EXHIBIT A: TRANSPORTATION LDC SUB-COMMITTEE
DRAFT ORDINANCE ATTACHMENT

TRAN ITEM #16

6.1.3 Residential Developments

A. When a residential subdivision is proposed that abuts an arterial or collector roadway, it shall be designed to provide lots abutting the roadway with access only from an alley, frontage road or interior local road. (See also Section 5.4.2.B.1.a)

B. Direct driveway access to individual one and two family dwellings from arterial and collector roadways are prohibited unless the Planning Commission determines, in consultation with the Director of Works, that there is no acceptable access alternative.

C. **Subdivisions** ~~**Developments**~~ with an aggregate of 200 or more dwellings (single family or multi-family) shall have at least two separate access roadways connecting directly to existing roadway(s)**.**~~**or as determined by**~~ **The Planning Commission, or authorized committee of the Planning Commission,** ~~**with**~~ **in consultation with the Fire Protection District having authority as well as the Director of Public Works, may require additional access roadways connecting directly to existing roadway(s) that are of a collector level or greater**. Developments created prior to the effective date of this paragraph and not in compliance with it may be modified, including construction of ancillary facilities and improvements to existing structures, provided that the modifications do not increase the number of dwelling units.

TRAN ITEM #19

6.2.4 Street Intersections

…

C. Intersection Offset **and Spacing** - **Spacing of intersections on the same and opposing sides of streets shall be in accordance with the access management principles contained in the Access Management Design Manual (Appendix 6A). When appropriate, deviations from the spacing criteria presented in Appendix 6A may be approved by the Director of Works to promote the public convenience, safety and to facilitate the proper use of the surrounding land.** ~~**Streets entering opposite sides of another street shall be laid out either directly opposite one another or with a minimum offset of one hundred feet between their centerlines.**~~

~~**D. Intersection Spacing - All local and cul-de-sac streets intersecting with and entering the same side of other collector, local or cul-de-sac streets shall be located at least two hundred feet apart measured from centerline to centerline. When the intersected street is an arterial, the distance between intersecting streets shall be at least 1,000 feet. All other streets intersecting with and entering the same side of any other street shall be located at least five hundred feet apart, measured from centerline to centerline, unless a closer spacing is expressly approved by the Director of Works, to promote the public convenience and safety and to facilitate the proper use of the surrounding land.**~~

D. ~~**E.**~~ Grades at Intersections - Where the grade of any street at the approach to an intersection exceeds three percent, a leveling area shall be provided, having not greater than a three per cent grade for a distance of fifty feet from the intersection of the street centerline. A sag immediately adjacent to the intersecting street and a vertical curve shall be used to connect the intersection grades. **The cross slope of the pedestrian path through an intersection shall not exceed two percent.**

TRAN ITEM #20

6.2.6 Requirements for Specific Types of Streets and Alleys

…

B. Development activity that meets the thresholds in the form district for Street and Roadside Design and new streets shall provide sidewalks in accordance with Tables 6.2.1 and 6.2.2 subject to the following exceptions:

1. ~~•~~ Sidewalks shall not be required on lots that are five acres or greater in area and developed for single family residential uses unless they connect with existing sidewalks on both sides of the property.

2. ~~•~~ Lots within approved major subdivisions in which the sidewalk(s) were waived as part of the subdivision approval for the applicable street frontage shall not be required to provide sidewalks.

3. In subdivisions only, sidewalks can be placed on only one side of a Green Street as described in Section 18.4.1 of the MSD design manual.

4. Where a sidewalk is located along the back of a vertical curb or where no verge exists, the minimum width shall be six feet exclusive of the curb.

5. ~~1.~~ Fee in Lieu Option - The Director of Works and the Director of Planning or designees may allow the payment in lieu of sidewalk construction upon a finding that construction of a sidewalk is not appropriate due to one of the following applicability requirements:

…

6. ~~2.~~ Sidewalk Waiver

TRAN ITEM #28

APPENDIX E AIR POLLUTION CONTROL DISTRICT EMISSION FACTORS

Emission factors for air quality analysis in Jefferson County are presented in the following tables. Table E -1 contains the carbon monoxide emission factor during the operating mode (when vehicle is in motion) and Table E-2 shows the emission factors to vising when the vehicles are in the idling mode of operation. The factors are provided by the Air Pollution Control District and may not be changed without prior approval. The factors were generated using MOBILE 5a and MOBILE 4. Ic.

TABLE E-1 CO EMISSION FACTORS (GRAMS PER MILE)
~~1990- 2000~~ 2015-2035

~~**MOBILE 5a (Version 26 Mar 93) Emission Factors –Carbon Monoxide (CO) SIP 93 Method**~~
~~**07-27-93 Composite Emission Factors**~~
~~**WINTER Jefferson County**~~

GM/MI @ MPH	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
3	233.533	217.272	199.029	177.538	166.651	138.000	131.331	124.476	117.334	110.642	105.354
4	179.8[illegible]2	167.317	153.561	137.290	129.070	107.053	101.968	96.792	91.472	86.494	82.555
5	146.370	136.359	125.478	112.528	106.016	88.125	84.056	79.936	75.747	71.830	68.725
6	123.499	115.2[illegible]	106.388	95.732	90.403	75.326	71.964	68.570	65.151	61.958	59.420
8	94.368	88.461	82.136	74.410	70.602	59.100	56.652	54.192	51.753	49.480	47.660
10	76.715	72.201	67.42[illegible]	61.470	58.583	49.241	47.351	45.460	43.619	41.903	40.519
12	64.943	61.336	57.586	52.801	50.523	42.615	41.100	39.591	38.150	36.808	35.713
14	56.555	53.577	50.552	46.5[illegible]	44.745	37.857	36.610	35.374	34.219	33.144	32.256
16	50.267	47.753	45.267	41.922	40.396	34.272	33.225	32.195	31.255	30.381	29.649
18	45.357	43.207	41.139	38.274	36.99[illegible]	31.470	30.580	29.711	28.939	28.222	27.613
20	41.495	39.618	37.846	35.309	34.197	2[illegible].110	28.310	27.529	26.852	26.233	25.695
25	34.687	33.026	31.443	29.186	28.147	23.82[illegible]	23.059	22.297	21.587	20.905	20.312
30	29.951	28.492	27.064	25.025	24.052	20.262	1[illegible].531	18.788	18.059	17.342	16.720
35	26.565	25.259	23.945	22.065	21.141	17.734	17.026	16.296	15.552	14.809	14.165
40	24.198	22.971	21.719	19.936	19.033	15.894	15.195	14.467	13.707	12.938	12.274
45	22.612	21.386	20.150	18.407	17.502	14.540	13.834	13.099	12.319	11.522	10.833
50	21.955	20.702	19.458	17.718	16.801	13.912	13.196	12.450	11.655	10.840	10.136
55	22.087	20.821	19.564	17.811	16.886	13.983	13.259	12.506	11.705	10.885	10.176
60	41.464	38.352	35.354	31.501	29.316	23.726	22.099	20.438	18.782	17.[illegible]44	15.764
65	61.001	56.028	51.273	45.307	41.852	33.557	31.017	28441	25.921	23.460	21.405
I/HR IDLE	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
	695.282	647.185	593.062	529.524	497.456	411.267	391.261	370.839	349.449	329.468	313.411

~~TABLE E-1 (CONTINUED)~~

~~CO EMISSION FACTORS (GRAMS PER MILE)~~

~~2000-2010~~

~~**MOBILE 5a (Version 26 Mar 93) Emission Factors -Carbon Monoxide (CO) SIP 93 Method 07-27-93 Composite Emission Factors**~~

~~**WINTER Jefferson County**~~

GM/MI @ MPH	2000	2002	2004	2006	2008	2010	2012	2014	2016	2018	2020
3	105.354	99.169	95.120	92.714	91.138	90.018	88.161	88.051	87.977	87.914	87.88
4	82.555	[illegible]	74.926	73.145	71.972	71.149	69.851	69.764	69.705	69.657	69.62
5	68.725	65.065	62.703	61.298	60.370	59.726	58.731	58.660	58.611	58.569	58.54
6	59.420	56.417	[illegible]	53.338	52.573	52.049	51.236	51.174	51.131	51.096	51.07
8	47.660	45.495	44.118	43.287	42.730	42.356	41.735	41.684	41.649	41.620	41.60
10	40.519	38.862	37.822	[illegible]	36.755	36.472	35.937	35.894	35.864	35.839	35.82
12	35.713	34.397	33.585	33.084	32.735	32.515	32.022	31.983	31.957	31.934	31.92
14	32.256	31.185	30.538	30.132	29.844	29.667	29.197	29.162	29.138	29.117	29.10
16	29.649	28.763	28.240	27.906	27.664	27.520	27.063	27.030	27.008	26.988	26.97
18	27.613	26.871	26.445	26.168	25.962	25.843	25.395	25.365	25.343	25.325	25.31
20	25.695	25.028	24.646	24.395	24.205	24.099	23.665	23.634	23.614	23.596	23.58
25	20.312	19.562	19.120	18.836	18.631	18.504	18.151	18.121	18.105	18.091	18.08
30	16.720	15.921	15.440	15.133	14.918	14.776	14.483	14.454	14.440	14.430	14.42
35	14.165	13.330	12.821	12.498	12.275	12.123	11.879	11.851	11.838	11.830	11.82
40	12.274	11.406	10.872	10.536	10.307	10.147	9.9948	9.920	9.910	9.902	9.89
45	10.833	9.931	9.375	9.029	8.794	8.628	8.472	8.445	8.435	8.429	8.42
50	10.136	9.211	8.642	8.289	8.053	7.883	7.762	7.734	7.725	7.720	7.71
55	10.176	9.245	8.672	8.318	8.081	7.910	7.816	7.789	7.779	7.774	7.77
60	15.764	13.954	12.820	12.127	11.672	11.351	11.141	11.098	11.085	11.077	[illegible]
65	21.405	18.707	17.007	15.975	15.302	14.828	14.530	14.471	14.454	14.444	14.43
I/HR IDLE	2000	2002	2004	2006	2008	2010	2012	2014	2016	2018	2020
	313.411	294.734	282.911	275.633	270.664	267.293	258.158	257.826	257.607	257.425	257.33

Emission Rates - Fleet: Jefferson County, KY

APCD Mobile Suit V9w (restricted worst case winter season)- using MOVES ver 2014oct

for project hot-spot analysis

2/17/2015

Grams per Mile

CO

Avg Speed (mph)	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
2.5	17.076362	15.464784	13.853206	12.241628	10.630049	9.018471	8.420109	7.821747	7.223385	6.625023	6.026661
5	9.554383	8.640151	7.725918	6.811686	5.897454	4.983222	4.644941	4.306660	3.968380	3.630099	3.291818
10	5.813922	5.248659	4.683395	4.118132	3.552869	2.987606	2.777392	2.567179	2.356966	2.146752	1.936539
15	4.849259	4.375396	3.901533	3.427670	2.953806	2.479943	2.303031	2.126118	1.949205	1.772292	1.595380
20	4.369412	3.943513	3.517615	3.091716	2.665818	2.239919	2.079639	1.919359	1.759078	1.598798	1.438518
25	3.994147	3.605806	3.217465	2.829124	2.440782	2.052441	1.906785	1.761128	1.615472	1.469816	1.324159
30	3.865028	3.487194	3.109360	2.731525	2.353691	1.975857	1.833907	1.691956	1.550006	1.408056	1.266106
35	3.384816	3.058925	2.733035	2.407145	2.081255	1.755365	1.633370	1.511376	1.389381	1.267387	1.145392
40	3.206287	2.898877	2.591468	2.284058	1.976649	1.669239	1.554461	1.439682	1.324904	1.210126	1.095347
45	3.054521	2.762684	2.470848	2.179011	1.887174	1.595338	1.486606	1.377875	1.269143	1.160412	1.051680
50	2.889772	2.614943	2.340114	2.065286	1.790457	1.515628	1.413302	1.310975	1.208648	1.106321	1.003994
55	2.736011	2.477115	2.218218	1.959321	1.700424	1.441528	1.345067	1.248606	1.152145	1.055684	0.959223
60	2.541006	2.301301	2.061597	1.821892	1.582188	1.342483	1.253411	1.164339	1.075267	0.986195	0.897123
65	2.498334	2.260270	2.022207	1.784143	1.546079	1.308016	1.218752	1.129488	1.040224	0.950960	0.861696
70	2.465250	2.227649	1.990047	1.752445	1.514844	1.277242	1.187360	1.097478	1.007596	0.917714	0.827832
75+	2.468813	2.227330	1.985846	1.744362	1.502878	1.261394	1.169095	1.076795	0.984496	0.892196	0.799897

Avg Speed (mph)	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
2.5	5.697795	5.368928	5.040062	4.711196	4.382330	4.305519	4.228708	4.151897	4.075086	3.998275
5	3.110418	2.929018	2.747617	2.566217	2.384816	2.343107	2.301398	2.259689	2.217979	2.176270
10	1.826156	1.715774	1.605392	1.495010	1.384627	1.359897	1.335167	1.310437	1.285707	1.260977
15	1.501486	1.407592	1.313697	1.219803	1.125909	1.104811	1.083712	1.062613	1.041514	1.020416
20	1.353076	1.267633	1.182191	1.096748	1.011306	0.992102	0.972899	0.953695	0.934491	0.915287
25	1.245076	1.165992	1.086908	1.007825	0.928741	0.910989	0.893236	0.875484	0.857731	0.839979
30	1.189422	1.112738	1.036054	0.959370	0.882686	0.865993	0.849300	0.832607	0.815914	0.799221
35	1.076722	1.008052	0.939383	0.870713	0.802043	0.787234	0.772426	0.757618	0.742809	0.728001
40	1.029383	0.963418	0.897453	0.831489	0.765524	0.751631	0.737738	0.723846	0.709953	0.696060
45	0.988156	0.924631	0.861107	0.797582	0.734057	0.720932	0.707807	0.694682	0.681556	0.668431
50	0.943422	0.882849	0.822276	0.761704	0.701131	0.688808	0.676484	0.664160	0.651837	0.639513
55	0.901446	0.843669	0.785892	0.728115	0.670337	0.658755	0.647172	0.635589	0.624006	0.612423
60	0.843117	0.789112	0.735107	0.681101	0.627096	0.616514	0.605932	0.595350	0.584768	0.574186
65	0.808595	0.755494	0.702393	0.649292	0.596192	0.586195	0.576199	0.566202	0.556206	0.546209
70	0.775752	0.723672	0.671592	0.619513	0.567433	0.557922	0.548412	0.538901	0.529391	0.519880
75+	0.748392	0.696888	0.645384	0.593880	0.542376	0.533249	0.524122	0.514996	0.505869	0.496742

Grams per Mile

PM2.5

Avg Speed (mph)	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
2.5	1.724964	1.538333	1.351703	1.165073	0.978443	0.791813	0.718971	0.646129	0.573286	0.500444	0.427602	0.407218	0.386834	0.366450	0.346066	0.325682	0.318165	0.310648	0.303132	0.295615	0.288098
5	1.002825	0.905827	0.808829	0.711832	0.614834	0.517836	0.479832	0.441827	0.403823	0.365819	0.327815	0.318931	0.310047	0.301163	0.292279	0.283396	0.279581	0.275767	0.271953	0.268139	0.264325
10	0.576983	0.521276	0.465569	0.409862	0.354155	0.298448	0.276645	0.254842	0.233039	0.211236	0.189433	0.184422	0.179411	0.174400	0.169389	0.164378	0.162199	0.160020	0.157842	0.155663	0.153485
15	0.449934	0.404769	0.359604	0.314439	0.269274	0.224109	0.206345	0.188580	0.170816	0.153052	0.135287	0.131049	0.126811	0.122573	0.118335	0.114097	0.112346	0.110596	0.108845	0.107095	0.105345
20	0.376681	0.337752	0.298823	0.259894	0.220965	0.182036	0.166766	0.151495	0.136224	0.120954	0.105683	0.101872	0.098060	0.094249	0.090437	0.086625	0.085118	0.083610	0.082102	0.080594	0.079087
25	0.334968	0.300072	0.265176	0.230281	0.195385	0.160489	0.146836	0.133183	0.119530	0.105877	0.092224	0.088920	0.085615	0.082311	0.079007	0.075702	0.074358	0.073014	0.071670	0.070326	0.068982
30	0.308725	0.276151	0.243576	0.211002	0.178428	0.145854	0.133111	0.120368	0.107625	0.094882	0.082139	0.078974	0.075809	0.072645	0.069480	0.066315	0.065068	0.063820	0.062572	0.061325	0.060077
35	0.252555	0.225837	0.199118	0.172400	0.145681	0.118963	0.108596	0.098229	0.087863	0.077496	0.067129	0.064428	0.061726	0.059024	0.056323	0.053621	0.052589	0.051557	0.050526	0.049494	0.048462
40	0.233443	0.208427	0.183410	0.158394	0.133377	0.108361	0.098692	0.089024	0.079355	0.069687	0.060018	0.057410	0.054802	0.052194	0.049585	0.046977	0.046013	0.045049	0.044084	0.043120	0.042156
45	0.218485	0.194805	0.171126	0.147446	0.123766	0.100086	0.090965	0.081844	0.072723	0.063602	0.054481	0.051943	0.049405	0.046867	0.044329	0.041791	0.040880	0.039969	0.039058	0.038146	0.037235
50	0.196737	0.175238	0.153739	0.132240	0.110741	0.089242	0.080999	0.072756	0.064513	0.056271	0.048028	0.045633	0.043238	0.040843	0.038448	0.036053	0.035220	0.034387	0.033554	0.032721	0.031889
55	0.173134	0.154055	0.134976	0.115898	0.096819	0.077740	0.070479	0.063218	0.055956	0.048695	0.041434	0.039224	0.037013	0.034803	0.032593	0.030382	0.029635	0.028888	0.028140	0.027393	0.026645
60	0.158078	0.140587	0.123097	0.105607	0.088117	0.070626	0.063998	0.057370	0.050742	0.044114	0.037485	0.035443	0.033401	0.031359	0.029317	0.027274	0.026589	0.025904	0.025219	0.024534	0.023849
65	0.156187	0.138831	0.121474	0.104118	0.086761	0.069405	0.062800	0.056195	0.049590	0.042985	0.036380	0.034391	0.032402	0.030413	0.028424	0.026435	0.025764	0.025092	0.024421	0.023750	0.023078
70	0.154452	0.137225	0.119997	0.102770	0.085542	0.068315	0.061736	0.055157	0.048577	0.041998	0.035419	0.033473	0.031527	0.029582	0.027636	0.025690	0.025031	0.024372	0.023713	0.023054	0.022395
75+	0.156237	0.138739	0.121240	0.103741	0.086243	0.068744	0.062033	0.055322	0.048611	0.041900	0.035190	0.033248	0.031307	0.029366	0.027425	0.025484	0.024825	0.024165	0.023506	0.022846	0.022187

Grams per Mile

PM10

Avg Speed (mph)	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
2.5	2.843663	2.639527	2.435391	2.231255	2.027119	1.822983	1.743199	1.663416	1.583633	1.503849	1.424066	1.413298	1.402530	1.391763	1.380995	1.370227	1.362013	1.353799	1.345585	1.337370	1.329156
5	2.332866	2.225838	2.118810	2.011782	1.904754	1.797726	1.755656	1.713586	1.671516	1.629446	1.587375	1.593273	1.599171	1.605069	1.610967	1.616864	1.612665	1.608465	1.604265	1.600066	1.595866
10	1.332507	1.271063	1.209619	1.148176	1.086732	1.025288	1.001163	0.977037	0.952912	0.928786	0.904661	0.907983	0.911305	0.914627	0.917948	0.921270	0.918872	0.916473	0.914075	0.911677	0.909278
15	0.921584	0.871924	0.822265	0.772606	0.722947	0.673288	0.653708	0.634129	0.614549	0.594970	0.575390	0.575513	0.575635	0.575758	0.575880	0.576003	0.574080	0.572158	0.570235	0.568313	0.566391
20	0.699606	0.656894	0.614183	0.571471	0.528760	0.486048	0.469260	0.452472	0.435685	0.418897	0.402109	0.400573	0.399037	0.397500	0.395964	0.394428	0.392774	0.391121	0.389468	0.387814	0.386161
25	0.602344	0.564121	0.525899	0.487676	0.449454	0.411232	0.396252	0.381273	0.366294	0.351314	0.336335	0.335463	0.334592	0.333720	0.332848	0.331977	0.330506	0.329034	0.327563	0.326092	0.324621
30	0.524343	0.488694	0.453045	0.417396	0.381747	0.346098	0.332132	0.318166	0.304200	0.290235	0.276269	0.274758	0.273246	0.271735	0.270224	0.268713	0.267348	0.265983	0.264619	0.263254	0.261889
35	0.425363	0.396123	0.366882	0.337642	0.308402	0.279162	0.267799	0.256437	0.245075	0.233713	0.222351	0.220908	0.219465	0.218022	0.216579	0.215137	0.214008	0.212879	0.211751	0.210622	0.209494
40	0.370014	0.342665	0.315316	0.287967	0.260619	0.233270	0.222687	0.212104	0.201521	0.190938	0.180355	0.178679	0.177003	0.175328	0.173652	0.171976	0.170922	0.169869	0.168815	0.167761	0.166707
45	0.326810	0.300945	0.275080	0.249215	0.223350	0.197484	0.187512	0.177539	0.167567	0.157594	0.147622	0.145750	0.143878	0.142005	0.140133	0.138261	0.137266	0.136271	0.135276	0.134281	0.133286
50	0.281103	0.257631	0.234158	0.210685	0.187212	0.163740	0.154732	0.145725	0.136718	0.127711	0.118703	0.116668	0.114632	0.112597	0.110561	0.108525	0.107616	0.106707	0.105798	0.104888	0.103979
55	0.236603	0.215782	0.194962	0.174141	0.153320	0.132499	0.124569	0.116638	0.108708	0.100777	0.092847	0.090734	0.088621	0.086508	0.084395	0.082283	0.081467	0.080651	0.079836	0.079020	0.078204
60	0.210164	0.191080	0.171997	0.152913	0.133829	0.114746	0.107508	0.100271	0.093033	0.085796	0.078559	0.076442	0.074326	0.072209	0.070093	0.067976	0.067228	0.066481	0.065733	0.064986	0.064238
65	0.203129	0.184198	0.165267	0.146336	0.127405	0.108473	0.101265	0.094056	0.086847	0.079639	0.072430	0.070355	0.068281	0.066206	0.064131	0.062057	0.061324	0.060592	0.059860	0.059128	0.058396
70	0.196842	0.178057	0.159272	0.140487	0.121702	0.102917	0.095739	0.088561	0.081383	0.074206	0.067028	0.064987	0.062946	0.060905	0.058863	0.056822	0.056104	0.055385	0.054667	0.053948	0.053230
75+	0.195028	0.175952	0.156877	0.137802	0.118726	0.099651	0.092332	0.085014	0.077695	0.070376	0.063057	0.061016	0.058975	0.056934	0.054893	0.052852	0.052133	0.051414	0.050695	0.049976	0.049257

TRAN ITEM #39

9.1.12 Parking Area Improvements and Maintenance

A. Surfacing and Facility Type

…

2. Developments that provide more than fifty (50) off-street parking spaces and exceed the minimum number of parking spaces required by this Part shall ~~**either: c.**~~ provide 25% more trees within the required Interior Landscape Area (ILA) than is otherwise required by Chapter 10 of the Land Development Code for the site's entire parking area. **An additional tree shall be provided for every four (4) parking spaces above the minimum number of parking spaces required by this Part, up to 25% more trees than would otherwise be required.** The trees provided shall be Type A trees that maximize the amount of shade that is provided within the parking area. Additionally, the ILA's shall be designed to maximize their ability to absorb the site's stormwater runoff in an effort to improve the water quality of the stormwater runoff and to provide an adequate water supply to ensure the long term health of the canopy trees. The Planning Commission may modify this requirement if the applicant demonstrates that an alternative site design, surfacing material or facility type offers greater environmental benefits than those associated with the requirements in this Part.

~~**a. Surface a portion of its total parking area proportional to the extent to which the minimum number of parking spaces is exceeded using concrete; or**~~

~~**b. Surface the parking spaces in excess of the minimum using semi-pervious paving systems, or locate those parking spaces in excess of the minimum within parking structures or elevator parking systems: or**~~