

# ATAG's Concerns With EHO Proposal



**Issue 1:** The 20% tree canopy requirement for one-family development is **at risk**.

## County's Position:

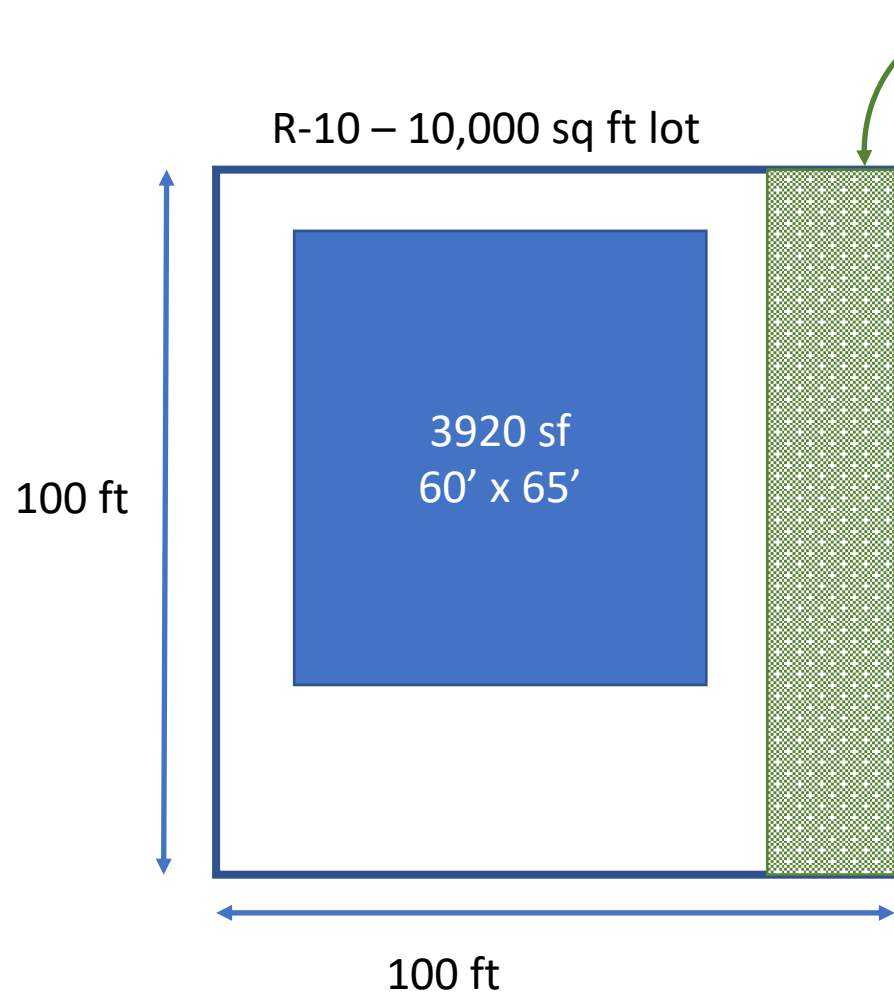
*"...CBPO requirement for 20% canopy for one-family development would continue to apply to one-family development because the current R district regulations in Article 5 would not change."*

**THIS STATEMENT NEEDS TO BE REVIEWED TO ENSURE IT IS LEGALLY CORRECT**

## The Code of Virginia 15.2-961:

- 10% tree canopy for a residential site **zoned** 20 or more units per acre
- 15% tree canopy for a residential site **zoned** between 10-20 or more units per acre
- 20% tree canopy for a residential site **zoned** 10 units or less per acre

**Issue 2:** The “one tree per unit” policy (described in Option 6A) results in fewer trees than the current 20% minimum for single family detached in 70% of cases.



**R10 Example:**

Current Standard -  $10,000 \times 20\% = 2,000$  sf of tree canopy in 20 yrs.

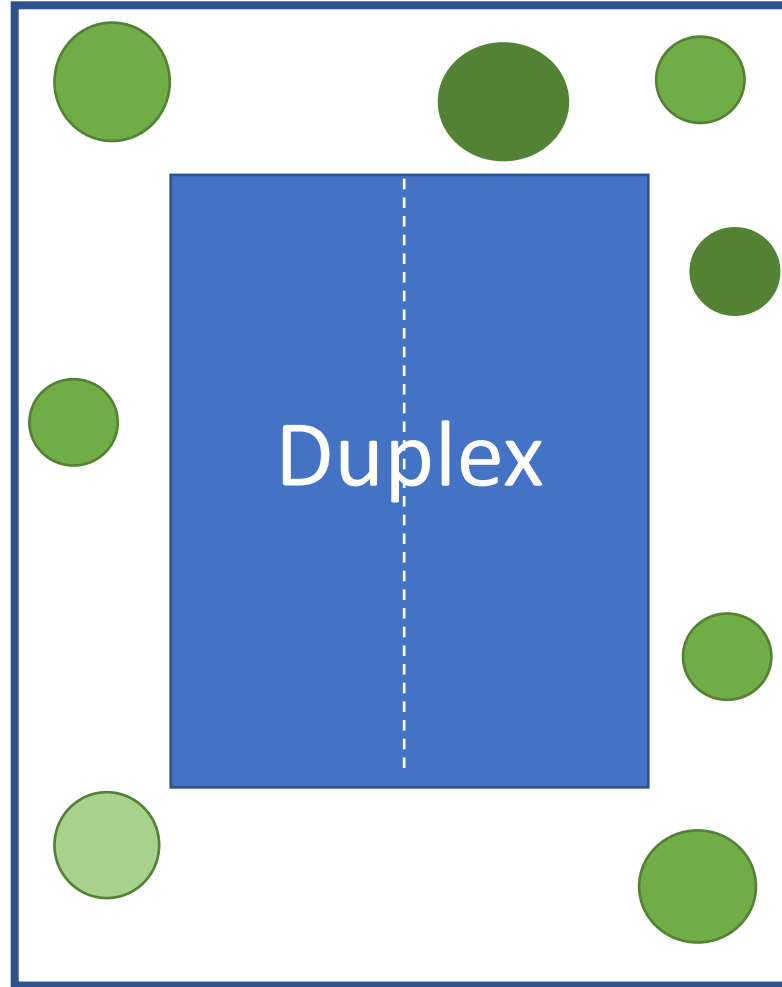
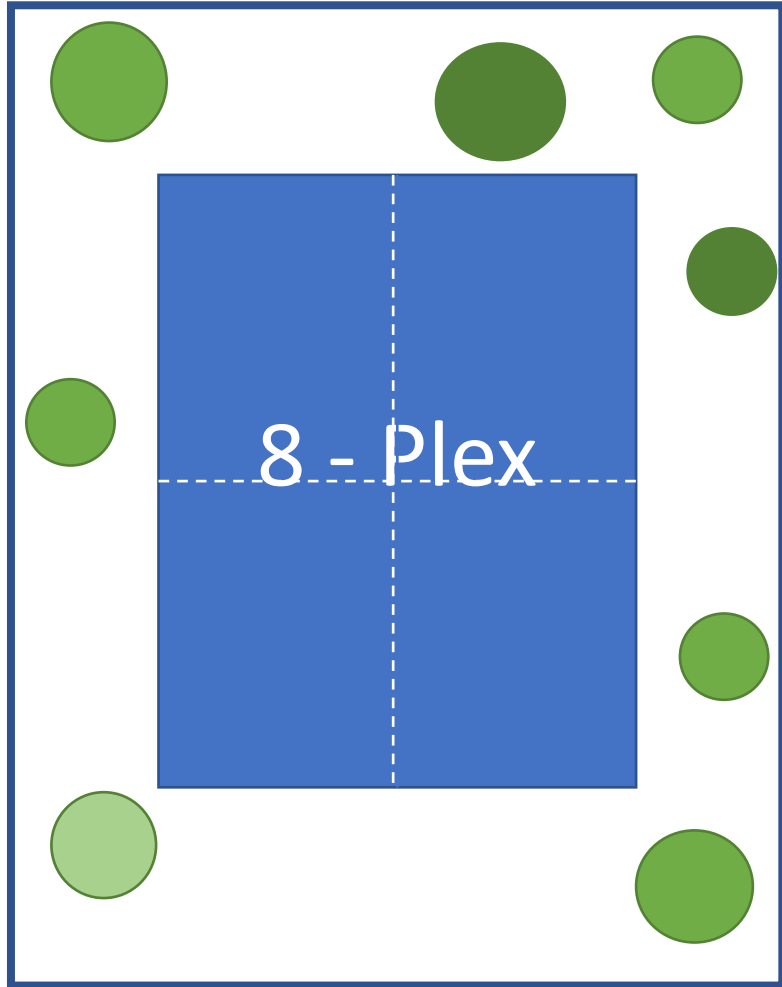
**Med tree example** = 218.75 sf canopy for each tree

**One tree per unit:**

- Duplex: **4.38 %** tree canopy in 20 yrs
- Triplex: **6.56 %** tree canopy in 20 yrs
- 4-plex: **8.75 %** tree canopy in 20 yrs
- 5-plex: **10.94 %** tree canopy in 20 yrs
- 6-plex: **13.13 %** tree canopy in 20 yrs
- 8-plex: **17.50 %** tree canopy in 20 yrs

**Issue 3:** “One tree per unit” is not based on available planting space.

If the county can require **8 trees** to be planted on a lot with an **8-plex**, why can't they require **8 trees** to be planted on a lot with a **duplex**, or **4-plex**?



# Appendix



# R10 Calculations - One Tree Per Unit

Number of Units	All Small Trees - canopy sf	All Med Trees - canopy sf	All Large Trees - canopy sf	All small trees %	All med trees %	All large trees %	Footprint of house (40%)	Remaining Land
2	125	437.5	787.5	1.25	4.38	7.88	4000	6,000
3	187.5	656.25	1181.25	1.88	6.56	11.81	4000	6,000
4	250	875	1575	2.50	8.75	15.75	4000	6,000
5	312.5	1093.75	1968.75	3.13	10.94	19.69	4000	6,000
6	375	1312.5	2362.5	3.75	13.13	23.63	4000	6,000
7	437.5	1531.25	2756.25	4.38	15.31	27.56	4000	6,000
8	500	1750	3150	5.00	17.50	31.50	4000	6,000

Tree size	20 yr Canopy sq foot	With native tree bonus
small	50	62.5
small-medium	110	137.5
medium	175	218.75
medium-large	250	312.5
large	315	393.75



# R8 Calculations - One Tree Per Unit

Number of Units	All Small Trees - canopy sf	All Med Trees - canopy sf	All Large Trees - canopy sf	All small trees %	All med trees %	All large trees %	Footprint of house (40%)	Remaining Land
2	125	437.5	787.5	1.56	5.47	9.84	3200	4,800
3	187.5	656.25	1181.25	2.34	8.20	14.77	3200	4,800
4	250	875	1575	3.13	10.94	19.69	3200	4,800
5	312.5	1093.75	1968.75	3.91	13.67	24.61	3200	4,800
6	375	1312.5	2362.5	4.69	16.41	29.53	3200	4,800
7	437.5	1531.25	2756.25	5.47	19.14	34.45	3200	4,800
8	500	1750	3150	6.25	21.88	39.38	3200	4,800

Tree size	20 yr Canopy sq foot	With native tree bonus
small	50	62.5
small-medium	110	137.5
medium	175	218.75
medium-large	250	312.5
large	315	393.75



# R6 Calculations - One Tree Per Unit

Number of Units	All Small Trees - canopy sf	All Med Trees - canopy sf	All Large Trees - canopy sf	All small trees %	All med trees %	All large trees %	Footprint of house (56%)	Remaining Land
2	125	437.5	787.5	2.08	7.29	13.13	3360	2,640
3	187.5	656.25	1181.25	3.13	10.94	19.69	3360	2,640
4	250	875	1575	4.17	14.58	26.25	3360	2,640
5	312.5	1093.75	1968.75	5.21	18.23	32.81	3360	2,640
6	375	1312.5	2362.5	6.25	21.88	39.38	3360	2,640
7	437.5	1531.25	2756.25	7.29	25.52	45.94	3360	2,640
8	500	1750	3150	8.33	29.17	52.50	3360	2,640

Tree size	20 yr Canopy sq foot	With native tree bonus
small	50	62.5
small-medium	110	137.5
medium	175	218.75
medium-large	250	312.5
large	315	393.75



# R5 Calculations - One Tree Per Unit

Number of Units	All Small Trees - canopy sf	All Med Trees - canopy sf	All Large Trees - canopy sf	All small trees %	All med trees %	All large trees %	Footprint of house (56%)	Remaining Land
2	125	437.5	787.5	2.5	8.75	15.75	2800	2,200
3	187.5	656.25	1181.25	3.75	13.125	23.625	2800	2,200
4	250	875	1575	5	17.5	31.5	2800	2,200
5	312.5	1093.75	1968.75	6.25	21.875	39.375	2800	2,200
6	375	1312.5	2362.5	7.5	26.25	47.25	2800	2,200
7	437.5	1531.25	2756.25	8.75	30.625	55.125	2800	2,200
8	500	1750	3150	10	35	63	2800	2,200

Tree size	20 yr Canopy sq foot	With native tree bonus
small	50	62.5
small-medium	110	137.5
medium	175	218.75
medium-large	250	312.5
large	315	393.75

