

September 23, 2025

Mr. Jason Bing, RA, CEM, LEED AP Director, Capital Programs Ann Arbor Public Schools 2555 South State Street Ann Arbor, Michigan 48104

RE: **Construction Activities and Radon Gas Levels on Adjoining Properties** 

Ann Arbor Public Schools - Ann Arbor, Michigan G2 Project No. 233473

Dear Mr. Bing:

Thank you for contacting G2 Consulting Group, LLC (G2) in regard to some reported community concerns relating to subsurface construction activities at Ann Arbor Public Schools (AAPS) properties resulting in increased radon gas concentrations in neighboring residential structures. This letter is intended to clarify those concerns regarding whether construction activities such as excavation, foundation work, or structural development can cause an increase in radon gas levels in neighboring or adjoining building structures.

G2 is a geotechnical engineering, environmental consulting, and construction materials testing firm that was founded in 1994. With more than 1,500 projects completed annually, our experience extends over many markets, including commercial development, education, energy, residential communities, healthcare, industrial, infrastructure, and telecommunications. G2's team of environmental professionals have well over 100 years of experience in environmental due diligence, site investigation, contaminant mitigation and remediation, and regulatory reporting. On a daily basis, our staff assists clients with simple tasks such as peer reviews of environmental reports to the most complex management issues including vapor mitigation,

Radon is a naturally-occurring radioactive gas that originates from the decay of uranium in soil, rock, and groundwater. It typically enters buildings through cracks and openings in foundations and accumulates in enclosed spaces, particularly basements, crawl spaces, and ground-level floors. The concentration of radon gas is primarily influenced by the underlying geology, soil permeability, building construction, and ventilation system(s) of individual structures – not by construction activities occurring on nearby properties. G2's review of the Michigan Department of Environment, Great Lakes, and Energy's (EGLE) Michigan Indoor Radon Results Map (https://gisegle.hub.arcgis.com), indicates that most, if not all, AAPS properties and their neighboring communities are located in areas with average radon test results that are greater than or equal to 4 picocuries per liter (pCi/L), and both EGLE and the United States Environmental Protection Agency (USEPA) recommend radon gas mitigation measures for all buildings.

Current scientific understanding and health assessments indicate that construction activities on one property do not increase radon levels on adjacent properties. It is G2's professional opinion that these increases in radon gas do not occur due to several factors:

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1866 Woodslee Street, Troy, MI 48083 248.680.0400



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- **Localized Soil Disturbance**: While subsurface construction activities may temporarily disturb soil and rock in a specific location, the release and migration of radon gas is highly localized. Radon gas dissipates quickly into the atmosphere once released (especially when no overlying building structure is present) and does not travel far laterally through soil to affect neighboring properties.
- Lack or Pathways: For radon to accumulate at elevated levels in a building, there must be pathways (such as foundation cracks or openings) and a pressure differential that draws radon gas in. Construction on an adjoining property is unlikely to alter the structural integrity or ventilation dynamics of an existing neighboring building.
- **No Proven Correlation**: G2 is unaware of any studies or monitoring by recognized health and environmental agencies, including EGLE and USEPA, that have established a causal link between nearby construction and increased radon concentrations in neighboring buildings.
- Radon Entry is Property Specific: Radon entry into a building is a site-specific issue determined by a property's foundation design, soil contact, and mitigation systems (if any) in place. As noted by both EGLE and the USEPA, proper testing and mitigation remain the most effective approaches for ensuring radon safety within any individual building structure.

In summary, while construction activity may raise short-term concerns such as noise, dust, or vibration (all of which can be managed through best management practices), it does not pose a scientifically supported risk of elevating radon gas levels on adjacent properties. It should be also understood that radon gas concentrations are greatly impacted by climate (both short-term and seasonal), thus, any spikes in radon levels that are being observed in buildings neighboring AAPS properties under construction may be attributed to localized climate events and trends. G2, in concert with EGLE and the USEPA, recommends that all property owner's regularly test their buildings for radon gas and implement mitigation measures as needed to maintain a safe building environment.

G2 appreciates the opportunity to be of service to you and looks forward to discussing the information presented herein. Should you have any questions or desire additional information, please feel free to contact us at (734) 390-9330 or pbell@g2consultinggroup.com.

Sincerely,

**G2 Consulting Group, LLC** 

Thum A. M. S.

Thomas A. McDonald Project Manager

Patrick T. Bell, PG Group Leader