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Partial building collapse

25 January 2021

A building in Crows Nest partially collapsed after excavation work had been undertaken at an adjacent construction site. Workers were completing steel fixing and formwork for a capping beam when they observed cracking and evacuated the site before the collapse. Fortunately, no workers or members of the public were injured.



The site of the collapse

Safety information

Implement 'reasonably practicable' control measures to manage the risks associated with unplanned structural collapse before, during and after excavation work.

Before excavation work:

Seek engineering advice

The information contained in this publication is based on knowledge and understanding at the time of writing and the findings are not yet confirmed. SafeWork NSW has commenced an investigation in response to the incident to determine its cause and circumstances. No conclusions should be drawn from the information in this publication about the cause of the incident or the culpability of any party.

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- consult with experienced and qualified competent persons such as engineers and specialist excavation contractors regarding all potentially affected structures and the proposed excavation methods, depths, and sequence
- carry out the necessary testing and analysis to determine the soil and groundwater conditions of the site in consultation with a geotechnical engineer
- determine the size, type, and extent of a potentially affected structure's foundations by obtaining all relevant information and carrying out the necessary inspections and testing in consultation with a structural engineer
- obtain written advice from competent persons regarding any temporary or permanent control measures required to adequately support all potentially affected structures, their foundations, and excavated faces. For example, structural supports to adjacent foundations or structures; designs for benching, battering, shoring, piling and/or earth anchors, limitations to excavation depths or distances from structures, limitations to de-watering, limitations to excavation methods or sequencing
- carry out detailed inspections of any potentially affected structure and record the results in a dilapidation report to be shared with all relevant parties
- develop a monitoring plan for all potentially affected structures which may include implementing survey markers and/or vibration monitoring devices.

Plan your work

- incorporate all 'hold-points' into your construction program as required by competent persons
- consider the type of plant being used, including the size, type position and reach to minimise the risk of plant colliding with existing structures and overhead powerlines
- establish exclusion zones to protect workers from unplanned structural collapses
- ensure safe access and working areas
- have designated areas for the storage of excavated, demolition or construction materials.

During excavation work:

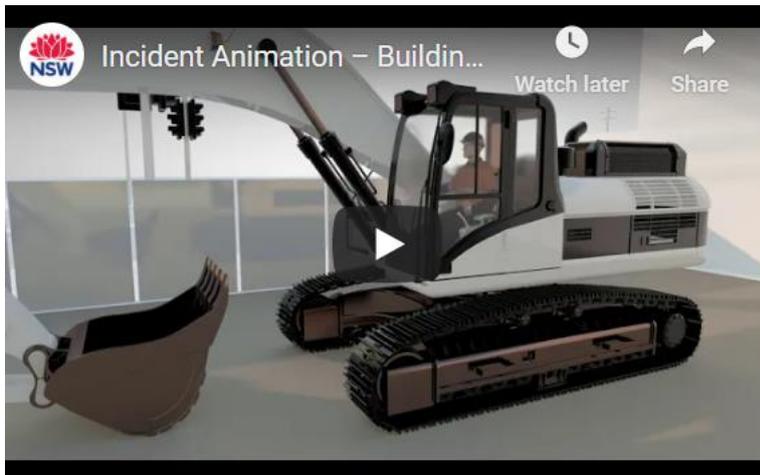
- ensure the adjacent building's foundations are not undermined
- ensure any requirements identified by the structural or geotechnical engineers are in place
- continue to consult with experienced and qualified professionals at critical stages of the excavation work and following unplanned events, e.g. heavy rainfall. Do not proceed beyond pre-determined 'hold-points' without written confirmation from the relevant party.
- ensure all workers carrying out the excavation are competent (e.g. check qualifications, experience, and any required licences)
- provide clear instructions to site workers and visitors including any updates as required
- ensure the work is supervised by a competent person and in accordance with the planned methods and sequencing
- if issues arise, stop, take action to ensure everyone is safe, and consult with all parties about how to rectify the issues.

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More information

- [Excavation work code of practice](#) (PDF 4MB)
- [Demolition work code of practice](#) (PDF 1.3MB)
- [SafeWork NSW incident animation – Building collapse](#)



View the latest incident information releases at safework.nsw.gov.au