

MEMORANDUM

DATE: August 28, 2014

TO: Kurt Seemann, P.E.
City of Redmond

FROM: Jeff Schramm
TENW

SUBJECT: Level 1 Traffic Analysis
Hussey Plat – Redmond
TENW Project No. 4911

This memorandum summarizes the Level 1 traffic analysis for the proposed Hussey Plat residential project, including a project description and trip generation estimate. The transportation concurrency application is also included.

Project Description

The proposed Hussey Plat residential project would be located north of NE 122nd Street at 178th Place NE as shown in the Attachment A site plan. The project would include the development of up to 23 single-family detached dwelling units and one duplex for a total of 25 single-family units. The existing site includes one single-family home, which would be removed with the proposed development, resulting in a net of 24 units. Vehicular access to the site would be provided via the extension of 178th Place NE at the existing intersection with NE 122nd Street to form a new north leg. The anticipated year of occupancy is 2017.

Trip Generation

The weekday daily, AM and PM peak hour trip generation estimates for the proposed residential development were based on trip equations published in the Institute of Transportation Engineers (ITE) *Trip Generation* manual, 9th edition. The resulting weekday daily, AM and PM peak hour trips are summarized in Table 1. A detailed trip generation estimate is included in Attachment B.

Table 1
Hussey Plat Trip Generation Summary

Time Period	Trips Generated		
	In	Out	Total
Weekday Daily	139	139	278
Weekday AM Peak Hour	5	12	17
Weekday PM Peak Hour	18	10	28

As shown in Table 1, the Hussey Plat residential development is estimated to generate 278 weekday daily trips with 17 trips occurring during the weekday AM peak hour (5 in, 12 out) and 28 trips during the weekday PM peak hour (18 in, 10 out).

Transportation Concurrency

A transportation concurrency application and Mobility Unit calculation is included in Attachment C.

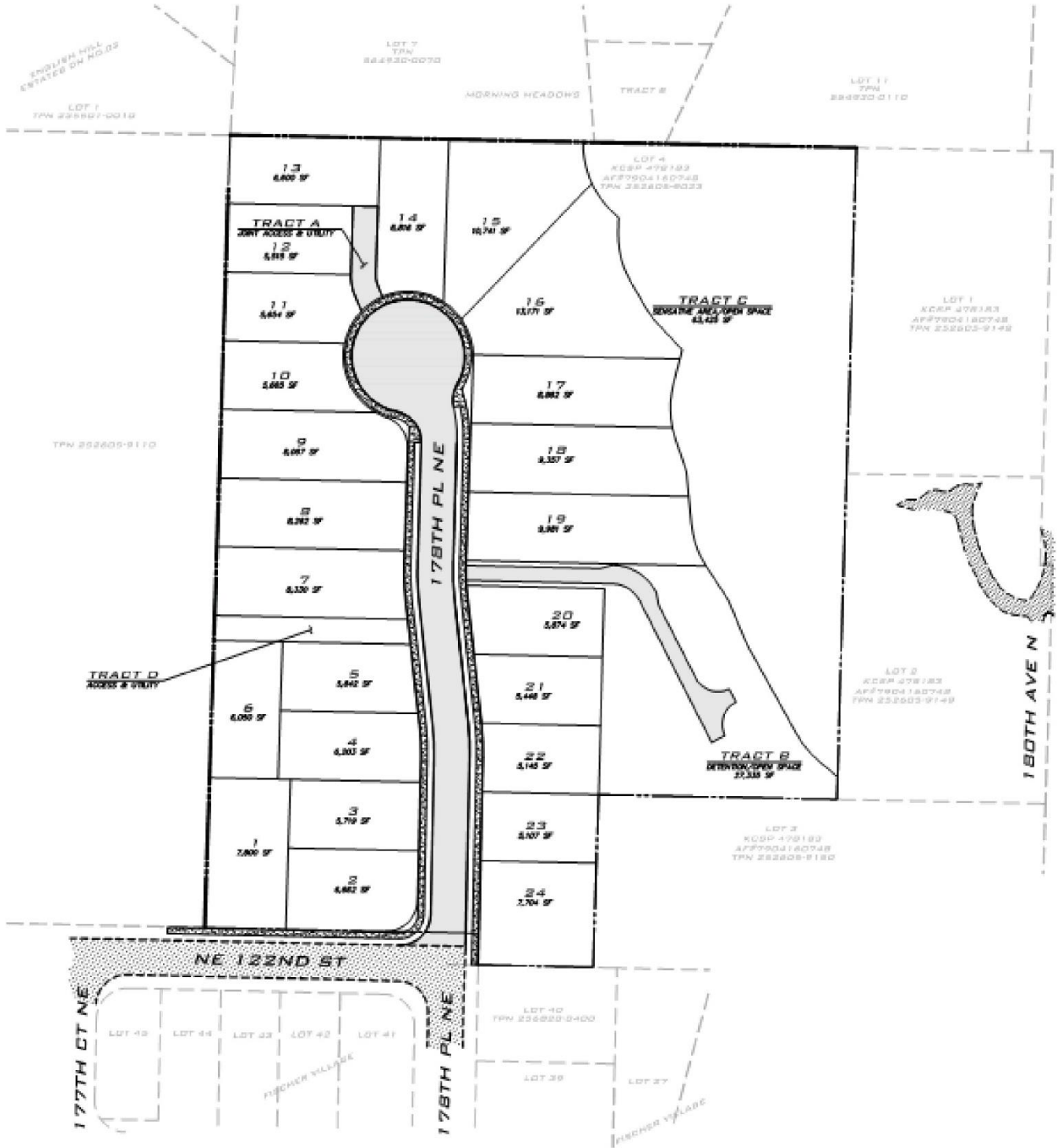
Next Steps

Upon your review of our trip generation estimates, please let us know if you need any additional information regarding the project.

If you have any questions, please feel free to contact me at (425) 250-0581 or schramm@tenw.com.

cc: Corey Watson, Quadrant Homes
Jeff Haynie, P.E. Principal TENW

Attachments: A. Preliminary Site Plan Concept
B. Trip Generation Estimate
C. Transportation Concurrency Application



ATTACHMENT B

Trip Generation Calculations

DAILY									
Land Use	Units		ITE LUC ¹	Directional Split		Trip Rate Total	Trips Generated		
				In	Out		In	Out	Total
Proposed Use									
Single-Family	25	Dwelling Units	210	50%	50%	Equation	146	147	293
Less Existing Use									
Single-Family	1	Dwelling Units	210	50%	50%	Equation	-7	-8	-15
Total Net New Weekday Daily Trips Generated =							139	139	278
AM PEAK HOUR									
Land Use	Units		ITE LUC ¹	Directional Split		Trip Rate Total	Trips Generated		
				In	Out		In	Out	Total
Proposed Use									
Single-Family	25	Dwelling Units	210	25%	75%	Equation	7	20	27
Less Existing Use									
Single-Family	1	Dwelling Units	210	25%	75%	Equation	-2	-8	-10
Total Net New AM Peak Hour Trips Generated =							5	12	17
PM PEAK HOUR									
Land Use	Units		ITE LUC ¹	Directional Split		Trip Rate Total	Trips Generated		
				In	Out		In	Out	Total
Proposed Use									
Single-Family	25	Dwelling Units	210	63%	37%	Equation	19	11	30
Less Existing Use									
Single-Family	1	Dwelling Units	210	63%	37%	Equation	-1	-1	-2
Total Net New PM Peak Hour Trips Generated =							18	10	28

Notes:

¹ Institute of Transportation Engineers, *Trip Generation Manual*, 9th Edition, 2012 Land Use Codes.

ATTACHMENT C

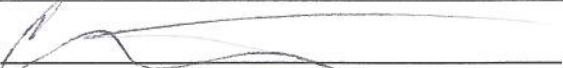
Transportation Concurrency Application

CITY OF REDMOND TRANSPORTATION CONCURRENCY APPLICATION

This application provides the City of Redmond with the information needed to issue a certificate of concurrency for a development. Please complete the entire form and return it to the Redmond Engineering Services Division. After agreement is reached on the mobility unit demand for a development based on the land use type, size of development and table on the back of this application, the City will, if necessary, determine if enough mobility unit supply is available to issue a certificate of concurrency. If determining the mobility unit demand for a development requires an independent calculation a fee for the review will be required, payable at the City Hall Permit Center.

1. Applicant name and address: The Quadrant Corporation
14725 SE 36th Street, Suite 100
Bellevue, WA 98006
2. Property location:
 - a. Property address: 177xx NE 122nd Street
 - b. Development name: Hussey Plat
 - c. Assessor's Parcel Number(s): 2526059023
3. Type of development permit to be requested: Subdivide 2 parcels into ²⁵/~~4~~ lots.

	Land Use Type (ITE Land Use Code)	Development Units	Mobility Unit Rate (see table on back)	Mobility Unit Demand	Notes
Proposed	Single-Family	25	2.78	69.50	
Total Proposed:					
Existing	Single-Family	1	2.78	2.78 5.56	
Total Existing:				5.56	2.78
Net New Mobility Unit Demand (Total Proposed minus Total Existing)				63.94	66.72

Signature of Applicant:  Date: 8/19/2014

8/28/2014

For Official Use Only:

Mobility Unit Demand calculation reviewed: _____	
Initials	Date
Concurrency certificate required: <input type="checkbox"/> Yes <input type="checkbox"/> No	Mobility Units available: <input type="checkbox"/> Yes <input type="checkbox"/> No
Application number: _____	

Development Mobility Unit Calculator

Land Uses	Standard of Measure ¹	Mobility Units/Land Use Unit		
		Citywide	Urban Centers	
			Downtown	Overlake
Residential				
Single Family	dwelling	2.78	2.78	2.78
Multiple Family	dwelling	1.71	1.28	1.59
Retirement Community	dwelling	0.62	0.62	0.62
Nursing Home	bed	0.48	0.48	0.48
Congregate Care/Asst Living	dwelling	0.37	0.37	0.37
Hotel/Motel	room	1.86	1.86	1.86
Commercial - Services				
Bank/Savings & Loan	sq ft/GFA	26.98	24.28	25.90
Day Care	sq ft/GFA	15.55	15.55	15.55
Library	sq ft/GFA	7.11	6.40	6.82
Post Office	sq ft/GFA	10.92	9.83	10.48
Service Station	fuel position	7.41	7.41	7.41
Service Station/Minimart	fuel position	5.37	5.37	5.37
Movie Theater	seat	0.11	0.10	0.10
Carwash	stall	4.53	4.53	4.53
Health Club/Racquet Club	sq ft/GFA	7.40	7.40	7.40
Commercial - Institutional				
Elementary School	student	0.35	0.35	0.35
High School	student	0.21	0.21	0.21
Church	sq ft/GFA	1.92	1.92	1.92
Hospital	sq ft/GFA	3.94	3.94	3.94
Commercial - Restaurant				
Restaurant	sq ft/GFA	16.02	14.42	15.38
Fast Food Restaurant	sq ft/GFA	27.24	24.51	26.15
Commercial - Retail Shopping Center				
up to 99,999	sq ft/GLA	4.87	4.38	4.67
100,000-199,999	sq ft/GLA	4.54	4.09	4.36
200,000-299,999	sq ft/GLA	4.09	3.68	3.93
300,000 and over	sq ft/GLA	4.81	4.33	4.62
Supermarket	sq ft/GFA	12.94	11.65	12.42
Convenience Market	sq ft/GFA	24.11	21.70	23.14
Free Standing Discount Store	sq ft/GFA	5.24	4.71	5.03
Miscellaneous Retail	sq ft/GFA	3.76	3.38	3.61
Furniture Store	sq ft/GFA	0.37	0.33	0.35
Car Sales - New/Used	sq ft/GFA	7.64	6.88	7.33
Commercial - Administrative Office				
up to 99,999	sq ft/GFA	7.22	6.93	7.15
100,000-199,999	sq ft/GFA	6.03	5.79	5.97
200,000-299,999	sq ft/GFA	5.27	5.06	5.22
300,000 and over	sq ft/GFA	4.66	4.47	4.61
Medical Office/Clinic	sq ft/GFA	10.53	10.11	10.43
Industrial				
Light Industry/Manufacturing	sq ft/GFA	3.14	3.14	3.14
Industrial Park	sq ft/GFA	2.75	2.75	2.75
Warehousing/Storage	sq ft/GFA	1.50	1.50	1.50
Mini Warehouse	sq ft/GFA	0.75	0.75	0.75

¹ For uses with Standard of Measure in sq ft, mobility units are given per 1000 sq ft.