Appellant's Exhibit 4

(as referenced in June 30, 2017
Appellant WPDC Cleveland LLC's Witness and Exhibit List)

MEMORANDUM

DATE: June 28, 2017

TO: Aaron Laing, Attorney
Schwabe, Williamson & Wyatt, PC

FROM: Michael J Read, P.E., Principal, TENW

SUBJECT: Supplemental Trip Generation and Parking Generation Analysis
Redmond Origins Appeal – TENW Project No. 3530

This memorandum documents a supplemental comparative trip generation and parking generation analysis of the proposed *Redmond Origins* project, a proposed marijuana retail store with ancillary uses in downtown Redmond. Updated project development information and other resources of marijuana retail trip generation studies are included within this study supplement. The study includes:

- Revised project description;
- Comparative trip generation estimates of proposed marijuana retail store with ancillary retail space using a combination of ITE rates and locally observed rates;
- Comparative parking generation estimates of each trip generation scenario noted above; and
- Trip generation studies of other existing marijuana retail uses in Washington and Colorado.

Project Description – Revised May 2017

The proposed *Redmond Origins* project is located at 16390 Cleveland Street in downtown Redmond, WA, and is located on the northwest corner of the Cleveland Street and 164th Avenue NE signalized intersection. The existing building "covers the entire parcel area" and, therefore, has no on-site parking, vehicular access, access easements, or standard doorways given its historical uses as warehouse space with rolling doors (see aerial with parcel data as **Attachment A**). The existing building is approximately 2,799 square feet of floor area in a single story.

Based upon information in approved architectural drawings date stamped by Gary Lee, City of Redmond on May 8, 2017 (**Attachment B**), we understand the proposed project would include a marijuana retail store in Suite A that comprises 1,528 square feet in gross leasable floor area (GLFA in rooms 101, 102, 103, and 106), as well as two separate retail spaces of 403 square feet and 380 square feet in GLFA as Suites B and C, respectively. The previously proposed mezzanine is no longer proposed for occupancy.

Trip Generation Analysis

Weekday PM peak hour trip generation estimates for the comparative analysis were first estimated based on trip rates published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 9th Edition, 2012. For the purposes of this analysis, a small coffee shop, sit-down restaurant, and office uses were considered for occupancy within the separate commercial suites that would be available to the open market. These were then added to the proposed marijuana retail store to estimate cumulative traffic impacts.

For review of the proposed marijuana retail uses, locally observed trip generation rates during the p.m. peak hour were applied to estimate for traffic and parking demand that would be generated by the marijuana retail use as this is a new land use category to the transportation engineering profession and has yet to be reviewed in this context.

As noted in our April 20, 2017 *Comparative Trip Generation and Parking Generation Analysis Redmond Origins Appeal* report, observed local trip generation rates of 42.6 trips per 1,000 square-feet in GLFA was found using "vehicle trips only" (i.e., without consider pedestrian trips of unknown origin). These studies were conducted in Colorado by a group of transportation professionals at four different marijuana retail stores found similar trip generation rates over a three-day study (see Attachment C). These surveys found significantly higher average trip generation rates during the p.m. peak hour of 54.6 trips per 1,000 square-feet in GLFA and 63.6 trips during the p.m. peak hour of the generator. These rates were not applied in this analysis. These additional surveys confirm our observations that retail marijuana sales land uses are similar to fast-food restaurants with a drive-thru from a trip generation rate standpoint

A comparative trip generation analysis of potential commercial tenants in Suites B and C in a cumulative analysis with the marijuana retail uses (proposal) PM peak hour trips are summarized in Table 1 under two scenarios:

- Scenario 1 – Marijuana Retail with coffee/bakery and sit-down restaurant uses.
- Scenario 2 – Marijuana Retail with small office tenants.

As shown in Table 1, the estimated PM Peak Hour vehicle trip generation of the proposed Redmond Origin project could range between 66 and 85 vehicle trips depending upon the type of commercial tenants in Suites B and C. Under either scenario, the estimated number of vehicle trips would trigger both a review of transportation concurrency and traffic operational impacts under City code.

Table 1: PM Peak Hour Trip Generation Summary – Redmond Origins

	New PM Peak Hour Trips Generated		
Land Use Type	In	Out	Total
Scenario 1			
Marijuana Retail (1,528 SF – Local Rates)	33	32	65
Coffee/Bakery Shop (Suite B 403 SF – ITE 936)	8	8	16
Sit-Down Restaurant (Suite C 380 SF – ITE 932)	3	1	4
Total	**44**	**41**	**85**
Scenario 2			
Marijuana Retail (1,528 SF – Local Rates)	33	32	65
Office (Suite B 403 SF & Suite C 380 SF– ITE 710)	0	1	1
Total	**33**	**32**	**66**

Source: Trip Generation Manual, 9th Edition, ITE, 2012 and TENW.

Parking Generation Analysis

Peak parking generation rates for the comparative land use scenarios were estimated based on rates published in the Institute of Transportation Engineers (ITE) *Parking Generation*, 4th Edition, 2010. Applying the similar land use scenarios outlined above for tenancy of Suites B and C, published peak parking demand estimates were also noted in the comparative analysis summarized in Table 2. As shown, the project is expected to generate a peak parking demand of between 12 and 17 stalls.

Table 2: Comparative Peak Parking Demand Summary

	Peak Parking Demand		
Land Use Type	Rate	Unit	Total[1] Stalls
Scenario 1			
Marijuana Retail (1,528 SF)	6.60	1,000 SF	10
Coffee/Bakery (403 SF)	10.40	1,000 SF	4
Sit-Down Restaurant (380 SF)	5.55	1,000 SF	3
		Total	**17**
Scenario 2			
Marijuana Retail (1,528 SF)	6.60	1,000 SF	10
Office (783 SF)	2.47	1,000 SF	2
		Total	**12**

Source: Parking Generation, 4th Edition, ITE, 2010 and TENW.
1 – Park parking demand was rounded up to the nearest stall.

City Code Requirements

The current City of Redmond off-street parking standards (Redmond Zoning Code 21.10.030 Old Town Zone) require a minimum of 2.0 stalls per 1,000 square-feet of GLFA for general sales or services, including marijuana retail sales. This code section also applies to site-down restaurant, take-out restaurant, or drive-thru restaurants. As shown in Table 3, the minimum required parking in current City code is estimated at 6 stalls under either scenario for the proposed *Redmond Origins* project.

Table 3 - Comparative Code Parking Requirements

Parking Component	Minimum Off-Street Parking Requirements[1]	Size	Total Stalls[1]
Scenario 1			
Marijuana Retail – Old Town (Proposal)	2.0 stalls/1,000 SF	1,528	4
Sit-Down Restaurant/Take-Out Restaurant	2.0 stalls/1,000 SF	783	2
		Total	**6**
Scenario 1			
Marijuana Retail – Old Town (Proposal)	2.0 stalls/1,000 SF	1,528	4
General Sales/Services – Old Town (Existing Building with Permitted Use)	2.0 stalls/1,000 SF	783	2
		Total	**6**

1 – Round to the highest even stall for parking requirement calculation.

Conclusions

Based on the evaluation of standard ITE trip generation and parking generation rates as well as observed marijuana retail stores at other representative locations within the Puget Sound region, the proposed *Redmond Origins* project is estimated to generate approximately between 66 and 85 weekday PM peak hour vehicle trips, which would trigger both a review of transportation concurrency and traffic operational impacts under City code. This is comparable, although lower, than observed sites in Colorado.

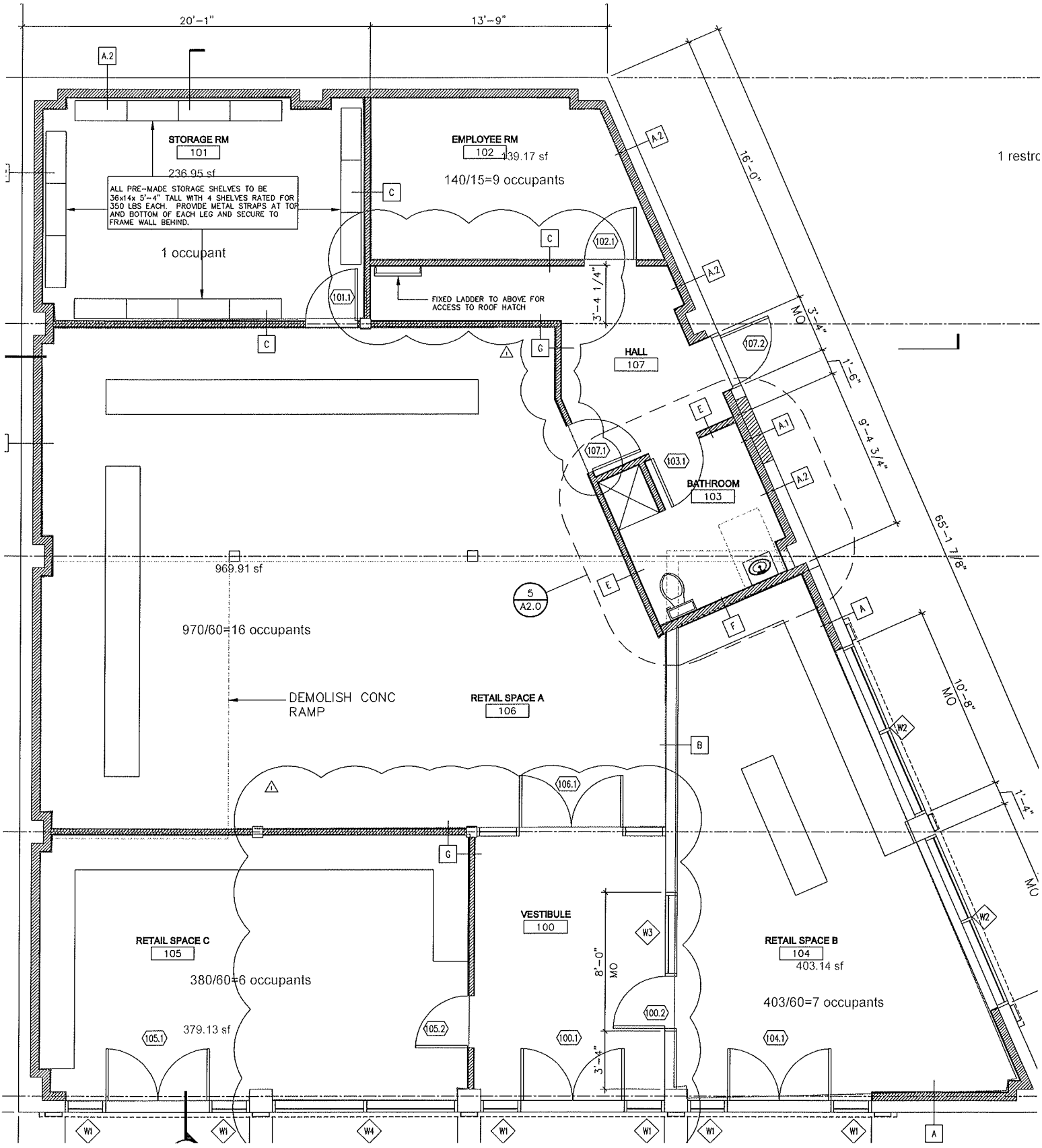
Peak demand of parking generation is estimated to range between 12 and 17 stalls during peak periods the site. Given that no on-site parking is available to the subject property, parking impacts would occur to both public on-street parking as well as available private parking lots immediately adjacent to the site and the vicinity, resulting in significant impacts.

Current City parking code would require a minimum of 6 off-street parking stalls be provided, none of which could be constructed on-site.

If you have any questions, please feel free to contact me at (206) 361-7333, ext. 101 or mikeread@tenw.com.

ATTACHMENT A
Project Site & Immediate Vicinity

ATTACHMENT B
Approved Tenant Improvement Plan at Redmond Origins


20'-1"
13'-9"
STORAGE RM
101
236.95 sf
ALL PRE-MADE STORAGE SHELVES TO BE 36x14x 5'-4" TALL WITH 4 SHELVES RATED FOR 350 LBS EACH. PROVIDE METAL STRAPS AT TOP AND BOTTOM OF EACH LEG AND SECURE TO FRAME WALL BEHIND.
1 occupant
EMPLOYEE RM
102
139.17 sf
140/15=9 occupants
FIXED LADDER TO ABOVE FOR ACCESS TO ROOF HATCH
3'-4 1/4"
HALL
107
16'-0"
3'-4" MO
1'-6"
9'-4 3/4"
65'-1 7/8"
BATHROOM
103
969.91 sf
970/60=16 occupants
DEMOLISH CONC RAMP
RETAIL SPACE A
106
10'-8" MO
1'-4"
VESTIBULE
100
8'-0" MO
RETAIL SPACE C
105
380/60=6 occupants
379.13 sf
RETAIL SPACE B
104
403.14 sf
403/60=7 occupants
1 restrc

ATTACHMENT C
Colorado Marijuana Retail Trip Generation Study Results

New Trip Generation Data – Marijuana Dispensaries Drive 10 Times More Traffic Than Specialty Retail Stores

TripGeneration.org

Per square foot (KSF), Marijuana Dispensaries are proving to be one of the biggest retail traffic generators in the United States. The tables below show the traffic rates at marijuana dispensaries as compared to pharmacies and other small size retail operations as reported in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual, 9th Edition* (http://www.ite.org/tripgeneration/trippubs.asp).

Weekday	Rate - Trips Per KSF			
	Marijuana Dispensary	ITE 880: Pharmacy w/o Drive Thru[1]	ITE 881: Pharmacy w/ Drive Thru[1]	ITE 826: Specialty Retail[1]
Daily	402.27	90.06	96.91	44.32
AM Generator	37.31	7.71	8.36	6.84
AM Adjacent Street (7-9am)	16.86	2.94	3.45	n/a
PM Generator	63.61	11.07	9.72	5.02
PM Adjacent Street (4-6pm)	54.64	8.40	9.91	2.71

[1] From the Institute of Transportation Engineers' *Trip Generation Manual, 9th Edition*.

Saturday	Rate - Trips Per KSF			
	Marijuana Dispensary	ITE 880: Pharmacy w/o Drive Thru[1]	ITE 881: Pharmacy w/ Drive Thru[1]	ITE 826: Specialty Retail[1]
Daily	418.25	n/a	n/a	42.04
Peak Generator	58.28	10.68	8.20	n/a
AM Adjacent Street (7-9am)	9.02	n/a	n/a	n/a
PM Adjacent Street (4-6pm)	55.92	n/a	n/a	n/a

[1] From the Institute of Transportation Engineers' *Trip Generation Manual, 9th Edition*.

(http://www.mikeontraffic.com/wp-content/uploads/2015/11/Marijuana-Dispensary-Trips.jpg) How do we know marijuana dispensaries are generating about 10x more traffic than a typical retail store and 5x more than a pharmacy?

The Spack Consulting team partnered with Melanie Banfield, owner and president of Ridgeview Engineering Consultants, LLC (mailto:melanie@ridgeview-engineering.com) in Morrison, Colorado to record traffic videos using CountingCars.com's (http://bit.ly/CountingCarscom) COUNTcam (http://bit.ly/COUNTcamcom) products at the driveways of four dispensaries in the Denver, Colorado area. Traffic video was collected for three days at each of the sites and then we reviewed the video and counted the traffic at these dispensaries using our COUNTcloud (http://bit.ly/COUNTcloud) service. You can get the full data set at www.TripGeneration.org (http://bit.ly/TripGen).

Get Trip Generation Data