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## HOWARD DEBECK ELEMENTARY SCHOOL SEISMIC UPGRADE

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<b>TARGET CONSTRUCTION START:</b>	April 2024
<b>TARGET COMPLETION:</b>	December 2025
<b>PROJECT BUDGET:</b>	\$17.52 Million
<b>FUNDING SOURCES:</b>	Ministry of Education Capital Plan - \$20.74 Million (maximum)
<b>CONSULTANT:</b>	Thinkspace Architecture Planning Interior Design Ltd.
<b>CONSTRUCTION MANAGER:</b>	Unitech Construction Management Ltd.
<b>PROJECT MANAGER:</b>	Richmond Project Team Enquiries: Karen Kwan, 604-308-1226

### BACKGROUND

Howard DeBeck Elementary is in a single-storey wood frame building of 3,332 m<sup>2</sup>, constructed in 1991 with additions and renovations in 2000. School District No. 38 (Richmond) has confirmed that the school is needed for the long term as part of the overall long-range strategic planning.

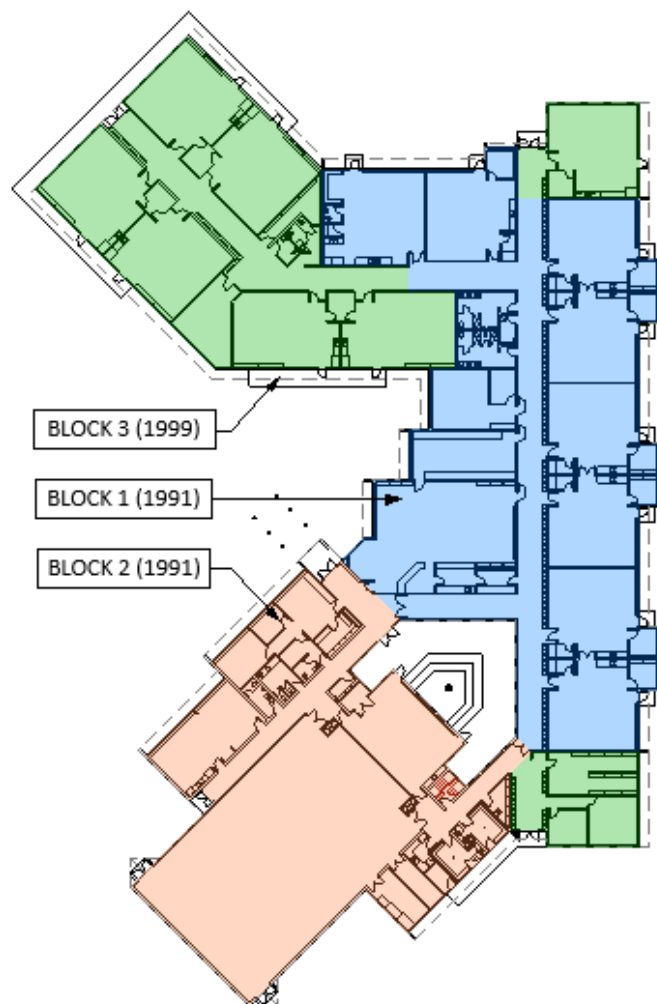
The K-7 school, which consists of three distinct blocks, was seismically assessed using Version 3 of EGBC's Seismic Retrofit Guidelines. The entire school has a moderate-high risk of liquefaction potential requiring substructure upgrades, with Block 1 (1991 Original Classrooms/Library) having a Seismic Risk Category H1 rating, Block 2 (1991 Gymnasium/Administration) having a Seismic Risk Category H2 rating and Block 3 (2000 Classrooms Addition) having a Low Risk rating.

### PROJECT SCOPE

- Seismic retrofit to achieve a life-safety level includes reinforcing existing brace bay columns with cross-bracing and column enhancements, adding new braces, thickening and widening existing brace bay footings, re-pinning the existing roof deck and adding new steel strapping and steel angle to its underside, and upgrading connections throughout.
- Non-structural seismic resistance upgrade to the entire school (added restraint of lighting, HVAC, plumbing and cabinets).
- Restoration of wall/floor/ceiling/exterior finishes and hard/soft landscaping affected by the structural work, addition and demolition.
- Minor removal and replacement of mechanical and electrical equipment to accommodate structural work.
- Additional scope funded out of the Provincial Building Envelope Program includes replacement of failed stucco exterior wall cladding with new prefinished metal cladding to match the rest of the building (\$275,000).

## PROJECT STATUS

- Project approval and funding agreement received from the Ministry of Education and Child Care 22 February 2023.
- Construction is well underway, with Phase 1 (Block 1 - 3 southeast classrooms + Block 3 south end bookroom) substantially complete and Phase 2 (Block 2 gymnasium, changerooms, multipurpose room and staff room + Block 3 south end resource rooms) set for completion in March 2025.
- Phase 3 (Block 1 – 3 northeast classrooms and Block 3 north end classroom) are start in December 2024, Phase 4 (Block 1 - 2 north-central classrooms and washrooms + Block 3 - 1 north-central classroom) is tentatively set to start in March 2025, Phase 5 (Block 2 administration offices + Block 3 washrooms) is tentatively set to start in July 2025, and Phase 6 (Block 1 library, computer room and resource room) is tentatively set to start in July 2025. The project is set set for completion in December 2025.
- Budget is on track. We are behind schedule but plan to make up lost time to bring it back on track.



Seismic Block Map – Howard DeBeck Elementary