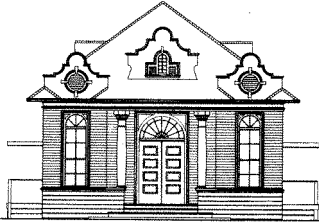


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MEMORANDUM

TOWN OF PORTOLA VALLEY

TO: Planning Commission & ASCC Sub-Group
Climate Protection and Green Building Program 2007-2008
Planning Commissioners: Linda Elkind, Nate McKitterick
ASCC members: Jeff Clark, Carter Warr
BEET Committee: Craig Breon, Linda Yates
Town Council Liaisons: Maryann Derwin, Steve Toben

FROM: Tom Vlastic, Deputy Town Planner

DATE: July 18, 2008

RE: Planning Commission & ASCC Sub-Group Status Report and
Recommended Next Steps – *Work Session Number 4*

Report Overview and Recommendations

This memorandum is intended to serve as a status report on the efforts of the sub-group, set-forth next steps and, hopefully, provide a basis for a pathway to adoption of a local rating system for new structures and major remodels. In addition, it is intended to provide an overview of the sustainability building efforts that have been made in furtherance of the 2007 BEET committee recommendations.

It is anticipated that based on this report and the next meeting of the sub-group specific recommendations would be formulated and forwarded to the planning commission and ASCC for review. Then, based on ASCC and Planning commission review, the recommendations would be modified as may be appropriate and presented to the town council for concurrence and directions with respect to implementation. A tentative timeframe for this process is also discussed herein.

A date has yet to be set for the next sub-group meeting, but members will be contacted shortly to check schedules and, hopefully, identify a mutually acceptable time for the meeting.

Background, Work To Date of Sub-group and Recommendations for Next Steps

To date, work group sessions and related meetings have included the following:

- December 13, 2007 Subgroup Meeting to consider council requests and particularly options for a local green building program
- January 31, 2008 Subgroup meeting to further discuss program options and next steps
- April 5, 2008 Community Workshop on Home Energy Conservation and Green Design (including several meetings with local architects in preparation for the workshop)
- May 1, 2008 Subgroup meeting to discuss and evaluate the workshop and develop suggestions for next steps
- May 14, 2008 meeting with local realtors on a possible green building program

At the sub-group's May 1 meeting, it was agreed that ideas for a green point rating system and particularly any program for "green-ups" of existing homes, particularly "green-ups" associated with the point of sale of existing residences, should be discussed with local realtors. The May 14 meeting with several local realtors was then convened. The input from the meeting is presented below.

At this point, it is recommended that the information presented in this report, specifically the issues and options for a possible "green" point rating system be discussed by the sub-group and tentative recommendations developed that can be forwarded to the full planning commission and ASCC for discussion, at least in concept, and then shared with the town council with commission and ASCC input. This would provide the opportunity for the town council to advise on the concepts and identify any tentative program adjustments that should be considered before more detailed work is pursued for implementation of a point system.

After the receipt of input from the town council, it is likely that the actual program for a town "green" point rating system would be finalized and set for public hearing prior to adoption. It is possible that the town council could consider tentative recommendations in September or October and, based on council direction, materials prepared for a planning commission hearing on a local rating system for later this Fall.

Overview of Town Sustainability Efforts In Response to 2007 Town Council Directions

As a general perspective, in the aftermath of the recent debate over possible changes to the basement floor area regulations, and based on the input received at the meeting with local realtors on options for green building initiatives, it has become clear that some caution needs to be exercised as any "green" point rating system is pursued. Most importantly, it is essential that efforts are made to ensure the community is fully informed on any actions to create any new "mandates" associated with the town's project review process.

At the same time, recent experience with planning applications is demonstrating that pursuit of sustainable building practices and incorporation of "green building" provisions into project plans is increasing substantially on a more voluntary basis. We believe this is happening both because of the general public awareness of the benefits of green building, but also due to the local encouragement resulting from the efforts of town officials and staff. These factors should also result in a greater willingness on the part of town residents to understand and hopefully "buy into" any town programs for green building, including a local rating

system for new projects and major remodels. Further, new initiatives like the recently introduced “Existing Home GreenPoint RATED” program (copy attached) should also enhance town efforts directed at “green-ups” for even the smallest of remodel projects, including those not requiring a building permit or formal town review.

Some specific efforts that have been underway over the past year are discussed below. The comments that follow also provide an overview of the actions that have been taken to pursue the “processes” recommendations of the BEET committee.

BIG GREENPOINT RATING SYSTEM. The sub-group reached tentative conclusions on the rating system members believe, based on current conditions, should be considered for application in the town. Sub-group members concurred that any local point rating system for new homes or major home remodels should make use, at least at first, of the BIG GreenPoint Rating system. This conclusion was reached because the tracking/monitoring components of the system were found to be less difficult and demanding than those associated with the LEED-H program and BIG is more house size, i.e., floor area neutral than the LEED-H program.

After looking at some examples, it was concluded that the BIG program with a minimum 50-point threshold would not present a difficult burden for local projects and, in fact, opinions were offered that a higher threshold would be appropriate and of more benefit to ensure the town was achieving the carbon emission reduction targets the town council has committed to. There will need to be some further evaluation of the metrics over time to see if any point threshold initially set will have to be adjusted to reach the identified targets for 2020 and 2050. This will need to be considered in light of findings associated with the effectiveness of other efforts in the area of “green-ups,” transportation, etc. Thus, there will need to be a periodic monitoring program relative to actual emission reductions, including PG&E data, to gauge success.

Even though monitoring will be needed to determine need for point adjustments over time, it was suggested during sub-group discussion that the initial point total should be set high enough to make a difference, but not so high as to create difficult or “unreasonable” targets. Further, there was agreement that the level should be set initially and not revisited for at least 2 to 3 years, or at least a long enough time period to allow for judgments to be made on the success of the efforts. Further, it was agreed that residents shouldn’t be subjected to frequent changes and that likely with a program in place applicants would be encouraged to seek higher standards on their own. This is similar to the actual experience the town has had in terms of the current, voluntary “sustainable buildings checklist” program.

Some recent application experiences appear relevant to point system consideration, as well as the setting of any specific BIG GreenPoint Rated point threshold. Recently the ASCC considered a small remodeling and addition project that included a voluntarily completed BIG GreenPoint Rated checklist. It achieved a level of over 90 points and this was for a very simple, 270 sf master bedroom addition for a home in Portola Valley Ranch. Two recent new home proposals for vacant Blue Oaks subdivision parcels also completed the BIG GreenPoint check list and both achieved totals of over 150 points. One includes a photovoltaic system and the other does not, but the second actually achieves a higher BIG point level.

In fact, based on town staff encouragement, encouragement by local design professionals, and likely the publicity associated with town “sustainability/carbon footprint reduction”

objectives, most new applications include considerable commitment to sustainable building. Further, the concern over fire hazard in hillside areas has also resulted in a strong trend to more durable, long-lived, fire-safe exterior building materials. Such materials add to the life of a structure and therefore increase its sustainability.

OTHER BEET COMMITTEE RECOMMENDATIONS, SUGGESTIONS. A number of direct and indirect efforts have been and are being made in line with, in particular, the “processes” recommendations of the BEET committee. These range from providing data to homeowners and applicants and potential applicants to development of specific town policies and possible example programs as part of the work on the “Sustainability Element” of the General Plan. Some highlights of the efforts are offered below. While much has been accomplished, a number of other initiatives still need to be pursued.

1. **Sustainability Element of the General Plan.** The Sustainability Element is in draft form (copy attached). It first briefly describes the other elements of the general plan that, while concentrating on other subjects, have provisions that contribute to sustainability. Next, the element lists six overarching goals of the sustainability element. After that, the major provisions of the element are grouped under six topics as follows:

- Transportation
- New Buildings
- Existing Building Stock
- Water Resources
- Living Environment
- Community Education and Involvement

By and large, the objective of the element is to provide comprehensive guidance for the sustainability program for the town. The commission has reviewed the element several times and is taking care to craft provisions all can agree on. We are now in the process of making a few changes in response to the last planning commission meeting on the draft. Tentatively, it is anticipated that after the next commission meeting on the element on August 6, the draft can be submitted to the town council for consideration. The next issue will be to decide on how to involve the community.

Based our review of Internet resources and various publications, it appears that the town is at the forefront in this general plan element effort. So far, we have been able to locate only one sustainability element that seems to come close to what the town is pursuing. Most programs seem to concentrate on more selective aspects of sustainability. Further, the element provides the policy “framework” recommended by the BEET committee around the five “key” areas of sustainability.

2. **Planning “Sustainability” and “Green Building” Handouts.** In addition to continued use of the San Mateo County “Sustainable Buildings Checklist” and encouragement of use of the BIG GreenPoint Rated calculation sheets, town planning staff has developed, and continues to develop, handouts relative to available resources for green building and “best practices” for green building. Further, the town has obtained relevant documents from BIG and made these available to town residents and design professionals.

As noted at a recent town council meeting, planning technician Carol Borck has developed a number of handouts and is using these to get the “Green” word out to town residences, specifically pursuing the “guidelines” portion of the BEET committee

recommendations. The handouts include general data on sustainable building in Town, as well as specific green options for flooring, insulation, windows, tankless water heaters, etc.

All applications for new residences and major remodels are required to include a completed "sustainability checklist." This document is one of the first now shared with a potential applicant and it is used as a basis for early discussions with project sponsors including architects, property owners, etc. This sharing of information has been important in enhancing the green elements of the projects. Further, the town's efforts to streamline the process for photovoltaic permits have also been extremely successful in getting photovoltaic systems in place in town.

Use of the County "sustainability checklist" has matured and Carol Borck now provides a summary overview of each that is presented to the ASCC for reference when the ASCC is acting on a project. This is a major component of all project reports to the ASCC and has intensified the focus on "green" building during the normal project review process.

These more recent sustainable building efforts are in addition to the basic policies, guidelines and regulations the town has had in place for many years that address size of buildings, impervious surfaces, preservation of natural terrain and minimizing site impacts, and use of drought tolerant, native plant materials for landscaping. It should not be forgotten that many of the town's current, long established planning provisions encourage the application of what are now identified as "green" or sustainable land use and building practices.

3. **Town Guidance re: Land Use Applications**. Most all of the applications staff deals with today have significant sustainable elements to them including those for both residential and non-residential projects. Perspective on residential projects was offered above. On the non-residential side, the town has encouraged and achieved with *Roberts Market* significant new, energy efficient systems and has also put into place a process for pursuing the addition of photovoltaic panels when they become more efficient and cost effective for a use of this scale and the limited roof area that is available. With *The Priory* the town was able to encourage a number of green building components including the living roof on the new performing arts center. For both of the projects, as well as all recent use permit requests, requirements relative to development and implementation of sustainability plans have become standard conditions of permit approval.

Further, based on previous sub-group discussion, it is likely that the final recommendations for any green point rating systems would include a minimum LEED level for new, larger non-residential buildings and projects, and in all our discussions with non-residential use representatives (e.g., The Sequoias, Priory, Alpine Hills), we have advised them that green building and site use components would be mandated conditions of any use permit or permit amendment. The recent permit actions have included green requirements not only in terms of energy conservation in buildings but also landscaping and land management to, for example, minimize water usage and provide for reuse of water on-site.

Thus far efforts have proven successful even though not based on a mandatory point system. Further, it has been helpful that the town has set a high public standard with the town center project and its "green" achievements. It has also been important to have

“green” resources locally available including not only building materials, but local design talent that is truly “up-to-speed” on how to incorporate “green” design into projects.

4. **April 5, 2008 Community Workshop on Home Energy Conservation and Green Design.** The green building workshop the town held last spring was successful on several levels and the town will need to determine the best “next steps” relative to, particularly, getting data out on greening of existing homes. The energy/green building audits done privately for houses in town revealed a clear desire on the part of homeowners to have a way to find out how “green” their existing homes are. Based on this and the workshop input, the town should likely consider at least developing a resource list for such audits.
5. **May 14, 2008 Meeting with Local Realtors.** In the aftermath of the May 1, 2008 Subgroup discussion on the possibility of an energy audit at the time of house sale, a meeting was held with local realtors to gauge reaction. The reaction was mixed at best and specifically not supportive of any added burdens associated with the point of sale. In fact, we were informed that at the National level the professional realtors associations oppose any such requirements. At the same time, the realtors did comment that their clients were interested in, and now much more aware of, “green” and energy issues and seeking more energy efficient homes. Nonetheless, the general reaction to the idea of a town mandate related to any audit or “green-up” around the point of sale was *extremely negative*.

It is noted, however, that local realtor publications include data on “green” homes, and the use of and understanding of “green” in terms of sustainability of houses appears to be more universally understood and used. For example, the popular “Home and Garden” (HGTV) television channel includes a significant amount of programming associated with “green” building and remodeling.

6. **Sustainability Coordinator.** The town is in the final stages of the interview process for the sustainability coordinator and that position should be able to build on the outreach efforts that staff has already initiated, as well as pursue the other “green” aspects of the position’s job description. The position will likely be filled and functioning shortly after town staff moves into the new town hall building. This should occur in late August or early September.
7. **Other BEET Committee “Process” Recommendations.** With respect to some of the other BEET committee recommendations, the ASCC has already been taking into account the need to make adjustments to some of the roof reflectivity policy limits as they pertain to “cool roofs.” Obviously, a balancing of objectives is exercised, as many “neighbors” remain concerned over visual impacts. Nonetheless, the ASCC and neighbors have worked diligently to permit installation of “cool roofs” and at the same time take into account potential visual impacts. Further, staff is working on a handout for the application processes to ensure they are not only streamlined but also to facilitate understanding by applicants and the town citizens in general. As to some of the other BEET committee recommendations, the following are noted:
 - At this point the town does not have a system in place for a paperless application process, and this will likely not be looked at until after the move into the new town hall is complete and staff has settled into the new offices.

- We have not yet formally reviewed the guidelines of the homeowners associations to ensure consistency with town guidelines, but we do meet with HOA representatives on occasion to make sure any conflicts are kept to a minimum. Further, in communications with HOA representatives, staff has reviewed the town's green building objectives so that there will be greater acceptance of things like "cool roofs," and application of photovoltaic systems. We understand that the Westridge HOA is also working on a set of guidelines regarding HOA concerns relative to solar panel aesthetics, specifically to help streamline the process for HOA review of such applications.
- Efforts have been made to streamline the application review process in terms of avoiding duplication of efforts, sequencing, etc. Some of the more significant conflict areas have to do with requirements of the fire district and sanitary district and efforts are being made to enhance these aspects of the project review processes.
- Staff and, particularly, the ASCC review processes encourage consideration of sustainable design in both building and site plans. Pre-application meetings include efforts to identify ways a project can be adjusted to enhance sustainability and this continues through the ASCC review effort.
- The town has yet to pursue a formal "construction exchange" process where grading, off-haul, ordering of materials, delivery of materials are coordinated between ongoing construction efforts. This is suggested to applicants and contractors, and we have required that construction staging plans for projects close to one another be coordinated, but implementation has been hampered by different schedules. Further, it appears that contractors find enough constraints with their own sub-contractor operations and are not particularly interested in further erosion of the controls they have relative to their own projects.

In summary, staff believes the efforts that have been made with respect to project review, including ensuring the processing procedures don't discourage green building efforts, are proving very successful. "Green" is a now common part of the town's building mantra and is an anticipated, expected, "up-front" part of the review process. It helps that applicants and their design professionals are independently "getting-on-board" to sustainable design and, as a result, this awareness should also facilitate understanding, and hopefully acceptance of town sustainability efforts, including any mandatory green point rating system.

Measuring of the success of the informational programs in bringing about "greening" or "green-ups" of existing homes is less clear. We know that the number of solar/photovoltaic permits that have been applied for and implemented is relatively significant and, therefore, the volume sales process for photovoltaic systems appears to have been very successful in the town. This is the case even in light of the differences of opinion on the timeline for "payback" and future significant enhancements in panel efficiency that are currently anticipated. But other efforts to, for example, improve the efficiency of existing energy systems (e.g., seal leaks in ducts), conversion to use of CFL fixtures and high energy efficiency appliances is less clear and may not be fully appreciated until there is a comprehensive check/audit on the reduction in local energy consumption.

The new BIG Existing Home GreenPoint rated program and other similar efforts should be explored and appropriate options selected for potential application in the town to encourage

the greening of existing homes that are not going through a process of house addition or major remodeling.

Eventually, the town's design guidelines should be updated to specifically include "green" building design provisions. These could include both "best practices" for buildings as well as site design to increase energy efficiency and reduce water consumption.

Suggestions for Actions and Next Steps

In addition to steps that might be taken to encourage "green-ups" of existing homes, the sub-group should consider forwarding specific recommendations to the full planning commission and ASCC relative to the BIG GreenPoint Rated system for new homes and major remodeling projects.

During the May 1 work session, some specific comments were offered relative to how a system might be developed and applied in the town. For example, the following were noted for further discussion:

Minimum point level. It was suggested that the minimum point threshold for a new house should be 75 points and that any project exceeding the 50% value test should be considered as a "new" house. For a major remodel, it was suggested that the point threshold should be 50, and for a minor remodel or "green-up" the completion of the checklist should be required without a minimum point total.

Definition of Major Remodel or Minor Remodel. It was suggested that a project proposing to remodel 25% of the existing house floor area or add over 400 sf be considered a major remodel.

Basements. It was understood that the basement performance standards currently being worked on would include those for energy conservation. When these become available they should be reviewed by the ASCC and planning commission and then forwarded to the town council with appropriate recommendations for adoption.

Non-Residential buildings. The sub-group has only briefly discussed non-residential buildings and it is not anticipated that there will be significant new development of non-residential structures in town over the next several years. Most such uses and buildings have recently gone through significant improvements (i.e., Priory, Sequoias, Alpine Hills, Town Center). Nonetheless, a minimum level of "sustainable" achievement should be considered. This might include a minimum LEED level, e.g., silver, or a minimum level of enhanced energy efficiency, e.g., 15% above what is otherwise mandated by the state building code. These are some of the approaches that have been used in other jurisdictions. Typically, they include a minimum floor area threshold.

Monitoring of progress/adjustments. The Sub-group should also encourage the council to continue the existence of the Metrics committee, with such professional support as may be needed, to set a program for monitoring of local efforts. The data feedback from this should be used periodically to make adjustments to the point system and other local programs to ensure the town continues on a successful path to the objectives set by the council for carbon emission reductions by 2020 and 2050.

When the recommendations of the sub-group are initially presented to the planning commission and ASCC, (and eventually to the town council) and for each hearing thereafter, it is **strongly** recommended that there be significant public notice of the discussion so the community is well informed on what is being considered.

TCV
encl.

cc. George Mader, Town Planner
Leslie Lambert, Planning Manager
Carol Borck, Planning Technician
Angela Howard, Town Administrator