FLOOR AREA RATIOS

BACKGROUND/SUMMARY

The current **Floor Area Ratio (FAR)** for Single-Family Zones in the Hillside Area is still 3 times the Buildable Area (Lot Size minus Setbacks). This allows for the construction of homes that are out-of-scale with the surrounding neighborhood, a phenomenon commonly referred to as "mansionization." For example, a 5,000 sq-ft, R1-1 zoned lot has a current development potential of over 7,000 square-feet (not including the garage); essentially permitting structures which are significantly larger than the lot itself.

The Baseline Mansionization Ordinance (BMO) has already addressed this phenomenon for the City's non-hillside neighborhoods, and the FAR proposal in the Baseline Hillside Ordinance, outlined below, should also do the same for single-family construction in the hillsides.

What is a Floor Area Ratio (FAR)?
FAR establishes a relationship between a property and the amount of development permitted for that property, and is expressed as a percentage or a ratio.

PROPOSED FLOOR AREA RATIOS

The FAR would be based on zone, lot size, and steepness of slopes on a hillside property, rather than lot size alone. This approach takes into account that there are many differences in hillside lots, and that the Code needs to consider the varying hillside conditions when determining Residential Floor Area limits. Residential Floor Area bonuses are also provided, as in the BMO, with additional options related to grading. A lot that is considered "flat" (entirely made up of 0% to 15% slopes) would be treated the same as it would in the BMO, in terms of the amount of development.

Similar to the BMO, the Baseline Hillside Ordinance uses specified **Floor Area Ratios** for each Single-Family Zone based on both the size of the lot and a property's unique hillside terrain (or topography). Homes would adhere to size limits computed by a formula that gradually reduces the FAR for the steeper areas of the lot. The premise is that steepness should be one of the variables used when determining the amount of development that can occur on a property.

The starting point for each zone is the base FAR established in the BMO:

R1	RS	RE9	RE11	RE15	RE20	RE40	RA
50%	45%	40%	40%	35%	35%	35%	25%

Next, the topography of a lot is addressed by identifying the following slope intervals, called **Slope Bands**, which each have an **FAR** value that decreases as they get steeper:

Slope Band	Angle (in degrees)	Description
0% - 15%	0 – 8.5	Flat to Moderate Slope
15% - 30%	8.5 – 16.5	Strong Slopes (true hillside)
30% - 45%	16.5 – 24	Very Strong Slopes
45% - 60%	24 – 31	Moderately Severe Slopes
60% - 100%	31 – 45	Severe Slopes
100% or greater	45 or greater	Extreme Slopes

A licensed surveyor is currently required to prepare a topographic map of a property for any development proposals within a Hillside Area. The same surveyor would also prepare a Slope Analysis Map, based on the natural/existing topography, which delineates the portions of a property which fall under each Slope Band and include a tabulation of the total area of the lot (in square feet) within each band. Those values would then be multiplied by the following FARs for the zone of the lot to determine the maximum Residential Floor Area limit for each individual property.

Single-Family Zone Hillside Area Residential Floor Area Ratios (FAR)								
Slope Bands (%)	**R1**	**RS**	**RE9**	**RE11**	**RE15**	**RE20**	**RE40**	**RA**
0 – 14.99	0.50	0.45	0.40	0.40	0.35	0.35	0.35	0.25
15 – 29.99	0.45	0.40	0.35	0.35	0.30	0.30	0.30	0.20
30 – 44.99	0.40	0.35	0.30	0.30	0.25	0.25	0.25	0.15
45 – 59.99	0.35	0.30	0.25	0.25	0.20	0.20	0.20	0.10
60 – 99.99	0.30	0.25	0.20	0.20	0.15	0.15	0.15	0.05
100 +	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

The concept for this approach is that not all properties in the Hillside Area are the same, and that the citywide baseline formula would address the unique topography of individual hillside properties.

CALCULATING THE MAXIMUM RESIDENTIAL FLOOR AREA

The maximum residential floor area for all development on a property is calculated using a formula (outlined below) that factors in the zone, size, and topography of the lot, where "A" is the area of the lot within each slope band, "M" is the FAR of the corresponding slope band, "V" is the sum of the residential floor area of each slope band.

Hillside Area Maximum Residential Floor Area Formula					
Slope Bands (%)	**Area (sq-ft)**		**FAR**		**Residential Floor Area**
0 – 14.99	A^1	×	M^1	=	V^1
15 – 29.99	A^2	×	M^2	=	V^2
30 – 44.99	A^3	×	M^3	=	V^3
45 – 59.99	A^4	×	M^4	=	V^4
60 – 99.99	A^5	×	M^5	=	V^5
100 +	A^6	×	M^6	=	V^6
	Maximum Residential Floor Area			=	Sum of V^1 through V^6

The following are 3 theoretical examples (a "Flat" Lot, Sloped Lot, and Very Sloped Lot) of calculations for a 5,000 sq-ft R1 Zoned property in different slope scenarios using the formula above:

FLOOR AREA RATIOS

Scenario 1 – "Flat" Lot

As you can see by the results of the proposed formula below, a "flat" to moderately sloped lot in the Hillside Area would be allowed to build the same amount as a property where the Baseline Mansionization Ordinance is applied today.

Slope Bands (%)	Area (sq-ft)	FAR	Residential Floor Area
0 – 14.99	5,000	0.50	2,500
15 – 29.99	0	0.45	0
30 – 44.99	0	0.40	0
45 – 59.99	0	0.35	0
60 – 99.99	0	0.30	0
100 +	0	0.00	0
	(5,000)	**Maximum RFA =**	**2,500 sq-ft**

Scenario 2 – Sloped Lot

A property that is mostly "flat" to moderately sloped, but does have a little more steep terrain would see a slight decrease in the maximum Residential Floor Area. As you can see from the results of the formula below, the property has a moderate reduction in the size limits when compared to a "flatter" lot. The rationale here is that this lot can accommodate slightly less development than the last example.

Slope Bands (%)	Area (sq-ft)	FAR	Residential Floor Area
0 – 14.99	2,500	0.50	1,250
15 – 29.99	1,000	0.45	450
30 – 44.99	950	0.40	380
45 – 59.99	400	0.35	140
60 – 99.99	100	0.30	30
100 +	50	0.00	0
	(5,000)	**Maximum RFA =**	**2,250 sq-ft**

Scenario 3 – Very Sloped Lot

A property comprised of steeper slopes would see a more significant decrease in the maximum Residential Floor Area, as illustrated by the result of the formula below. A majority of this property is in the very strong to moderately severe slope categories, and therefore cannot accommodate the same amount of development as the other examples.

Slope Bands (%)	Area (sq-ft)	FAR	Residential Floor Area
0 – 14.99	500	0.50	250
15 – 29.99	600	0.45	270
30 – 44.99	1,000	0.40	400
45 – 59.99	2,000	0.35	700
60 – 99.99	500	0.30	150
100 +	400	0.00	0
	(5,000)	**Maximum RFA =**	**1,770 sq-ft**

GUARANTEED MINIMUM RESIDENTIAL FLOOR AREA

If a property is entirely within the severe to extreme slope categories, it would be possible to have a Residential Floor Area limit that would not be able to accommodate a livable structure using the proposed Slope Band FAR method. In order to make sure that this does not occur, the proposed Baseline Hillside Ordinance would include a Guaranteed Minimum Residential Floor Area.

FLOOR AREA RATIOS

R1	RS	RE9	RE11	RE15	RE20	RE40	RA
5,000 sq-ft min lot	7,500 sq-ft min lot	9,000 sq-ft min lot	11,000 sq-ft min lot	15,000 sq-ft min lot	20,000 sq-ft min lot	40,000 sq-ft min lot	17,500 sq-ft min lot
1,500 sq-ft		3,000 sq-ft		4,000 sq-ft			3,000 sq-ft

The guaranteed minimum is increased for the larger lots in order to maintain a basic scale for the each zone. Lots in the RE9 and RE11 Zones are roughly two times the size of the R1, so the minimum is increased accordingly. Lots in the RE15, RE20, and RE40 are guaranteed 4,000 square-feet. The RA Zone is intended to have the smallest house to lot ratio, in order to accommodate the agricultural and animal-keeping uses, so it is given a moderate guaranteed minimum.

It is important to keep in mind that these numbers being proposed are preliminary, and that the exact values will be determined through the public hearing process. If you have concerns regarding the numeric value of any of these guaranteed minimums, please be sure to express them in writing or in one of the many public forums which will be provided to you during the adoption process.

20% RESIDENTIAL FLOOR AREA BONUS

Similar to the BMO, the Baseline Hillside Ordinance would allow for a 20% Residential Floor Area Bonus if the project meets certain design criteria that reduces the project's environmental or visual impact.

Proportional Stories Option – The total Residential Floor Area of each story other than the Base Floor in a multi-story building does not exceed 75% of the Base Floor area; this option in only available for buildings on a natural/existing "flat" (less than 15% slope) pad.

Front Facade Stepback Option – At least 25% of the front facade of a building is stepped-back a distance of at least 20% of the building depth; this option in only available for buildings on a natural/existing "flat" (less than 15% slope) pad.

Minimal Grading Option – The total grading on the site, including exempted grading, does not exceed 10% of the total lot size in cubic yards or 1,000 cubic yards, whichever is less; this option in only available for properties where at least 60% of the lot is comprised of slopes which are 30% or greater.

Landform Grading Option – Grading is done in accordance with the Department of City Planning – Planning Guidelines Landform Grading Manual in order to better reflect the original landform and result in minimum disturbance to natural terrain. This option is only available for properties where at least 60% of the lot is comprised of slopes which are 30% or greater, and the total quantities of non-exempted grading on the site do not exceed 1,000 cubic yards.

Green Building Option – New single family dwelling are building in substantial compliance with the requirements for the U.S. Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED®) for Homes program at the "Certified" level or higher.

ZONING ADMINISTRATOR ADJUSTMENT

The Zoning Administrator will continue to have the authority to grant an Adjustment of no more than 10% to the maximum Residential Floor Area limits for a property; any increase larger than 10% would require a Variance.