



Unreinforced Masonry Policy Committee Meeting

Meeting Summary

City of Seattle, Department of Planning and Development

Seattle Municipal Tower, Room 4080, 700 5th Avenue, Seattle, WA 98104

Thursday, March 8, 2012 – 8:30 a.m. to 10:00 a.m.

Attendance

Committee Members

- Art Frankel, USGS
- Bob Freitag, University of Washington
- David Gonzalez, Degenkolb Engineers
- Mark Huppert, Preservation Green Lab
- Ryan Kennedy, Pioneer Square Alliance
- Terry Lundeen, Coughlin Porter Lundeen
- Paul Mar, SCID Preservation and Development Authority
- Sean Martin, Rental Housing Association
- Rachel Minnery, Environmental Works
- Steve Moddemeyer, Collins Woerman
- Mark Pierepiekarz, MRP Engineering
- Eugenia Woo, Historic Seattle

Staff

- Landon Bosisio, EnviroIssues
- Richard Conlin, City Councilmember
- Barb Graff, Office of Emergency Management
- Rebecca Herzfeld, City Council Staff
- Sandy Howard, DPD
- Erika Lund, Office of Emergency Management
- Steve Pfeiffer, DPD
- Ethan Raup, Mayor's Office
- Jon Siu, DPD
- Bill Steele, University of Washington
- Bryan Stevens, DPD
- Diane Sugimura, DPD
- Angie Thomson, Facilitator, EnviroIssues
- Maureen Traxler, DPD

Welcome

Diane Sugimura, Department of Planning and Development (DPD) Director, welcomed meeting attendees. Diane noted that after major Pacific Rim earthquakes, DPD receives questions from reporters on how the City's Unreinforced Masonry (URM) policy is developing. She thanked committee members for taking on the challenge of developing recommendations for this policy and reminded the group to continually keep any unintended consequences in mind.

Ethan Raup, representing the Mayor's Office, seconded Diane's gratitude to the committee and stated that the URM issue is extremely important to the safety of the City of Seattle. He said the Mayor and his staff realize there are no cheap fixes, but the committee's recommendations will help the city prepare for the next earthquake event.

Barb Graff, from the City of Seattle Office of Emergency Management, told the committee that a future earthquake in Seattle is not a question of “if”, but “when.” She noted that in many cases, developers must make choices such as safe or convenient, or safe or historic. She encouraged the group to think about using “and” instead of “or”, so development could be both safe and historic. This URM policy, like the introduction of safety belts, may be unpopular but has the power to potentially save thousands of lives and ensure that safety is a significant part of Seattle’s continued development.

Richard Conlin, City Councilmember, thanked the committee, DPD, and the Mayor’s Office for moving forward with this difficult and important task. Everyone in Seattle during the Nisqually earthquake remembers the experience, and the recent trend of earthquakes around the Pacific Rim should have everybody on alert. Buildings need to not only protect lives, but also be resilient enough so the city and region can recover quickly. It is also important that the committee address ways to make the required retrofit programs affordable to all building owners.

Introductions

Angie Thomson, EnviroIssues, led a round of introductions and explained that her role as a neutral facilitator is to foster discussion among meeting participants and drive the meeting outcome towards a workable solution. She explained that discussions should be respectful and move the conversation forward, not focus on personal statements.

Background

Bill Steele, Seismology Lab Coordinator at the University of Washington, gave the group an overview of the region’s geology and earthquake history. Future earthquakes are expected to be much stronger due to the Pacific plate moving north towards the immovable British Columbia plate. These earthquakes will provide high-intensity, high-energy ground movements which will severely affect stiff structures such as unreinforced masonry structures. Bill showed the Seattle Urban Hazard Map, indicating that the central waterfront and Duwamish River areas have shaking levels that far exceed safe shaking levels for URM buildings.

Jon Siu, DPD Principal Engineer, gave a presentation on the city’s previous efforts to develop a URM policy. For the purpose of this committee, a URM is a building with multiple layers of red brick tied together with header or tie courses. Beams of the building are generally not tied to weight-bearing walls—they typically rest in pockets in the walls. The first level of earthquake damage to URM buildings usually occurs when the parapet falls from the shaking. The falling bricks are a hazard to people near the building. The second level of earthquake damage can occur if the earth shakes enough so that the walls bow out and the floor beams fall out of the pockets, causing the floors to collapse. The hazard in this case is to people both inside and outside the building.

Jon reviewed the City’s current policy, which is triggered when a developer is doing work that requires a permit. A seismic report and potentially a retrofit are required when a building sustains major damage and/or is undergoing a major addition or alteration. Three retrofits levels are possible: 1) Brace the parapets, 2) Bolt walls to the floor/roof, 3) Add braces and/or walls.

Previous URM policy efforts began with several ordinances in the late 1970s. Efforts between the city and building owners met an impasse and the ordinances were ultimately repealed. From 2008-2009, URM policy and URM technical committees met and produced a draft ordinance that required a minimal retrofit to reduce the hazard. Policy committee discussions centered on the cost of the retrofit policy, ranging anywhere from \$5-\$40 per square foot. Due to concerns with DPD's budget, the URM policy was put on hold. Today, Seattle has an estimated 820 URM buildings citywide. This committee will again take on the task of recommending elements of a URM policy to City staff.

Angie reviewed the committee's strategic work plan. The committee will serve as an advisory group, and City staff is responsible for drafting the policy's language. This group is scheduled to meet again in March and then once every month until October. The policy will then be submitted to Council in early 2013. City staff will provide background information and presentations at the start of each meeting so everyone has the same level of understanding on the subjects at hand. Staff will also provide materials before meetings if necessary. DPD will consider the recommendations and feedback of the committee as meetings occur, and the committee's recommendation report will go directly to the City Council. Angie noted that committee members are not precluded from commenting on the policy separately as part of the public process.

Discussion

Angie turned the group's attention to the meeting schedule. She reviewed the topics for discussion over the next several months, and asked the group for comments on the meeting schedule and asked if any topics may have been missed.

Bob Freitag, University of Washington, said the committee should address co-benefits of earthquake retrofits. For example, if a building is set to begin a retrofit, there are numerous green benefits that could be implemented simultaneously. He suggested these topics be covered during the incentive and threshold discussion. Bob also noted that while some URMs are unsafe, they also are defining features of a community. Seattle needs to retain, to the greatest extent possible, its historic structures. Sandy responded that the URM policy has an objective to reduce the risk of collapse of URMs without resulting in demolition or vacation of buildings. Diane Sugimura, DPD Director, added that this is exactly the kind of policy discussion the City needs before a disaster rather than after.

Mark Huppert, Preservation Green Lab, stated that the committee needs to have a context discussion about the constraints the buildings operate within, including an analysis of the benefits the policy proposes and the unintended consequences of those benefits. Mark Pierepiekarz, MRP Engineering, said while we want to create and retain a vibrant community, it won't be possible without funding. The committee will need to spend some significant time discussing sources for funding for retrofits.

Terry Lundeen, Coughlin Porter Lundeen, asked how likely an earthquake event is to occur. How does the City communicate this policy to those who will be affected by it? If a sizable earthquake were to take place tomorrow, the Seattle Municipal Tower would save lives but might need to be torn down; some buildings in Pioneer Square won't be so lucky. Jon added that the City needs to communicate

expectations to the public, such as the fact that no building can be made earthquake-“proof.” Building owners need to know what they can expect for the money they invest in retrofits.

Steve Moddemeyer, Collins Woerman, asked what kind of investments and strategies the City is already making towards earthquake response. Where does the URM policy fit within those investments? There will need to be a continuum of responses, from mandates to incentives. Eugenia Woo, Historic Seattle, asked if the same standards will apply to everyone. Just because a URM is not officially recognized as historic does not mean it will not be considered a historic landmark in the future. Rebecca Herzfeld, City Council staff, noted that it would be helpful to know how many URM provide low-income housing and how many are historic structures.

David Gonzalez, Degenkolb Engineers, stated that as the committee begins to look at finance issues, it might be appropriate to invite finance experts to the table. He suggested the committee reach out to a relevant organization like Resilient Washington. Angie noted that due to the committee’s limited time, a finance sub-committee may be necessary.

Mark Pierepiekarz said it would be useful to understand what issues sank previous URM efforts. With the economy still down, money will likely be the greatest issue. Paul Mar, SCID Preservation and Development Authority, asked about the triggers of a retrofit and their potential unintended consequences. Terry suggested that the committee create a robust inventory of grant programs, foundations, funding sources and all available tools to support this work. Art Frankel, USGS, commented that the group needs to think about how we can communicate the level of risk to building owners. This committee will need to be clear about the performance-based objectives that we require.

Bill suggested that the committee look at demolition issues in case of a disaster. He noted that not every URM is going to be saved since some have such low economic value or their structural condition is so poor that a retrofit would not be economically feasible. Mark Huppert noted that this is a lightning rod issue in the community, but agreed that it should be discussed. He also asked how many building owners have earthquake insurance. Owners have a disincentive to invest in their building if they do not believe their structure will still be standing after an earthquake event. Rachel Minnery, Environmental Works, suggested bringing the insurance industry into the conversation. She also said the committee should look for alternatives to retrofitting the buildings when possible and stressed that outreach and risk communication with the public will be key to the success of the policy and its implementation.

Angie summarized that the group needs to discuss this policy’s context and what people would get for the money spent. Bob added that ultimately this policy is a life safety issue, which is often a difficult metric to communicate. The committee also needs to discuss and understand the objectives of this policy.

Action items:

- Provide overview of 2012 URM survey data

Closing

All committee members received binders with FAQs, a summary report of URM programs in California jurisdictions, and a URM Seismic Hazards Study from 2007. All information received will be also posted on the website.

The next URM Policy Committee meeting will be March 22nd, from 8:00am – 10:30am, in SMT 1610. Art Frankel will be unable to attend due to a conflicting Seismic Workshop at the University of Washington. Angie thanked all participants for attending the meeting and noted that materials for the next meeting will be sent to committee members prior to the 22nd.