

## Ashland City Hall – Project Considerations

January 31, 2020

### INTRODUCTION

The following information is provided as a follow-up to the Council's decision to advance the City Hall project, and to address questions asked at a Town Hall meeting in January 2020. Considerations presume the Council's direction that City Hall should be a safe, accessible, functional, durable building to last approximately 100 years. Insights were developed by the project team of ORW Architecture, Ciota Engineering, and Adroit Construction.



### Construction Timing

For a new building, the construction duration is expected to be approximately 12-14 months. For a renovation, the more complicated tasks of demolition, excavation, foundation, and structural upgrade work takes an estimated 4 months longer resulting in a construction duration of 16-18 months.

### Minimizing Disruption Downtown

To minimize disruption to the downtown area, the design could prioritize systems and materials that expedite construction, so the structure and building enclosure could be completed in approximately 6 months for new construction or approximately 10 months for renovation. The remaining interior construction would be less disruptive to downtown.

### Sustainability and Carbon Footprint

In both scenarios, most or all of the existing building is demolished, and some materials could be recycled. Because mechanical, electrical, and roof systems are replaced in both options, they offer similar opportunities for energy-saving systems and solar power production.

For a renovation, the building is demolished except for three exterior walls. These walls would not be sent to the landfill, yet the extended construction schedule results in additional vehicle trips and other carbon-generating construction activities. The structural upgrade would likely include a building-within-a-building consisting of Concrete Masonry Unit (CMU) walls inside the existing walls with larger concrete footings to accommodate the load of a heavier, double wall construction.

For new construction, there is a potential for recycling bricks from the exterior walls, and additional or taller windows could be provided to allow for more daylighting. The new exterior walls would be lighter, with smaller concrete footings.

### Space Reduction

Both options will take up the same footprint, very similar to the existing City Hall. For a renovation, the CMU walls of the building-within-a-building take up additional floor space compared to traditional stud framing, making the resulting usable floor area smaller than with new construction (a minimum of 600 SF smaller).

### Safety

The structural system for renovation will be different from new construction but building occupants will be equally protected from a seismic event. However, during a seismic event



the existing exterior walls are not guaranteed to perform equal to new construction and could pose a hazard to passers-by due to failing bricks or plaster. Special measures are also required to protect the construction team from hazards during construction.



### Historically Sensitive Design Experience

The ORW team is well-versed in designing renovations of and additions to historically significant buildings, and in designing new buildings in historic districts as outlined in the list below.

The design process will include collaboration with the City and members of the Planning and Historic commissions to share the emerging design and progress as it develops. Additionally, a historic consulting architect (Peter Meijer Architect) can be added to the design team to assist with the State Historic Consultation process, the City's local approval process, and help determine how the building fits into the downtown context.

#### ORW Local Experience:

- OSF Hay-Patton Rehearsal Center, Renovation (*Ashland Historic Preservation Award 2016*)
- ASD Bellview School, Renovation (*Ashland Historic Preservation Award in 2010*)
- SOU Churchill Hall, Renovation (*Ashland Historic Preservation Award 2013*)
- Winchester Inn, Restaurant Remodel & Addition
- North Mountain Park Recreation Center, Renovation and Adaptive Reuse
- Jackson County Courthouse, Multi-Phase Renovation
- St. Mark's Episcopal Church, Hafer House and Sanctuary Renovation, and Parish Hall Addition
- McLoughlin Middle School, Re-design & Remodel
- Craterian Ginger Rogers Theater, Renovation (*Governor's Livability Award 2000*)
- 29 South Grape Street, Interior Renovation of Historic Former West Side Livery Stable

#### David Wilkerson Historic Experience prior to ORW:

- Fraunces Tavern, New York, NY. Renovation of Historic Landmark Museum and Restaurant (where George Washington gave his farewell speech to his troops)
- New York State Appellate Court, New York, NY. Renovation Historic Landmark Courthouse
- Municipal Building, New York, NY. Renovation in McKim, Mead & White's landmark building
- St. Peter's Episcopal Church, New Kent, VA. Parish Hall Renovations of Historic 17th Century Church (where George & Martha Washington were married)
- MCV Hospitality House, Richmond, VA. Renovation of Church for Patient & Family Lodging
- 100 Block East Broad St., Richmond, VA. Mixed-use Redevelopment of 1900 landmark Building
- Crosswalks Television, New York, NY. Renovation Guastavino-tiled arcade in McKim, Mead & White's landmark Municipal Building
- Keyspan Energy Management, Queens Village, NY. Adaptive Reuse of former Coin Foundry into corporate offices
- Goochland Baptist Church, Goochland, VA. Steeple replacement for Historic 1700's Church
- 105 East Cary Street, Richmond, VA. Adaptive Reuse of Brownstone Rowhouse
- Union Station, Richmond, VA. Iconic copper dome restoration on John Russell Pope's landmark building
- 1895 Queen Anne Residence, Richmond, VA. Restoration of first Carytown neighborhood house

#### Dana Crawford Historic Experience prior to ORW:

- OSU Hallie Ford Center, Corvallis, OR. New building in Historic District (*Corvallis Historic Award*)
- OSU Austin Hall School of Business, Corvallis, OR. New educational building in Historic District







## **What evidence suggests that the current City Hall is unduly susceptible to seismic damage?**

In developing this answer, the City consulted with Oregon Department of Geology and Mineral Industries (DOGAMI). DOGAMI has published that “great” Cascadia subduction zone earthquakes occur on average every 500 to 600 years, although individual intervals for recurrence have been as low as 100 to 300 years. The last great subduction zone earthquake occurred in 1700, so it is reasonable to conclude that the next will occur at any time.

DOGAMI’s current interactive hazard map that shows the Ashland area can expect “strong” shaking during the next Cascadia subduction zone earthquake (DOGAMI identifies three higher levels of shaking, including very strong, severe, and violent, as well as two lower levels of moderate and light). Certain geohazard factors that exacerbate damages, such as soil conditions that would cause the liquefaction or amplification of shaking are not present in the downtown core – but that does not negate the fact that City Hall is located in a seismically-prone area. DOGAMI further emphasized to the City that the type of structure is extremely important in evaluating seismic susceptibility. An unreinforced masonry structure, such as City Hall, is the worst type of building to be in during an earthquake. DOGAMI’s publications identify URM buildings as “notoriously dangerous in earthquakes” because they are prone to collapse and are often the cause of earthquake-related fatalities (CREW, 2013). Even in the absence of additional soil geohazards like liquefaction and amplifications, URM buildings are not resilient to “strong” shaking. For reasons such as this, DOGAMI warns that “even the lowest hazard categories could experience severe damage” (DOGAMI 1999).

The City recognizes that the underlying material of a building site is an important consideration when developing a new structure built to withstand seismic activity. The City will work closely with its consulting engineer to determine whether a geotechnical study or an evaluation of the mapped soil series may be needed during preliminary design. In any case, the condition of the soil beneath the building is taken into consideration as a site condition/constraint as the construction design process nears final building permit status. The stability or assigned risk level of the general area in and around the building does nothing to alter the seismic building code requirements for either a new building or significant alteration. The same seismic requirements will apply regardless.

Cascadia Region Earthquake Workgroup (Crew). 2013. Cascadia Subduction Zone Earthquakes: A Magnitude 9.0 Earthquake Scenario. Update, 2013.

DOGAMI. 1999. Relative Earthquake Hazard Maps for Selected Urban Areas in Western Oregon. Interactive Map Series IMS-9.