

Appendix E

Concept Plan Alternatives

Concept Plan Alternatives

The guiding principles informed the creation of five total concept plan alternative maps. With the exception of the first alternative, the alternative maps aim to balance existing conditions analysis, public involvement, regulatory requirements, and implementation of relevant best practices. Tradeoffs between preservation of open space and development density were made in order to balance the guiding principles; these tradeoffs are illustrated through a “clustered” versus “spread” development pattern.

Concept A is largely a reflection of desires communicated throughout the public involvement process, free of certain regulatory constraints, and best practices. Concepts B and D illustrate a “clustered” pattern of development that favors higher density in certain areas to limit development in others. Concepts C and E illustrate more of a “spread” concept, where urban development encompasses a larger area within the urban reserve but at lower local densities.

To calculate density, net or “buildable” acres are considered. Areas designated as open space/natural, parks, or multi-modal paved road are not considered buildable acres. In areas designated for residential or mixed-use development, the standard assumption is that 17 percent of the gross area is committed to transportation right of way. Consequently, 17 percent of the gross acreage is subtracted from residential and mixed-use lands and the remaining net buildable land is used to calculate density. In rural designated areas, no adjustment for transportation right of way is made (other than what is illustrated in the map) because the buildable lots are large (5 acre minimum), the urban level of services are minimal, and additional roads or driveways would also likely be private. Average housing density (DU/ACRE) is equal to the total number of units divided by the net buildable land. Population is calculated assuming 2.68 people per dwelling unit.

Additionally, because of regulatory requirements to consider surrounding land uses, each of these alternatives assume the development of industrial and/or commercial uses in Urban Reserve 7B, north of Forest Grove and east of the DHUR. Finally, these alternatives assume the increased urbanization of currently unincorporated land between the DHUR and Thatcher Road. This land, currently zoned as “Rural Residential” or “Future Urban,” is located inside the UGB but outside the city limits of Forest Grove.

Concept A

Concept A

Concept A reflects the desires communicated throughout the public involvement process, free of certain regulatory constraints, and best practices.

- Approximate total dwelling units: 328
- Approximate total buildable acres: 130.7
- Average density: 2.5 dwelling units per acre

Land Use Elements

- Retains existing rural character
- 47.9 buildable acres of low-density residential development clustered around a 7.3 acre park in the northern section of the urban reserve
- 82.8 acres of rural land, with a maximum of 17 dwelling units

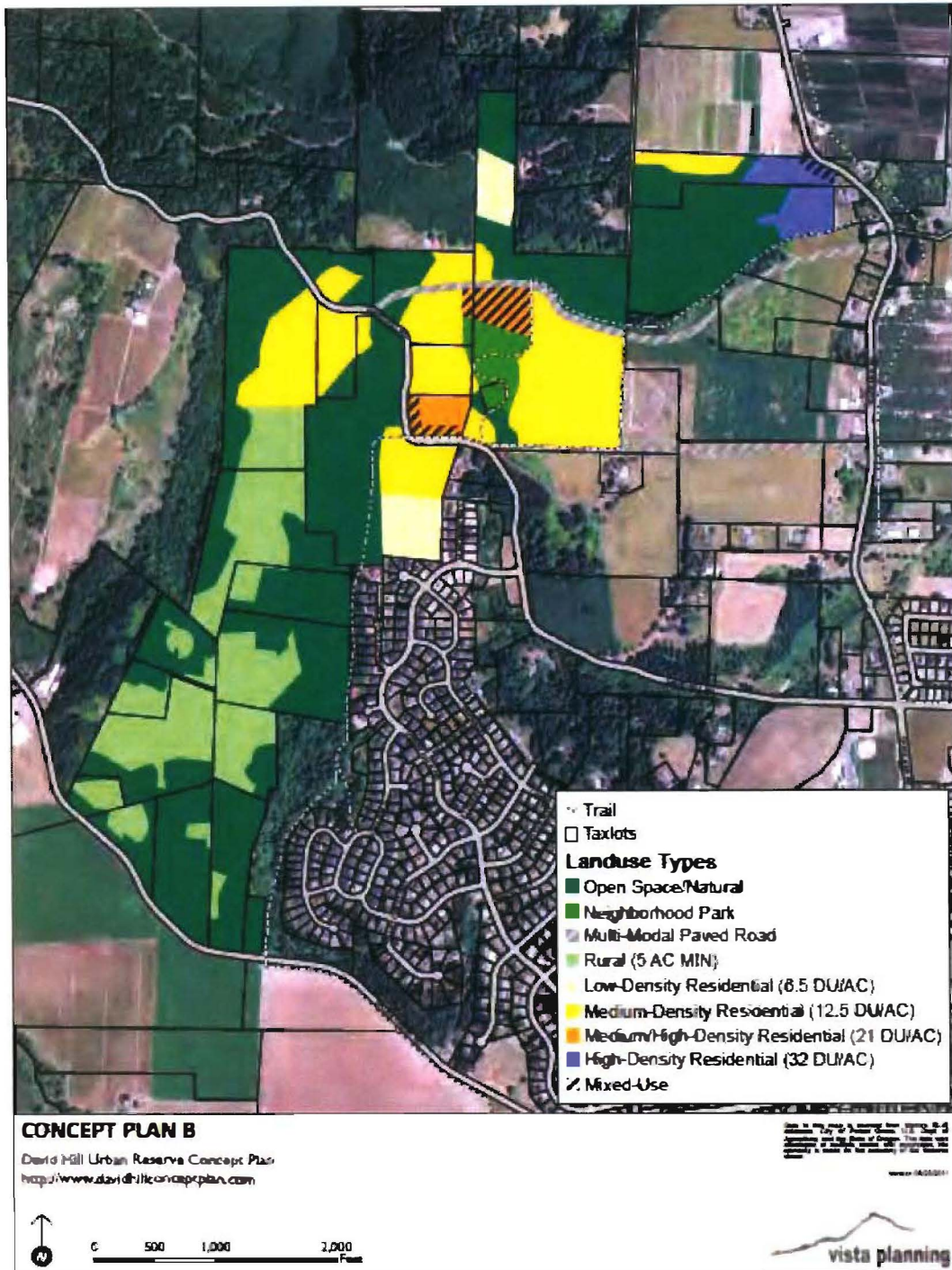
Transportation Elements

- 8.3 acres of paved road, including the section of David Hill Road that travels through the DHUR
- Speed limits no higher than 25 mph
- Street-calming features include: street trees, speed humps, additional signage,
- David Hill Road includes two travel lanes, bicycle lanes, sidewalks and tree planting strips
- Bicycle and pedestrian paths throughout constrained areas, along the current UGB, and through proposed parks; with connection points serving residential areas
- Two additional neighborhood collector roads north of David Hill Road improve connectivity between the DHUR and Thatcher Road

CONCEPT A									
LANDUSE	AVG DU/AC	% NET BUILDABLE	ACRES	BUILDABLE ACRES	UNITS	POPULATION	% TOTAL ACRES	% BUILDABLE ACRES	% TOTAL UNITS
Open Space/Natural	0	0	160.7	0.0	0	0	51%	0.0%	0.0%
Rural (5 AC MIN)	0.2	1	82.8	82.8	17	44	26%	63.3%	5.0%
Neighborhood Park	0	0	7.3	0.0	0	0	2%	0.0%	0.0%
Multi-Modal Paved Road	0	0	8.3	0.0	0	0	3%	0.0%	0.0%
Low-Density Residential (6.5 DU/AC)	6.5	0.8 3	57.8	47.9	312	835	18%	36.7%	95.0%
Medium-Density Residential (12.5 DU/AC)	12.5	0.8 3	0.0	0.0	0	0	0%	0.0%	0.0%
Medium/High-Density Residential (21 DU/AC)	21	0.8 3	0.0	0.0	0	0	0%	0.0%	0.0%
High-Density Residential (32 DU/AC)	32	0.8 3	0.0	0.0	0	0	0%	0.0%	0.0%
Mixed-Use				0.0				0.0%	
TOTAL			316.8	130.7	328	880	100%	100%	100%

* Mixed Use not included in Totals

Concept B



Concept B

Concept B illustrates a “clustered” pattern of medium- to high-density development located in the northern and northeastern sections of the DHUR. It favors higher density in certain areas to limit development in others. Intensive land uses are focused around David Hill Road and includes a mixed-use “neighborhood center.”

- Approximate total dwelling units: 1023 and
- Approximate total buildable acres: 126.1
- Average density: 8.1 dwelling units per acre

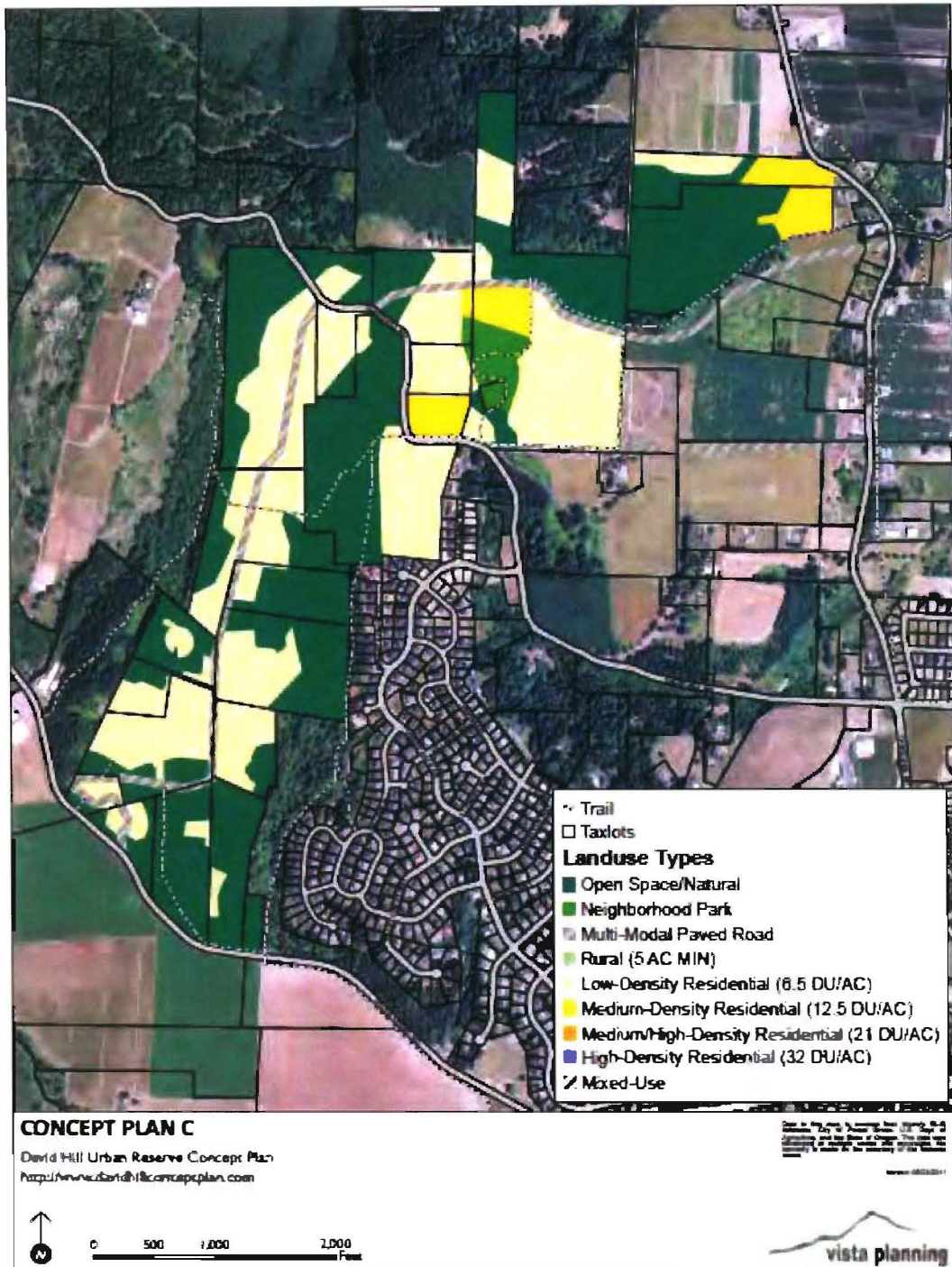
Land Use Elements

- 9.9 acres of low-density residential serves as a transitional buffer between existing development southeast of the DHUR and future development
- Medium/high- and Medium-density residential surrounding a 7.3 acre park north of David Hill Road
- 7.7 acres of high-density residential development at the northeastern corner adjacent to Thatcher Road
- A total of 6.4 acres of mixed-use along David Hill Road, adjacent to the park, and along Thatcher Road to serve the medium/high- to high-density development
- 55.7 buildable acres of rural land

Transportation Elements

- 8.3 acres of paved road, including the section of David Hill Road that travels through the DHUR
- Speed limits no higher than 25 mph
- Street-calming features: street trees, speed humps, and additional signage
- David Hill Road includes two travel lanes, bicycle lanes, sidewalks and tree planting strips
- Bicycle and pedestrian paths throughout constrained areas, along the current UGB, and through proposed parks
- Speed zone along Thatcher Road to slow traffic
- Two additional neighborhood collector roads north of David Hill Road to improve connectivity between the DHUR and Thatcher Road

Concept C



Concept C

Concept C presents an alternative for lower-density development spread throughout the DHUR.

- Approximate total dwelling units: 798
- Approximate total buildable acres: 110.7
- Average density: 7.2 dwelling units per acre

Land Use Elements

- Low- and medium-density residential surrounding a 7.3-acre park in the northern section
- Medium-density residential immediately adjacent to Thatcher Road
- Low-density south of David Hill Road and along Gales Creek Road
- A total of 117.7 acres of low-density residential
- A total of 15.7 acres of medium-density residential

Transportation Elements

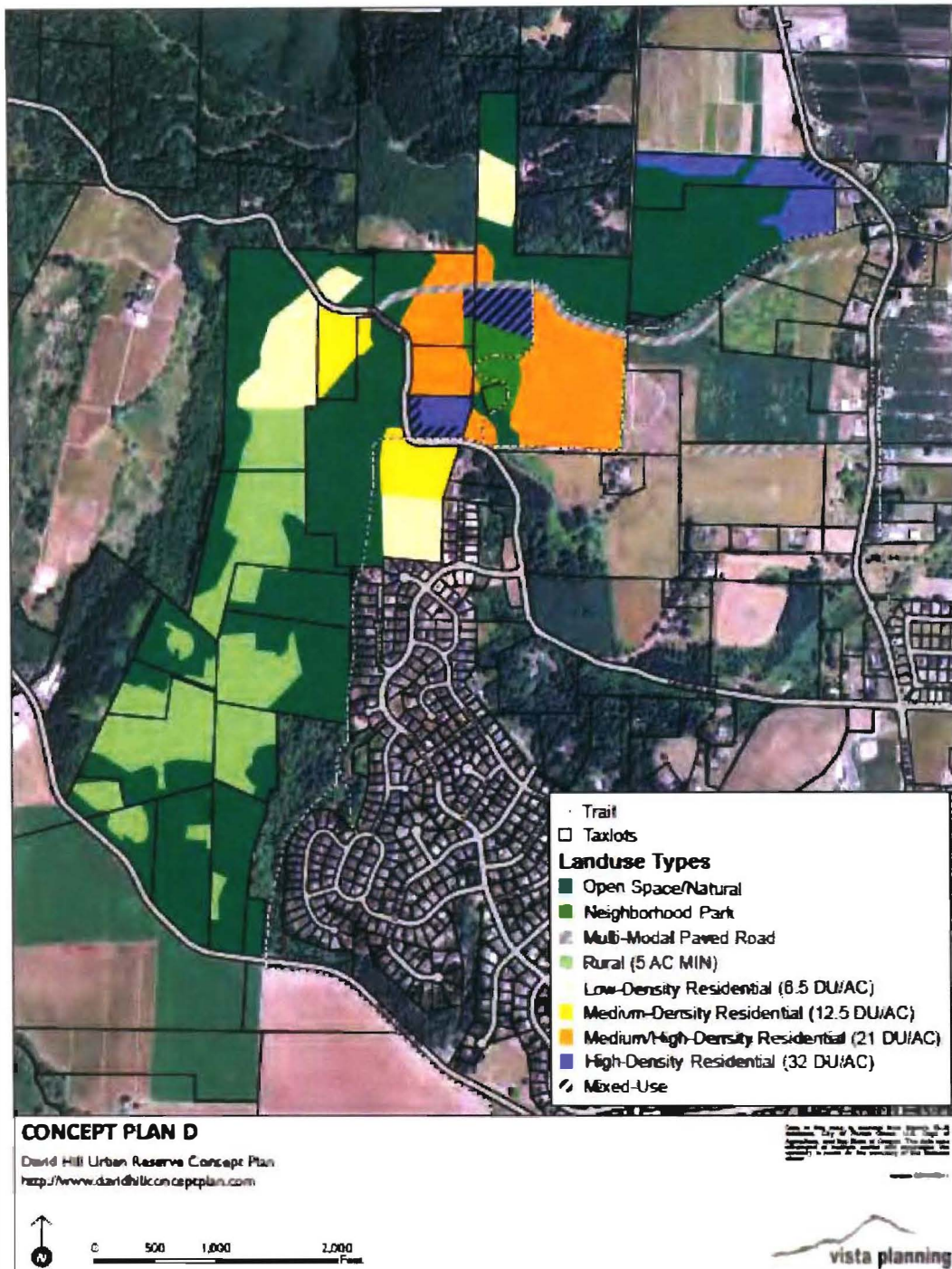
- 17.7 acres of paved road, including the section of David Hill Road that travels through the DHUR
- Speed limits no higher than 25 mph
- Street-calming features: street trees, speed humps, and additional signage
- David Hill Road includes two travel lanes, bicycle lanes, sidewalks and tree planting strips
- Speed zone along Thatcher Road to slow traffic
- Creekwood Place extended north to connect with David Hill Road
- Speed zone along Gales Creek Road to slow approaching traffic
- Traffic signal along Gales Creek Road to facilitate left-turn movements out of the DHUR
- Bicycle and pedestrian paths throughout constrained areas, along the current UGB, and through proposed parks; with connection points serving residential areas
- Two additional neighborhood collector roads north of David Hill Road to improve connectivity between the DHUR and Thatcher Road

CONCEPT C										
LANDUSE	AVG DU/AC	% NET BUILDABLE	ACRES	BUILDABLE ACRES	UNITS	POPULATION	% TOTAL ACRES	% BUILDABLE ACRES	% TOTAL UNITS	
Open Space/Natural	0	0	158.5	0.0	0	0	50%	0.0%	0.0%	
Rural (5 AC MIN)	0.2	1	0.0	0.0	0	0	0%	0.0%	0.0%	
Neighborhood Park	0	0	7.3	0.0	0	0	2%	0.0%	0.0%	
Multi-Modal Paved Road	0	0	17.7	0.0	0	0	6%	0.0%	0.0%	
Low-Density Residential (6.5 DU/AC)	6.5	0.83	117.7	97.7	635	1701	37%	88.2%	79.6%	
Medium-Density Residential (12.5 DU/AC)	12.5	0.83	15.7	13.0	163	437	5%	11.8%	20.4%	
Medium/High-Density Residential (21 DU/AC)	21	0.83	0.0	0.0	0	0	0%	0.0%	0.0%	
High-Density Residential (32 DU/AC)	32	0.83	0.0	0.0	0	0	0%	0.0%	0.0%	
Mixed-Use				0.0				0.0%		

TOTAL	316.8	110.7	798	2138	100%	100%	100%
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* Mixed Use not included in Totals

Concept D



Concept D (the preferred alternative)

Concept D presents an alternative for clustered medium/high-density and high-density development located in the northern and northeastern sections of the DHUR. The most intensive land uses are focused around David Hill Road and includes a mixed-use “neighborhood center.” It favors higher density in certain areas to limit development in others.

- Approximate total dwelling units: 1,323
- Approximate total buildable acres: 126.1
- Average density: 10.5 dwelling units per acre

Land Use Elements

- Medium/high- and high-density residential surrounding a 7.3-acre park in the northern section of the urban reserve
- 9.9 acres of low-density residential serves as a transitional buffer between existing development southeast of the DHUR and future development
- Low- and medium-density residential just south of David Hill Road
- High-density residential located in the northeastern corner along Thatcher Road
- A total of 6.4 acres of mixed-use along David Hill Road, adjacent to the park, and along Thatcher Road to serve the medium/high- to high-density development
- 55.7 buildable acres of rural land

Transportation Elements

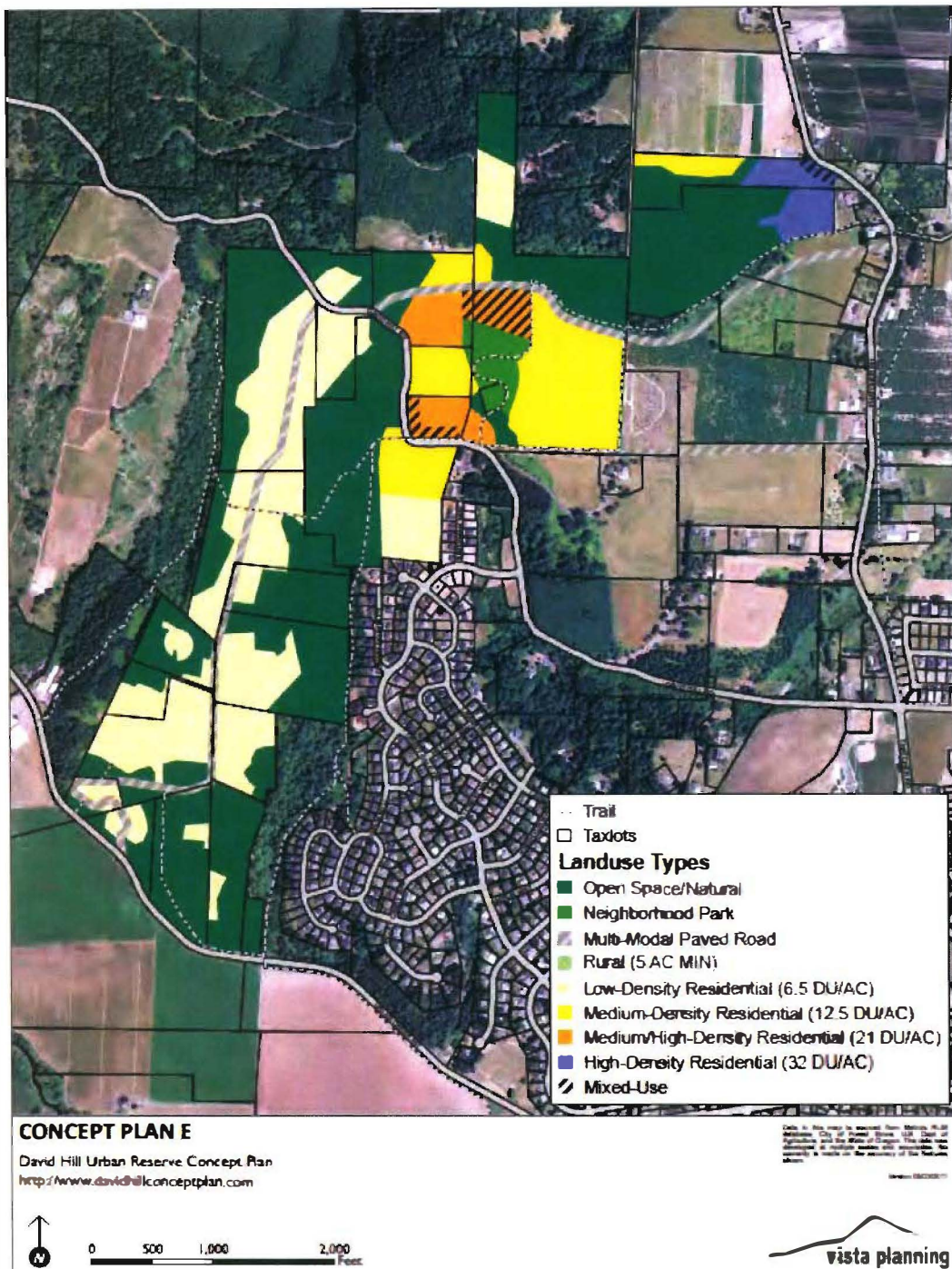
- 8.3 acres of paved road, including the section of David Hill Road that travels through the DHUR
- Speed limits no higher than 25 mph
- Street-calming features: street trees, speed humps, and additional signage
- David Hill Road includes two travel lanes, bicycle lanes, sidewalks and tree planting strips
- Speed zone along Thatcher to slow traffic
- Bicycle and pedestrian paths throughout constrained areas, along the current UGB, and through proposed parks; with connection points serving residential areas
- Two additional neighborhood collector roads north of David Hill Road to improve connectivity between the DHUR and Thatcher Road

CONCEPT D	AVG DU/AC	% NET BUILDABLE	ACRES	BUILDABLE ACRES	UNITS	POPULATION	% TOTAL ACRES	% BUILDABLE ACRES	% TOTAL UNITS
LANDUSE									
Open Space/Natural	0	0	160.7	0.0	0	0	51%	0.0%	0.0%
Rural (5 AC MIN)	0.2	1	55.7	55.7	11	30	18%	44.2%	0.8%
Neighborhood Park	0	0	7.3	0.0	0	0	2%	0.0%	0.0%
Multi-Modal Paved Road	0	0	8.3	0.0	0	0	3%	0.0%	0.0%
Low-Density Residential (6.5 DU/AC)	6.5	0.83	21.3	17.7	115	308	7%	14.0%	8.7%
Medium-Density Residential (12.5 DU/AC)	12.5	0.83	11.3	9.4	117	314	4%	7.4%	8.9%
Medium/High-Density Residential (21 DU/AC)	21	0.83	33.6	27.9	585	1569	11%	22.1%	44.2%
High-Density Residential (32 DU/AC)	32	0.83	18.6	15.4	494	1325	6%	12.2%	37.4%
Mixed-Use				6.4				5.1%	

TOTAL	316.8	126.1	1323	3546	100%	100%	100%
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* Mixed Use not included in Totals

Concept E



Concept E

Concept E illustrates an alternative for low-, medium- and high-density development “spread”, where urban development encompasses a larger area within the urban reserve but at lower local densities. Intensive land uses are focused around David Hill Road and includes a mixed-use “neighborhood center.”

- Approximate dwelling units: 1,232
- Approximate buildable acres: 110.7
- Average density: 11.1 dwelling units per acre

Land Use

- Medium- and medium/high-density residential surrounds a 7.3-acre park in the northern section of the urban reserve
- 8 acres of high-density residential immediately adjacent to Thatcher Road
- 9.9 acres of low-density residential serves as a transitional buffer between existing development southeast of the DHUR and future development
- Low-density south of David Hill Road and along Gales Creek Road
- A total of 6.4 acres of mixed-use along David Hill Road, adjacent to the park, and along Thatcher Road to serve the medium/high- to high-density development

Transportation

- 17.7 acres of paved road, including the section of David Hill Road that travels through the DHUR
- Speed limits no higher than 25 mph
- Street-calming features: street trees, speed humps, and additional signage
- David Hill Road includes two travel lanes, bicycle lanes, sidewalks and tree planting strips
- Green street infrastructure
- Speed zone along Thatcher Road to slow traffic
- Creekwood Place extended north to connect with David Hill Road
- Speed zone along Gales Creek Road to slow approaching traffic
- Traffic signal along Gales Creek Road to facilitate left-turn movements out of the DHUR
- Bicycle and pedestrian paths throughout constrained areas, along the current UGB, and through proposed parks; with connection points serving residential areas
- Two additional neighborhood collector roads north of David Hill Road to improve connectivity between the DHUR and Thatcher Road

CONCEPT E	AVG DU/AC	% NET BUILDABLE	ACRES	BUILDABLE ACRES	UNITS	POPULATION	% TOTAL ACRES	% BUILDABLE ACRES	% TOTAL UNITS
LANDUSE									
Open Space/Natural	0	0	158.5	0.0	0	0	50%	0.0%	0.0%
Rural (5 AC MIN)	0.2	1	0.0	0.0	0	0	0%	0.0%	0.0%
Neighborhood Park	0	0	7.3	0.0	0	0	2%	0.0%	0.0%
Multi-Modal Paved Road	0	0	17.7	0.0	0	0	6%	0.0%	0.0%
Low-Density Residential (6.5 DU/AC)	6.5	0.83	74.9	62.2	404	1084	24%	56.2%	32.8%
Medium-Density Residential (12.5 DU/AC)	12.5	0.83	37.0	30.7	383	1028	12%	27.7%	31.1%
Medium/High-Density Residential (21 DU/AC)	21	0.83	13.8	11.4	240	644	4%	10.3%	19.5%
High-Density Residential (32 DU/AC)	32	0.83	7.7	6.4	204	547	2%	5.8%	16.6%
Mixed-Use				6.4				5.8%	

TOTAL	316.8	110.7	1232	3302	100%	100%	100%
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* Mixed Use not included in Totals