.6-7.3                          | -                            | HIG            | H  -24               |                        |                    | i                    |                         |
|  | į                                 |                |                   |                                  |                              | !              |                      |                        |                    |                      |                         |
|  | FL00DING                          |                | HIGH              | MATER TABLE                      | CEME                         | NTED P         | AN I B               | EDROCK                 | SUBSID             | ENCE IHYDI           | POTENT 'L               |
| FREQUENCY  | : DURATION                        | MONTHS         | DEPTH :           | KIND HONT                        | HS IDEPTH                    | HARDN          | ES9!DEPTH            | HARDNES                | I INIT.            | TOTAL GRP            | FROST ACTION            |
| NONE   | , Lakelium                        |                | >6.0 1            | <del></del>                      |                              | <del>:</del> - | 112-20               |                        | 1 - 1              |                      |                         |
|  | SANITARY                          | FACILITIES     |                   |                                  |                              |                |                      | RUCTION M              |                    |                      | · · · · · · · · · · · · |
| <del>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</del> | I SEVERE-DEPTH                    |                | PE                |                                  | ļ                            | 1.1            | POOR-DEPT            | H TO ROCK              | LOW STR            | ENGTH                |                         |
| SEPTIC TANK<br>ABSORPTION<br>FIELDS              |                                   |                |                   |                                  | ROADFI                       | ш              |                      |                        |                    |                      |                         |
| SEMAGE<br>LAGOON<br>AREAS                        | SEVERE-DEPTH                      | TO ROCK, SLO   | PE                |                                  | SAND                         | 1              | IMPROBABL            | E-EXCESS               | FINES              |                      |                         |
| SANITARY<br>LANDFILL                             | SEVERE-DEPTH                      | •              | PE,100 CL         | AYEY                             | GRAVE                        | 1              | IMPROBABL            | E-EXCESS               | FINES              |                      |                         |
| (TRENCH)   |                                   |                |                   |                                  |                              |                | DOOR DEDT            |                        | T00 CI 4           | YEY,LARGE            | CTONEC                  |
| SANITARY<br>LANDFILL<br>(AREA)                   | SEVERE-DEPTH                      | TO ROCK, SEC   | A-E               | ·                                | TOPSOI                       | 1              | rook-per i           | H 10 NOCK              | ,100 02            | TET , EARGE          | 310NE3                  |
| DAILY  | POOR-DEPTH TO                     | ROCK,TOO       | LAYEY, HAR        | D TO PACK                        |                              |                | þ                    | LATER MANA             | GEMENT             |                      |                         |
| COVER FOR LANDFILL                               | -                                 |                | ۰ س               | POND SEVERE-DEPTH TO ROCK, SLOPE |                              |                |                      | 2                      |                    |                      |                         |
|  | BUILDING S                        | ITE DEVELOP    | ENT               |                                  | AREA                         | 1              |                      | • . •                  | <del></del> -      |                      |                         |
| SHALLON<br>EXCAVATIONS                           | SEVERE-DEPTH                      | TO ROCK, SLO   | PE                |                                  | EMBANKME<br>DIKES A<br>LEVEE | NTS !          | SEVERE-HA            | ARD TO PAC             | к                  |                      |                         |
| DHELLINGS<br>HITHOUT<br>BASEMENTS                | SEVERE-SHRIN                      | K-SHELL, SLO   | Æ                 |                                  | EXCAVAT<br>PONDS<br>AQUIFER  |                | SEVERE-NO            | WATER                  |                    |                      |                         |
| DHELLINGS<br>WITH<br>BASEMENTS                   | SEVERE-DEPTH                      | TO ROCK,SLO    | PE, SHRINK        | -SHELL                           | DRAINA                       |                | DEEP TO I            | <b>LATER</b>           |                    |                      | •,                      |
| SMALL<br>COMMERCIAL<br>BUILDINGS                 | SEVERE-SHRIM                      | K-SHELL, SLOP  | Æ                 |                                  | IRRIGAT                      | :              | LARGE STO            | ONES, SLOW             | INTAKE,F           | PERCS SLOW           | <br>LY                  |
| LOCAL<br>ROADS AND<br>STREETS                    | SEVERE-LON S                      | TRENGTH, SLO   | E,SHRINK-         |                                  | TERRAC<br>AND<br>DIVERSI     | æs :           | SLOPE,LAF            | RGE STONES             | ,DEPTH 1           | ra Rock              |                         |
| LAHNS,<br>LANDSCAPING<br>AND GOLF<br>FAIRHAYS    | SEVERE-SLOPE                      | ,DEPTH TO RO   | OCK,TOO CL        |                                  | GRASS<br>WATER               | ED:            | LARGE STO            | ONE6, SLOPE            | , DEPTH            | TO ROCK              | <del>-</del>            |

**FOOTNOTES** 

DIXONVILLE-PHILOMATH-HAZELAIR COMPLEX, 12 TO 35 PERCENT SLOPES HAZELAIR PART

# **LANFEAR Thom**

From:

RCarverIII@aol.com

Sent:

Friday, June 11, 2004 2:41 PM Thom.LANFEAR@co.lane.or.us

To: Cc:

scornacchia@hershnerhunter.com; hatland@att.net

Subject:

PA 03-5901

Thom,

Thank you for your time and analysis preparing the County Staff Report dated June 8, 2004, regarding the above referenced application.

In the County Staff Report, we were requested to provide additional acreage calculations for the Subject Property using the actual size of 42.19 acres as shown on the tax map for TL 3500 in 18-04-13 instead of the 38.626 acres used by LCOG to generate the High Value Soil Map (Exhibit K to our application dated September 2, 2003).

We contacted LCOG to request that they run a new High Value Soil Map for the Subject Property using 42.19 acres for purposes of their calculations. We received a return telephone call today from Ms. Cindy Peterson from LCOG. Her message stated that 1) the GIS map system used by LCOG is not an exact system, 2) High Value Soil Maps generated by their organization have always been based upon approximate acres and to the best of their ability under the current computer system, 3) even though the system generates an approximation, such approximation has always been acceptable to the county for land use decisions and should be in our case also, 4) as a practical matter, the system cannot generate a new map at the 42.19 acres without changing the dimensions of the adjoining properties and LCOG is not inclined to do so. Should you wish to contact Ms. Peterson directly, her phone number is (541) 682-4452.

Not withstanding the lack of availability of a revised LCOG map or the precedence of the Lane County Land Management Division historically and routinely accepting such similarly calculated LCOG maps as sufficient proof of the applicants' burden under ORS 197.247(1)(b)(C), we are able to provide additional factual information to support a finding that the 42.19 acre Subject Property complies with the above referenced statute section.

The acreage on the LCOG map for the Subject Property shows 38.626 acres or 3.564 fewer acres than the 42.19 shown on the tax map. If one assumes that 100% of this 3.564 acre discrepancy is composed of class I-IV soils and such 3.564 acres were added to the 15.034 acres of class I-IV soils shown on the LCOG map, the maximum total acres of class I-IV soil on the Subject Property could be no more than 18.598 acres which is 44.081% of total 42.19 acres. It is therefore physically impossible for the site not to contain more than 50% class V-VIII soils.

Should you have any additional questions, please do not hesitate to contact me.

Thank you again for your time and analysis.

Sincerely, Roy Carver, III

# LANE COUNTY PLANNING COMMISSION

# Staff Report



File PA 03-5901 LAND MANAGEMENT DIVISION

http://www.LaneCounty.org/PW\_LMD/

Hearing Date: June 15, 2004

Report Date: June 8, 2004

### I. PROPOSAL

A. Applicant:

Roy Carver III P.O. Box 51505 Eugene, OR 97405 Agent: Harry Taylor P.O. Box 1420 Veneta, OR 97487

Owner:

Julia Carver P.O. Box 51505 Eugene, OR 97405

B. Proposal

Request for a Plan Amendment to redesignate 42.2 acres from "Forest" land to "Marginal Land" and rezone from "Impacted Forest Lands (F-2)" to "Marginal Lands (ML)" pursuant to Lane Code 16.400 and 16.252.

#### II. RECOMMENDATION

The proposed plan amendment and zone change is adequately supported by the current file record to support a recommendation for approval of the request provided that the acreage calculations are revised and satisfy ORS 197.247(1)(b)(C).

# III. SITE AND PLANNING PROFILE

A. Location

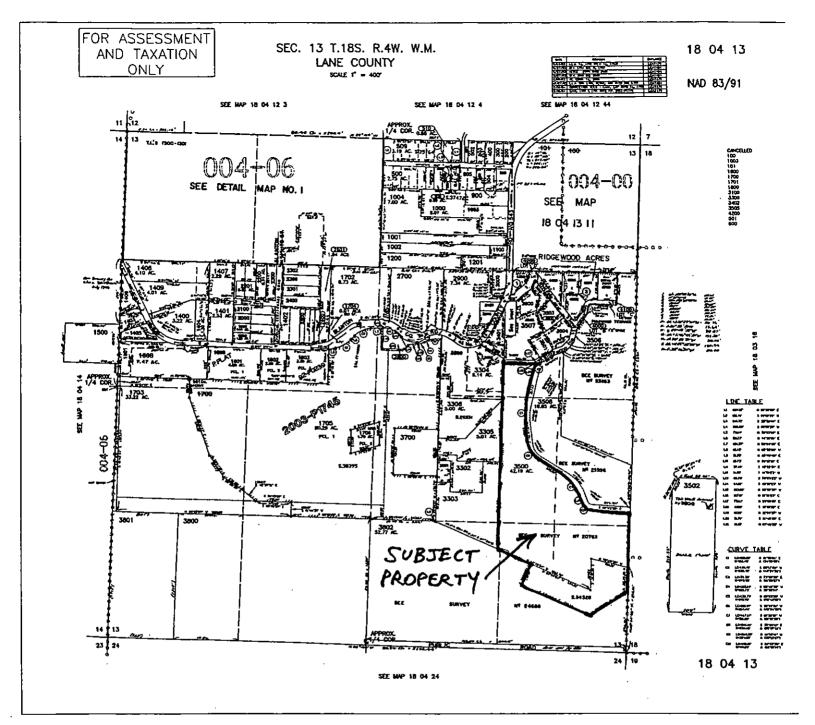
18-04-13 #3500

B. Zoning

F-2/Impacted Forest Lands Zone. Plot 334.

#### C. Site Characteristics

The subject property consists of a total area of 42.2 acres. The undeveloped property is located immediately south of the Eugene City Limits and Urban Growth Boundary at the end of Ridgewood Drive. Refer to page 4 and exhibits of applicant's original statement for more detail on the property and surroundings.



#### D. Surrounding Area

Land to the north is within the Eugene City Limits. Property to the northwest is zoned RR-5 within the County jurisdiction. Property to the east is within the City of Eugene and the Urban Growth Boundary. Property to the south is zoned Impacted Forest Lands. Property to the west is zoned are zoned Rural Public Facility and RR-5. See Page 6 with exhibits of the applicant's statement provide considerable detail on the characteristics of neighboring lands.

#### E. Services

Fire: Eugene Rural RFPD #1

Police: County, State Sewer and Water: on-site School District: Eugene 4J

Power: EWEB

Access: Ridgewood Drive (County)

#### F. Referral Comments Received

Comments were received from Lane County Transportation Planning, EWEB, Goal One Coalition, and several nearby property owners. These are attached as Exhibits to this report.

#### IV. CRITERIA AND ANALYSES

#### A. Character of the Request

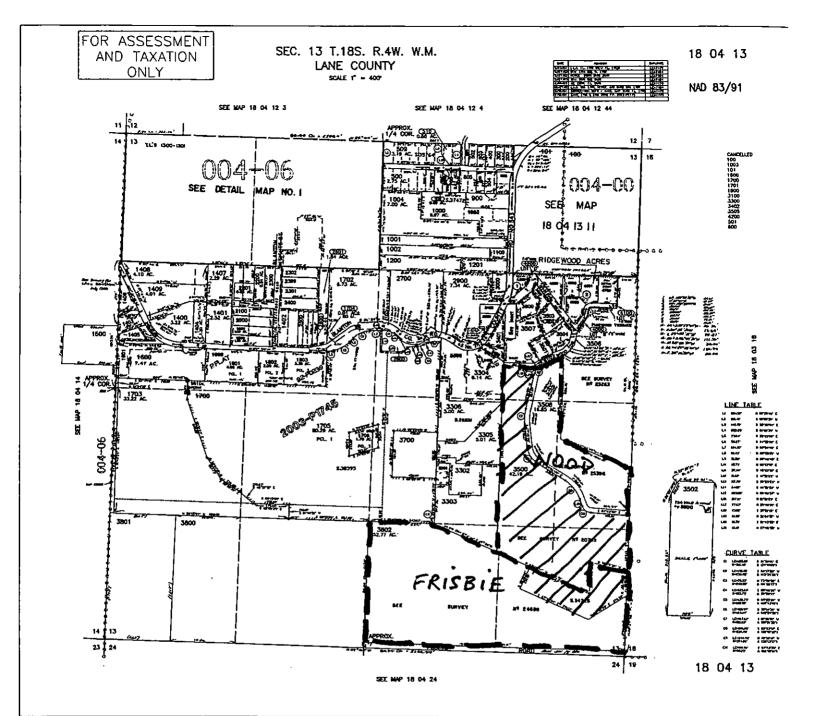
The proposal is a Minor Amendment pursuant to Lane Code 16.400(6)(h) and Oregon state law concerning the designation of Marginal Land (1991 ORS 197.247). State statutory standards invoked by this application are as follows:

ORS 197.247(1)(a) The proposed marginal land was not managed, during three of the five calendar years preceding January 1, 1983, as part of a farm operation that produced \$20,000 or more in annual gross income or a forest operation capable of producing an average, over the growth cycle, of \$10,000 in annual gross income. ["income test"]

and

ORS 197.247(1)(b)(C) The proposed Marginal Land is composed predominantly of soils in capability classes V through VIII in the Agricultural Capability Classification system used by the U.S. Department of Agriculture Soil Conservation Service, and is not capable of producing 85 cubic feet of merchantable timber per acre per year. ["productivity test"]

Also effective on the decision are several County criteria from Lane Code 16.400, having to do with adoption of a Plan amendment and information required to be developed in support of the request. The applicant's Statement (attached) recites the appropriate local and state standards and applies them to the proposal.



SUBJECT PROPERTY

Approval of the Plan amendment and rezoning could result in a total of four parcels of (a minimum of) 10 acres as authorized in the County's Marginal Lands zone, Lane Code 16.214. Ten-acre parcels in the ML zone are authorized next to non-resource lands such as RR-5, or if adjacent resource lands are themselves qualified for Marginal Land status as analyzed by the applicant. It needs to be noted here that approval of the Plan amendment/rezone does not constitute approval of land division, which is a separate administrative processes involving conditions of approval and notice to neighboring landowners.

# B. Analysis

The following comments can be made with respect to the evidence supplied in support of the action.

# 1. <u>Income Tests</u>

ORS 197.247(1)(a) The proposed marginal land was not managed, during three of the five calendar years preceding January 1, 1983, as part of a farm operation that produced \$20,000 or more in annual gross income or a forest operation capable of producing an average, over the growth cycle, of \$10,000 in annual gross income.

This provision requires the applicant to analyze the farm operations or forest operations that existed from January 1, 1978 through December 31, 1982, a five-year period. The initial submittal by the applicant does not address the relevant properties under consideration during that time period. See the applicant's submittal of May 28, 2004 for the corrected analyses.

The subject property is comprised of two portions of properties under separate ownership during 1978 through 1982. On the opposite page is a map that illustrates the boundaries of ownership from 1978 to 1982. The "Wood Parcel" is the land in common ownership from 1979 – 1982 identified as Parcel 2 of minor subdivision M152-79 (48 acres). The "Frisbie Parcel" is comprised of the land that was added to the subject property in 1997 and taxlot 3802 to the south (61.5 acres). The "Christie Parcel" is the adjacent property to the south in its' present configuration. In order to qualify the subject property for Marginal Land status, the applicant must analyze the actual farm operation or the capability of any forest operation that was occurring on both the "Wood Parcel" and the "Frisbie Parcel" during the relevant 5-year period.

#### a. Farm Operation Analysis

The applicant has submitted two analyses from Mr. Paul Day examining the subject property's potential for farm use. The original analysis was updated on May 25, 2004 to review the entire "Wood Parcel" and submitted with the May 28, 2004 submittal. His determination concludes that the subject property was not managed, and could not have been managed as, part of a farming operation that produced \$20,000 in annual gross income between 1978 and 1983. This analysis is supported by the information supplied in the comments from Mr. Wayne Wood whose parents owned the property during

the relevant time period. Apparently, all farming had ceased prior to 1978 and the land was converted to forestland.

# b. Forest Operation Analysis "Wood Parcel"

The applicant's May 28, 2004 submittal (attached) contains an analysis of the capability of the forest operation that occurred on the "Wood Parcel". It is identified as Exhibit "A" to that submittal. The analysis has concluded that the forest operation was capable of producing only \$2,610 in annual gross income.

# c. Forest Operation Analysis "Frisbie Parcel"

The applicant's May 28, 2004 submittal (attached) contains an analysis of the capability of the forest operation that occurred on the "Wood Parcel". It is identified as Exhibit "C" to that submittal. The analysis has concluded that the forest operation was capable of producing only \$2,922 in annual gross income.

# d. Objections to the Forest Operations Analyses

The Goal One Coalition, represented by Mr. Just, has submitted objections to the methodology used by the applicant to analyze the income capability of the subject property forest operation and the adjacent property forest operation. There are two primary objections raised: capability for the production of tree species other than Douglas Fir, and the use of 1983-timber values to calculate potential gross income. The objections are contained on Page 10 of Attachment 6. The applicant has addressed the objections in the May 28, 2004 submittal. The applicant's Consulting Forester has provided an analysis of other tree species for each forest operation. The use of 1983-timber values follows direction contained in the Lane County Board of Commissioners 1997 interpretation attached to this report.

Based upon the information currently in the record, staff supports a finding that this criterion is met by this application.

#### 2. Productivity Tests

ORS 197.247(1)(b)(C) The proposed Marginal Land is composed predominantly of soils in capability classes V through VIII in the Agricultural Capability Classification system used by the U.S. Department of Agriculture Soil Conservation Service on October 15, 1983, and is not capable of producing ... 85 cubic feet of merchantable timber per acre per year in those counties west of the summit of the Cascade Range, as that term is defined in ORS 477.001(21).

There are two components to this criterion: the soils of the property must be >50% class V through VIII, and the subject property cannot be capable of producing 85 cubic feet of merchantable timber per acre per year.

#### a. Classification of Soils

The applicant has provided an analysis of the Agricultural Capability Classification of the soils for the subject property on page 5 of the original submittal. The analysis concludes that 61.347% of the soils are rated Class

VI agricultural soils. The basis for the classification is identified as the Soil Survey of Lane County, September 1987 and the soil type and area calculations compiled by LCOG (Applicant's Original Submittal Exhibit D). The calculations only account for 38 acres of the 42-acre subject property and need to be revised by the applicant.

An issue has been raised by the Goal One Coalition over the use of the Class VI rating for the Dixonville-Philomath-Hazelair soil complexes (soil types 43C and 43E). See Page 2 of the Goal One submittal. According to the Soil Survey of Lane County, the complex soil types are made up of a percentage of several soil types. For example, #43C is comprised of 30% Dixonville, 30% Philomath, 25% Hazelair and 15% of Panther, Ritner, Witzel and Rock Outcrop. #43E is comprised of 35% Dixonville, 30% Philomath, 20% Hazelair and 15% of Ritner, Witzel and Rock Outcrop. The Agricultural Capability rating given in the text of the Soil Survey of Lane County (pages) 63 & 64) for the two complexes is VI. Both the Soil Interpretation Record (Green Sheet), and the LCOG data submitted by the applicant, break out each component of the soil complex and assign a rating to each individual component. Only one of the three soil components (Philomath) is rated Class VI in those two sources. The Goal One Coalition has submitted a copy of the current Natural Resources Conservation Service data from their web page showing the same information.

The applicant has responded to the issue in the May 28, 2004 submittal taking the position that the issue is limited to whether the applicant is required to use the "available NRCS data". The applicant argues that the data submitted by Mr. Just is not from the Agricultural Capability Classification System in use by the USDA SCS on October 15, 1983. This is not factually correct. Apparently, the Classification System in effect in 1983 contained both a generalized Classification for the complex and the individual data for the complexes that continues to the present time. The publication date of the Soil Survey of Lane County is September 1987. The information in the 1987 survey is based upon the data contained on the SCS "Green Sheets" that existed in 1981. The Green sheets have the components of the complexes broken out with separate agricultural capability classifications in the same manner as the current NRCS web page and the LCOG mapping report submitted by the applicant. The text of the Soil Survey with the generalized classification for the complex was apparently in draft form in 1981 and applied the same generalized rating for the complexes. Although a copy of the draft document has yet to be found in the Planning Office, reference to the classifications for the two complexes as Class VI is contained in the Agricultural Lands Working Paper published in November 1981.

The Class VI generalized rating assigned to these two complexes is apparently applied because it is the classification associated with the most limited of the individual component classifications for agricultural purposes. The components of the unit are so intricately intermingled that is impractical to manage them separately.

Provided that the applicant revises the acreage calculations and demonstrates that >50% of the soils are within Class V through VI, staff supports a finding that this criterion has been met.

# b. 85 cubic ft. per acre per year standard

The applicant has addressed the concerns about the original analysis raised by the Goal One Coalition and re-analyzed the capability of the subject property to produce 85 cubic feet per acre per year of merchantable. See Exhibit "B" of the May 28, 2004 submittal. The analysis includes species of trees other than Douglas Fir and concludes that the property produces 62 cubic feet per acre per year. The applicant has also analyzed the capability of the adjacent property to the south to demonstrate that it also qualifies as marginal land so that the subject property may be divided into 10-acre parcels. See Exhibit "D" of the May 28, 2004 submittal. The analysis includes species of trees other than Douglas Fir and concludes that the property produces 66.4 cubic feet per acre per year.

#### 3. Policy Analysis.

Reference is made in the application to Lane County RCP policy 3, Goal 4, as follows:

Forest Lands that satisfy the requirements of ORS 197.247 may be designated as Marginal Lands and such designations shall also be made in accordance with other Plan Policies. Uses and land divisions allowed on Marginal Lands shall be those allowed by ORS 197.247.

Within the applicant's statement (pp. 10 & 11) is a discussion of applicable plan policies as required above; the statement concludes that policy compliance is achieved. Compliance with ORS 197.247 is satisfied by the Marginal Lands tests discussed earlier in this staff report.

# 4. <u>Lane Code Requirements.</u>

The remainder of the original submittal satisfactorily addresses compliance with the code aspects such as: fulfilling the purpose of the ML zone as found in LC 16.214(1); the Plan Amendment requirements of LC 16.400; and the rezone requirements of LC 16.252. Staff agrees with the statements as presented.

# IV. CONCLUSIONS

# A. Summary Comments

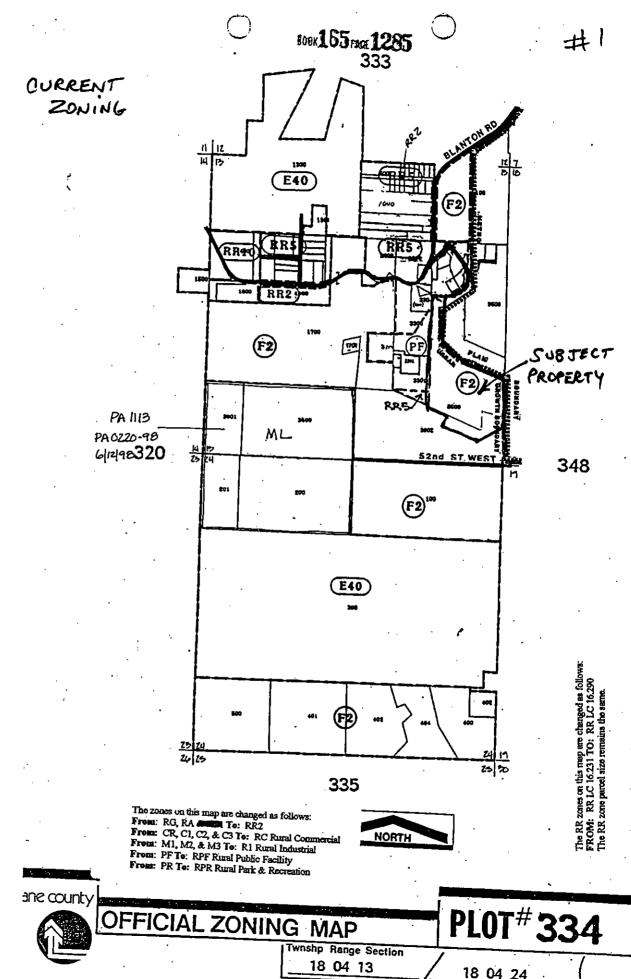
If the Commission concurs with the applicant's arguments, a recommendation for approval to the Board of Commissioners is appropriate. Approval can be founded in Lane Code 16.400(h)(iii)(iv-iv), necessary to provide for the implementation of adopted Plan Policy or elements. The element in question is that portion of the Plan authorizing Marginal Lands.

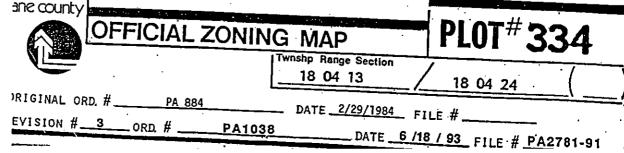
### B. Attachments to this Staff Report

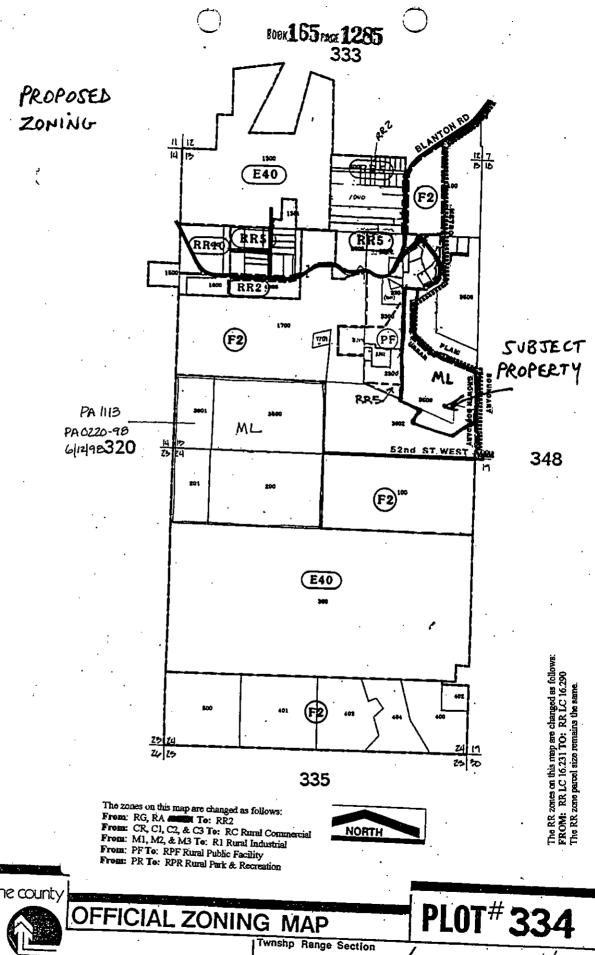
- 1. Current and proposed Zone map & plan map
- 2. Applicant's statement dated September 2, 2003 with exhibits
- 3. Forester's Supplemental Information from Booth Consulting, Inc. dated March 15, 2004
- 4. Applicant's submittal of May 28, 2004 with exhibits
  - a. Letter from Steve Cornacchia
  - b. Exhibit "A" Forest Productivity Analysis (Wood Parcel)
  - c. Exhibit "B" Forest Productivity Analysis (Subject Property)
  - d. Exhibit "C" Forest Productivity Analysis (Frisbie Parcel)
  - e. Exhibit "D" Forest Productivity Analysis (Christie Parcel)
  - f. Exhibit "E" March 1997 Supplement to Marginal Lands Information Sheet
  - g. Traffic Impact Analysis by James Branch, P.E.
  - h. Letter from Don B. Mogstad, P.E.
  - i. Property Line Adjustment Deed #9788122
  - i. Legal Lot Verification PA 1162-98
  - k. ORS excerpts (5 pp.)
  - l. Letter from Paul Day (Wood Parcel)
- 5. Comments from Wayne Wood dated May 9, 2004
- 6. Submittal form Goal One Coalition dated April 22, 2004 with exhibits
- 7. Correspondence from Transportation Planning (Bill Morgan) to applicant
- 8. Letter from EWEB dated April 6, 2004
- 9. Comments from Cole Living Trust dated April 6, 2004
- 10. Comments from Ken & Shirley Mart

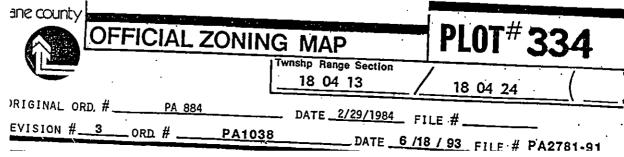
#### C. Materials to be part of the Record

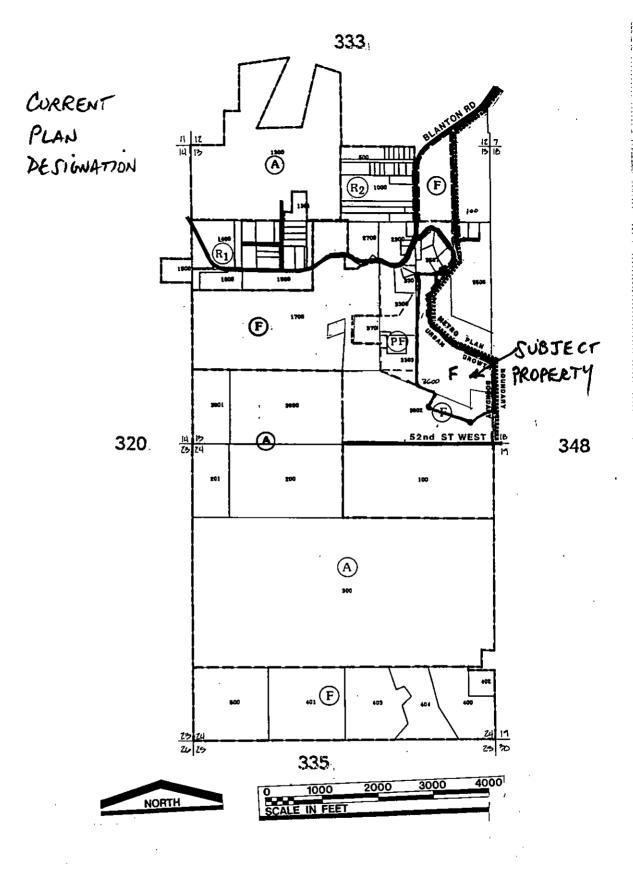
- 1. This staff report and attachments.
- 2. File PA 03-5901

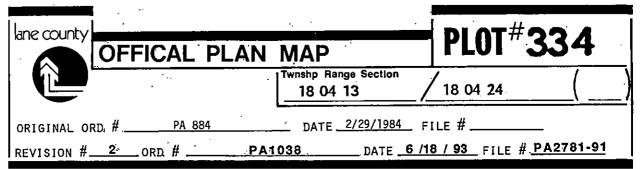


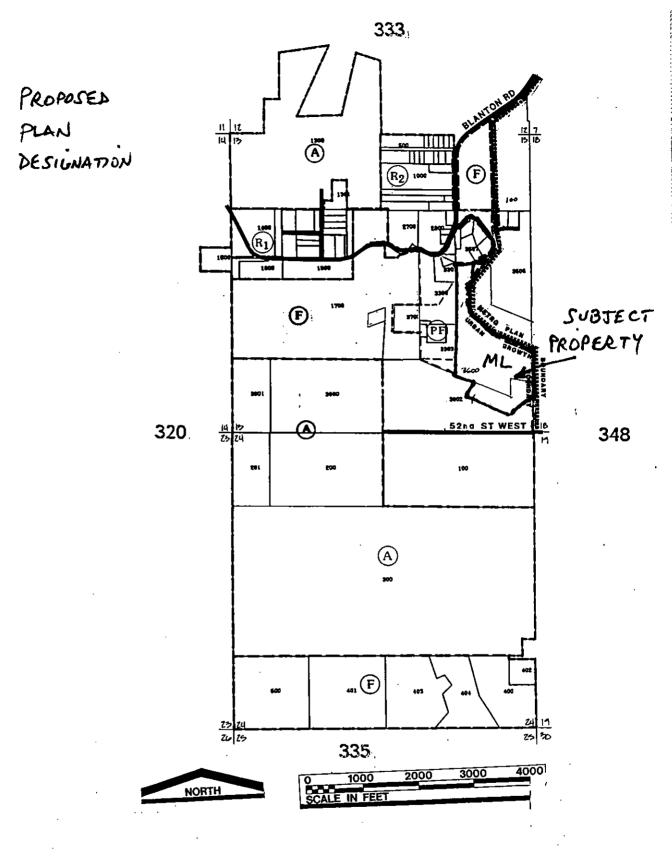


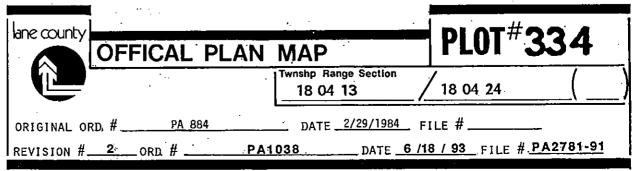












# APPLICANT'S STATEMENT

APPLICATION FOR APPROVAL OF A RURAL COMPREHENSIVE PLAN MINOR AMENDMENT TO DESIGNATE PROPERTY FROM FOREST LAND TO MARGINAL LAND AND A CONCURRENT ZONE CHANGE FROM F-2 TO MARGINAL LANDS

DATE: September 2, 2003

# I. PROPOSAL DESCRIPTION

A. APPLICANT/ OWNER Julia A. Carver P.O. Box 51505 Eugene, OR 97405

**B. AGENT:** 

Harry A. Taylor P.O. Box 1420 Veneta, OR 97424

south of Blanton Road.

C. PROPOSAL:

Approval of a Minor Plan Amendment to The County Rural Comprehensive Plan (RCP) diagram to designate property from Forest to Marginal Lands, and a concurrent zoning map amendment from Impacted Forest (F-2) to Marginal Lands (ML-RCP), for a 42.2 acre site located adjacent to the Urban Growth Boundary and Eugene City limits on the city's south side, about ¼ mile

This application implements Lane County Goal 4 Policy 3, which provides for designating Forest Land as Marginal Land that complies with ORS 197.247 and applicable RCP Policies. The site (herein after the "Subject Property") is depicted on the Plot Plan (Exhibit A) and South Eugene Aerial Photograph (Exhibit B).

The proposed land use change will allow development of four dwellings on the Subject Property at a density of one dwelling per 10 acres.

#### II. PROPOSAL SUMMARY

This section includes a general overview of the amendment request, the site's characteristics, and the primary issues associated with the proposal.

#### Overview

The application seeks to designate the Subject Property as Marginal Lands and rezone the Subject Property to Marginal Lands (ML\_RCP). The Rural Comprehensive Plan and

ORS 197.247 provide for designating land as Marginal Lands provided the proposed marginal land was not managed for three of the five years prior to January 1, 1983, as part of a farm operation that produced \$20,000 in gross annual income or a forest operation capable of producing on average over the growth cycle \$10,000 in annual income; is composed of predominately agricultural Class V-VIII soils; and is consistent with applicable RCP policies. Marginal Lands designation does not require an exception to the statewide planning goals. A marginal Lands designation is properly implemented by the Marginal Land zone.

#### Site Characteristics

The Subject Property is a vacant 42.2 acre parcel, with gradual (0-5%) to moderate (6-10%) slopes downward to the south. There is a steeper (15-20%) downward slope to the south of approximately 6 acres at the southerly property line. Approximately 80% of the Subject Property contains mixed forested areas. These areas contain Oak, Ponderosa Pine, and Douglas Fir trees. The plantation has been described by a professional forester as not being in good thrift, and that there are severe signs of stress. Approximately 20% of the Subject Property contains natural meadows and rock outcroppings. The Subject Property is located adjacent to the Metropolitan Area Urban Growth and General Plan boundaries, and Eugene city limits. (Exhibit C).

# **Summary of Primary Issues**

- 1) Consistency with state statutory requirements ORS 197.247.
- (a) The subject property meets the ORS 197.247 farm soil quality test for designation as Marginal Land. Evidence from the Lane Council of Governments ("LCOG") shows that the site consists of a majority of Class V and higher non agricultural capable soil (Exhibit D) based upon the USDA Soil Survey of Lane county (1987) showing the soil classification in effect at that time for each of the soils on the Subject Property (Map pages 90, 91, 102,103).
- (b) The subject property meets the ORS 197.247 farm income test for designation as Marginal Land. The applicant has submitted photographic evidence for March, 1979 (Exhibit E) and April, 1982 (Exhibit F), that the Subject property was not managed as part of a farm operation that produced \$20,000 in gross annual income during three of the five years preceding January 1, 1983. Further evidence prepared by Mr. Paul Day, former Lane County Extension Agent, confirms the lack of potential of the Subject Property to generate the above referenced \$20,000 per year (Exhibit G).
- (c) The subject property meets the ORS 197.247 forest soil quality test for designation as Marginal Land. Evidence from LCOG analysis (Exhibit D) shows the forestry soil capability is 28 cubic feet per acre per year which less than the maximum 85 cubic feet per acre per year. Robert Booth, a professional forester, also concluded the site could produce only 28 cubic feet per acre per year (Exhibit H).

- (d) The subject property meets the ORS 197.247 forest income test for designation as Marginal Land. Evidence submitted shows the Subject Property is not a forest parcel capable of producing \$10,000 in annual gross income over the growth cycle. Based on the Lane County Marginal Lands Information Sheet, Forest Land Income Test on page 2 (Exhibit I), the Subject Property's soil Class is rated 6, is less than 64 acres in size, and therefore qualifies for Marginal Lands designation under the forest income test rule.
- 2) Consistency with Rural Comprehensive Plan Policies and Lane County Code Provisions. The following RCP policies are considered applicable to this request:
  - A. RCP Goal 3 Policy 14 provides that lands that satisfy the requirements of ORS 197.247 and applicable county policies may be designated as Marginal Lands. The proposed land qualifies as Marginal Land in accordance with the provisions of ORS 197.247 (1991 Edition).
  - B. RCP Goal 5, Flora and Fauna, Policy 11 The Subject Property is located in a designated Peripheral Big Game Range. Density of one dwelling per 10 acres on gently sloping vegetated land is consistent with the general land use pattern in the immediate area and will not conflict with big game management. No significant wildlife habitat, sensitive sites or other Goal 5 resources have been inventoried on the Subject property or adjacent lands.
  - C. RCP Goal 5 Water Resources Policy 3 and Lane Code 16.004 (4) require a demonstration of an adequate water supply to support the proposed use. The property is within an existing water district and will be served by Eugene Water and Electric Board.
- 3) Consistency with Board of County Commissioner's interpretation and administration of Marginal Lands applications. This application complies with:
  - i. Lane County Working Paper: Marginal Land (1983)
  - ii. Lane County Information Sheet: Requirements for Marginal Land Designation and Zoning, and
  - iii. Supplement to Requirements for Marginal Lands Information Sheet (1997).
- 4) Consistency with statutory requirements of ORS 215.327. Under ORS 215.327, a county may allow divisions of Marginal Land to create a parcel or lot containing 10 acres or more if the lot or parcel is not adjacent to land zoned for exclusive farm use or forest use or, if it is adjacent to such land, the adjacent land qualifies for designation as Marginal Land under ORS 197.247. Evidence submitted shows that one forest use parcel is adjacent to the Subject Property (Exhibit J), but that such adjacent parcel also qualifies for designation as Marginal Lands (Exhibit K).

#### III. GENERAL INFORMATION

#### A. LOCATION AND SITE DESCRIPTION

Assessor's map No. 18-04-13 TL 3500

Zoning F-2/RCP

Plot no. 334

Area 42.2 acres

Tax Code 4-01

Location: The subject property is located adjacent to the Eugene city limits on the city's south side, about ¼ mile south of Blanton Road. The site is adjacent, along its north and east property boundaries, to the Eugene Metropolitan Plan and the Urban Growth Boundary. Over 2,000 lineal feet of the Subject Property's boundaries to the north and east are adjacent such boundary. A portion of the boundary is also adjacent to the Eugene city limits.

Site: The subject property is an undeveloped tract of 42.2 acres with an irregular shape. The parcel has a maximum width of about 1360 feet from west to east, and a maximum length of about 2070 feet from north to south. The site has 60 feet of frontage on Ridgewood Drive, which terminates on the northern boundary of the site (Exhibit A).

The site crests the ridge to the south of the Eugene city limits. The northern portion of the site is flat, while the southern portion is gentling sloping. Near the south property line the property slopes more steeply to the south with rock outcroppings. The northernmost portion of the site is primarily small Ponderosa Pine, with the southern area primarily Douglas Fir and Oak.

History: The Subject Property was part of a 90 acre parcel purchased by Helen and Hugh Wood in the 1940's. Mr. Wood was a full time professor in the School of Education at the University of Oregon. In 1979, Mr. and Mrs. Wood transferred 25 acres of the property to an organization for the benefit of Nepal. In 1985, the Wood's sold 15.3 acres to the City of Eugene Parks Department. Other smaller parcels were sold over time for adjacent residential development.

The remaining 34.2 acre parcel was retained by the Woods until their deaths in the mid 1990's. At that time, the property passed by bequeath to their two children, who in turn sold the parcel in 1996 to Carver Trust No. 1. Subsequently, in 1997, Carver Trust No. 1 enlarged the parcel by acquiring an adjoining 8 acres of TL 3802 by lot line adjustment. The resulting 42.2 acre parcel is the Subject Property.

Improvements: There are no structures on the property. An access road parallels the northeastern property line of the site, from the terminus of Ridgewood Drive at the northwest to the property boundary at the northeast. This 12' wide road is graded and graveled, with asphalt paving in spots. A water tank owned by EWEB exists on the

property near the northwesterly boundary fronting Ridgewood Drive. Underground water and electric lines traverse the property running in existing utility easements located next to and parallel to the existing road. High speed data and cable lines also exist in underground easements. Three sides of the property are fenced. The property has no other improvements.

Legal Lot Status: The Subject Property is a legal lot being Parcel 2 of M 152-79 (PA: 498-98) (Exhibit W).

Soils: The Agricultural classes for the soil types shown in the following chart are based upon the classifications listed by the Soil Conservation Service in the USDA Soil Survey of Lane County, September 1987, on map sheet numbers 90, 91, 102 and 103, and using the soil type and area calculations compiled by LCOG (Exhibit D).

| Map # Soil type |  | Area<br>(ac.)     | Area<br>(%) | Index<br>cf/ac/yr | (Weighted<br>Average) | Agricultural<br>Capability |
|-----------------|--|-------------------|-------------|-------------------|-----------------------|----------------------------|
| 43C             | Dixonville-Philomath-<br>Hazelair complex (3-12) | 18.825<br>%)      | 48.399      | 54                | 26.137                | VI                         |
| 43E             | Dixonville-Philomath-<br>Hazelair (12-35%)       | 1.145             | 3.637       | 63                | 2.291                 | VI                         |
| 45C             | Dupee Silt Loam (3-20%                           | <b>%) 15.03</b> 4 | 38.653      | 0                 | 0                     | Ш                          |
| 138E            | Witzel-very cobbly<br>Loam (3-30%)               | 3.622             | 9.311       | 0                 | 0                     | VI                         |
|                 | Average Site Index                               |                   |             |                   | 28.426                |                            |

From analysis, 61.347% of the soils on the subject property are rated as Class VI agricultural soils, and 38.653% of the soils are rated as Class III agricultural soils. The soils on the subject property are predominately Class V and higher and meet the benchmark established by Oregon law to determine the farm land capability threshold for Marginal Lands designation.

Based on the LCOG data (Exhibits D), the total forest capability for the subject property is calculated to be 28 cubic feet per acre per year, which is below the 85 cubic feet per acre per year benchmark established by Oregon law to determine the forest land capability threshold for Marginal Land designation. An independent report prepared by a professional forester, Mr. Robert Booth, supports this analysis(Exhibit H). The Subject Property is not only under the maximum permitted 85 cubic feet per acre per year for designation as Marginal Lands, but is also under the 50 cubic feet per acre per year maximum for designation as Non Resource land.

Wetlands: National Wetlands Inventory map "Eugene East 3" (Exhibit L) indicates none of the site is a jurisdictional wetland.

Wildlife: The Lane County Wildlife Inventory indicates the site is located in an Impacted Big Game Range (Exhibit M).

Hazards: No natural hazards have been identified by county inventories or by on-site field observations. Improvements will not be located in areas of significant slope. Building in such areas is already prohibited by existing CC&Rs. The Subject Property is not located in a flood zone.

Other Resources: No historic, archaeological, scenic or other resources have been identified on the subject property or by County inventories.

Farm/Forest Deferral: The Subject Property has received a forest tax deferral since 1970 (Exhibit N).

# **B. ADJACENT AND SURROUNDING AREAS AND ZONING**

The Subject Property is located adjacent to the southerly edge of the Eugene Urban Growth Boundary and portions of the Eugene city limits. Residential zoning is adjacent to the north and northwest. Residential and Rural Public Facility zoning are adjacent to the west. Residential zoning and an EWEB water tank are adjacent to the east. A Residential zoned parcel is located at the southwest corner, and adjacent to the south is one forest use parcel improved with a single family home (Exhibit X).

North: Three parcels to the north are located adjacent to the Subject Property. Tax Lot 3508 is a 15.30 acre Suburban Residential (RA) zoned site owned by the City of Eugene Parks Department. It is inside both the Urban Growth Boundary and the Eugene city limits. This parcel is undeveloped. Tax lots 3501 and 3507 border the subject property to the northwest. Tax lot 3501 is a 0.73 acre parcel, zoned RR-5 and developed with a single family residence. Tax lot 3507 is 3.16 acre RR-5 zoned parcel owned in conjunction with Tax Lot 3501, and is improved with both a swimming pool and a tennis court.

West: Five parcels to the west are adjacent to the Subject Property. Tax lot 3304 is 6.14 acres, zoned RR-5, and developed with a single family residence. Tax lot 3306 is 5.0 acres, zoned RR-5, and developed with a single family residence. Tax lot 3305 is 5.01 acres, zoned RPF (Rural Public Facility) and is developed with transmission and reception towers. Tax lot 3303 is 8.69 acres, zoned RPF, and developed with transmission and reception towers. One parcel is located at the southwest corner of the Subject Property, is a portion of Tax Lot 3303, zoned RR-5, and unimproved.

East: Five parcels to the east are adjacent to the Subject Property. Tax Lot 501, owned by US West, is within the Urban Growth Boundary, zoned Suburban Residential (RA) and developed with a microwave telephone relay station. Tax Lot 600 is privately owned,

and zoned Suburban Residential (RA). Tax lot 700 is approximately 1 acre, owned by EWEB, located inside both the urban Growth Boundary and the Eugene city limits, zoned agricultural (Ag), and improved with a water tank that serves the adjacent approximately 50 acre Solar Heights subdivision. Tax Lot 900 is privately owned, located inside both the Urban Growth Boundary and the Eugene city limits, zoned Low Density Residential (R-1), and unimproved. Tax Lot 1300 is privately owned, located inside both the Urban Growth Boundary and the Eugene city limits, zoned Low Density Residential (R-1), and improved with a single family residence.

South: One parcel to the south is adjacent to the Subject Property. Tax lot 3802 is 53.60 acres, adjacent to the Urban Growth Boundary, zoned Impacted Forest (F-2), and developed with the single family residence of a medical doctor.

The following table summarizes the characteristics of parcels adjacent to the property.

| <u>Map</u> | Tax lot | Size (ac.)   | Development        | Zoning |
|------------|---------|--------------|--------------------|--------|
| 18-04-13   | 3303    | 8.69         | Tower              | RPF    |
|            | 3304    | 6.14         | Residence          | RR-5   |
|            | 3305    | 5.01         | Tower              | RPF    |
|            | 3306    | 5.00         | Roadway            | RR-5   |
|            | 3501    | 0.73         | Residence          | RR-5   |
|            | 3507    | 3.16         | Pool/Tennis Ct.    | RR-5   |
|            | 3508    | 15.30        | Undeveloped        | RA     |
|            | 3802    | 53.60        | Residence          | F-2    |
| 18-04-18   | 501     | approx 1.0   | Transmission Tower | RA     |
|            | 600     | <b>"</b> 2.0 | Transmission Tower | RA .   |
|            | 700     | <b>"</b> 1.0 | EWEB (tank)        | AG     |
|            | 900     | " 1.0        | Vacant             | R-1    |
|            | 1300    | <b>"</b> 5.0 | Residence          | R-1    |

Land use adjacent to the Subject Property is predominately residential (RA, R-1 and RR-5). 12 of the 13 adjacent parcels are zoned either residential or RPF (Rural Public Facility). Only 1 out of the 13 adjacent parcels is zoned as resource land (TL3802); it is developed with a single family residence owned by a medical doctor.

To the east, approximately 500 feet from the Subject property, is "Solar Heights", a residential subdivision.

# C. SERVICES

| Fire    | Eugene Rural Fire Protection District #1            |
|---------|---|
| Police  | Lane County Sheriff                                 |
| Schools | Eugene School District #4J                          |
| Sewer   | Individual septic systems                           |
| Water   | EWEB through the dissolved Hillcrest Water District |

Access

Ridgewood Drive (County)

Electricity

**EWEB** 

Telephone

**US West Communications** 

Solid Waste Glenwood Solid Waste Transfer Site

# IV. APPROVAL CRITERIA AND ANALYSIS

# A. Marginal Lands Criteria ORS 197.247 (1991 Edition)

ORS 197.247 (1) (a) authorizes counties to designate land as marginal land subject to the following criteria:

- (a) The proposed marginal land was not managed, during the three of the five calendar years preceding January 1, 1983, as part of a farm operation that produced \$20,000 or more in annual gross income or a forest operation capable of producing on average, over the growth cycle, of \$10,000 in annual gross income; and ...
- (b) The proposed marginal land meets at least one of the following tests:
  - (A) At least 50 percent of the proposed marginal land plus the lots or parcels at least partially located within one-quarter mile of the perimeter of the proposed marginal land consists of lots or parcels 20 acres or less in size on July 1, 1983;
  - (B) The proposed marginal land is located within an area of not less than 240 acres of which at least 60 percent is composed of lots or parcels that are 20 acres or less in size on July 1, 1983; or
  - (C) The proposed marginal land is composed predominately of soils in capability classes V through VIII in the Agricultural Capability Class Classification System in use by the United States Department of Agriculture Conservation Service on October 15, 1983, and is not capable of producing eighty-five cubic feet of merchantable timber per acre per year in those counties west of the summit of the Cascade Range.

#### Discussion:

(a) The Applicant has submitted evidence that Mr. and Mrs. Wood received a forest tax deferral on the Subject Property in 1970 (Exhibit N). In a 1982 aerial photograph (Exhibit F), planted Christmas trees existed across the Subject Property. In a year 2000 aerial photograph, (Exhibit O), the Christmas trees still

existed on the Subject Property. Because the trees were never harvested, no farm income could have been generated from such trees during the five years preceding January 1, 1983. Such Christmas trees would have made other farming, except grazing, very difficult on the Subject Property.

In order for the Subject Property to actually generate \$20,000 annually in gross income for three of the five years being analyzed, it first must be physically capable of generating such gross income annually. If it is not physically capable of generating such income, then it did not generate such income. Mr. Paul Day, former Lane County Extension Agent, examined the Subject Property, the aerial photographs, soil data from LCOG and USDA, and such other evidence he deemed necessary in order to express a professional opinion on the farm income potential of the Subject Property. His report (Exhibit G) states the Subject Property is: 1) not suitable for grazing, 2) not suitable for crop production, 3) not suitable for hay production, 4) not capable of growing irrigated crops and, 5) not necessary to permit farm practices on adjacent and nearby lands. The Subject Property is not capable of generating \$20,000 in gross income per year from any type of farming business, with or without Christmas trees in place. Mr. Day's professional opinion, the aerial photographs, and the fact that Mr. Wood was a full time professor in the School of Education at the University of Oregon, offer substantial and conclusive evidence that the Subject Property was not part of a farming operation that generated \$20,000 or more in annual gross income during three of the five years preceding January 1, 1983. The Applicant hereby states that the proposed marginal land was not managed, during three of the five calendar years preceding January 1, 1983, as part of a farm operation that produced \$20,000 or more in annual gross income.

With respect to the capability of the Subject Property to generate \$10,000 or more in average annual gross income from a forest operation, the LCOG data (Exhibit D), as analyzed on page 5 of this application, shows the Subject Property has a Site Index of 28. Under the Soil Test criteria chart on page 2 of the County's Information Sheet: Requirements for Marginal Land Designation and Zoning (Exhibit I), a site index average of 28 falls under Class 6 which allows a maximum acreage of 64. Since the Subject Property is 42.2 acres, the Subject Property, pursuant to the Lane County formula, is not capable of producing an average over the growth cycle of \$10,000 in annual gross income. The report by the forestry consultant, Robert Booth, confirms that the property was not capable of generating the required \$10,000 in annual gross income (Exhibit H). The Applicant states that the proposed marginal land was not managed, during three of the five calendar years preceding January 1, 1983, as part of a forest operation that was capable of producing an average over the growth cycle, of \$10,000 in annual gross income.

(b) Applicant elects to comply with 197.247 (b) (C). Evidence submitted from LCOG (Exhibit D) and Soil Survey of Lane County shows that 61.347% of the soil on the Subject property is composed of Class VI capable soils. The Applicant states

that the proposed marginal land is therefore composed predominately of soils in capability classes V through VIII in the Agricultural Capability Classification System in use by the United States Department of Agriculture Soil Conservation Service on October 15, 1983.

The Subject Property is located west of the summit of the Cascade Range and must not be capable of producing 85 cubic feet per acre per year. As previously shown on the soil chart on page 5 of this Application, the Subject Property is capable of producing 28 cubic feet of merchantable timber per acre per year. The Applicant states that the proposed marginal land is not capable of producing 85 cubic feet of merchantable timber per acre per year.

## B. Lane County Rural Comprehensive Plan. The following RCP policies are considered applicable to this request:

- 1. RCP Goal 3 Policy 14 provides that lands that satisfy the requirements of ORS 197.247 and applicable county policies may be designated as Marginal Lands. As previously indicated, the proposed land qualifies as Marginal Lands in accordance with the provisions of ORS 197.247 (1991 Edition).
- 2. RCP Goal 5 Flora and Fauna Policy 11 directs the Oregon Department of Fish and Wildlife (ODFW) to recommend an overall residential density for the protection of big game. The policy further directs the County to work with ODFW to prevent conflicts between development and Big Game Range through land use regulation in resource areas, siting requirements and similar activities which are part of the County's rural resource zoning program. The Subject Property is located in a designated Peripheral Big Game Range by the Eugene Quad Wildlife Inventory (Exhibit M). The application of this policy does not reflect the current state of regulation of big game habitat. The 1982 working paper identified Peripheral Big Game range as being composed of the foothill areas generally located between upland commercial forest lands and the valley floors. Peripheral range was identified as important habitat particularly during severe winters, but has enough development to limit big game management options. The working paper suggested use of an ODFW standard of one dwelling unit for 40 acres in a Peripheral range would pose a maximum density without conflict. If zoning conflicts could not be resolved, the working paper indicated the County could go through the Goal 5 ESEE analysis. In 1983, revisions questioned that assumption, which led to changes of the standards by the County adding language to the policy concerning the use of land use regulations, siting requirements and similar activities. Before adoption of the RCP and implementing ordinances, the County elected to disregard the "40 acre or ESEE" standard suggested by the first working paper and instead elected to incorporate big game/development conflict resolution through the zoning code by use of siting standards, and reliance on timber restocking and reduction of impacts in forest areas. The proposed amendment/zone change proposes a residential density that would result in one dwelling per 10 acres. The Applicant intends to minimize impacts by appropriate

- siting homes on the upland commercial forest portion of the property. The foothill area at the south end of the property is deed restricted to prohibit any dwellings.
- 3. RCP Goal 5 Flora and Fauna Policy 12 requires that if uses are identified that would conflict with Goal 5 resources, that an evaluation of the economic, environmental and energy consequences be conducted to determine the level of protection necessary for the resource. There are no sensitive wildlife habitat areas inventoried on the Subject Property. Additionally, there are no other Goal 5 resources that have been identified or are known to exist on the property. Therefore a Goal 5 ESEE analysis is not required.
- 4. Lane Code 16.004 (4) and RCP Goal 5 Water resources Policy 3 require a demonstration of an adequate water supply to support the proposed use. The Subject Property is located in an existing water district supplied by the Eugene Water and Electric Board (EWEB). Applicant has received a letter from EWEB confirming their agreement to serve water to the Subject Property (Exhibit O).
- 5. RCP Goal 11, Public Facilities and Services, Policy 6, requires that Marginal Lands have a service level consistent with the service level for residential lands outside a Community designation. Rural Residential Policy 6e requires schools, on-site sewage disposal, individual water supply system, electrical and telephone service, rural level of fire and police protection, and reasonable access to solid waste disposal facilities. The Subject Property complies with these requirements. As previously indicated in Section III C above, the Subject Property is in an existing water district served by EWEB and receives a full range of rural residential services necessary to serve the maximum 10 acre density allowable by the Marginal Lands zone. With respect to on-site sewage disposal, the Subject Property has received a septic and drain field permit for one site location from Lane County (Exhibit P). The soil type, in which the drain field has been approved, exists in multiple areas across the Subject Property and can accommodate additional septic systems.

#### C. Lane Code

The Marginal Lands Zone (ML-RCP) Purpose section 16.214(1) states the following intent for the zone:

- (a) Provide an alternative to more restrictive farm and forest zoning.
- (b) Provide opportunities for persons to live in a rural environment and to conduct intensive or part-time forest or farm operations.
- (c) Be applied to specific properties consistently with the requirements of ORS 197.005 to 197.430 and the policies of the Lane Rural Comprehensive Plan.

The Marginal Lands zone (ML-RCP), 16.214 (2) (b), provides for a dwelling or mobile home on a vacant legal lot pursuant to the legal requirements of LC 214(6).. The proposed zoning is consistent with this statute. The applicant has provided evidence that qualifies the property for Marginal Lands designation and Marginal Lands zoning in

accordance with ORS 197.247. Applicable Rural Comprehensive Plan Policies have been addressed. The request is consistent with both state statutes and county policies as indicated by sections IV A and B above. The application of Marginal Lands zoning accurately describes the capability of the Subject Property and provides relief from the more restrictive F2 forest zoning.

Lane Code 16.214 (6) provides for land division as follows:

- (a) Into lots or parcels containing at least 10 acres if the lots or parcels are not adjacent to land zoned Exclusive Farm Use (E), Nonimpacted Forest Use (F-1), or Impacted Forest Use (F-2), or if it is adjacent to such land, the land qualifies for designation as marginal land pursuant to ORS Chapter 197.
- (b) Into lots or parcels containing 20 acres or more if the lots or parcels are adjacent to land zoned Exclusive Farm Use (E), Nonimpacted Forest Use (F-1), or Impacted Forest use (F-2), and that land does not qualify as marginal land pursuant to ORS Chapter 197.
- (c) A parcel of any size necessary to accommodate any of the nonresidential uses identified in LC 16.214(2)(h),(I),(j),(l) and (n) and LC16.214(3)(a),(c),(f) and (g).

One parcel adjacent and to the south is zoned as resource land (F-2). The 53.6 acre property is owned by a medical doctor and developed with one single family home. This adjacent parcel, while designated for forest use (F-2), qualifies for designation as Marginal Lands pursuant to Oregon Revised Statute 197.247. Evidence, including soil information published in USDA Soil Survey of Lane County Oregon (1987) and analysis from the Lane Council of Governments (Exhibit K) is provided below:

| Map # | # Soil type                                     | Area<br>(ac.) | Area<br>(%) | Index<br>cf/ac/yr | (Weighted<br>Average) | Agricultural<br>Capability |
|-------|---|---------------|-------------|-------------------|-----------------------|----------------------------|
| 43E   | Dixonville-Philomath-<br>Hazelair (12-35%)      | 19.001        | 35.445      | 63                | 22.33                 | VI                         |
| 138E  | Witzel-very cobbly<br>Loam (3-30%)              | 31.116        | 58.044      | 0                 | 0                     | VI                         |
| 43C   | Dixonville-Philomath-<br>Hazelair complex (3-12 | 3.474<br>%)   | 6.481       | 54                | 3.499                 | VI                         |
| 45C   | Dupee Silt Loam (3-20)                          | %) 0.016      | 6 0.029     | 0                 | 0                     | Ш                          |
|       | Average Site Index                              |               |             |                   | 25.82                 |                            |

The above chart shows that than 99.97% of this property's soil is agricultural class VI, thus meeting the soil threshold test, as defined in the statutes, for Marginal Lands by being composed predominately of Class V through VIII soil.

The adjacent property meets the forest soil quality test for designation as Marginal Land. Evidence above shows that the forest cubic foot site class is 25.82 cubic feet per acre per year, well below the threshold of 85 cubic feet per acre per year, or less for designation as Marginal lands.

The adjacent property meets the forest income test for designation as Marginal Land. Using the adjacent property's average cubic foot site class of 25.82, the property is designated category class 6 cubic foot site class under Lane County Working Paper: Marginal Land. Under category 6, a site meets the county's forest income test if the site is under 64 acres in size. The adjacent property is 53.60 acres and therefore qualifies under the forest income test for designation as Marginal Land.

The adjacent property also meets the farm income test for designation as Marginal Land. Aerial photographs taken in 1979 (Exhibit Q) and in 1982 (Exhibit R) during the five year period preceding January 1, 1983, show no orchard existed, no crops were being farmed, and no grazing operation was apparent.

A recorded Statutory Warranty Deed dated June 23, 1977, shows this adjacent property was deeded to Russell J. Fryburg, Noel F. Wicks, Donald C. Frisbie and Lawrence F. Cooley (Exhibit S). Fryburg et al conveyed their undivided interests on October 2, 1984 to Timberlane Land Company (Exhibit T). During the entire analysis period of five years prior to January 1, 1983, Fryburg et al owned the adjacent property. The Applicant was able to locate Mr. Donald C. Frisbie, one of the owners during the this five year period. Mr. Frisbie stated that this property was held for investment and future development. He certified the property was not managed, during three of the five calendar years preceding January 1, 1983, as part of a farming operation that produced \$20,000.00 or more in annual gross income (Exhibit U).

The adjacent property does not have significant grazing, watershed, wildlife, or scenic values that require retention of a resource designation

Lane Code 16.400 (6) (i) provides: A change of zoning to implement a proposed Plan Amendment may be considered concurrently with such amendment. In such case, the Board shall also make the final zone change decision, and the Hearings Official's consideration need not occur. This application requests a Plan Amendment and a concurrent zone change from F-2 (Impacted Forest Lands) to ML-RCP (Marginal Lands).

Lane Code 16.252 (2), Procedures for Zoning, Rezoning and Amendment Requirements, provides: Zonings, re-zonings 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 re-zonings shall be consistent with the specific purposes of the zone classification proposed, applicable Rural Comprehensive Plan elements and components, and Statewide Planning Goals by the Land Conservation and Development Commission.

The purpose section of Chapter 16, Lane County Lane Use And Development Code, is defined by a series of broad statements which include references to: ensuring development is commensurate with the character and physical limitations of the land; protection of the public health, safety, convenience and welfare; and provision for the orderly and efficient transition from rural to urban land use.

The purpose of this request is to apply specific land development requirements that more accurately identify the Subject Property. This request does not involve or propose an urban land use.

The proposed density of one dwelling per 10 acres is consistent LC 214(6), with the carrying capacity of the Subject Property, and will not adversely affect any surrounding land uses. None of the surrounding parcels are commercially farmed or grazed, nor is there any reasonable capability thereof. The majority of surrounding parcels are zoned residential, primarily RR-5. Homes have been constructed on three sides of the Property and have dedicated the area to rural residential uses.

#### D. Plan Amendment Criteria Lane Code 16.400(6)(h):

Lane Code 16.400 (6) requires the Planning Commission to forward its recommendation to the Board of County Commissioners. An amendment to the Rural Comprehensive Plan is adopted by an Ordinance that provides findings to the following factors specified by LC 16.400 (6) (h) (iii):

(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.

The Applicant has presented information that demonstrates the Subject Property meets all applicable standards for a designation of Marginal Lands. The Subject Property is subject to the Lane County Rural Comprehensive Plan, adopted and acknowledged by LCDC as being in compliance with the Statewide Planning Goals. Applicable Plan policies have been addressed in section IV B above. Notice will be provided by Lane County to surrounding lands as required by LC 14.100 (4), and to LCDC as required by ORS 197.610. Statewide Planning Goals are addressed below in Section E.

- (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 (ii-ii) necessary to fulfill an identified public or community need for the intended result of the component or amendment; OR
- (iii-iii) necessary to comply with the mandate of local, state or federal policy or law; OR
- (iv-iv) necessary to provide for the implementation of adopted Plan policy or elements; OR

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

This amendment request is consistent with Plan Amendment standards (i-i), (iv-iv), and (v-v). It implements policies established in the Marginal Land Policy and RCP Goal 2 Policy 12. This policy permits changing Plan designations from qualifying Resource Lands to Marginal Lands through the County's Plan Amendment Procedure.

- (i-i) The amendment identifies an error in the RCP, where the subject property was designated Forest Land. Evidence submitted with this application demonstrates this designation is inconsistent with documented site capabilities and limitations, and is inconsistent with both County policies and Statewide Planning Goal requirements for the designation and protection of forest land.
- (iv-iv) This amendment implements RCP Goad 2, Policy 26. This law allows lands to be designated as Marginal Lands when the parcel(s) in question do not meet the definitions of resource land in Statewide Planning Goals 3 and 4. The majority of soil types on the subject property (61%) are classified as Agricultural Classes V-VII which is below the standard used to define agricultural land. The average site timber productivity rating of 28 is below the threshold of what is used to define forest land.
- (v-v) Based upon reasons discussed in this application, it is desirable, appropriate and proper to designate the subject property as Marginal Lands. Rural residential development is appropriately oriented to areas like the Subject Property which are limited or precluded from any substantial resource use. Rural development on low or non-resource parcels relieves the pressure of development on lands which 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. All Plan policies deemed applicable have been addressed above in Section IV B. No policies have been identified that directly conflict with this request.

(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 Rural comprehensive Plan provides for application of a Marginal Lands designation to the Subject Property based on specific conditions. The proposed amendment is consistent with acknowledged procedures and is compatible with the existing structure of the Plan as previously demonstrated.

This application is classified as a minor amendment as it requires only a change to the Plan Diagram and does not require an exception to the Statewide Planning Goals. Minor amendments are further required to address the criteria of LC 16.400 (8) (c) below.

Lane Code 16.400 (8) (c) (i) requires a description of the proposal and its relationship to the Plan. A description of the proposed amendment and its relationship to the Plan is provided above.

Lane Code 16.400 (8) (c) (iii) (aa) through (gg) requires an assessment of the probable impacts of the proposed amendment on: the land use and development pattern of the area, availability of services, natural resources and resource lands, natural hazards, and the criteria for designation of Marginal Lands as provided by the "Working Paper: Marginal Lands" published by Lane County.

The ownership and land use patterns of the adjacent area have been previously addressed in Section III B above. All but one adjacent property are zoned rural residential (RA, RR, R-1) or rural Public Facility (RPF). Predominant use in the area is residential. The proposed maximum density of one dwelling per 10 acres would not adversely affect the adjoining lands. The Subject Property receives all services necessary for rural residential lands. The Applicant has demonstrated the proposal is consistent with the Marginal Lands criteria outlined in the Working Paper.

#### E. Statewide Planning Goals

The Oregon Land Conservation and Development Commission Goals and Guidelines are incorporated herein by reference, except as noted. The following applicable statewide goal statements have been summarized.

#### GOAL 1 Citizen Involvement

Requires that citizens and affected public agencies be provided an opportunity to comment on the proposed amendment and zone change. Public notification in the form of mailed public notice will be sent by Lane County to affected agencies, including the Department of Land Conservation and Development and owners of record within 500 feet of the site.

#### GOAL 2 Lane Use Planning

Goal 2 establishes a land use planning process and policy framework as a basis for all land use decisions, and requires development of an adequate factual base to support these decisions. A minor change is one that does not have significant effects beyond the immediate area of change, and is based on special studies or information. The public need and justification for the specific change must be established.

Lane County has adopted a comprehensive land use plan amendment process with specific standards that must be addressed to justify a minor change. Substantial compliance with LC 16.400, RCP Amendments (included in this statement) constitutes compliance with the applicable provisions of Goal 2.

#### GOAL 3 Agricultural Lands

Goal 3 strives to preserve and maintain agricultural lands. In western Oregon agricultural land consists of predominately Class I-IV soils as identified by the Soil Conservation Service. It includes other lands which are suitable for farm use, taking into consideration soil fertility, suitability for grazing, climatic conditions, existing and future availability of water for farm irrigation purposes, existing land use patterns, required technological and energy inputs, or accepted farming practices. Lands in other soil classes which are necessary to permit farm practices to undertaken on adjacent or nearby lands will be included as agricultural lands.

The Subject Property qualifies for Marginal Land zoning land, in part because the soil is predominately Class V-VII and is of low suitability for farming as discussed earlier in this statement. No exception to Goal 3 is required.

#### GOAL 4 Forest Lands

Goal 4 requires the preservation and conservation of forest land for forest uses. Forest land is defined by Statewide Planning Goal 4 as: 1) lands composed of existing and potential forest lands which are suitable for commercial forest uses; 2) other forested lands needed for watershed protection, wildlife and fisheries habitat and recreation; 3) lands where extreme conditions of climate, soil and topography require the maintenance of vegetative cover irrespective of use; 4) other forested lands in urban and agricultural areas which provide urban buffers, windbreaks, wildlife and fisheries habitat, livestock habitat, scenic corridors and recreational use.

The characteristics that define forest land have been addressed earlier in this statement. Regarding the "other forest uses": provision of Goal 4, the Applicant submits that: 1) the site is not suitable for commercial forest uses; 2) the site is not needed for watershed protection, wildlife and fisheries habitat and recreation; 3) and no County inventories or other information has identified the need to maintain the site as forest land to provide urban buffers, windbreaks, wildlife and fisheries habitat, livestock habitat, scenic corridors, or recreational use, as required by Goal 4. Marginal Lands do not require an exception to the statewide planning goals.

## 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. This administrative rule requires evaluation of these

resources. OAR 660-23-10 and -20 includes definitions, standards, and specific rules applicable to each Goal 5 resource.

The following Goal 5 resources are addressed in an inventory done as part of a County-wide 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 Goal 5 resources that are listed below have been determined to be site-specific, given the requirements of each resource.

- 1) Riparian corridors, wetlands, and wildlife habitat: no significant riparian corridors or wildlife habitat have been identified on the subject property except for a Peripheral Big Game Range. This area has previously been deed restricted to prohibit construction of dwellings.
- 2) Groundwater resources: The site and adjacent lands are not inventoried by Lane County as part of a critical quantity or quality groundwater area. Water service will be by EWEB and no wells will be required.

Proposed development on the site, as guided by applicable provisions of the Lane Code will not impact these Goal 5 resources. This goal has also been addressed earlier in this statement.

## 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. This goal has been addressed earlier in this statement.

## GOAL 7 Areas Subject to Natural Disasters or Hazards

Goal 7 is intended to protect life and property from natural hazards. This goal has been addressed earlier in this statement.

#### GOAL 8 Recreational Needs

This goal addresses the recreational needs of the State and visitors to it, and does not affect the subject property. No publicly owned recreational lands are located outside of the Eugene Urban Growth Boundary in the vicinity of the site. The City of Eugene owns a 16 acre property adjacent to the north, inside the Urban Growth Boundary. The property is zoned Suburban Residential (RA), and included in the city's Ridgeline Park and used as a connecting trail system.

#### GOAL 9 Economy of the State

Goal 9's purpose is to diversify and improve Oregon's economy. This goal is primarily applicable to commercial and industrial development.

#### GOAL 10 Housing

Goal 10 is intended to provide for the housing needs of Oregon's citizens. This plan amendment request would facilitate the construction of four dwellings on the site.

#### 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. A full range of rural services presently exists to serve the proposed rural residential development on the site. No additional public facilities and services is available or will be required beyond the present level.

#### GOAL 12 Transportation

Goal 12 is intended to provide and encourage a safe, convenient and economical transportation system. This goal does not address specific land use actions, such as this proposal, but is implemented at the comprehensive planning stage on an area-wide basis. The Subject Property accesses Ridgewood Drive, a local paved public road. Most of the road is county maintained. One smaller portion is privately maintained. This local road currently serves approximately nine homes, and would potentially serve an additional four homes contemplated by this application. Applicant contacted Lane County Public Works and attended a preliminary meeting to discuss potential impacts and requirements. Applicant subsequently received a written preliminary indication from Public Works (Exhibit V) that the privately maintained portion of Ridgewood Drive would need to be widened to a county standard of 18' within the existing 60' public right of way. Public Works further indicated in Exhibit V that they "do not see anything out of the ordinary significantly impacting the transportation facilities". Applicant will comply with all county requirements imposed through the planning and development phases.

## 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 density and character of new residential development proposed for the site is rural. Given the rural nature of adjacent land, and the rural nature of the development planned for the site, Goal 14 is not applicable to this request.

#### GOALS 15 - 19

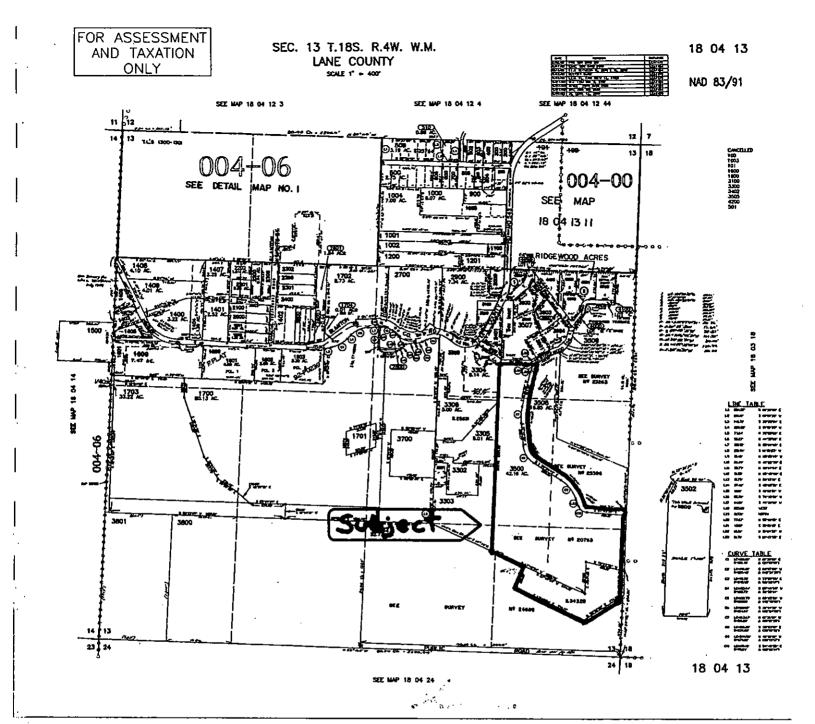
The Goals are not applicable to this plan amendment request, as they are geographically oriented to specific areas not located on the Subject Property.

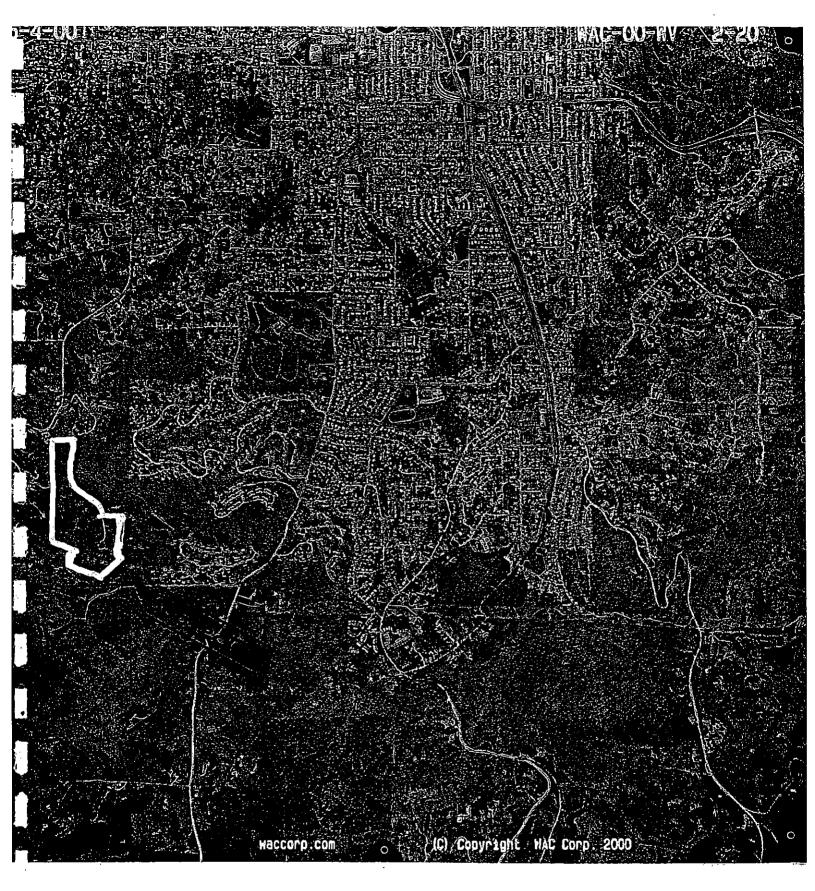
#### V. CONCLUSION

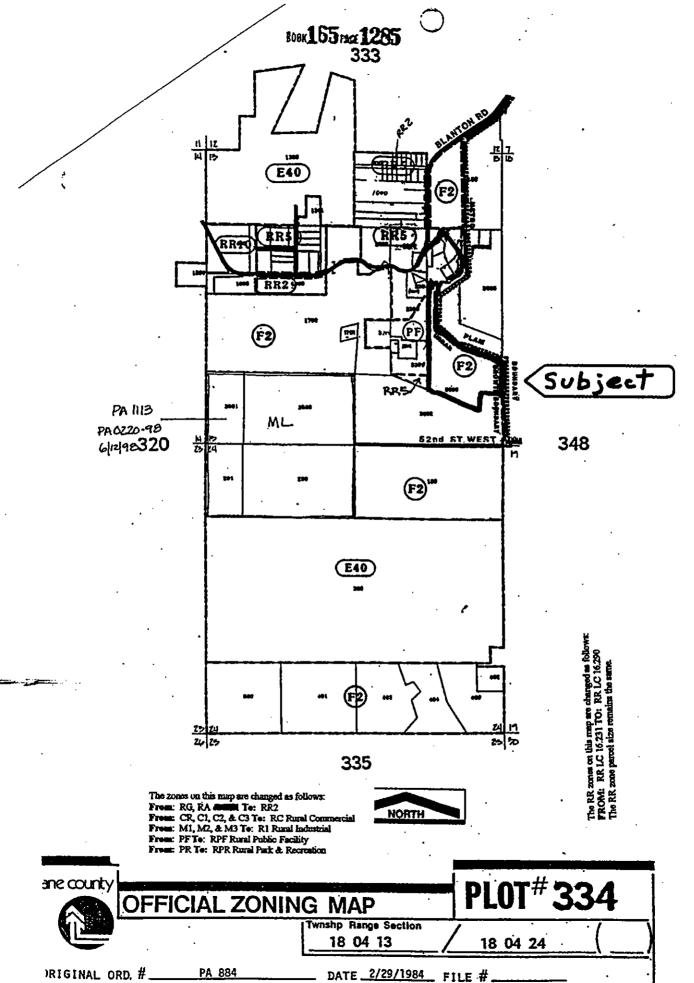
The proposed minor plan amendment and concurrent rezoning addresses and satisfies all applicable criteria of the Lane Code, Rural Comprehensive Plan and ORS 197.247, and is consistent with and receives policy support with the Board of Commissioners interpretation and administration of Marginal Lands. Therefore, the Applicant requests the Planning Commission and Board of Commissioners approval this application to redesignate and rezone the Subject Property as Marginal Lands.

#### VI. ATTACHMENTS

| Exhibit "A" | Plot Plan, Subject Property                                  |
|-------------|--|
| Exhibit "B" | South Eugene Aerial Photo Year 2000                          |
| Exhibit "C" | Zoning Map of Area with UGB                                  |
| Exhibit "D" | LCOG Soil Map and Analysis, Subject Property                 |
| Exhibit "E" | Aerial Photograph, March, 1979, Subject Property             |
| Exhibit "F" | Aerial Photograph, April, 1982, Subject Property             |
| Exhibit "G" | Farming Report by Paul Day, Subject Property                 |
| Exhibit "H" | Forestry Report by Robert Booth, Subject Property            |
| Exhibit "I" | Working Paper: Marginal Lands, Soil Class Chart              |
| Exhibit "J" | LCOG Colored Zoning Map, Surrounding Area                    |
| Exhibit 'K" | LCOG Soil Map and Analysis, Adjacent Southerly Property      |
| Exhibit 'L" | National Wetlands Inventory Map, Subject Property            |
| Exhibit "M" | Impacted Big Game Range Map                                  |
| Exhibit "N" | Lane County Assessor Forest Deferral, Subject Property       |
| Exhibit "O" | Water Service Letter from EWEB, Subject Property             |
| Exhibit "P" | Septic Approval, Subject Property                            |
| Exhibit "Q" | Aerial Photograph, Adjacent Southerly Property, March, 1979  |
| Exhibit "R" | Aerial Photograph, Adjacent Southerly Property, April, 1982  |
| Exhibit "S" | Deed to Fryburg et al Adjacent Southerly Property            |
| Exhibit "T" | Deed from Fryburg et al, Adjacent Southerly Property         |
| Exhibit "U" | Certificate from Donald Frisbie, Adjacent Southerly Property |
| Exhibit "V" | Public Works Department, Preliminary Road Requirements       |
| Exhibit "W" | Legal Lot Verification, Subject Property                     |
| Exhibit "X" | Plot Plan, Adjacent Southerly Property                       |





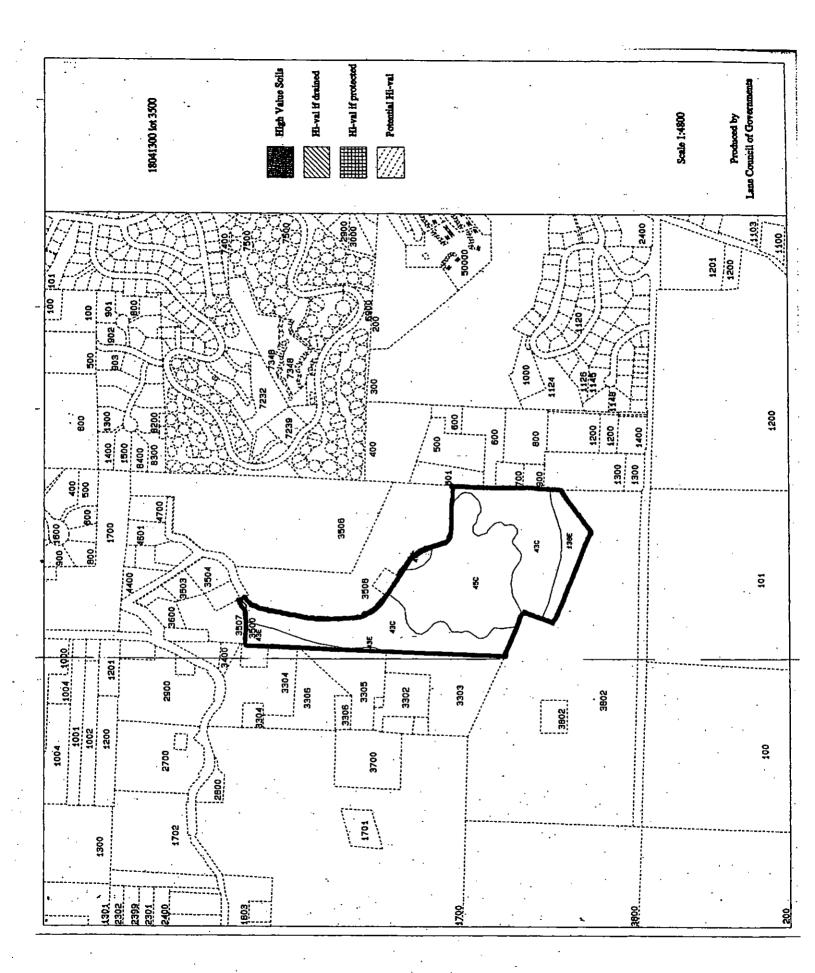


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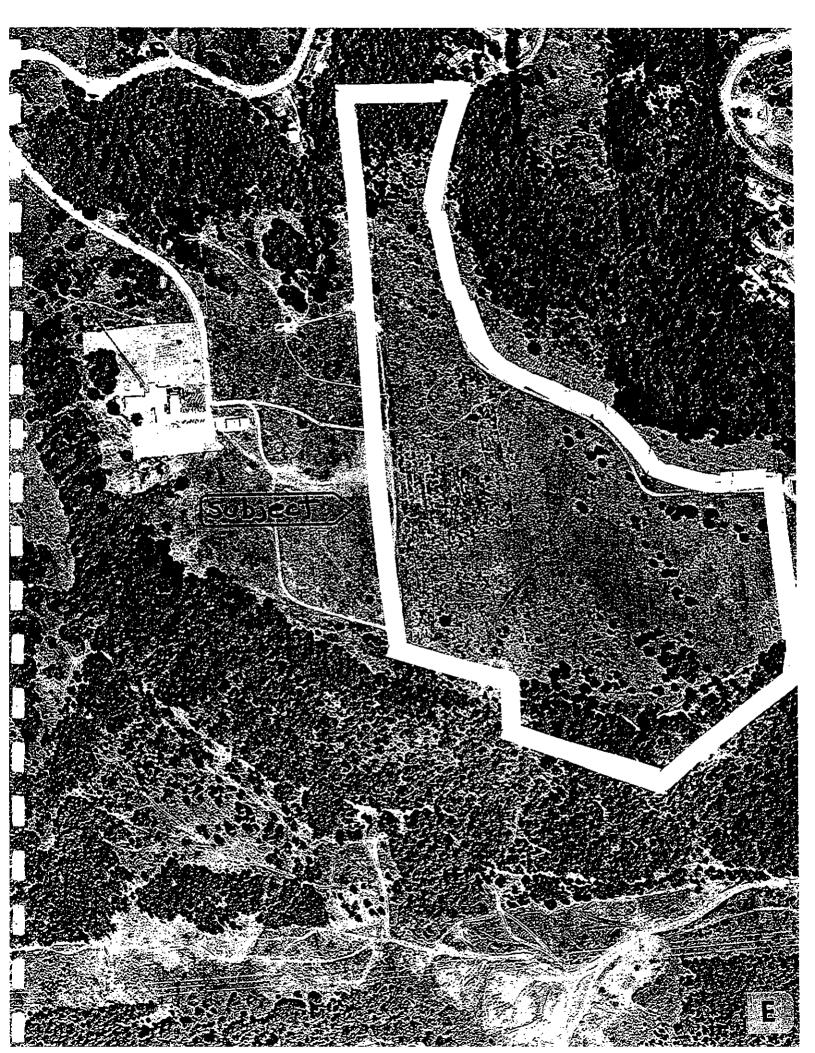
EVISION #\_

DATE 6 /18 / 93 FILE # PA2781-91



#### SOIL MAP UNITS IN ACRES FOR MAP 18041300 LOT 3500

| MAP<br>UNIT<br>SYMBOL | AREA IN<br>ACRES | PERCENT | SOIL NAME                    | COMPONENT<br>NAME                      | AGRICULTURAL<br>CAPABILITY<br>CLASS |
|-----------------------|------------------|---------|------------------------------|--|-------------------------------------|
| 43C                   | 18.825           | 48.399  | DIXONVILLE-F<br>3 TO 12 PERC | HILOMATH-HAZELAIR COMPL<br>ENT SLOPES  | EX,                                 |
|                       |                  |         |                              | DIXONVILLE                             | 3                                   |
|                       |                  |         |                              | PHILOMATH                              | 3<br>6                              |
|                       |                  |         |                              | HAZELAIR                               | 4 .                                 |
| 43E                   | 1.415            | 3.637   | DIXONVILLE-P<br>12 TO 35 PER | HILOMATH-HAZELAIR COMPL<br>CENT SLOPES | EX,                                 |
|                       |                  |         |                              | DIXONVILLE                             | 4                                   |
|                       |                  |         |                              | PHILOMATH                              | 6                                   |
|                       |                  |         |                              | HAZELAIR                               | 4                                   |
| 45C                   | 15.034           | 38.653  | DUPEE SILT L<br>3 TO 20 PERC |  |                                     |
|                       |                  |         |                              | DUPEE                                  | 3                                   |
| 138E                  | 3.622            | 9.311   | WITZEL VERY                  |  |                                     |
|                       |                  |         |                              | WITZEL                                 | 6                                   |
|                       |                  |         |                              |  |                                     |





# AGRICULTURAL REVIEW RIDGEWOOD DRIVE PROPERTY

**Prepared For** 

Mr. Roy Carver

By Paul E. Day Agricultural Consultant

August 11, 2003

To:

Mr. Roy Carver P.O. Box 51505 Eugene, OR 97405

From:

Paul E. Day, Agricultural Consultant

82631 Barbre Road Dexter, OR 97431-9726

Subject:

Carver Property: Agricultural Capacity Review

Tax Lot:

T18S-04W-Sec. 13 Tax Lot 3500

#### SUMMARY

The Carver property referenced above was visited for the purpose of evaluating its agricultural capability relative to a possible Marginal Lands zoning designation.

Analysis of the findings resulted in the conclusions that:

- Soil conditions and lack of water severely limit the capacity for agricultural production.
- 2. Grazing is the only practicable agricultural use of the subject parcel and projected income from grazing would produce less than half of the \$20,000 limit on income from marginal lands parcels
- 3. With the exception of a failed Christmas tree planting, no attempts have been made at agricultural production on the property.
- 4. Adjacent lands are primarily in urban and rural residential uses and are not involved in agricultural production.
- 5. Zoning of this parcel as Marginal Lands would be consistent with its agricultural capabilities and with the general nature of the surrounding area.

#### **OBSERVATION OF THE PARCEL**

The subject parcel was visited on July 2, 2003, to evaluate its capacity for agricultural production. Property boundaries, zoning, and soil series designations were noted on maps provided by LCOG. Historical photos provided by WAC Corporation, Inc., were used to determine the state of the property in March of 1979 and April of 1982. Soil maps for the surrounding area and watercourse designations were noted using aerial photographs and mapping from the Soil Survey of Lane County Area, Oregon, (1987) produced by the Soil Conservation Service (currently known as the Natural Resource Conservation Service) of the United Stated Department of Agriculture.

The parcel was inspected on foot noting soil conditions, current use, evidence of past use, facilities, plant communities, water resources, and adjacent properties. Various aspects of the property were discussed with the current owner's representative, Mr. Roy Carver.

#### **Location and Description**

The Carver property is located in the South Hills area of Eugene, Oregon, slightly to the north of the projected right of way for 52<sup>nd</sup> Avenue. It abuts the Metro Urban Growth Boundary to the east and also abuts portions of the Eugene city limits. The northern property line abuts both the Urban Growth Boundary and the Eugene city limits. The southeast corner of the property abuts the Eugene city limits and the Urban Growth Boundary. The property address is 520 Ridgewood Drive, Eugene, Oregon 97405.

The property is configured in an irregular "L" shape and sits on a ridgeline with slopes to both the north and the south. It consists of a total of 42.2 acres (after corrections made to maps in late June of 2003) and is zoned on the LCOG map as F2 (Impacted Forest Lands).

Access to the land is by Ridgewood Drive, an improved public road. A private unimproved road traverses the property from the entrance at the northwest to the east property line providing access to a micro-wave tower facility. An unimproved side road branches toward the south property line.

There are no ponds, active streams, or wells on the property. Two very minor seasonal drainages leave the property and are a part of the headwaters of Spencer Creek. Neither was active at the time of the site visit.

The land is not currently in any productive agricultural use. It is covered by a mixture of trees, brush, and patches of open land. It appears that the area has been logged at some time in the past.

#### <u>Improvements</u>

A gate and short fences at either side of the access road are found at the entrance to the property and remains of an old steel post and wire fence are found on the southern portion of the property. A substantial chain-link fence marks a portion of the eastern boundary. No buildings, outbuildings, corrals, feeding, watering, storage, livestock handling and loading equipment, etc., typical of agricultural activities were noted, nor were any remains of such

improvements observed. No machinery was present and there did not appear to have ever been any fields developed on the property.

#### Soil Characteristics and Grazing Capacity

During the site visit soil conditions observed were consistent with the characteristics of soils shown on mapping sheets 91 and 103 of the SCS soils reference noted above.

Four different soil classifications are mapped on the parcel (although two of them differ primarily in the degree of slope). They are a mixture of agricultural and non-agricultural soils as defined by Oregon's land use laws. [This is based on the USDA classification scheme of Class I to Class VIII in which Class I to Class IV soils are considered agricultural soils in Western Oregon and Class V to Class VIII soils are considered non-agricultural.] None of the soils are listed in the SCS reference as "Prime Farmland".

The soils that are listed as agricultural are limited in their productive capacity for most crop production by lack of irrigation potential, moderate to mostly high erosion hazard, droughtiness, steepness, presence of large surface stones, seasonal high water tables and the need for drainage, and compaction hazard. Grazing could be practiced (to a limited degree) on most of the soils present.

The capacity for grazing using the production ratings listed in the SCS reference is calculated in Table One which follows on page four. Table One indicates a capacity to carry approximately 18 cows on the property. However, the soil conditions associated with winter wet weather would require that cattle be kept off of the soils for a substantial portion of the year. Grazing on these soil types when waterlogged can cause trampling damage to the soil and compaction of the soil. Lack of water would be a problem in the dry season.

#### **Plant Communities**

A wide selection of plants is present on the property. In general, the land is a mixture of trees and meadows. The trees are both coniferous and deciduous including fir, pine, and oak species. The meadows include numerous weeds such as daisies, blackberries, bull thistle, poison oak, scotch broom, sticky eyebright, tussock, dock, St. Johnswort (a livestock poisoning plant) and others. Both annual and perennial grasses were noted. A very small portion of the grasses are desirable forage species – orchard grass and ryegrass – with the majority being weedy grasses.

A substantial amount of the trees appear to have been planted in rows as in a Christmas tree plantation that was not harvested and has gone well beyond maturity for that crop. The aerial photos from 1979 and 1982 both show large sections that appear to be a Christmas tree plantation. It does not appear that any attempt has been made to develop improved pastures.

Table 1. PASTURE PRODUCTION CAPACITY Carver Property, Eugene, OR

| Soil Series Designation                        | Slope 3        | Acres In<br>This Series | AUMs¹/Acre² | AUMs In Author August 1985 |
|--|----------------|-------------------------|-------------|----------------------------|
| Dixonville-Philomath-Hazelair<br>Complex (43C) | 3 – 12         | 18.825                  | 4           | 75.30                      |
| Dixonville-Philomath-Hazelair<br>Complex (43E) | 12 – 35        | 1.450                   | 4           | 5.66                       |
| Dupee (45C)                                    | 3 – 20         | 15.034                  | 8           | 120.27                     |
| Witzel (138 E)                                 | 3 - 30         | 3.622                   | 4           | 14.49                      |
| Total AUMs Fro                                 | m Parcel       |                         | <u> </u>    | 215.72                     |
| Animal Units Co                                | apacity For Pa | rcel                    |             | 17.98                      |

#### <u>Water</u>

There are no lakes, ponds, wells, live streams, or artificial water storage facilities on the parcel. A couple of seasonal drainages exist that provide surface drainage (eventually flowing into Spencer Creek) during winter rains. Furthermore, no source of water of any volume or permanence is available in the area. This eliminates irrigation of agricultural crops. If livestock were to be kept on the land a source of drinking water would need to be developed or water would need to be carried on to the property from a remote source.

There were no stock watering facilities present and no remains of abandoned facilities were seen. The soils involved are not conducive to establishment of water catchments – see the limitations noted in Table Two which follows on page five.

## **Current Use of the Land**

The subject parcel is currently in an unimproved state and does not appear to be in use for any productive purpose.

<sup>&</sup>lt;sup>1</sup> An Animal Unit Month (AUM) is a measure of forage productive capacity and is generally defined as the amount of feed needed to care for a 1000 lb. cow (or the equivalent) for a 30 day period. Thus, 12 AUMs of feed are required to care for a cow for one year. Individual soil class capacities are listed in Table Five of the SCS Reference noted earlier and are based on an assumption of high level management.

<sup>&</sup>lt;sup>2</sup> Non-inigated.

# Table 2. POND LIMITATIONS Carver Property, Eugene, OR

| Soil Series Designation                     | Pond Lin<br>Degree | nitations<br>Cause   |
|---|--------------------|----------------------|
| Dixonville-Philomath-Hazelair Complex (43C) | Moderate To Severe | Slope, depth to rock |
| Dixonville-Philomath-Hazelair Complex (43E) | Severe             | Slope                |
| Dupee (45C)                                 | Severe             | Slope                |
| Witzel (138 E)                              | Severe             | Slope, depth to rock |

#### Prior Use of the Land

The history of the parcel seems to be that it was a portion of a substantially larger partial from sometime in the 1940's until sometime in the 1970's. Portions of the original parcel were sold or granted to other persons and have become parts of subdivisions and rural home sites. The owner in the period of the 1940's to 1970's reportedly was employed on the faculty of the University of Oregon, spent some of his time working outside of the United States, and deeded portions of the original property to other persons and groups. He did not live on the subject parcel. Both he and his spouse are said to be deceased and their heirs are not knowledgeable about the parcel.

There is no history or appearance of the land having been used for any agricultural purpose other than the possibility of its having been planted to Christmas trees that were not harvested.

## **Adjacent Properties**

Land adjacent to the south is zoned F2 (Impacted Forest Lands) which is the same as the subject parcel. It has one dwelling on it.

Land adjacent to the east near the southeast corner of the subject parcel is inside the City of Eugene and is zoned R-1 (Low Density Residential). It is mapped as being broken into various sized parcels.

A small piece of land adjacent to the east and also within the Eugene city limits is mapped as AG (Agricultural) but is occupied by a water storage tank owned by the Eugene Water and Electric Board (EWEB).

Immediately north of the EWEB installation is a small parcel that contains a microwave tower installation.

Land adjacent to the north and northeast is inside the Urban Growth Boundary and zoned RA (Suburban Residential). This parcel is owned by the City of Eugene Parks Department and is used as a portion of the city wilderness park that leads to the summit of Spencer Butte.

To the north and northwest adjacent parcels are outside the Urban Growth Boundary and zoned RR5 (Rural Residential 5-Acre Minimum). A similar parcel is adjacent near to the southwest comer of the subject parcel.

The remaining land adjacent to the west is zoned RPF (Rural Public Facility) and is the site of various television broadcast towers and similar facilities.

Based on observations during the site visit and review of aerial photos showing the parcel and adjacent properties it appears that the only adjacent parcel having any resource use would be the one immediately to the south of the subject parcel. It is approximately 50 to 60 acres of land zoned F2 (Impacted Forest Lands) and has one residence on it.

The subject parcel is not operationally involved with any agricultural production on adjacent parcels. If any such production does exist in the area (and none was observed) it would be from gardens, etc., incidental to a rural residential lifestyle and completely independent of the subject parcel.

#### **ANALYSIS**

#### **General Considerations**

The characteristics of the general land formation of the area in question (i.e., a ridge-top with moderate to steep slopes and little to no water availability) coupled with prevailing soil resource capabilities combine to result in agricultural production capacities that are marginal to unsuitable.

The situation is such that while low level production might be possible for a specific crop in one small area, soil characteristics would change rapidly and substantially when moving a short distance into an adjacent soil type. The adjacent area may be suitable for low level production of another crop but not of the first crop. Thus, the manager is forced to produce a number of different crops in separate small areas, or to compromise on yields across dissimilar areas, or to incur the cost of soil modifications. Costs of the latter are usually prohibitive — especially if low value crops are involved.

#### **Specific Considerations**

#### 1. Soil Limitations Marginalize Productive Capacity

Although the majority of the soil types on the parcel are classed as agricultural, each of them has characteristics that make them lowly productive. Coupled with the soil limitations is the limitation imposed by the size of the parcel. In combination, poor soil qualities and limited area assure that the parcel will be marginal in overall productivity.

## 2. Insufficient Water Eliminates High Value Crop Production

The Soil Conservation Service (SCS) resource provides yield data for two irrigated crops – corn and strawberries. These crops (and other similar crops) cannot be commercially produced on this parcel due to the lack of available irrigation water. Additionally, the soils involved are unsuitable to support development of water storage capacity for irrigation purposes. (See limitations noted in Table Two on page five.)

## 3. Field Crop Production Is Impracticable

Wheat is noted in the SCS Reference as a possible crop on the 15 acres of Dupee Soil found on the subject property. Field crops such as this are typically produced on large parcels of land that are flat or have only modest slopes. This is necessary to efficiently and safely operate the large tillage and harvest machinery used in field crop production. The inefficiency associated with operating such equipment on a 15 acre parcel would in itself make this parcel marginal for field crops. Furthermore, Dupee soil is wet enough that subsoil drainage is usually needed to grow wheat.

If the other soils on the property were pressed into service in an attempt to overcome the machinery inefficiency problem, more severe problems would be encountered. Among these would be shallow soils, cobbles (large stones) big enough to damage equipment, erosion problems, dangerous slopes, etc.

Additionally, access to the parcel through urban streets with large equipment would pose problems for both farmer and urban dweller.

Relative to field crops, this parcel is worse than marginal for production — it is impracticable.

#### 4. Forage Production Is Impracticable or Marginal

- a) <u>Hay</u>. Although most of the soils on the parcel might be considered suitable for production of forage crops, hay production would be impracticable due to the conditions noted in the preceding discussion of field crops.
- b) <u>Grazing.</u> Where agricultural production is attempted with the soils available on this parcel, grazing is the most prevalent use. However, production and income problems would be severe.

Small ruminants (e.g., goats, sheep) in this rural/urban interface area would be vulnerable to predation from urban dogs allowed to roam freely, feral dogs, and coyotes. Livestock species such as poultry and swine are typically not raised in pasture situations. Free range production, if attempted, would also be subject to the likelihood of predation as well as possible noise, odor, etc., problems related to the rural/urban interface situation.

Cattle would be subject to similar problems (although to a lesser degree relative to predation) but would be the best suited to the conditions on the subject parcel.

Cattle could not be expected to have produced \$20,000 gross annual income in the 1978 through 1982 period. To determine this requires consideration of both the cattle carrying capacity of the subject parcel and the prices for livestock that would have been sold.

Carrying capacity was developed using the information presented in Table One on page four. Capacity is calculated at just under 18 head of cows. This figure is optimistic since it does not include any allowance for the grazing capacity that would be lost to facilities development (barn, road, handling equipment, etc.) that would be needed to operate a cattle production unit.

The amount of products to be sold from the land is summarized in Table Three on page ten. The number of animals of various classes of stock to be sold is based on a format provided in an enterprise budget developed by Oregon State University (EM8372). The enterprise budget is prepared for a 100 cow unit.

Using current prices<sup>3</sup> the projected annual income for 100 cows comes to \$42,260 or \$422.60 per cow. Multiplying this value by the 18 cow carrying capacity provides a projected annual gross income of \$7606.80 for the property. It would be necessary to increase this output by a factor of 2.6 to approach the \$20,000 ceiling for income on marginal land parcels.

<sup>&</sup>lt;sup>3</sup> Current prices are at or near historic highs. This is due in part to a temporary ban on imports of Canadian cattle and beef because of an animal health problem. Since the income cap associated with marginal lands is not exceeded using current values, the lower prices from 1978 through 1982 would also fail to exceed the income limit.

If livestock prices were adjusted to values from the 1978 through 1982 market, an even greater gap between projected income and the \$20,000 cap would result (see footnote three on previous page).

In summary, due to either inability to produce or low productive capacity, the subject parcel cannot be expected to produce \$20,000 gross annual income under today's market conditions and would be even farther from that mark under market conditions of the 1978 through 1982 period.

#### **Apparent Production History**

The former owners are deceased and their heirs are unable to provide information regarding production attempts. Therefore, efforts were made to find evidence of previous agricultural production.

- Christmas Trees. It appears from aerial photos taken in March of 1979 and April of 1982 that Christmas trees were planted on the land at some time prior to March of 1979. In the 1982 photograph it appears that the trees were still present but not flourishing. In some of those areas rows of trees are still present and appear to be remnants of a Christmas tree planting. There is no evidence of Christmas tree harvest.
- 2. <u>Field and Horticultural Crops</u>. There is no evidence of any tillage practices having been exercised on the property to prepare the land for field crops or horticultural crops other than the Christmas trees noted above.
- 3. <u>Livestock Production.</u> No buildings or foundations for animal housing or feed storage were observed. No facilities for watering, handling or loading of livestock were observed. One fence was observed that is typical of use in livestock production. It was at the southern portion of the property in a location indicating that it may have been a line fence prior to the current owners having added a small piece of land to the southern end of the parcel. On close inspection<sup>4</sup> the construction of this fence suggests its purpose was to keep livestock from entering the property from the south rather than to keep stock confined on the property.

It does not appear that there have been any attempts at agricultural production except for a failed attempt to produce Christmas trees.

<sup>&</sup>lt;sup>4</sup> A properly constructed livestock fence will have the wires on the same side of the fence as the animals. This allows pressure from animals to be directed against the posts rather than against fasteners holding the wire to the posts. In this instance the wires were on the south side of the posts suggesting that the fence was keeping animals off the subject parcel.

## TABLE 3. GROSS ANNUAL SALES FROM 100 BEEF COWS WILLAMETTE VALLEY REGION

## Based on OSU Cow-Calf Enterprise Budget EM 8372

## Market Summary (July 2003)

| Class                 | Price \$/Lb. |
|-----------------------|--------------|
| Heifer, Cull Yearling | 0.70         |
| Cow, Cull             | 0.40         |
| Bull, Cull            | 0.53         |
| Calf, Steer           | 0.95         |
| Calf, Heifer          | 0.89         |

#### Worksheet For 100 Cow Herd

|                       | <u> </u>          |               |                       | •           |
|-----------------------|-------------------|---------------|-----------------------|-------------|
| Class                 | Weight<br>In Lbs. | Price \$/Lb.  | Head Sold<br>Per Year | Gross Sales |
| Heifer, Cull Yearling | 800               | 0.70          | 4                     | \$2,240.00  |
| Cow, Cull             | 1100              | 0.40          | 10                    | 4,400.00    |
| Bull, Cull            | 1800              | 0.53          | 1                     | 954.00      |
| Calf, Steer           | 500               | 0.95          | 46                    | 21,850.00   |
| Calf, Heifer          | 450               | 0.89          | 32                    | 12,816.00   |
|                       | Gross A           | Annual Sales, | Total                 | \$42,260.00 |
|                       | Gross A           | Annual Sales, | Per Cow               | \$422.60    |

#### **CONCLUSIONS**

The soils present on the subject property are a mixture of lowly productive agricultural soils and non-agricultural soils.

There is no water available to support agricultural production beyond seasonal rainfall which would rapidly flow off of the property. There are no future prospects for developing a supply of agricultural water.

Analysis of the existing soil and water situation indicates that there is not a possibility of producing \$20,000 gross annual income from the land.

Aside from an apparently failed attempt to produce Christmas trees, there is no physical evidence of any historical efforts to produce agricultural income from the property.

There is no written or anecdotal evidence of agricultural production from the property.

Adjacent properties are not involved with agricultural production. They are primarily urban or rural residential in nature. Other uses of adjacent land support urban water supplies and communication facilities.

Zoning of this parcel as Marginal Lands would be consistent with its agricultural capabilities and with the general nature of the surrounding area.

Report Submitted By:

Paul E. Day, Agricultural Consultant



## Booth Consulting, Inc.

Bob Booth, State Certified General Appraiser, Consulting Forester

Timber Cruises & Appraisals Real Estate Appraisals Value Consultations Forest Management Planning Log Marketing Land Use Planning

> August 28, 2003 Carverproductivity.03

Mr. Roy Carver, III Carver Trust No. 1 P.O. Box 51505 Eugene, OR 97405

RE: Your request for an independent determination of the forest growing capability for your property situated in Township 18 South, Range 4 West, Section 13, Tax Lot #3500, Willamette Meridian.

Dear Mr. Carver,

The tract site area has been changed from what the county assessor's office originally showed, and is 42.19 acres, more or less, according to recent assessor's office corrections. The following tabulation sets forth the soils present on this site, their description, area, and production capability as rated by the <u>Lane County Soil Ratings for Forestry and Agriculture</u> prepared by the Lane Council of Governments in August of 1997.

| SOIL# | DESCRIPTION   | ACRES | SITE<br>INDEX | PRODUCTION<br>CAPABILITY<br>CU. FT. / ACRE / YEAR |
|-------|---|-------|---------------|---|
| 43C   | Dixonville-Philomath-Hazelair complex 3-12% slopes  | 17.5  |               |   |
| 43E   | Dixonville-Philomath-Hazelair complex 12-35% slopes | 5.0   |               |   |
| 45C   | Dupee silt loam 3-20% slopes                        | 19.7  |               |   |
|       |   | 42.2  |               |   |

As may be noted above, the 43 series soil does not have a site index or production capability rating reported in the Soil Survey of the Lane County Area. Soils 43C and 43E are a complex of three soils and a production capability rating was not assigned at the time of the survey for the complex. The Lane Council of Governments soil capability ratings provided for a means of adjusting for the fact that the Dixonville silty clay loam (soil #41F) does have a soil capability rating of 152 cubic feet per acre per year for this soil. The adjustments for the complex are presented on the next page.

| SOIL#              | ACTUAL % OF AREA (as determined by LCOG) | NORMALIZED %<br>OF AREA | SITE<br>INDEX | PRODUCTION<br>CAPABILITY<br>CU. FT. / ACRE<br>/ YEAR | NORMALIZED % X<br>CU. FT. / ACRE /<br>YEAR |
|--------------------|--|-------------------------|---------------|--|--|
| 41C Dixonville scl | 30                                       | 35                      | 120           | 152  | 53   |
| 107C Philomath sc  | 30                                       | 35                      |               |  | 9 10 10 10 10 10 10 10 10 10 10 10 10 10   |
| 52B Hazelair scl   | 25                                       | 30                      |               |  |  |
| TOTALS:            | 85                                       | 100                     |               |  |  |
|                    |  |                         |               |  |  |