

Green Roof Review Task Force

Meeting #8 – May 23, 2018 – 9:00-12:00

200 W 14th Ave, 2nd Floor, Grand Mesa Room
DRAFT Agenda

Meeting Objectives:

- Review the full package of proposed action for new buildings, major renovations and existing buildings
 - Build toward consensus on a package that everyone can live with
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9:00 Opening

- Welcome – Opening – Introductions – Preliminary Matters – Agenda Preview and Operating Protocol Reminder

9:05 Input – Public Meetings and More

- Quick Summary
- High-Level Reaction and Observations – What Does this Tell Us?

9:25 Latest Version – Recap

9:35 Consensus-Seeking Discussion – With Proposed Changes

Each Observation Should Lead to An Idea: ‘Our recommendation is stronger and would move us toward an agreement if we change it in this way... ‘

Fundamental Questions:

- Is this something that serves the interests of the other members of the task force and the constituencies they represent while taking care of what I care about?
- Can I live with this, stand behind this, recommend this to City Council?
- Have we accomplished the benefits of the vote but in a way that can gain more willing compliance?
- Is it better than the ordinance the voters passed – more balanced, fairer, less expensive...?

11:49 Recap – How Close are We to a Meeting-of-the-Minds?

11:50 Next Steps

- Final Task Force Meeting – Thursday, June 7 1:00 – 4:00
- Council Committee-of-the-Whole – June 25

12:00 Adjourn

**Green Roof Review Task Force
Summary – Meeting #8 – May 23, 2018**

Meeting Objectives:

- Review the full package of proposed action for new buildings and existing buildings
 - Build toward consensus on a package that everyone can live with
-

I. Preliminary Items

- Think about finding the best answer given your differences, not the answer that's best for you
- June 7th meeting will be at History Colorado
- After discussion, the task force did not change the protocol related to speaking to the press
- Reminder – do not characterize the opinion of the whole group (there will not be one until after meeting 9) and do not characterize the opinions of others
- The task force requests that observers, including the media and those on social media, do the same

II. Summary of Input So Far

Survey

- 69 survey responses so far
- In response to the question 'Is the proposal an improvement?' – 5 out of 10
- Interested public rate the same question 4 out of 10
- From the real-estate-related survey respondents
 - o Compliments
 - o Indication that, like the ordinance, this would delay roof replacement
 - o Mixed opinion on the effect on density
 - o Requests for exemptions of different types – all existing buildings or affordable housing or landmark buildings or small-scale residential 5 stories and under

Public Meetings

- Compliments – the task force work is more realistic
- Concern about small-scale residential 5 stories and under
- Offer an option to propose one's own option
- Exempt unavailable roof space
- Concern about fee-in-lieu
- . Discomfort about the fee.

Letters

- Create incentive for contiguous green space
- Exemption requests
- Incentives for density
- Concern about over-reliance on cool roof

III. Summary of the Current Proposal – Katrina

- Correction to the energy efficiency calculation – percent dropped to 5% and 12% due to a solar efficiency error for new buildings
- Existing – green space can be anywhere on the site
- Adding detail to address building additions

IV. Economist – City and County – Office of Economic Development

- Will produce a written response
- Focus on the importance of reliable costs
- Creating certainty is a positive
- A 1-2% increase in construction costs from implementation of a new ordinance is within the realm of the cost increase the city is experiencing now
- A minor impact of housing affordability
- Positive implication from the city's reputation as a progressive city committed to sustainability

Q: Is the increased construction cost from this ordinance on par with (and in addition to) the increase from the affordable housing impact fee?

A: yes

Q: Given that the two are added to one another, are there more increases we can expect?

A: Not sure

Q: Did you talk to builders for your analysis?

A: No, they have their input here

Comment: We are experience cost increases over last year that are at least 5% and more like 8-10%

Q: Did you say that this is good for affordable housing?

A: Yes, spending on energy is central to affordability (along with two others – mortgage or rent and transportation) (energy); improvements that improve energy efficiency will pay back to the renter or owner

Q: Because existing buildings are so different from one another, did you examine some existing buildings?

A: We used the independent analysis from Stantec

A: (From Stantec) We got the information from the task force members and advisors about their buildings

V. Discussion and Revision

- Off-site solar is beneficial, however, we should not treat it as equal to on-site solar
- LEED distinguishes between the two – it takes 8-times as much off-site to equal on-site
- We treat solar differently in the new building portion of the proposal than in the existing building portion
- We need to define off-site solar so that the benefits are happening in Denver or in Xcel service territory, not out-of-state
- The energy benefits to the grid are the same
- We should require that 50% of a requirement happen on-site in the form of energy efficiency or contributions
- The current proposal is too difficult for existing buildings, too costly
- Cool roofs will improve urban heat island; we could stop there for existing buildings.
- The voters approved green roof and solar on all buildings
- Even if most don't use the green option, we should retain it
- We need to think about the other benefits – stormwater and green space
- The real estate community understanding that this has passed
- The best thing we can do is focus on what is best for the city and what will achieve actual results
- Assuming a significant percentage of existing buildings would be exempt from the green roof requirement because it would require major structural change, cool roofs on all existing buildings is an improvement over what the ordinance would have produced

- Polling the experience of solar companies, they find just a few hundreds of commercial flat roofs over last 10 years that cannot be made to support on-site solar due to structural issues. (~5 instances in ~hundreds over 10+ years); a 'butler building' is good example of one that could not support solar
- The 'and' for the energy program is going too far
- We should create an option in which the energy program is one compliance path, but not part of every compliance path
- Cool roof alone – unlikely to get 9 council votes – they would see that as undermining what the voters voted for
- We need to go beyond cool roofs because voters expected green roofs
- We need to find options that can produce all of the benefits of the ordinance as voters passed it – urban heat island, green space and stormwater, climate and energy
- The number of options is confusing
- We have already reduced the green space to something small; if we eliminate it from every option for existing buildings, those who are watching what the task force is doing will not understand or accept it
- The ordinance intended to have solar as an option, so we have to include that
- We should re-examine the definition of available roof space and return to our first draft
- We should examine LEED Silver to see if that is a better, more equivalent standard
- We could rethink the fee-in-lieu approach – allowing those with existing buildings to pay for green roof space on new buildings to increase their coverage
- A market system of tradable credits for green space; incentivize new buildings to do more
- Other cities have incentives for height and density
- Community Planning sees complications
- We could raise the exemption to include 5-story, podium + stick-built residential with fewer than a certain number of units
- We could simplify the existing building approach to cool roof plus something – green space or fee or energy program or solar or LEED, etc.
- We have to keep a pathway that include a green roof
- Perhaps one path has only green roof
- It is valuable to have everyone do something
- We have to consider what happens for existing buildings where a cool roof doesn't work

VI. Creating a Workable, New Proposal

- Package 1
 - Option 1 – Cool + Green Space on the Site – roof, terrace, or on the ground
 - Option 2 – Cool + Solar
 - Option 3 – Certification – Silver or Gold
 - Option 4 – Cool + Fees-in-Lieu of Green
 - Option 5 – Cool + Energy Efficiency
- Discussion
 - Cool roof and energy misses stormwater and green space
 - Cool definition needs to be expanded to include metal and ballasted roof options
 - Retro-commissioning is so affordable and pays back – many will choose Option 5
 - The key is how much and when – how to calculate the green # and the solar # and the amount of energy improvement
 - Stick to the numbers that are in the proposal

- The fee-in-lieu will require a rate study after this process is over – with one meeting left, we can review the methodology and reach agreement on a method that we believe is sound
- This package assumes that everything is triggered at roof replacement; an owner could pick a path in advance of the need for roof replacement and begin banking the credit for improvements that won't be required until a new roof is required
- Keep the concept of credits and using the fee to increase green roofs on buildings that can support them
- Need to divide what goes in the ordinance from what goes in rules and regulations
- For off-site solar – use the greater of 15% energy improvement or the space on the roof
- We need to re-examine the definition of available roof space
- Use the smaller of the full coverage calculation or the individual building's available space
- Important to remember that as we spread out the costs across all existing buildings, we are taking in those that would have been able to avoid building a green roof because of the major structural alterations test – and we need to deal with their willingness to accept having to do something under our proposal – there are buildings that we may want to help with compliance
- We should examine the idea that the fire department favors modular green roof units – that may be a mistake
- We have more work to do on campuses

VII. Next Step

Convene the Kathie/Brandon/Mark/Amy caucus and anyone else who wants to meet to work out the details of the approach to existing buildings – based on today's package of 5 options – in advance of June 7 meeting – Everyone will get a meeting notice

Full proposal to the task force in advance of June 7th meeting --- need a final recommendation at that meeting