



Ontario Association of Architects

April 22, 2020

The Honourable Catherine McKenna, MP
Ministry of Infrastructure and Communities
180 Heath Street, Suite 1100
Ottawa, ON K1P 0B6

[sent via email]

Dear Minister,

The Ontario Association of Architects (OAA) is the licensing body and professional association for the province's architects. Established in 1899, it is entrusted with a provincial mandate to regulate the practice of architecture "in order that the public interest may be served and protected." The profession's responsibility to the public interest is incredibly important during this pandemic, and architects stand ready to help.

While the OAA typically focuses on provincial affairs, certain circumstances warrant its engagement at the federal level. The response to COVID-19 is proof of Canada's capacity for collective and cohesive action at multiple levels of government when needed. The current pandemic is a precursor to what we may face with the looming climate crisis. An influx of federal money in response to the economic devastation of COVID-19 should be focused on preparing for, and mitigating the effects of, climate change. A holistic approach at the national level has the potential to lead to resiliency and climate stability. There is a path forward, together.

The OAA wholeheartedly supports the "shovel-ready" initiative you recently announced as a way to reboot the economy. This initiative can also have a positive impact on climate and carbon mitigation and adaptation in the same way that the government ensured funding directed toward the downturn in the oil sector benefited the environment. In Canada, the built environment is among the largest sources of carbon emissions, along with the transportation and energy sectors, and it is the easiest sector to mitigate to align with our national and international commitments.

On behalf of Ontario's architecture profession, I offer you the following suggestions for your consideration.

1. Provide the infrastructure to allow for fully embracing the potential of digital services.

While the government has a Connectivity Strategy and is working to bring high-speed internet to all Canadians, access continues to be inconsistent or unavailable in many parts of the country, and costs vary widely for the service. This makes working remotely a challenge for many businesses as well as municipalities. The government should work toward accelerating its high-speed strategy to bring access to the country. This would help support businesses and municipalities to operate, or continue operating, remotely.

While access would assist many businesses and municipalities, other challenges would still remain. Many municipalities have implemented digitally processed permit

applications, reviews, and issuing permits wherever possible. However, others still require funding and support in embracing digital services, as well as aligning systems and efficiencies. Once construction restarts, simple protocols such as live webcams and real-time mobile video calls will help maintain physical distancing on construction sites.

Building projects require the expertise of not only architects, but also building officials. It is critical that everyone be able to work together safely, maintaining physical distancing practices. By helping municipalities with this transformation, the federal government would help move projects currently stuck in the approval process to be ready so that work may commence as soon as conditions permit.

2. Upgrade all existing building stock to improve resiliency and energy efficiency.

Renovating existing structures takes advantage of embedded carbon while minimizing the need for additional carbon expenditure. Much of our existing building stock predates the climate extremes we are now experiencing as well as the new technologies that have been developed in response.

The government should invest in new projects and infrastructure that meet the highest degree of energy efficiency, increasing resiliency against both energy supply disruptions (such as the recent propane shortage in Quebec) and financial shocks, while working toward reducing carbon emissions. Ontario architects have created buildings that have reduced total operating costs by more than 70 per cent, and greenhouse gas emissions by greater than 90 per cent, at no net increase in capital/construction budgets, as evidenced by projects among our 2020 OAA Design Excellence Award finalists. This has raised the bar for awards competitions. Federally procured projects should set these same net-zero targets as minimum standards moving forward.

Such measures can be driven in the short term by adding criteria to the funding structure of shovel-ready projects. Beyond that, energy and resiliency targets need to be incorporated into the National Building Code and, by extension, provincial building codes. Implementation of a NEC/NBC Energy Step Code is a great move, but it needs to be expanded to establish performance targets and carbon intensity targets to align with 2030 and 2050 international standards. Energy use intensity (EUI) benchmarking and reporting must also be developed for all types of building and sizes.

Finally, the government ran on a plan that would result in the creation of zero-emission homes and retrofitting 1.5 million homes to make them energy efficient. As we reboot the economy, there will be no better time to implement these campaign commitments.

3. Help municipalities complete public construction and infrastructure projects.

With federal dollars already set aside for infrastructure projects, there is a unique opportunity emerging to support provinces and municipalities to complete previously identified public projects that do not have the funding to proceed. Years ago, it was reported that the federal government was having difficulty spending dollars allocated

to kick-start a sluggish economy. The gravity of the current situation means that experience cannot be repeated.

It is within the public's best interest to see these infrastructure projects move forward and be completed. Federal support may prove integral to the completion of active projects, requiring the government to expeditiously push out any of the unspent infrastructure funding.

4. Invest in predesign and design activities *now*.

As a precursor to development and construction, architecture plays a critical role in preparing projects for permit and construction. If the federal government invests in predesign and design activities across the country now, then Canada can hit the ground running once it is safe to do so. This will provide opportunities for the construction jobs that will help rebound our economy. It is important that work resumes quickly once we have emerged from the COVID-19 crisis.

Fortunately, predesign and design work in particular can be safely done without risk of spreading the disease. There are many projects that were identified before the pandemic hit Canada, which are currently on hold waiting for funding approval to move forward. Now is the time to approve those projects so that the planning, design, and pre-construction work can take place to ensure shovel-ready projects are ready to go once the pandemic is over.

5. Ensure the country is positioned to succeed.

Affordable housing, hospitals, daycares, schools, community centres, libraries, emergency services building, and parks require programming and design studies. Many huge projects are only possible through the completion of small and mid-sized "enabling" projects that are complicated and take time. While there may be a desire to halt some of this work, continuing on with programming and design will ensure that projects are ready when it is safe to begin construction. These projects also engage many small and mid-size practices in communities across Ontario and all of Canada.

In Ontario, the architectural profession has a tremendous impact on the province, enabling 14 per cent of the GDP and supporting nearly one million jobs. In some respects, this makes it easy to overlook the fact that more than 75 per cent of architectural practices are very small businesses with fewer than two architects and less than 20 employees. It is critical to ensure that these smaller businesses are also included in the reboot. Architectural practices of all sizes are ready to contribute to this recharging of our economy.

6. Utilize our COVID-19 response to achieve climate stability.

Solutions to this crisis can help mitigate the next one. As we look to develop an economic response to COVID-19 and beyond, there is an excellent opportunity to expand and create new jobs and business opportunities by promoting research and local manufacturing of the building materials needed for the construction industry as it transitions to greater energy efficiency. Products such as triple-glazed windows, advanced insulation, heat/energy recovery ventilation (HRV/ERV) units, geothermal pumps, ceramic radiant panels, grid-tied battery systems and grid-scale battery

backups, photovoltaic innovations, and heavy timber assemblies can all be developed and manufactured in repurposed industrial buildings across the country. Many of these products are currently imported from abroad, slowing down timelines and impacting efficiencies.

While this would create new jobs and business opportunities, a Canada that invests in new built projects would have the additional benefit of ensuring they are resilient to the intensification of climate events on the horizon. Incentivizing energy-efficient projects, and encouraging the renovation and restoration of the nation's existing building stock, will result in the reduction or elimination of energy costs, impacting long-term operating costs. It will also leave more money in the pockets of owners of public and private buildings, saving the country money and making it a better place in which to live and do business.

Empowering businesses to develop innovative solutions to this public health challenge has invigorated innovation in the country. When this challenge is met, that innovation could be refocused on the longer term challenge of achieving climate stability.

The results of these initiatives would create better, resilient buildings, in a healthier environment, while providing a global competitive advantage for the country. The creation of buildings and industries that address sustainability also offers new jobs for Canadians from across the diverse skill set of people that make up our diverse country. Additionally, ensuring lower operational costs on buildings such as social housing, libraries, and community centres is a good financial strategy for the future.

If you have any questions, wish to discuss any of this further, or would like the architecture profession's perspective on any matters, I am always open to discussion. I would look forward to working with you.

Thank you for your continued leadership,



Kathleen Kurtin, Architect
OAA, FRAIC
President

