

Drawing: P:\2015\14-178\Redline\Marinwood\Development\131760-TR-PL.dwg
 Date: May 21, 2015 10:52:06am
 Scale: 1" = 30'

LEGEND

	TREE PROTECTIVE FENCING PER COX STD PLAN CR-R-49
	EXISTING TREE TO BE REMOVED
	EXISTING TREE TO REMAIN
	EXISTING OFFSITE TREE

TREE DENSITY CALCULATIONS

SIGNIFICANT TREES ON SITE=	241
WABLE SIGNIFICANT TREES ONSITE=	232 - 884 CREDITS
NON-WABLE SIGNIFICANT TREES ONSITE=	7
TREES TO BE SAVED=	24 - 160 CREDITS
TREE CREDITS REQUIRED=	57
TREE CREDITS TO BE PLANTED=	97

- NOTES**
1. SEE LANDSCAPE PLANS FOR TREES TO BE PLANTED.
 2. SEE SHEET TR-03 AND TR-04 FOR AIRBORNE REPORT AND DETAILS.

SURVEY DISCLAIMER
 TOPOGRAPHIC SURVEY INFORMATION ON TAX LOTS 2726050003, 2726050004, 2726050005, 2726050006 AND WITHIN 150' OF AND IN AS SHOWN ON THESE PLANS HAS BEEN PROVIDED BY COLE DESIGN, INC. LAND DEVELOPMENT CONSULTANTS, INC. ASSUMES NO LIABILITY AS TO THE ACCURACY AND COMPLETENESS OF THIS DATA. ANY DISCREPANCIES FOUND BETWEEN WHAT IS SHOWN ON THE PLANS AND WHAT IS NOTED IN THE FIELD SHOULD BE BROUGHT IMMEDIATELY TO THE ATTENTION OF THE ENGINEER.

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Call 2 Business Days Before You Dig
811 or 1-800-424-5555
 Utilize Underground Location Center

REVISIONS

NO.	DATE	BY	DESCRIPTION
1	5-21-15	REVISED PER CITY COMMENTS DATED 2-17-15	

LDC
 THE CIVIL ENGINEERING GROUP
 1001 1/2 AVENUE, SUITE 100
 WOODLAND, WA 98672
 WWW.LDCORP.COM

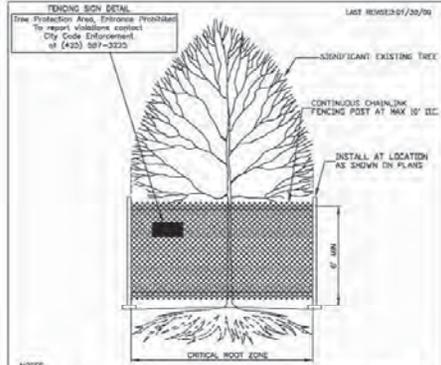
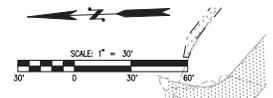
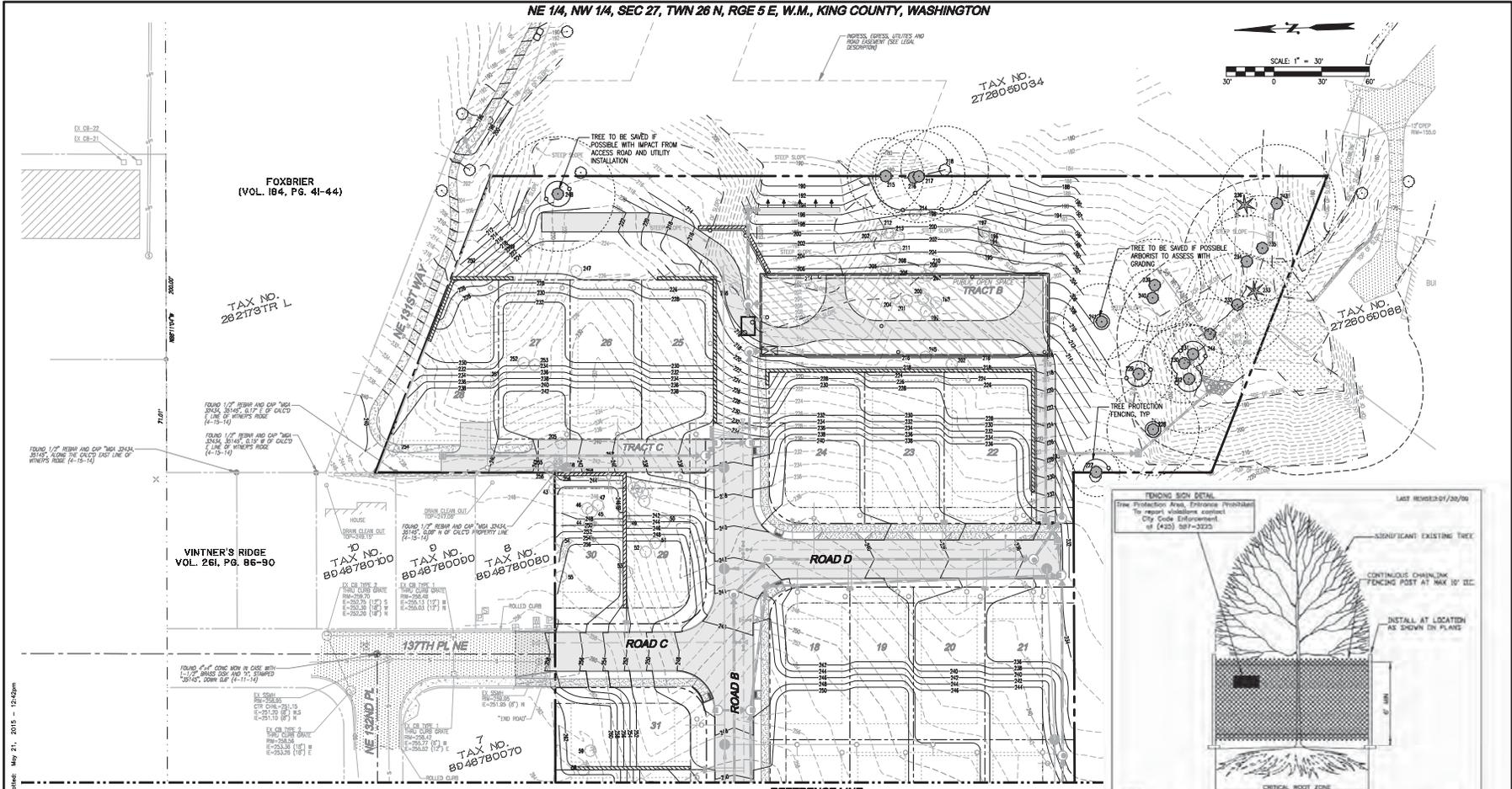
**PULTE GROUP
 MARINWOOD**
 INTEGRATED DEVELOPMENT PLAN



JOB NUMBER: 13-178
DRAWING NAME: 131760-TR-PL
DESIGNER: WMM
CHECKING BY: KCS
DATE: 2-08-15
SCALE: 1"=30'
INTRODUCTION: KIRKLAND

TR-01
 SHEET 33 OF 36

NE 1/4, NW 1/4, SEC 27, TWN 26 N, RGE 5 E, W.M., KING COUNTY, WASHINGTON



- NOTES**
- MINIMUM SIX (6) FOOT HIGH TEMPORARY CHAINLINK FENCE SHALL BE PLACED AT THE CRITICAL ROOT ZONE OR DESIGNATED LIMIT OF DISTURBANCE OF THE TREE TO BE SAVED. FENCE SHALL COMPLETELY ENCLOSE TREES. INSTALL FENCE POSTS USING PIER BLOCKS UNLESS APPROVED OR SAVED INTO MAJOR ROOTS. MODIFICATIONS TO FENCING MATERIAL AND LOCATION MUST BE APPROVED BY PLANNING OFFICIAL.
 - TREATMENT OF ROOTS EXPOSED DURING CONSTRUCTION: FOR ROOTS OVER ONE (1) INCH DIAMETER DAMAGED DURING CONSTRUCTION, MAKE A CLEAN STRAIGHT CUT TO REMOVE DAMAGED PORTION OF ROOT. ALL EXPOSED ROOTS SHALL BE TEMPORARILY COVERED WITH DAMP BURLAP TO PREVENT DRYING, AND COVERED WITH SOIL AS SOON AS POSSIBLE.
 - NO STOCKPILING OF MATERIALS, VEHICULAR TRAFFIC, OR STORAGE OF EQUIPMENT OR MACHINERY SHALL BE ALLOWED WITHIN THE LIMIT OF THE FENCING. FENCING SHALL NOT BE MOVED OR REMOVED UNLESS APPROVED BY THE CITY PLANNING OFFICIAL. WORK WITHIN PROTECTION FENCE SHALL BE DONE MANUALLY UNDER THE SUPERVISION OF THE ON-SITE ARBORIST AND WITH PRIOR APPROVAL BY THE CITY PLANNING OFFICIAL.
 - FENCING SIGNAGE AS DETAILED ABOVE MUST BE POSTED EVERY FIFTEEN (15) FEET ALONG THE FENCE. SIGN TO BE MINIMUM 11"X17", AND MADE OF WEATHERPROOF MATERIAL.

CITY OF KIRKLAND
PLAN NO. CK-R-89
TREE PROTECTION

- LEGEND**
- Tree protective fencing per con std plan CK-R-89
 - Existing tree to be removed
 - Existing tree to remain
 - Existing offsite tree

- NOTES**
- SEE LANDSCAPE PLANS FOR TREES TO BE PLANTED.
 - SEE SHEET TR-03 AND TR-04 FOR ARBORIST REPORT AND DETAILS.

TREE DENSITY CALCULATIONS

Significant trees on site-	241
WALKE SIGNIFICANT TREES ONITE-	232 - 894 CREDITS
NON-WALKE SIGNIFICANT TREES ONITE-	74 - 180 CREDITS
TREES TO BE SAVED-	257
TREE CREDITS REQUIRED-	257
TREE CREDITS TO BE PLANTED-	97

SURVEY DISCLAIMER
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TOPOGRAPHIC SURVEY INFORMATION ON TAX LOTS 2728050071, 2728050072, 2728050073, 2728050074 AND 2728050075 HAS BEEN PROVIDED BY CORE DESIGN, INC. LAND DEVELOPMENT CONSULTING, INC. ASSUMES NO LIABILITY FOR THE ACCURACY AND COMPLETENESS OF THIS DATA. ANY DISCREPANCIES FOUND BETWEEN WHAT IS SHOWN ON THE PLANS AND WHAT IS NOTED IN THE FIELD SHOULD BE BROUGHT IMMEDIATELY TO THE ATTENTION OF THE ENGINEER.

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811 or 1-800-424-5555
Utility Underground Location Center

REVISIONS

NO.	DATE	BY	DESCRIPTION
1	5-21-15	REVISED PER CITY COMMENTS DATED 2-17-15	

LDC
Engineering
Structural
Planning
Surveying
THE CORE ENGINEERING GROUP
1001 1ST AVE. S.W.
KIRKLAND, WA 98223
PH: 425-826-8888
WWW.LDCORP.COM

PULTE GROUP
MARINWOOD
INTEGRATED DEVELOPMENT PLAN



JOB NUMBER: 13-170
DRAWING NAME: 1317NP-TR-PL
DESIGNER: MWM
CHECKING BY: KSC
DATE: 2-06-15
SCALE: 1"=30'
JURISDICTION: KIRKLAND

TR-02
SHEET 34 OF 36

Drawing: PL030133, 13-170 Redwood Meadows, Legend/Development/1317NP-TR-PL.dwg Plotdate: May 21, 2015 10:52:06am

NE 1/4, NW 1/4, SEC 27, T2N 26 N, R5E 5 E, W.M., KING COUNTY, WASHINGTON

ARBORIST REPORT (COMPILED BY: SHOFFNER CONSULTING)

1	2	3	4	5	6--LIMITS OF DISTURBANCE					7	8	9	10	11	12	13	14	15	16	17	18
187	BLA/M	mt 14	1.0	45	23	23	23	23	23	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1
188	BLA/M	mt 14	3.0	45	23	23	23	23	23	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - P
189	BLA/M	mt 10	1.0	45	23	23	23	23	23	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1
190	N/A	N/A	8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Poor	Poor	Poor	Poor	Poor	Poor	Dying and decay	Significant	4	NON-VISIBLE	REMOVE
191	BLA/M	8	1.0	25	13	13	13	13	13	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	2	Visible	REMOVE - 1
192	BLA/M	16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Good	Good	Good	Good	Good	Good	Recovery from Wild fire, not visible, mt 4 tree.	Significant	4	NON-VISIBLE	REMOVE
193	BLA/M	8	1.0	30	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1
194	BLA/M	26	8.0	86	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Mirror branch dieback	Significant	2	Visible	REMOVE - 1
195	BLA/M	12	2.0	50	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	2	Visible	REMOVE - 1
196	BLA/M	16	4.0	42	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1
197	BLA/M	22	7.0	52	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1
198	BLA/M	20	6.0	50	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Mirror branch dieback	Significant	2	Visible	REMOVE - 1
199	BLA/M	8	1.0	42	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1
200	BLA/M	20	6.0	45	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Mirror branch dieback	Significant	2	Visible	REMOVE - 1
201	BLA/M	16	4.0	48	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1
202	WGT/D	8	1.0	20	15	15	15	15	15	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1
203	BLA/M	18	5.0	48	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1
204	BLA/M	12	2.0	45	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Mirror branch dieback	Significant	2	Visible	REMOVE - 1
205	BLA/M	20	6.0	56	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1
206	BLA/M	10	1.0	42	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1
207	BLA/M	16	4.0	48	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1
208	BLA/M	10	1.0	45	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1
209	BLA/M	10	1.0	42	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1
210	BLA/M	8	1.0	32	17	17	17	17	17	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1
211	N/A	6	1.0	28	15	15	15	15	15	Wet	N/A	Good	Good	Good	Good	Good	Mirror branch dieback	Significant	2	Visible	REMOVE - 1
212	N/A	10	1.0	36	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Mirror branch dieback	Significant	2	Visible	REMOVE - 1
213	BLA/M	18	5.0	54	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1
214	N/A	14	3.0	38	18	18	18	18	18	Wet	N/A	Good	Good	Good	Good	Good	Moderate branch dieback	Significant	3	Visible	REMOVE - 1
215	N/A	22	7	48	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Moderate branch dieback	Significant	3	Visible	REMOVE
216	N/A	20	6	48	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Moderate branch dieback	Significant	3	Visible	REMOVE
217	BLA/M	20	6	58	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE
218	BLA/M	24	8.0	50	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1
219	N/A	22	7.0	45	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Mirror branch dieback	Significant	2	Visible	REMOVE - 1
220	N/A	16	4.0	36	18	18	18	18	18	Wet	N/A	Good	Good	Good	Good	Good	Mirror branch dieback	Significant	2	Visible	REMOVE - 1
221	N/A	16	4.0	36	18	18	18	18	18	Wet	N/A	Good	Good	Good	Good	Good	Mirror branch dieback	Significant	2	Visible	REMOVE - 1
222	N/A	16	4.0	36	18	18	18	18	18	Wet	N/A	Good	Good	Good	Good	Good	Mirror branch dieback	Significant	2	Visible	REMOVE - 1
223	N/A	10	1.0	34	18	18	18	18	18	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1
224	N/A	8	1.0	28	15	15	15	15	15	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1
225	N/A	8	1.0	28	14	14	14	14	14	Wet	N/A	Good	Good	Good	Good	Good	Mirror branch dieback	Significant	2	Visible	REMOVE - 1
226	BLA/M	26	8.0	75	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1
227	BLA/M	38	15.0	75	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Mirror branch dieback	Significant	2	Visible	REMOVE
228	BLA/M	18	5.0	58	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE
229	BLA/M	12	2.0	42	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE
230	BLA/M	18	5.0	50	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE
231	BLA/M	8	1.0	36	18	18	18	18	18	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE
232	BLA/M	24	8.0	65	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Mirror branch dieback	Significant	2	Visible	REMOVE
233	WGT/D	8	1.0	16	9	9	9	9	9	High	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE
234	BLA/M	16	4.0	38	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Mirror branch dieback	Significant	2	Visible	REMOVE
235	BLA/M	40	14.0	68	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Mirror branch dieback	Significant	2	Visible	REMOVE
236	LC/D	8	1.0	15	8	8	8	8	8	High	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE
237	WGT/D	4	1.0	15	8	8	8	8	8	High	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1
238	WGT/D	8	1.0	16	9	9	9	9	9	High	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1
239	BLA/M	22	7.0	58	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE
240	BLA/M	16	4.0	38	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE
241	BLA/M	16	4.0	48	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE
242	BLA/M	36	14.0	68	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE
243	BLA/M	42	17.0	74	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE
244	BLA/M	24	8.0	45	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE
245	BLA/M	14	3.0	30	15	15	15	15	15	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1
246	BLA/M	30	11.0	40	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1
247	BLA/M	4	1.0	16	8	8	8	8	8	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1
248	BLA/M	48	20	72	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE
249	BLA/M	24	8.0	40	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1
250	BLA/M	30	11.0	42	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1
251	BLA/M	18	5.0	35	16	16	16	16	16	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1
252	BLA/M	18	5.0	35	16	16	16	16	16	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1
253	BLA/M	18	5.0	35	16	16	16	16	16	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1
254	BLA/M	36	14.0	68	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1
255	N/A	26	8.0	42	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1
256	BLA/M	16	4.0	44	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1
257	N/A	12	2.0	28	14	14	14	14	14	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1
258	BLA/M	15	4.0	42	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1
8337	BLA/M	14	3.0	38	20	20	20	20	20	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1
8468	SP/Tr	14	3.0	30	16	16	16	16	16	Wet	N/A	Good	Good	Good	Good	Good	Generally good condition and health	Significant	1	Visible	REMOVE - 1

Drawing: P:\2015\14-176 Redmond Mallon, Lopez\Arborist\Arborist\13178P-TR-PL.dwg Date: May 21, 2015 10:46am

OFFSITE TREES

1	2	3	4	5	6--LIMITS OF DISTURBANCE					7	8	9	10	11	12	13	14	15	16	17	18
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IX. TRANSPORTATION

Policy T-3.5: Implement the Commute Trip Reduction (CTR) Plan to reduce single occupancy vehicle (SOV) use and vehicle miles traveled (VMT) as set forth in Kirkland's CTR Plan.

The State of Washington Commute Trip Reduction Efficiency Law requires local jurisdictions to develop and implement a plan to reduce both single occupancy vehicle trips and reduce overall vehicle miles traveled. Kirkland's Commute Trip Reduction Plan is a collection of adopted goals and policies, facility and service improvements and strategies about how we will help make progress for reducing drive alone trips and vehicle miles traveled. These strategies will encourage multi-modal transportation in Kirkland. The Plan encourages partnership and coordination with other agencies and employers.

The CTR Plan goals set targets for reductions at affected work sites. The work site must contain 100 or more employees. At a minimum, the City of Kirkland works with CTR affected employers to establish transportation demand management programs to reduce SOV and VMT to meet CTR goals. Kirkland must work cooperatively with the State, Metro, and other local jurisdictions to promote the success of the CTR program.

As part of the CTR program, urban centers may be voluntarily designated to further reduce SOV and/or VMT beyond the basic CTR requirements through a Growth and Transportation Efficiency Center (GTEC) Plan. Totem Lake, as a State designated urban center, is recognized as a GTEC. The purpose of the GTEC is to increase access to the employment and residential centers while reducing the number of drive alone trips. Within the GTEC plan, the pool of affected employers may be expanded beyond CTR affected employers and may also include selected residential uses.

MAINTAINING MOBILITY

The Comprehensive Plan promotes a new balance among the various modes of travel through an expansion of transit, ridesharing, walking, and bicycling opportunities on or adjacent to the existing vehicular system.

The plan supports the maintenance and enhancement of vehicular capacity on the existing system and recognizes the continued importance of vehicular circulation to local mobility, but not at the expense of other modes of travel or community character. This strategy is likely to result in higher levels of roadway congestion in specific areas, but provides more travel options for those who choose to use alternative modes of travel.

Goal T-4: Establish and maintain a roadway network which will efficiently and safely provide for vehicular circulation.

Policy T-4.1: Promote efficient use of existing rights-of-way through measures such as:

- ***Intersection improvements;***
- ***Time-of-day parking restrictions along congested arterials;***
- ***Signal timing optimization;***
- ***Added center left-turn lanes; and***
- ***Limiting left turns along congested arterials.***

The existing vehicular circulation system in Kirkland is largely complete, and improvements to this system should focus on maximizing the use of existing vehicle lane capacity, rather than physically adding new lane capacity. Road widening solely for general purpose use is generally not preferred.

This policy supports the use of transportation system management strategies to maximize the use of existing rights-of-way. These are relatively low-cost expenditures – for intersection or signal improvements, for example – which increase the efficiency of the system.

IX. TRANSPORTATION

Policy T-4.2: Consider improvements such as queue bypasses, time-of-day parking restrictions, transit signal priority and arterial transit lanes for transit or carpool use that will increase the people-carrying capacity of roadways.

When faced with a limited transportation system and financial resources, it becomes critical to make the best of what we have. One way the City can increase the people-carrying capacity of existing roadways and encourage alternative modes of transportation is by improving mobility for transit or carpools.

In Kirkland and most other cities, transit currently sits in traffic with other vehicles. The benefit of riding transit, consequently, is diminished considerably. Lanes on arterial streets dedicated to transit or carpools are not commonly found as yet. Before Kirkland can build arterial transit lanes or queue bypasses, study is needed to ensure that it is physically possible and will be safe. Another important consideration is the impact of these facilities on community character. Transit mobility will serve Kirkland residents, but the City will have to balance the desire for transit mobility with negative impacts when making the decision whether or not to proceed.

Policy T-4.3: Maintain a system of arterials, collectors, and local access streets that forms an interconnected network for vehicular circulation.

Traffic spread over a “grid” of streets, which is designed appropriate to neighborhood and system needs, flows smoothly. Kirkland has a number of existing cul-de-sacs, which help to create quiet and private residential areas. At the same time, however, cul-de-sacs and dead ends result in uneven traffic distribution and benefit some at the expense of others. Valuable emergency response time can also be lost when connections between arterials are missing. Pedestrian and bicycle traffic is also interrupted. Future street connections should be considered when the City reviews its Citywide road network system.

In addition, future street connections should be studied and determined with each neighborhood plan update. The neighborhood plan study should include looking at efficient and convenient road connections

to schools, parks and other public facilities, and commercial centers. Adding bicycle, pedestrian and other nonmotorized connections should also be considered.

Policy T-4.4: Minimize bypass traffic and safety impacts on neighborhood streets.

Cut-through traffic onto neighborhood streets from nearby congested arterials or collectors does occur. The intent of this policy is to minimize the amount of cut-through traffic and the impacts of this traffic when it does occur by the use of various forms of traffic-calming techniques.

Policy T-4.5: Maintain and improve convenient access for emergency vehicles.

Emergency vehicles need to access sites using the shortest route possible. Providing an interconnected street network is the best way to achieve direct access.

One major barrier to direct access in Kirkland is I-405. Consideration should be given to providing for emergency vehicle access when new nonmotorized crossings of I-405 are planned.

Policy T-4.6: Ensure adequate access to commercial and industrial sites.

The transportation needs of commercial and industrial uses are important to Kirkland’s future. For our economy to prosper, freight, employees, and customers must be able to move to and from businesses. This further supports the need to minimize congestion in the community.

Policy T-4.7: Maintain the road system in a safe and usable form for all modes of travel where possible.

A significant portion of the public’s investment in City infrastructure resides in the pavement of City streets. The City must protect this investment through regular road maintenance. The Public Works Department has operated a Pavement Management Program since 1990. The pavement condition of each road has been inventoried to allow for the strategic investment of maintenance funds. Besides pavement mainte-

IX. TRANSPORTATION

nance, Public Works has a regular program for pavement marking, storm drain cleaning, street sweeping, sign maintenance, and similar street maintenance.

With current funding levels and repair strategies, the overall condition of City streets is stable. If the level of funding does not stay constant or increase, the overall condition could fall off at a rate from which it would be impossible to recover without a very large investment. A higher level of funding would cause the overall condition to improve.

Policy T-4.8: Provide for local vehicular access to arterials, while minimizing conflicts with through traffic.

One problem along some arterials is the high number of driveways or places where vehicles can enter or leave traffic lanes. An excessive number of driveways is a safety concern for pedestrians on sidewalks. Also, traffic flow is unexpectedly interrupted when vehicles turn between intersections. However, properly located and spaced driveways can benefit traffic flow.

The intent of this policy is to permit the minimum number of curb cuts needed to adequately serve abutting uses. The end result will be minimizing conflicts with pedestrian and vehicular traffic.

Goal T-5: Establish level of service standards that encourage development of a multimodal transportation system.

Policy T-5.1: Develop an approach for measuring level of service based on the standards described below in Policies T-5.2, T-5.3 and T-5.5.

Developing level of service standards for a transportation system is a difficult task. After much study and discussion, the City decided that an intersection capacity technique was the best choice for Kirkland.

Mode split (the percentage of single-occupant vehicle use and transit or other mode use) is used as the level of service standard for transit (Policy T-5.2). For vehicular level of service, the City has developed an aggregated roadway level of service measure that

averages the capacity of signalized intersections within a geographic area (Policy T-5.3). Nonmotorized level of service is expressed in terms of miles of completed bicycle and pedestrian facilities and number of complete corridors and reflects the desire to create an interconnected system of bicycle and pedestrian routes (Policy T-5.5).

Policy T-5.2: By the year 2022, strive to achieve a mode split of 65 percent single-occupant vehicle (SOV) and 35 percent transit/other mode.

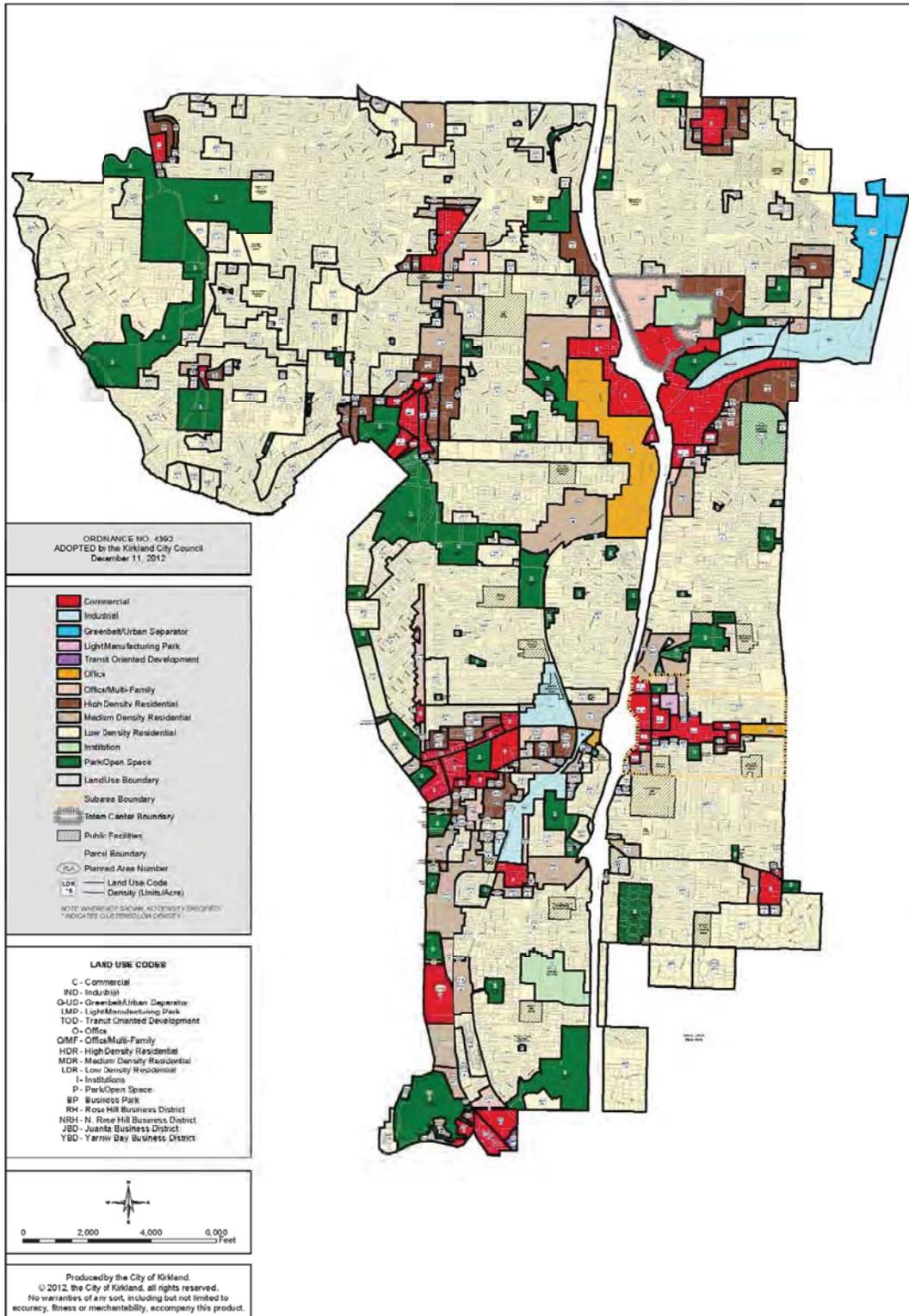
The mode splits described in this policy are the level of service standard for transit. They represent a long-term goal for the City to achieve through providing improved transit accessibility, transportation demand management programs, efficient nonmotorized systems, locating shops and services close to home, and other strategies to get people out of single-occupant vehicles. The standard is expressed in terms of a desired percentage of peak-hour home to work trips by single-occupant vehicles and transit/other mode.

Policy T-5.3: Utilize the peak-hour vehicular level of service standards shown in Table T-2 – a two-part standard for the transportation subareas and for individual system intersections.

This policy establishes a peak-hour level of service (LOS) standard for vehicular traffic based on 2022 land use and road network. It is a two-part standard, based on the ratio of traffic volume to intersection capacity (V/C) for signalized system intersections. Volume to capacity ratios were determined using the planning method from *Transportation Research Circular 212*.

The two standards are as follows:

- (1) Maximum allowed subarea average V/C for signalized system intersections in each subarea may not exceed the values listed in Table T-2.
- (2) No signalized system intersection may have a V/C greater than 1.40.



LU-1 Comprehensive Land Use Map

