

The Institute Responds to Victorian Building Authority's draft Guideline for the Conduct of Non-mandatory Remote Video Inspections (RVIs)1st Edition August 2020.

INTRODUCTION.

The Institute (The Australian Institute of Architects) has considered the document that has been circulated by the Victorian Building Authority via close distribution. The document is the Guideline for the Conduct of Non-mandatory Remote Video Inspections (RVIs) 1st Edition August 2020. The draft document put forward by the Victorian Building Authority is a draft Guideline for "non-mandatory" inspections using video and digital photographic technology. The draft Guideline is, to our current awareness, the main method intended to bring Remote Video Inspection (RVI) into mainstream use.

Technology continually evolves and can present efficiency and efficacy opportunities. The introduction of new technologies are likely to enjoy greater success and rapid uptake when supported by well-developed frameworks with well-staged implementation strategies to develop ongoing governance, support best practice, manage risks, and develop evidence to support policy evaluation and review.

Similar policy approaches apply to introducing and upscaling technologies in other settings. These include tele-health technologies in health care and using technologies in the courts and justice system.

The limits of the technology should be thoroughly appreciated. We note that Remote Video Inspection (RVI) is just that, visual inspection. Visual inspection cannot appraise tactile, acoustic, olfactory and dynamic/kinetic aspects of a building (e.g cues to ventilation issues, drainage issues, or loose/inadequately fixed building elements). These non-visual components of an inspection might also detect sub-optimal ergonomic performance for end-users, such as a door that requires too much effort to close.

Our overall response is in reference to the stake-hold of our members as "responsible persons" in the way the term applies in the draft Guideline. This response to the draft proposal identifies two key issues that need to be addressed as part of a stronger and more replete proposal that, we understand, is to be disseminated for broader consultation. These are practice governance, and creating a robust policy framework including practice education and strengthening of the practice Guideline.

Our recommendations are made to ensure the greatest success of the proposed scheme and one that will also engender greater public confidence in the work of the construction sector. This is critical in an era when the quality of construction work in Australia has been brought into question by catastrophic and serious building failures and outcomes. The public demands greater scrutiny.

The Shergold-Weir review has placed the onus on all States and Territories to re-regulate construction in order to enhance safety, improve quality, build public confidence and ensure world-class built environment outcomes. A poorly designed and implemented scheme would stand to diminish the achievement of these objectives.

KEY ISSUES AND RECOMMENDATIONS.

Practice Governance.

Governance of the practice from a contractual and professional practice perspective is not sufficiently addressed in the Guideline. The draft Guideline state that,



An inspection under these guidelines may be initiated by the permit holder, parties to a contract, an individual responsible for the building or plumbing work. In some cases, the responsible person may request an inspection to take place for the purposes of determining conformity with legislation, standards, benchmarks, contracts, manuals and guidelines.

The draft Guideline also states that,

- The responsible person should consider any request for an RVI having regard to the scope and complexity of the inspection and level of detail required to determine the inspection outcome.
- Regardless of the mode of inspection, responsible parties to building and plumbing work that have a duty of care or implied warranties, applicable to their role, must ensure they carry out their functions to a satisfactory standard.
- The responsible person should direct onsite personnel, subject to safety considerations of the on-site operator, to provide sufficient footage of building or plumbing works in order to form an opinion that the work satisfies the necessary requirements for the purposes of the inspection.
- The responsible person may choose to record the live feed of the inspection for future reference and as evidence of the inspection. Where this occurs, consent of all parties to the inspection is required to comply with the Privacy and Data Protection Act 2014 (Vic).

However these statements tend to place the onus on the 'responsible person' (e,g Architect, Engineer or Building Surveyor), but do not sufficiently support the authority of the responsible person. For example, a statement in the Guidelines that "In some cases, the responsible person may request an inspection" does not imply the right to request the inspection.

Institute members have reported experiencing difficulties when they request to inspect building works performed in a construction project¹. The Guideline, especially without a broader policy framework, does not address the need to create a legal authority or right for responsible persons to request a non-mandatory inspection and determine the use or non-use of RVIs as a central part of non-mandatory inspections.

One possible solution to creating a legislated authority or right could include making provisions within the Building Act and Building Regulations. These provisions could directly create the rights for the responsible persons and the obligations on responding parties. Another solution would be to indirectly create such rights and obligations by including these as legislated minimum terms for the contract between the contractor and the principle, and the contract between the contractor and the consultant when novation occurs.

These legislatively driven solutions may take time to implement and in the short-term, strengthening the language of the Guideline may simply promote a change in culture and behaviours. The Guideline should, as far as guidelines generally are able to, promote the importance of non-mandatory inspections and promote a right of refusal by the responsible persons to refuse an RVI, redact a scheduled RVI or reject a conducted RVI and undertake an onsite re-inspection.

A further element of these solutions is the option to introduce a third party to carry out the inspections. The Institute published an article about site inspections during Covid-19 in its May



2020 Acumen practice notes publication. In the six-page article the benefits and risks were considered. The practice note advises that,

The parties and the consultants could agree to engage a single party to carry out the inspections on behalf of each of them. This could be the builder, an experienced third-party (including an independent builder) or a professional engineering surveyor. There will be additional costs here and the parties will need to agree how those are shared ².

Recommendation 1: That legislative changes are introduced to give effect to rights of responsible persons to request the undertaking of non-mandatory inspections of building works, including the methods to do so and the obligations upon responding parties.

Recommendation 2: That pursuant to the overall intent of Recommendation 1 that the draft Guideline line is strengthened to promote changes in culture and behaviours that support responsible persons to request non-mandatory inspections and control the methods to do so.

Recommendation 3: That Remote Video Inspections are carried out by an agreed competent independent third party,

Robust Policy Framework.

The second issue is the need for a robust policy framework including practice education and strengthening of the practice Guideline. The Guideline would be subjugated to the framework. The legislative framework and the Guideline need further elements and policy implementation steps to create a larger and stronger policy framework. This, in turn would promote greater uptake and success of RVIs in practice.

The need for more comprehensive treatment of legislative issues.

The draft Guideline does make reference to the legislative framework, insofar as existing limits and the requirements for inspections. Some references are also made to potential consent record keeping requirements of the Electronic Transactions (Victoria) Act 2000, the Evidence Act 2008 and the Privacy and Data Protection Act 2014. We also note that the legislative framework has not referenced provisions of the Victorian Surveillance Devices Act 1999. Under the Surveillance Devices Act, Section 3 (Definitions), an "optical surveillance device

"means any device capable of being used to record visually or observe an activity, but does not include spectacles, contact lenses or a similar device used by a person with impaired sight to overcome that impairment,"

The Surveillance Devices Act does not specify that these be fixed devices and actually has a number of provisions for body-worn devices. Sections 6 and 7 permit the recording of conversation and visual recording of private activities with consent of the parties concerned and Section 11 permits the communication and even publication of recorded material if consented by the parties or to protect the lawful interests of the person communicating or publishing the recording.

Without a proper explanation of how the provisions of the Surveillance Devices Act 1999 apply to the conduct of RVIs there may be resulting unintended contraventions of the Act. The Guideline should therefore delineate the necessary procedures to conduct RVIs in a way that does not contravene the Act.

The proper context for Remote Video Inspection for mandatory vs non-mandatory inspections. The draft Guideline states that the proposed program of non-Mandatory Remote Video Inspections



does not comply with the Building Act 1993 (Vic) and the Building Regulations 2018 with respect to the conduct of mandatory inspections and statutory functions, in person, by a prescribed class of registered or licensed practitioner within the meaning of the legislation.

Consequently, Guideline section 5.1 indicates that only non-mandatory inspections can be completed under the Guideline. This position is fully supported by the Institute.

However, even non-mandatory inspections can still be *formal* inspections such as those required to achieve formal contracted approvals and endorsements of elements of the works and which assess conformity, quality, suitability, or otherwise. Section 1.2 (Background) of the draft Guideline also indicates that remote video inspections are not intended to be any less rigorous that those conducted in-person.

The correct settings for fixed image and video cameras such as exposure levels, focussing and depth of field and focal length (which alters the ratio of foreground to background image size) are all important technical skills. In addition, operators would need to learn techniques for live video such as rates of zooming and panning and incorporating known scale elements to calibrate perceived size/ proportion (e,g in the same way medical imaging sometimes places a coin on a "plain" Xray to appraise size). There would also be the need to have practices that incorporate staged video image sequences that provide the broader visual context of the part of a building being observed. The draft Guideline points this out,

It is important for the responsible person to gain an appreciation of the site (wide pan view of building site or element) to provide context and assess the process for inspection to observe the relevant elements.

All of these are evidence of the need for any operator to have thorough competence in a standardised practice. It is therefore suggested that the operation of the equipment and the overall conduct of remote video inspection is only performed by people certified as competent to do so.

Finally, to re-state a point made in the introduction to this response, in-person inspections engage with more of our senses (like touch/feel, sound), and on-site conditions of elements may only be fully appreciated in person (such as plumbness, surface finish, reflectance, and stability). Therefore, it would be logical and more appropriate to adopt the term "Remote Video Observation" as a more accurate term for the use of remote video technologies to augment inspections rather than "Remote Video Inspection".

Inclusion of a funded and evaluated pilot.

Best practice policy development should aspire to policy being evidence-based. The Guideline itself does not reference the literature or other data from authoritative sources. Recognising that RVI may still be largely regarded as a new and emerging practice, policy makers should seek to pilot and evaluate introductions of new programs or practices. A pilot would include a validation methodology to test RVI as a novel method for conducting inspections against on-site inspections as the "gold standard".

Industry practice education and support tools.

While the draft Guidelines in their most recent (August 2020) version have been strengthened with practical examples and even a sample checklist, this falls short of industry practice education. Industry practice education should target different segments of the construction sector recognising that mandatory and non-mandatory inspections together are critical to improving safety and quality of buildings. Components of industry practice education should include:



- The specific practical measures to ensure compliance with the requirements of the Acts that form part of the legislative framework such as the archiving and destruction of video and photo records. Industry practice education tools to support these measures would extend to specifications and templates beyond the included checklist for consent forms and registers for equipment used, time of day etc.
- A more comprehensive explanation of the non-statute legal issues including contracts and common law risks and the necessary safeguards to avoid unforeseen professional indemnity and public liability insurance claims. This could also include model contract clauses.
- Local, national and international professional practice standards that accord to both minimum and best practices by all parties involved.
- More detailed criteria for both the uses and non-uses of RVI.
- Identification of situations other than Covid-19 restrictions where RVIs present material practice, project and even risk mitigation enhancements.
- Detailed operator guidelines for operation of the equipment and conducting an inspection including communication protocols between device operator and the offsite responsible person.
- Contingency procedures for managing planned and unplanned interruptions to the inspection (outages).
- The attainment of a certified competency as suggested above..

A risk and quality assurance and framework.

A policy framework should also include within itself a risk framework to identify and mitigate risks including such as:

- substandard or deliberately misleading RVIs.
- cybersecurity risks especially in relation to perversion of RVI material captured in the construction of critical civil infrastructure, defence, or other security related projects (e.g a corrections facility).

Commencing the overall RVI framework implementation with a well-designed and evaluated pilot is also an opportunity to develop specific quality indicators and audit strategies. These would be adapted as part of ongoing quality assurance program in the post-pilot phase and be accompanied by an ongoing surveillance and compliance strategy.

Recommendation 4. The current policy of not using remote video technology for mandatory inspections is maintained.

Recommendation 5. That Remote Video Inspection is only performed by persons who have undertaken a training program and have achieved a certified level of competency.

Recommendation 6. That the term, "Remote Video Observation is adopted instead of Remote Video Inspection to ensure the capability of video technology to undertake inspection is not overstated and the limitations of capturing both visual and non-visual information for the purpose of any inspections using video technology are understood.



Recommendation 7. Develop a robust policy framework and policy implementation steps to ensure the successful uptake and operation of RVIs in the Victorian construction sector which includes:

- the draft Guideline and more comprehensively addressed legislative framework.
- a funded and evaluated pilot.
- industry practice education and support tools
- a risk and quality assurance and framework.

A national approach.

A larger policy framework should extend nationally – to develop a national guideline, endorsed by a national authority. Whilst a construction project site may be located in Victoria, parties to remote inspections are borderless, and these Guideline apply to those persons.

The context of existing interstate legislation such as the Design & Building Practitioners Act (NSW) and the supporting upcoming Regulations, whose principles may grow nationally – should be considered. Such legislation imposes greater accountability on Architects (and their Sub-Consultants) in the area of compliance, by introducing strict new processes for endorsement, verification, and validation. This, in turn, certainly supports the notion of further clarification in many of the areas highlighted in this response (especially those pertaining to contract and professional practice).

Taking a national approach would likely require placing the matter on the agenda of the Building Ministers Forum or the Australian Building Codes Board.

Recommendation 8. That consideration be given to developing a national Guideline for Remote Video Inspection within a national policy framework as part of the working program of the Building Ministers Forum and/or the Australian Building Code Board.

¹ THE BENEFITS AND CHALLENGES OF NOVATION FOR ARCHITECTS – VICTORIA. July 2019. The Australian Institute of Architects.

² COVID-19 site inspection considerations 2020, May 05. Retrieved from https://acumen.architcture.com.au/resources/covid-19-considerations/covid-19-inspections-considerations/