



Business Case:

Kapapamahchakwew - Wandering Spirit School

Business Case for a new, standalone, and fully Indigenized facility to provide a truly decolonized environment for Indigenous students and Communities across Toronto

Toronto District School Board

October 19, 2023

United Nations Declaration on the Rights of Indigenous Peoples

Article 14

1. Indigenous peoples have the right to establish and control their educational systems and institutions providing education in their own languages, in a manner appropriate to their cultural methods of teaching and learning.
2. Indigenous individuals, particularly children, have the right to all levels and forms of education of the State without discrimination.
3. States shall, in conjunction with indigenous peoples, take effective measures, in order for indigenous individuals, particularly children, including those living outside their communities, to have access, when possible, to an education in their own culture and provided in their own language.

2023-24 Capital Priorities Program

Business Case – Written Component

Using this document or by providing a separate submission please ensure your response considers all the aspects requested in the business case.

School Board Name: 12 - Toronto DSB

Project Name: New Kapapamahchakwew - Wandering Spirit School

Project Ranking: 1

Project Description: New Standalone JK to Grade 12 Fully Indigenized 397 Pupil Place School

Panel: Both

Municipality: Toronto

Project Category: Facility Condition

Project Type: New School

Child Care: No (*childcare has already been funded*)

If yes, CMSM / DSSAB Name and number:

Choose an item.

Joint-Use School: None

If Site is EDC Eligible: No

Board Contact Information: *Daniel Castaldo, (416) 428-1857*
daniel.castaldo@tdsb.on.ca

1.0 Rationale for Need

Part A: Project Rationale

The new, standalone and fully Indigenized school for Kapapamahchakwew - Wandering Spirit School is being submitted to the Ministry of Education as the top Capital Priority project to recognize and acknowledge the Board's strong commitment to Truth and Reconciliation.

The funded strategy to renovate and expand the current facility at 16 Phin Avenue is no longer appropriate from an Indigenous or equity perspective or align with a shared goal of constructing and operating efficient, modern facilities.

The proposed project has been significantly revised since the previous submission in February 2022. The current iteration of the project has been downsized in scope to reduce the school's capacity, square footage and cost. In addition, the project has been phased to prioritize the school and child care components only, which could be followed by subsequent phases to accommodate the Urban Indigenous Education Centre, a swimming pool, and potential expansion if required. These future components are not being submitted for capital funding consideration at the present time.

High-Level Summary of Changes to the Proposal

- The capacity of the proposed school has been reduced from 533 pupil places to 397 pupil places
- The project has been phased to prioritize the school and childcare first; the Urban Indigenous Education Centre (UIEC) and other building elements such as the swimming pool have been removed from the scope
- The proposed square footage of the school and childcare components has been reduced by over 12,000 ft²; from 78,730 ft² to 66,353 ft²

A standalone facility for Kapapamahchakwew - Wandering Spirit School, exclusively used by Indigenous programs and services is required to provide a truly decolonized environment where Indigenous programs can exist without the interference of colonial practices.

The funding previously allocated for this project in 2018 reflected the standard approach to capital priorities funding allocations whereby a set of strict benchmarks are applied. This project needs to be reviewed and thoughtfully considered through a lens that respects and honours the voice and self-determination of the Indigenous communities. This funding was also allocated to support a renovation and expansion to the current home of Kapapamahchakwew - Wandering Spirit School, 16 Phin Avenue.

Indigenizing and expanding the 16 Phin building is no longer an option. The recent uncovering of mass unmarked graves of Indigenous children subjected to the residential school system in this

country has sparked a nation-wide reflection and discussion on our collective commitments to Truth and Reconciliation.

The 16 Phin building was designed and constructed to meet the needs of a colonial education system in the early 1900's. As an imposing and expansive monolith, the building is not well suited in its current design, layout, or presence to serve as the permanent home for Kapapamahchakwew - Wandering Spirit School and the Urban Indigenous Education Centre. The stark resemblance of 16 Phin to the many residential schools that dotted the Canadian landscape until the mid 1990's doesn't provide for an environment that honors Indigenous voices and self determination. The images on the following page juxtapose the Kamloops Indian Residential School in British Columbia, where the unmarked graves of 215 Indigenous children were tragically discovered in May 2021, with the 16 Phin building.

This business case outlines the board's proposal to construct a new, fully Indigenous standalone school to support Indigenous communities in the City of Toronto. This new building is planned to accommodate students in Grades JK-12, along with a childcare centre. The school will be rooted in Indigenous teachings and community, as well as being a welcoming and inclusive environment for all students across the city.



Kamloops Indian Residential School



16 Phin Avenue Building

This business case is intended to provide the Ministry of Education with an overview of the revised proposal, an understanding of the importance of this initiative, an overview of the rationale and to request the necessary capital funding to move this project forward together.

The vision is to integrate and be inclusive to the broader community in the teaching and learning approach, which will be designed to foster Indigenous values and culture; the intent will be to welcome all into the Indigenous context.

In 2017, Kapapamahchakwew – Wandering Spirit School was relocated into the former Eastern Commerce CI building located at 16 Phin Avenue to provide the school with space to expand its grades from JK-8 to JK-12 and to co-locate with the Urban Indigenous Education Centre. A location map and aerial photograph of the 16 Phin Avenue site can be found in Appendix A.

At the time, the building also accommodated an alternative secondary school (Subway Academy I), the TDSB's museum and archives, a childcare centre (Creative Pre-School), and space for several TDSB administrative groups (Deaf and Hard of Hearing, Education and Community Partnerships Programs, Pay Equity, and Labour Relations). Since that time only Subway Academy I and Creative Pre-School remain in the building alongside Kapapamahchakwew; all other groups have been relocated.

A benchmark allocation was made in 2018 through the Capital Priorities process to support renovating and expanding 16 Phin. A total of \$11.52M was allocated, which included \$8.87M to support the aspect of the project associated with the school. This funding was allocated using a proxy new school of 300 pupil places as per Ministry benchmarks at that time. The remaining funds were allocated to support the construction of a 3-room childcare centre and EarlyON room.

In the design process, the Elders Council and the Indigenous communities expressed the need for a new, standalone facility that accommodates only Indigenous programs and services. A new facility is required because it is not possible to retrofit the 16 Phin Avenue building within the funds provided to create a fully Indigenized space.

Additionally, and more importantly, the 16 Phin Avenue building was constructed in 1924 in a colonial style of architecture that resembles many residential schools. Also of significant concern is the facility condition of the building and ongoing costs of maintenance and renewal. The building is also oversized for the needs of the school – a new facility would be right sized to align with the enrolment and program needs of Kapapamahchakwew - Wandering Spirit School, rather than the school needing to adjust to the conditions of the building.

To eliminate the association with residential schools and to provide instructional spaces suited for Indigenous ways of learning, the best solution is to build a new facility designed by Indigenous architects for Indigenous communities.

Although the building isn't appropriate, the 16 Phin site is still the preferred location to build the standalone Indigenous facility. At 4.9 acres it is large enough to accommodate a new facility and other important areas like a ground for community celebration/activities, and a lacrosse field. It is located centrally within the city and has excellent access to public transit – the Donlands subway station is only 190 metres away.

A new facility could be built on the current sports field while Kapapamahchakwew continues to operate in the existing 16 Phin building. Once the new facility opens, the existing 16 Phin building would be used for the Urban Indigenous Education Centre (UIEC) until funding is secured to expand the new school to include this group.

The 16 Phin building would also be right sized for the UIEC, resulting in large portions of the facility being demolished over time, including an area of 65,670 ft² as part of the first phase of the project. This reduction in square footage would also reduce operating costs and eliminate a significant amount of renewal backlog from the school and the system.

In response to the voice of the Indigenous communities, staff are currently in the process of moving the other user groups in the 16 Phin Avenue building to other locations. The only remaining groups in the building are Kapapamahchakwew, Subway Academy I, the Urban Indigenous Education Centre and Creative Pre-School (private childcare centre).

Discussions on relocating Creative Pre-School from the building are currently underway. Subway Academy I will also be relocated, subject to the outcome of the Board's review of all Secondary Alternative Schools. All other user groups have been relocated into other TDSB locations. The proposed new school does not include any other groups aside from Kapapamahchakwew and the new childcare centre (not Creative Pre-School).

Demographic Overview

A growing body of research points to the positive impact on student achievement of Culturally Relevant and Responsive Pedagogy (CRRP). At Kapapamahchakwew – Wandering Spirit School, CRRP has been the foundation of teaching and learning for nearly forty years. With educational programming grounded in the knowledge and traditions of First Nations peoples, and a learning environment that reflects their histories, experiences, cultures and understandings, the school has offered the children of Toronto's Indigenous communities an alternative to mainstream schooling.

The City of Toronto estimates that there are between 35,000 and 70,000 Indigenous people living in Toronto. (Anishinaabe, Haudenosaunee, Métis, Cree, Mi'kmaq, Inuit and more). Based on census data and information from various agencies working with the Indigenous communities, it is estimated that between 6,000-7,000 students of Indigenous heritage are currently enrolled in TDSB schools. The census indicators identified and explained below suggest that the Indigenous population is large, rapidly growing and very present within urban communities such as the City of Toronto.

Increase in Population is Much Higher for the Indigenous Population

Statistics Canada reports that past censuses have emphasized two key characteristics of the Indigenous population: that Indigenous peoples are both young and growing in number. The 2016 Census reaffirmed these trends. (Source: <https://www150.statcan.gc.ca/n1/daily-quotidien/171025/dq171025a-eng.htm?indid=14430-1&indgeo=0>)

Between 2006 and 2016, the Indigenous population has grown by 42.5% across Canada. This is more than four times the growth rate of the non-Indigenous population over the same period. According to population projections, the number of Indigenous people will continue to grow quickly. In the next two decades, the Indigenous population is likely to exceed 2.5 million persons. According to Statistics Canada, there are two primary factors that have contributed to the growing Indigenous population.

- The first is natural growth, which includes increased life expectancy and relatively high fertility rates; and

- The second factor relates to changes in self-reported identification: more people are identifying as Indigenous on the census.

According to the 2016 census, the First Nations population—including both those who are registered or treaty Indians under the Indian Act and those who are not—grew by 39.3% from 2006 to reach 977,230 people in 2016.

- The Métis population (587,545) had the largest increase of any of the groups over the 10-year span, rising 51.2% from 2006 to 2016.
- The Inuit population (65,025) grew by 29.1% from 2006 to 2016.
- The number of First Nations people with Registered or Treaty status increased by 14%, while the number of First Nations people without Registered or Treaty status (Non-Status) increased by 61%.

Indigenous Population is Considerably Younger than the Non-Indigenous Population

As per the 2016 census the median age was much lower for the Indigenous population than for the non-Indigenous population. The average age of the Indigenous population was 32.1 years in 2016, nearly a decade younger than the non-Indigenous population (40.9 years). As reported in the 2011 census:

- Indigenous people and Inuit had higher fertility rates than the non-Indigenous population; and
- Métis had a slightly higher fertility rate than the non-Indigenous population.

Largest Indigenous Population Resides in Ontario

According to the 2016 census nearly a quarter (or 24.2%) of the total Indigenous population in Canada lived in Ontario; this was an increase of 2% from the 2011 census. Further, and for the first time, Ontario had the largest Métis population in Canada at 120,585, up 64.3% from 2006 and accounting for one-fifth (20.5%) of the total Métis population. Métis were also the most likely to live in a city, with 62.6% living in a metropolitan area.

Urban Indigenous Population is the Fastest Growing Segment of Canadian Society

The increase in the urban population of Indigenous peoples has been taking place for decades across Canada. The urbanization of Indigenous peoples in Canada is due to multiple factors—including demographic growth, mobility and changing patterns of self-reported identity.

In 2016, 867,415 Indigenous people lived in a metropolitan area of at least 30,000 people, accounting for over half (51.8%) of the total Indigenous population. From 2006 to 2016, the number of Indigenous people living in a metropolitan area of this size increased by 59.7%.

Facility Condition at the 16 Phin Building

16 Phin, the current location for Kapapamahchakwew - Wandering Spirit School, was constructed in 1924 to provide easier access to secondary education for students living east of the Don River. The program focus at the school was business and commercial studies.

The school is large, expansive, and complex. The school received 4 additions over the next 50 years, beginning in 1926 where 18 classrooms were added to the school. In 1930, another 6 classrooms, auditorium, swimming pool and 2 gyms were added. In 1961, 6 classrooms, a health centre and cafeteria were constructed. And finally, in 1966, a 3rd gymnasium, instruction room, data processing room and language lab were added. The total area of the building is approximately 197,000 ft².

The current renewal backlog at the 16 Phin building is **\$24.6M**. The total that is deemed to be 'high and urgent' is \$21.3, or 87% of the total backlog. The 5-year projected renewal backlog is \$26.4M, an increase of \$2M. The current Facility Condition Index (FCI) is 69%, projected to increase to 74% over the next 5 years.

Over the past 10 years there has been over \$10M spent through the School Renewal Grant and School Condition Improvement Grant to maintain the facility. This ongoing maintenance and renewal of the facility will be required into the distant future if it is to be retained. There are significant facility condition issues that remain. A new replacement school would allow the Board to forgo ongoing and costly investment into an aging building that is vastly oversized for Kapapamahchakwew - Wandering Spirit School.

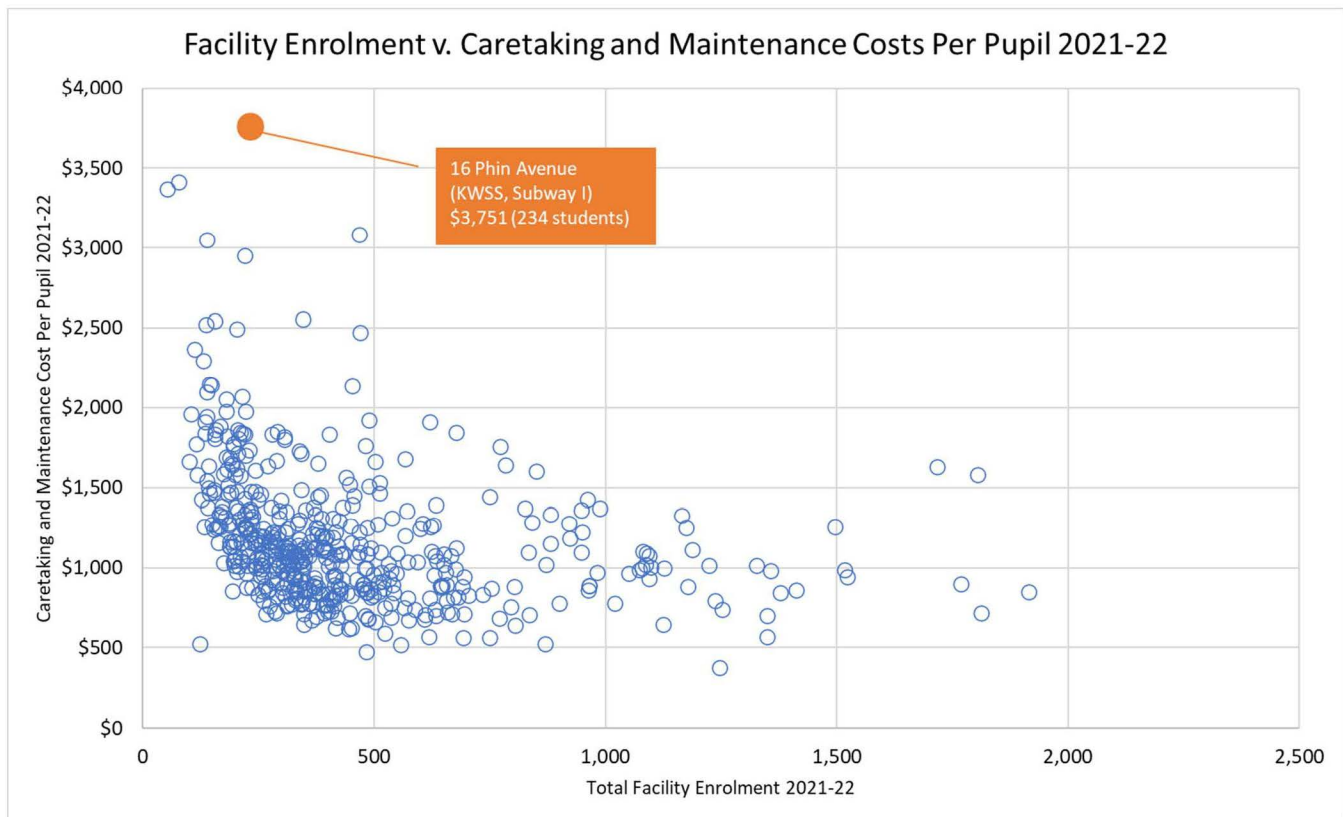
Demolishing the existing 16 Phin building provides the Board with an opportunity to remove \$26.4M in renewal backlog from the system, while properly right sizing the facility to accommodate the school and childcare.

NOTE: The excel business case did not properly pre-load the GFA of the 16 Phin Avenue building. The only GFA component that pre-populated was the space in the building used by Subway Academy I. The long-term vision would be to demolish the entire building of 18,301 sq. M., not only the 2,561 sq. M. associated with Subway I. As part of Phase 1, 6,101 m² of the existing building would be demolished (65,670 ft²).

Operating Costs of the 16 Phin Building

The existing facility is approximately 197,000ft², and as a result is incredible costly to operate and maintain, especially when compared to the actual and projected enrolment of Kapapamahchakwew - Wandering Spirit School.

In 2021-22 the 16 Phin building had the highest per pupil operating cost (caretaking and maintenance) of all facilities across the city at \$3,751 per pupil. The building had an enrolment of 234 students in 2021-22, which included Kapapamahchakwew - Wandering Spirit School (JK-12) and Subway I.



Part B: Alternative Accommodation Strategies

Funded Project

The proposed standalone Kapapamahchakwew - Wandering Spirit School is a unique project that should not be defined or analyzed in the same manner as other Capital Priority projects submitted by the Board. The enrolment, utilization rates and/or future plans for surrounding schools are irrelevant to the needs of this project. There has been an exhaustive discussion over the past decade about the most appropriate means of providing a dedicated facility to support urban indigenous education in the City of Toronto. The decision has been made to pursue a standalone facility, not using a nearby operating school to accommodate Kapapamahchakwew - Wandering Spirit School. The school serves Indigenous students from across the city and does not have a boundary – making boundary changes irrelevant. Grade changes are not applicable either; the school is JK-12, and a grade change would defeat the purpose of a standalone indigenous school.

In 2018, the school received funding from the Ministry through the Capital Priorities Program to right size, renovate and indigenize the 16 Phin building. Through the Ministry’s benchmark-based formula, the school was allocated a total grant of \$11.52M: \$8.87M to provide space for the school; \$2.12M to provide space for an Indigenous childcare centre; and \$0.53M to provide space for an Indigenous EarlyON Centre. These funding benchmarks do not reflect or recognize the uniqueness of the project as it relates to design, space, and functionality.

The insurmountable issue is the resemblance of 16 Phin Avenue to a residential school. No amount of investment renovation or expansion will change the imposing presence of this facility or the impact that it has on those that pass through its doors each day.

Photos of the 16 Phin Avenue façade and the façade of a residential school are provided in Appendix B. Further, there are elements of this project that may be considered 'community' and are intrinsically connected to the school and cannot be disconnected. The foundation of this project is rooted in connecting the broader Indigenous communities with the school. These community elements are not reflected within the colonial approach to benchmark funding allocations. These elements include spaces like an Elder's lounge, community kitchen and a sacred room – all are reflected in the Facility Space Template for the project.

Vision

The vision for the Indigenous school was and is to create an innovative hub for Urban Indigenous Education that will contribute to the growth of knowledge and demonstrate leadership in the field of Urban Indigenous Education.

This Centre will be dedicated to increasing cultural capacity across the Board through the implementation of inclusive curriculum, enhanced professional learning, and innovative program partnerships. Although the project has been phased to allow the focus to be on the school and childcare at this time, the long-term vision is to incorporate a new addition for the Urban Indigenous Education Centre in the future. This is not included as part of the scope of this business case submission.

The UIEC will continue to support and actively engage participation by parents and members of the Indigenous communities in partnership with Kapapamahchakwew - Wandering Spirit School. The school will not only be welcoming of the community but also responsive to the community's needs. Partnerships with Indigenous service providers, post-secondary institutions and arts and culture organizations will be a priority as the project evolves.

Current Funded Project

In 2019 TDSB Design staff and the architect retained to lead the project undertook a costing exercise to estimate the full cost associated with the vision plan to Indigenize the 16 Phin building as per the vision. The estimate suggested that to achieve the vision at 16 Phin the total cost would be approximately \$40.8M. The estimate suggested that the addition to the 16 Phin building would cost \$17.23M alone, which is substantially higher than the funded amount of \$8.87M.

This meant that the renovations required to fully Indigenize the facility to align with the vision plan at 16 Phin were estimated to cost an additional \$21.4M to undertake. These renovations were required across all floors of the existing school. These funds were not recognized in the allocated benchmark funding and would still not address the imposing façade of the 16 Phin building and its resemblance to a residential school. Further, these estimates were provided in 2019 and the cost of construction

in the City of Toronto and across the province has increased dramatically, meaning that the 2023 cost of this project would be substantially higher than the 2019 estimate.

The proposal for a new, fully Indigenized facility is a redress to the legacy of residential schools and pays honour to the Indigenous children who did not survive, and to the Indigenous communities who live with the intergenerational trauma of that system.

Although the cost of a new standalone school is expected to exceed Ministry funding benchmarks, it may not be as high as the cost to renovate/expand the 16 Phin building to achieve the vision.

Impact of Not Proceeding With the Project

Not proceeding with this project would not align with the Truth and Reconciliation Commission of Canada's 94 Calls to Action, specifically numbers 62 and 63, which are outlined below:

Education for reconciliation

62. We call upon the federal, provincial, and territorial governments, in consultation and collaboration with Survivors, Aboriginal peoples, and educators, to:

- I. Make age-appropriate curriculum on residential schools, Treaties, and Aboriginal peoples' historical and contemporary contributions to Canada a mandatory education requirement for Kindergarten to Grade Twelve students.*
- II. Provide the necessary funding to post-secondary institutions to educate teachers on how to integrate Indigenous knowledge and teaching methods into classrooms.*
- III. Provide the necessary funding to Aboriginal schools to utilize Indigenous knowledge and teaching methods in classrooms.*
- IV. Establish senior-level positions in government at the assistant deputy minister level or higher dedicated to Aboriginal content in education.*

63. We call upon the Council of Ministers of Education, Canada to maintain an annual commitment to Aboriginal education issues, including:

- I. Developing and implementing Kindergarten to Grade Twelve curriculum and learning resources on Aboriginal peoples in Canadian history, and the history and legacy of residential schools.*
- II. Sharing information and best practices on teaching curriculum related to residential schools and Aboriginal history.*
- III. Building student capacity for intercultural understanding, empathy, and mutual respect.*
- IV. Identifying teacher-training needs relating to the above.*

A fully indigenized, standalone facility for Kapapamahchakwew - Wandering Spirit School aligns with these commitments to action and would represent a significant step forward for both the Government

of Ontario and Toronto District School Board in recognizing and supporting Indigenous self-determination.

Not proceeding with the project would leave Kapapamahchakwew - Wandering Spirit School in the current 16 Phin building, which, as has been explicitly expressed by members of Indigenous communities, is not appropriate given its resemblance to that of a residential school. This is a cause of ongoing trauma to the community that requires immediate action and attention.

From a facilities perspective the building is grossly oversized relative to the enrolment of the school, is Prohibitive to Repair with over \$26M in 5-year renewal backlog and will require a substantial amount of ongoing investment to keep in a state of good repair. These are ongoing and significant costs to both the Province and the Board and could be avoided through the provision of a new school.

A new, state of the art school with building systems that incorporate best practices in environmental sustainability would be a dramatic shift from the costly monolith that is 16 Phin Avenue.

2.0 School Enrolment and Capacity Overview

The proposed capacity for the new Indigenous school is 397 pupil places, this has been reduced since the February 2022 submission when a school of 533 pupil places was proposed.

The current organization and use of the existing 16 Phin building results in a capacity of 924 pupil places. As per the funded project proposal where the building was to be renovated and expanded, approximately 33,400ft² of the existing facility would have been demolished to allow the addition to be constructed onto the building.

This addition would have included gymnasiums, a swimming pool, classrooms, and associated spaces like washrooms, change rooms and cafeteria. The proposed changes to the facility, including the addition and planned renovations to the interior, would have resulted in a capacity of 1,005 pupil places. This iteration of the project would have resulted in a facility that was still a mismatch with the school's enrolment and supporting uses. A large amount of renewal backlog would have remained unaddressed, and elements of the facility would continue to deteriorate.

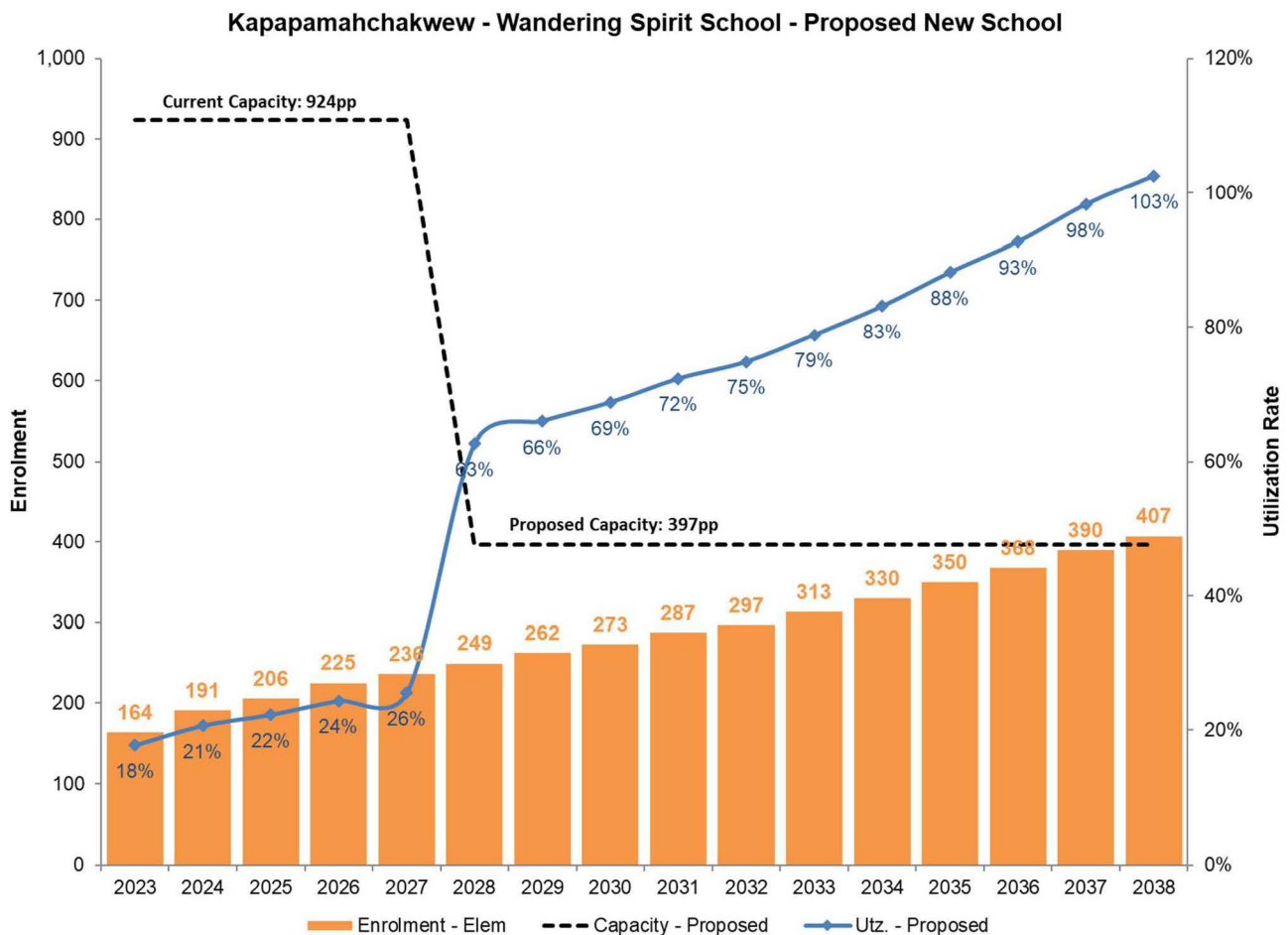
The February 2022 proposal sought a much larger standalone facility, not only in capacity, but one that would have also included the Urban Indigenous Education Centre and swimming pool. The reduced capacity of 397 pupil places is a better match with the current and projected enrolment for the school and represents a much more efficient model.

Enrolment at Kapapamahchakwew - Wandering Spirit School is currently 116 students in JK to Grade 8 and 48 students in Grade 9-12 for a total of 164 students. The model upon which the new standalone school is based is smaller than what was shared with the Ministry in February 2022. The proposed capacity of the new school is 397 pupil places: 282 associated with the elementary portion and 105 with the secondary portion. The previous proposal included 386 pupil places for elementary

and 147 for secondary. This represents an overall reduction of 146 pupil places to the school component of the project.

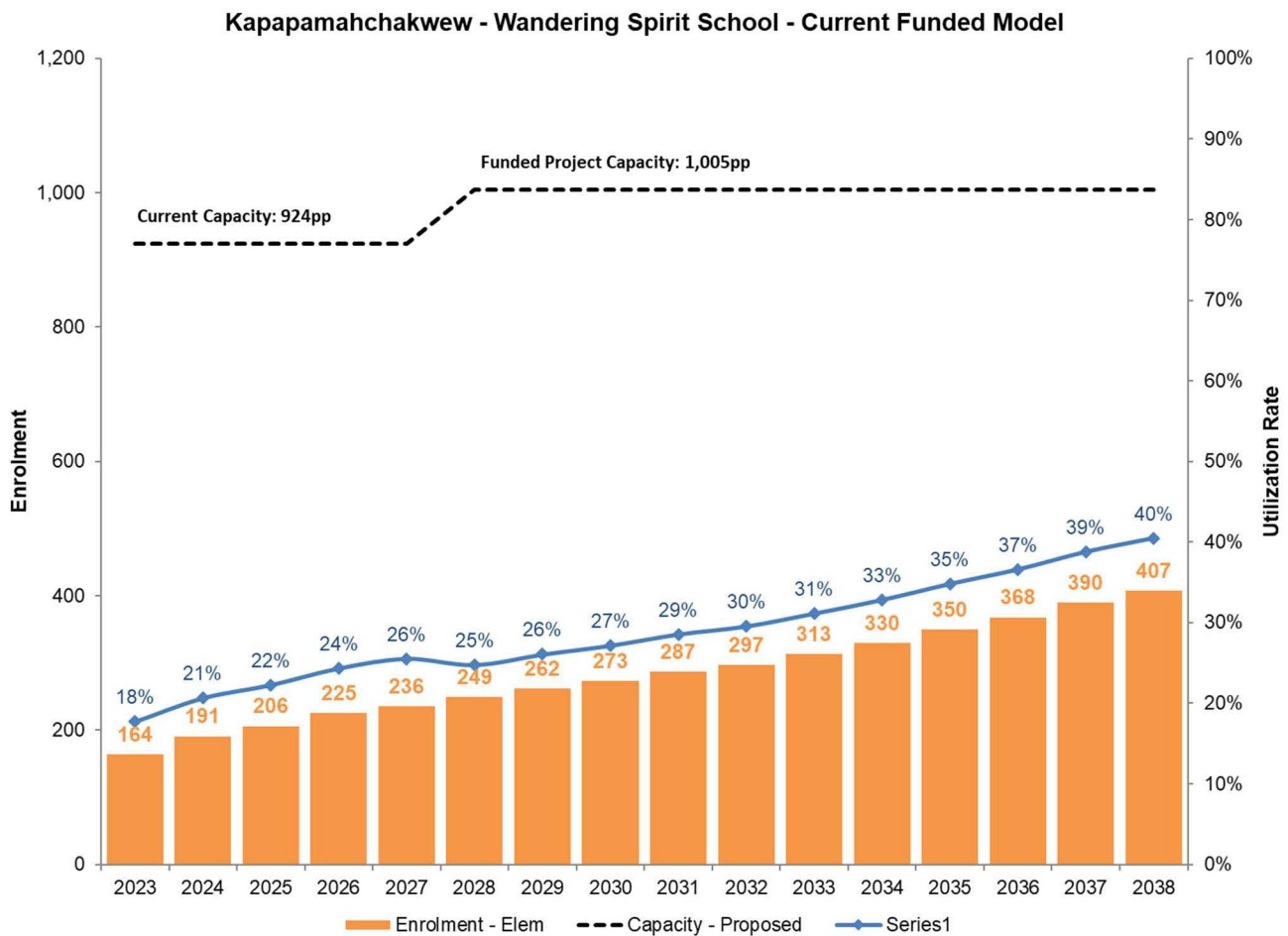
The following graphs illustrate the current and projected enrolment of Kapapamahchakwew - Wandering Spirit School under the two different scenarios. The first reflects the proposed option, which is a new replacement school of 397 pupil places, the second is the current funded model which would see an interior renovation and expansion of the 16 Phin building to a capacity of 1,005 pupil places.

Under the current proposal the school would be right sized to a capacity of 397 pupil places, with an opening date of September 2028. Upon opening, the school would increase in utilization from 26% to 63% with an enrolment of 249 students. With the new facility and increasing enrolment year-over-year, the school is expected to reach 75% utilization by 2032 and 98% utilization by 2037 with 390 students. As outlined, the building will be planned in a way that allows for future expansion if/when required.



The current funded model is outlined in the graph below. Under this model the existing facility would be renovated and expanded to a capacity of 1,005 pupil places. This is the capacity that was reflected in the February 2022 business case where a new replacement school was first identified.

Under this model the school’s capacity would increase from 924 to 1,005 in 2028, resulting in a utilization rate of 25%. Although enrolment is projected to grow, the building is still significantly oversized relative to the population of the school. By 2032 the school’s utilization rate is projected to be 30%, and by 2037 only 39%. This does not align with Ministry’s parameter for schools to be utilized at 100% within 5 years of opening.



Surrounding schools have not been considered as a solution to this project due to the unique and culturally sensitive nature of the proposal. It has already been determined through extensive consultation with Indigenous communities that co-existing with another TDSB school and/or group is not feasible and that a standalone facility is the only appropriate solution that aligns with commitments to Truth and Reconciliation.

The 16 Phin site is still the most appropriate location for the Kapapamahchakwew - Wandering Spirit replacement school. Other sites in the area have been investigated in the past and do not provide opportunities for another standalone school to be constructed.

An added benefit of the 16 Phin site is the ability for the Urban Indigenous Education Centre to continue operating while the new school is constructed and operational. The UIEC is connected to Kapapamahchakwew - Wandering Spirit school, but also supports Indigenous instruction across the entire City.

3.0 Proposed Scope of Work

Part A: School Project Scope

The revised scope of work for Kapapamahchakwew - Wandering Spirit school involves the construction of a new, standalone 397pp JK-12 school and childcare. The new building would be constructed on the playfield of 16 Phin Avenue. There would be no need to relocate the school or UICE during construction.

The new school would allow for a significant portion of the existing 16 Phin building to be demolished, reducing renewal backlog and operating costs. The building would continue to be used for the UICE until a future phase of the project can be completed.

The scope of the project includes the following areas, among others:

- 2 Full Day Kindergarten Classrooms
- 8 Elementary Classrooms (3 Primary, 3 Junior, 2 Intermediate)
- 1 Science / Tech Room
- 1 Art Room
- 1 Instrumental Music / Drama / Dance Room
- 1 Language Room (Ojibwe)
- 1 Flexible Resource Space
- 5 Secondary Classrooms
- 2 Resource and 2 Seminar Rooms
- Triple Gymnasium
- Library / Learning Commons
- Fitness / Weight Room
- Cafetorium and Teaching Kitchen
- Sacred Room
- Elders Lounge
- Office Spaces for UIEC *(to support transition to the new building)*

A Design Brief prepared by Two Row Architects is attached as Appendix C. This document provides a significant amount of detail regarding the unique design approach to this project, specifically importance of a design resonates with Indigenous cultural values, traditions, and histories, creating a space that truly represents the community it serves.

Schematic drawings and supplementary drawings, prepared by Two Row Architect can be found in Appendix D. These drawings illustrate the Indigenous design perspectives described in the brief and showcase how the new school is dramatically different from the 16 Phin building.

A phasing plan, also provided by Two Row Architects is attached as Appendix E. This phasing plan outlines the fulsome scope of the project, inclusive of not only Phase 1 – school and childcare – but also the UIEC, potential pool and future addition. This phasing plan also demonstrates the sequential demolition of the existing building at 16 Phin Avenue as the project evolves.

Part B: Child Care Project Scope, if applicable

Is the board requesting childcare funding to support childcare space with the Capital Priorities project request? **No**

Funding for a 3-room childcare has already been allocated to the project.

6.0 Project Readiness Assessment

Part A: Site Ownership

Please elaborate about the school board's current status of site acquisition for the requested Capital Priority, including:

- Do you require Land Priorities funding or do you have other sources of funding available?

The 16 Phin Avenue site is owned by the TDSB, and no land priorities funding is required.

- Has the board secured a site for the project? If not, what progress has been made? When does the board expect to have secured a school site?

The 16 Phin Avenue site is owned by the TDSB and is of a sufficient size to accommodate the proposed replacement school. No additional land is required to support the project.

- What is the status of the identified site?

Owned by the Board.

- Are all or some of the utilities connected? If not, when does the board expect this work to be complete?

The 16 Phin Avenue building is an operating school, and all utilities are connected.

- Are the roads providing access to the site developed and usable? If not, when does the board expect this work to be complete?

The 16 Phin Avenue building is an operating school and is serviced by an existing road network.

- Has the board completed phase 1 of the environmental assessment? If not, when will the board be able to do so? If applicable, were there any issues identified that will influence the timelines or budget of the project and by how much?

TBD

- Has the board completed a geotechnical assessment of the site? If not, when will the board be able to do so? If applicable, were there any issues identified that will influence the timelines or budget of the project, and by how much?

TBD

- Is the site topography suitable for this project? If not, what are the board's plans to address this issue and what are the implications for project timelines and budget?

16 Phin Avenue is a flat parcel of land with an existing school and associated functions. There are no topographical issues to resolve that would impact the Board proceeding with the replacement school project.

- Does the current zoning enable the construction of a school? If not, please provide details on the requirements for rezoning and any implications on timelines or budget.

The site is appropriately zoned; there are no implications on timelines or budget related to Zoning.

- Have all unique site costs been identified? If not, when does the board expect to have an estimate with ~80% confidence?

TBD

- For additions and renovations only: Does the board know with certainty whether the project will require relocating students currently enrolled at the school? If not, please provide additional information about how that decision is being made.

There is no need to relocate students. The replacement school can be constructed on the site while the existing school remains operational.

- If alternative accommodation is required during the project, please provide information about the board's plan for relocating the students and any further steps you need to complete to finalize this plan.

Alternative accommodation is not required. Students will remain on-site while the replacement school is constructed.

Please elaborate if the school board anticipates any challenges in securing a site for this project when working with municipalities or developers.

The site is owned; therefore, no challenges are expected

Part B: Project Design

The Design Brief attached in Appendix C provides additional detail regarding the unique approach to the design of Kapapamahchakwew - Wandering Spirit School. A summary of these points can be found below.

The design of the new Kapapamahchakwew - Wandering Spirit School, formerly known as the First Nations School of Toronto, does not fall into the scope of any repeat design (catalogue), or TDSB schools/projects.

The unique pedagogical requirements of this school which will provide curriculum focused on indigenous culture and teachings, requires a newly conceived facility based on indigenous design principles. Hence, why the Indigenous Architecture firm Two Row Architect was engaged for its design. The need for a new facility, which does not follow the prescribed catalogue for TDSB schools, is especially important given the current Wandering Spirit School operates from a colonial building whose spatial planning is diametrically opposed to the pedagogical requirements of a school for First Nations students.

Additionally, the existing building is in disrepair and is unfit to host any students, let alone indigenous students who carry the intergenerational trauma from Canada's legacy of Residential Schools. This is the result of the aesthetics, smell, and unpleasant acoustic qualities which are representative of the colonial residential schools.

The proposed new build is on the existing site of the current building formerly known as Eastern Commerce at 16 Phin Ave. The new building is proposed to be three storeys in height and is to be constructed prior to the full demolition of the current building – partial demolition will take place. The proposed area of the building for Phases 1A and 1B (school and childcare) is 66,353 ft² (6,164m²).

Standardized classroom sizes are used and oriented along a radial grid that orients classrooms to the cardinal directions, prioritizing mother earths gifts, and embracing solar gain. The design allows for future classrooms to be plugged into the building along this radial grid. Energy efficient, and sustainable, mechanical systems are proposed to align with the cultural values of First Nations communities to live lightly on the land (Natural Ventilation, High Efficiency Heat to Air Pumps) and to harvest the gifts of mother earth (photovoltaic panels).

The board has been consulted by Two Row Architect to consider, and implement, the following points regarding the appropriate and respectful conception a piece of contemporary indigenous architecture:

- **Land and Place-Based Design:** Rooted in an intimate understanding and respect for the land, contemporary Indigenous architecture often starts with a thorough analysis of the site, its history, its ecosystems, and its significance to local Indigenous communities. Buildings are often designed to be in harmony with their surroundings, respecting natural topographies and ecosystems.

- **Cultural and Spiritual Symbolism:** Indigenous cultures are rich in symbolism and spiritual narratives. Contemporary Indigenous design often weaves these symbols and stories into the architecture, whether through building forms, patterns, materials, or spatial experiences.
- **Community-Centered Design Process:** Indigenous design frequently emphasizes collaboration and consultation with the community from the project's inception to completion. This inclusive approach ensures that the final design genuinely reflects the community's values, needs, and aspirations.
- **Sustainability and Environmental Stewardship:** Indigenous cultures have a long history of living sustainably and in balance with nature. Indigenous architecture often emphasizes eco-friendly materials, energy-efficient design strategies, and sustainable construction practices, reflecting a deep respect for Mother Earth.

The design of the WSS is scalable to allow for future phases of the school to plug-in to the proposed Phase 1 of the school. A schematic design package showing future phases of the school is included as a supplementary drawing package in Appendix D and illustrates how the school's design can grow while maintaining its specific identity as an indigenous school designed around indigenous values and principles.

The board plans for the partial demolition of the existing WSS school at 16 Phin Ave to commence prior to the construction of the new facility. This will allow for temporary site storage and parking to occupy the area of partial demolition. The design of the new building follows a radial grid with upper-level classrooms stacked on top of one another. This allows for ease of construction and modularity. Lastly, the board has engaged A.W. Hooker as the cost consultant, who has advised a fast track for construction of Phase 1 of the school to save costs. As a result of the above, the project is suited to be constructed quickly and on budget.

The largest design challenge is meeting and expressing the culturally specific needs of the First Nations communities and students the school is conceived for. Community Integration of the broader Indigenous community through communal events, gatherings, and outreach from elders, is an essential pedagogical component of a First Nation school. Ensuring these programs are operational throughout the construction of the new school and minimizing impact to these programs during the demolition of the existing school, are a critical which will require careful planning and commitment from the Board.

The proposed project is completed to a Schematic Design stage for the Phase 1 school. Supplementary schematic design drawings are provided to show the concept for the school in future phases with additional pedagogical and communal programming to fully satisfy the cultural needs of the community this school serves. Artistic renderings are also provided in the supplementary drawings (Appendix D) to supply visuals to the community and stakeholders of the project with a view of the completed project.

The design stage is completed from a Schematic Design point of view. The project is ready at this point to move on to the Design Development stage where the structural systems, building envelope, layout of classrooms, and interior detailing can be flushed out.

The estimated cost of the project is \$51.99M as per the Class D cost consultant report as prepared by A.W. Hooker. The report is attached in Appendix E. The Ministry has already committed \$11.5M to the project, which leaves an **unfunded requirement of approximately \$40M**. A summary of extraordinary costs associated with the project can be found in Appendix F. These costs are reflected in the Excel business case, but a description is found in the Appendix.

Part C: Project Milestones

The project milestone schedule is based on durations of key project activities and approvals. The schedule is largely affected by City of Toronto approval processes, such as Site Plan Approval, and by internal approval timelines.

The dates provided in this business case are the best high-level projections based on current and previous project experience and may be subject to change if projected activities are delayed, particularly those that are not within the Board's control.

Project completion is contingent on timely approvals from the City of Toronto, such as Site Plan and Building Permit. Furthermore, delays can also be due to unknowns during construction such as unforeseen soil condition, weather conditions, and labour/manufacturing delays.

The most likely impediment on this project timeline will be the Zoning amendment and Site Plan approval processes in which the board and its consultants have the least control over. Additionally, the process to acquire funding from the Ministry to support the project will need to be expedited to ensure the years long effort of the Indigenous community to move this project forward is not delayed any longer. Furthermore, delays can also be due to unknowns during construction such as soil conditions, weather conditions, and labour/manufacturing delays.

Delays will be mitigated by ensuring project team will explore opportunities for pre-approvals such as partial building permits, undertaking early works such demolition and overlap project activities where possible.

Delays will be mitigated by ensuring the project team explores opportunities for pre-approvals such as partial building permits, undertaking early site works such demolition and by overlapping project activities where possible.

TDSB has undertaken an exercise to identify key project milestone durations such as internal reviews and approvals, which has been applied to the projected schedules and gives the project schedule a level of certainty as a result.

For project delays that cannot be mitigated, the schedule will be extended to suit in the future. Please refer to attached high level project schedule in Appendix G that identifies key milestones and durations. A critical element of the projected schedule is the Site Plan Approval (SPA) process, which has been estimated to be 18 months from submission to NOAC (Notice of Approval of Conditions) and is one of the key drivers for the overall completion date.

TDSB has engaged a City of Toronto Planner who will continue to assist the project team by advocating for an expedited SPA process, which can significantly improve the project timeline.

Part D: Predictors of On-Budget Completion

Estimated project costs are based on third party cost consultant reports by A.W. Hooker, along with soft cost estimates based on TDSB previous experience and additional third-party consultants.

The current estimate is significantly higher than previous tendered projects due to market volatility and cost consultant projections. The estimated project cost is based on the project milestone schedule and appropriate escalations as carried by the third-party cost consultant.

A 10% contingency has been carried for each project to protect against unknowns during project development and construction and has been added to the cost consultant estimate. Unique site costs have been identified based on TDSB past project experience, however as the project develops, further unique site costs may be identified that are unknown at this preliminary stage.

The childcare component of the project has been designed and identified in the drawings and cost report. If the project is not funded, the childcare will also not proceed.

Based on recent project experience, the construction market volatility is a significant factor for project cost increases. Previous TDSB capital priorities funding was not based on market prices and therefore resulted in budget shortfalls when projects were tendered on the open market.

If the project is funded based on the cost consultant report, which builds in escalation and contingencies, there is less risk of future budget increases. Increases in project timelines are also a risk to the project budget, therefore the project team will work to ensure projects are delivered as per the schedule to avoid incurring additional costs.

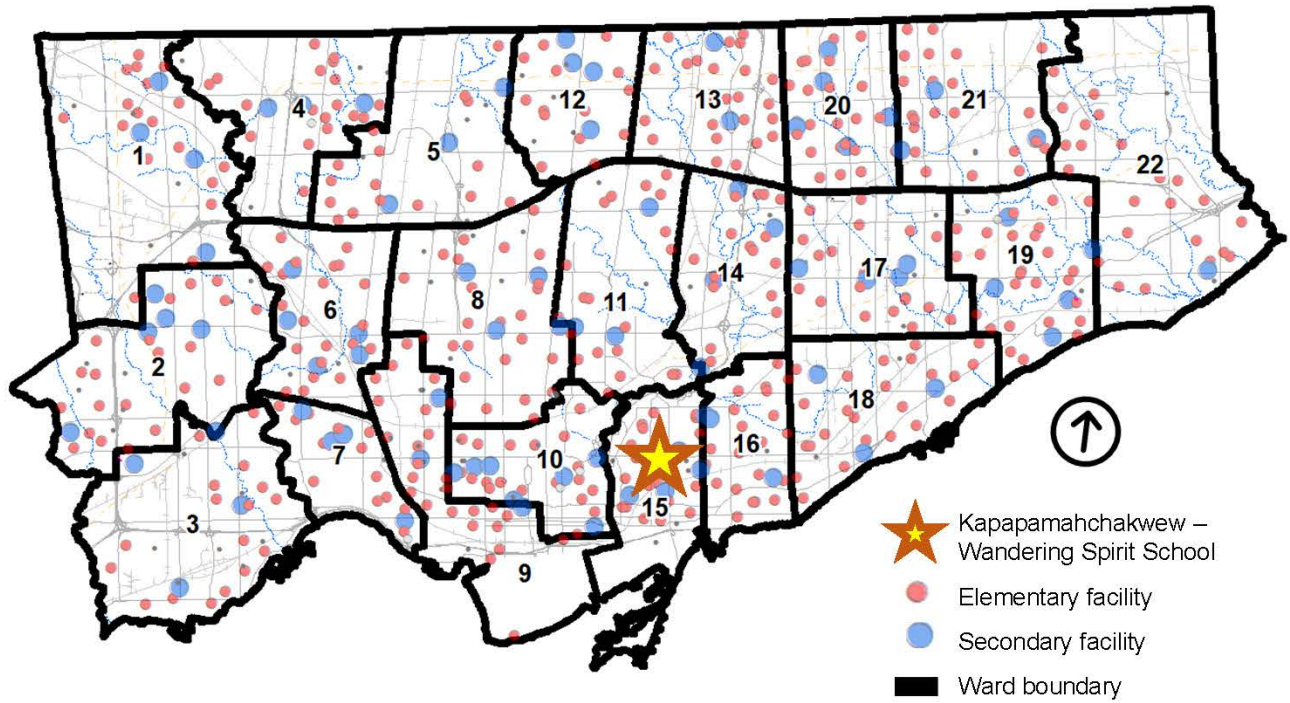
The substantial site cost includes the demolition of the existing 16 Phin building which is in disrepair (7.3% of project budget). The project will also need to adhere to City of Toronto Site Plan approval requirements and Toronto Green Standards.

Appendices

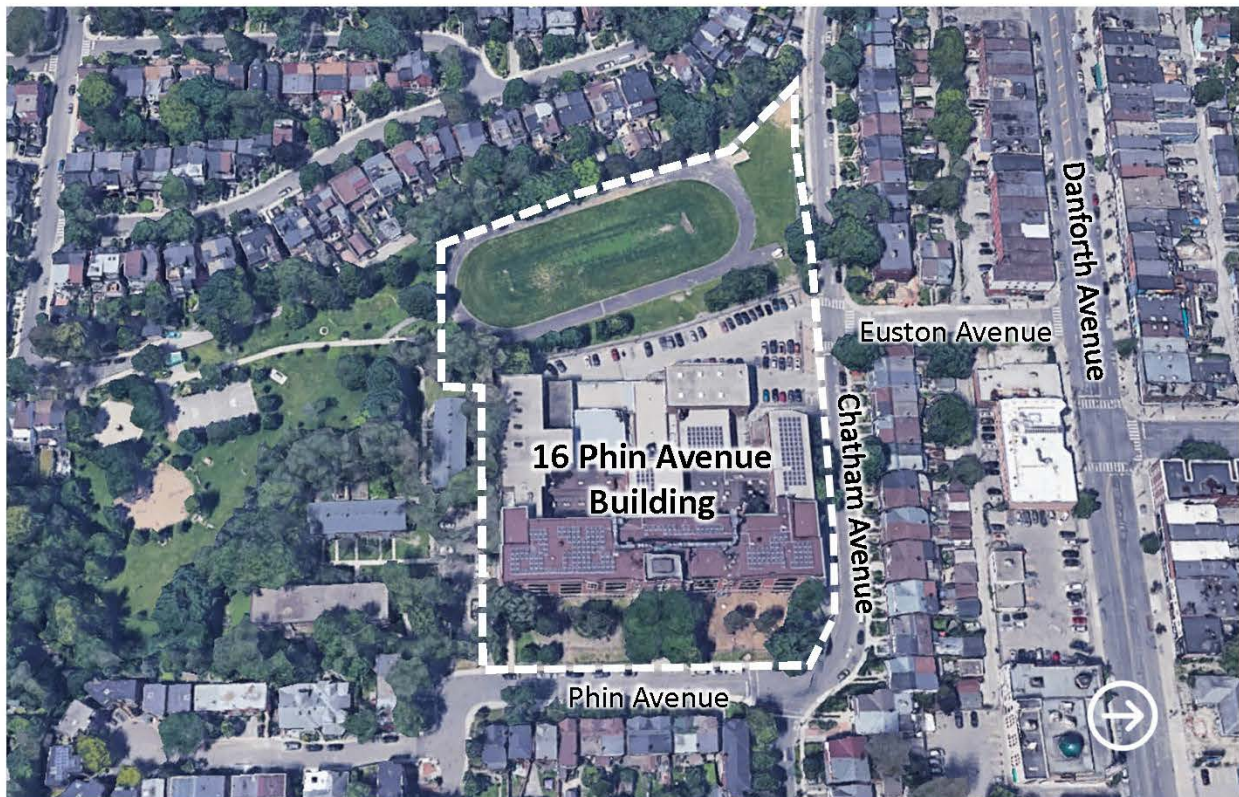
Appendix A: Location Map and Aerial Photograph of 16 Phin Avenue

- Appendix B: Photos of 16 Phin Avenue's Facade
- Appendix C: Design Brief for the Project
- Appendix D: Schematic and Supplementary drawings including Phasing Plan, Images
- Appendix E: Class D Cost Consultant Report (A.W. Hooker)
- Appendix F: Summary of Extraordinary Costs
- Appendix G: Project Milestone Schedule

Location of Kapapamahchakwew – Wandering Spirit School



Aerial Photo of Kapapamahchakwew – Wandering Spirit School



Façade of 16 Phin Avenue Building Compared to Façade of Kamloops Indian Residential School

16 Phin Avenue Building



Kamloops Indian Residential School



Design Brief - Wandering Spirit School

1. Introduction

The purpose of this design brief is to provide a comprehensive and cohesive framework for the development of the design and construction of Kapapamahchakwew the Wandering Spirit School. This brief aims to capture the vision, values, and aspirations of the school community, ensuring that the resulting architectural and environmental design embodies its Indigenous educational philosophies, caters to the diverse needs of its students, and enhances the overall learning experience. By setting clear objectives, criteria, and guidelines, this brief serves as a foundational document that will guide architects, designers, stakeholders, and contractors throughout the planning and construction process, ensuring that the essence of Wandering Spirit School is translated into a physical space that is functional, sustainable, and inspiring.

Summary of the project

Kapapamahchakwew - Wandering Spirit School, formerly known as the First Nations School of Toronto, is an educational institution in Toronto dedicated to providing a curriculum rooted in Indigenous culture and teachings. It serves as an example of the commitment to preserve, celebrate, and teach Indigenous languages, values, traditions, and knowledge within an urban environment. The proposed project is on the site of the current building formerly known as "Eastern Commerce" at 16 Phin Ave. The new building is proposed to be three storeys in height and is to be constructed prior to the demolition of the current building. The proposed area of the building for phases 1a and 1b is 66,353 ft² (6,164m²).

Wandering Spirit School - Overview

1. Location: Situated in Toronto, Ontario, the school provides an urban setting for students to engage in a curriculum deeply tied to Indigenous perspectives.
2. Education Philosophy: Beyond the standard provincial curriculum, Wandering Spirit School emphasizes the teachings, traditions, languages, and values of Indigenous peoples. The goal is not only to educate but also to instill a sense of pride and identity among Indigenous youth.
3. Language and Culture: One of the distinctive features of the school is its commitment to language preservation. Classes are often offered in Indigenous languages, with efforts to ensure students gain fluency and an appreciation for their linguistic heritage.

4. 4. Community Involvement: The school often involves community elders and leaders in its programs, ensuring that teachings are authentic and rooted in lived experiences. This collaboration also strengthens ties between students and the broader Indigenous community.

J

5. 5. Holistic Approach: Embracing a holistic view of education, Wandering Spirit School integrates physical, emotional, spiritual, and intellectual growth into its programs. Traditional ceremonies, storytelling, land-based learning, and other practices are woven into the daily life of the school.
6. 6. Outreach and Collaboration: Recognizing the value of cross-cultural understanding, the school often collaborates with other institutions and engages in outreach activities to promote awareness and appreciation of Indigenous cultures within the broader community.

Objectives and Project Goals

Cultural Representation: To ensure that the design resonates with Indigenous cultural values, traditions, and histories, creating a space that truly represents the community it serves.

Sustainable Design: Incorporate sustainable and eco-friendly materials and construction methods, reflecting Indigenous communities' deep respect and connection to the land.

Flexible Learning Spaces: Create adaptable environments that cater to various teaching methods, from traditional classroom settings to communal gathering areas for ceremonies and storytelling.

Land-based Learning: Incorporate elements that allow for land-based education, such as gardens, outdoor classrooms, or areas dedicated to traditional practices.

Inclusivity: Design spaces that are accessible and welcoming to all, ensuring that every member of the community, including elders and those with disabilities, can fully participate in school activities.

Holistic Wellness: Prioritize the physical, emotional, spiritual, and mental well-being of students and staff by integrating elements like natural lighting, open spaces, and areas dedicated to reflection and meditation.

Community Integration: Ensure the school serves not only as an educational institution but also as a community hub where events, gatherings, and other activities can be held, strengthening the bonds within the community.

Safety and Security: While maintaining an open and inclusive design, ensure the safety and security of students, staff, and community members.

Future Adaptability: Design the school with future growth and changes in mind, ensuring spaces can be easily adapted or expanded to meet evolving needs.

Local Materials and Craftsmanship: Engage local artisans and use local materials, fostering a sense of community ownership and connection to the building, while also minimizing the environmental footprint.

2. Background Information

Client's Vision

The Kapapamahchakwew - Wandering Spirit School in Toronto has a rich history that dates back several decades. The school was established in 1976 and is named after Kapapamahchakwew, a respected Cree warrior and leader. The school was founded with the aim of providing quality education to Indigenous students in Toronto, while also promoting and preserving Indigenous culture, language, and traditions.

Over the years, the Kapapamahchakwew - Wandering Spirit School has played a crucial role in supporting the academic and cultural needs of Indigenous students. The school offers a comprehensive curriculum that incorporates Indigenous perspectives and teachings, ensuring a holistic educational experience. It strives to create a safe and inclusive environment where students can thrive academically, emotionally, and culturally.

The school has been actively involved in community engagement and collaboration, working closely with local Indigenous organizations, elders, and community members. This partnership has helped in the development of culturally relevant programs and initiatives, such as powwows, traditional ceremonies, and language revitalization efforts.

The Kapapamahchakwew - Wandering Spirit School has faced various challenges throughout its history, including limited resources and the ongoing struggle for Indigenous rights and recognition. However, the school has remained resilient and committed to its mission of empowering Indigenous students and fostering cultural pride.

Today, the Kapapamahchakwew - Wandering Spirit School continues to be a beacon of Indigenous education in Toronto. It continues to adapt and evolve, incorporating new technologies and teaching methodologies to meet the changing needs of its students. The school's dedication to providing a supportive and culturally affirming learning environment has made it a respected institution within the Indigenous community and beyond.

Site analysis and context (location, history, existing structures, etc.)

Eastern Commerce Collegiate Institute (ECCI) was a public high school part of Toronto District School Board in Toronto, Ontario, Canada. Opened in 1925, it offered a range of courses leading to all Ministry pathways: University, College, Apprenticeship, and Workplace. Co-operative Education is an integral part of the curriculum.

The school offered a Specialist High Skills Major in Business and Marketing, The National Retail Business Certificate, and an internationally recognized Computer Licence Certificate. In 2002, the department won the Kenneth Fryer Award for mathematics teaching.

The school attracted enrollment to students from all parts of Toronto due to its proximity to Donlands station. Since the school's closure in 2015, the building still hosts Subway Academy I, the First Nations School and the TDSB Historical and Archival Records.

Budget considerations

Design to a budget of \$650/sf, which is higher than the average school construction cost, considering that this school must include unique and sustainable features and building methods.

Project timeline

We anticipate construction start date for Spring, Q2, 2025. There will be continuous construction and no gap. We recommend keeping the school operational while construction of the new build occurs simultaneously. Please refer to phasing diagrams.

3. Design Criteria

Architectural Style & Aesthetics

Contemporary Indigenous design in architecture reflects a profound engagement with Indigenous knowledge, cultural practices, histories, and relationships with the land. This design approach does not just mimic traditional forms but rather interprets and integrates Indigenous principles in modern contexts. Here is a description of some hallmarks of this evolving design style:

- 1. Land and Place-Based Design:** Rooted in an intimate understanding and respect for the land, contemporary Indigenous architecture often starts with a thorough analysis of the site, its history, its ecosystems, and its significance to local Indigenous communities. Buildings are often designed to be in harmony with their surroundings, respecting natural topographies and ecosystems.

2. **Cultural and Spiritual Symbolism:** Indigenous cultures are rich in symbolism and spiritual narratives. Contemporary Indigenous design often weaves these symbols and stories into the architecture, whether through building forms, patterns, materials, or spatial experiences.
3. **Community-Centered Design Process:** Indigenous design frequently emphasizes collaboration and consultation with the community from the project's inception to completion. This inclusive approach ensures that the final design genuinely reflects the community's values, needs, and aspirations.
4. **Sustainability and Environmental Stewardship:** Indigenous cultures have a long history of living sustainably and in balance with nature. Indigenous architecture often emphasizes eco-friendly materials, energy-efficient design strategies, and sustainable construction practices, reflecting a deep respect for Mother Earth.

Spatial requirements (number of rooms, layout preferences, etc.)

The Project has established design goals and spatial requirements. These are clearly identified in the functional program and space allocation list. Please refer to this document for further information.

4. HVAC (Heating, Ventilation, and Air Conditioning)

The aim of this HVAC brief is to outline and create a comfortable and sustainable indoor environment that aligns with the cultural values and needs of the Indigenous community. The proposed HVAC system will incorporate High Efficiency Heat to Air Pumps, Geothermal Displacement Ventilation Systems, and Natural Ventilation techniques.

1. **Comfort and Well-being:** The HVAC system should provide a comfortable indoor environment for students, staff, and visitors, considering factors such as temperature, humidity, and air quality.
2. **Energy Efficiency:** The system should prioritize energy efficiency to minimize environmental impact and reduce operational costs.
3. **Cultural Sensitivity:** The design should respect and incorporate Indigenous cultural values and practices, ensuring the HVAC system aligns with the community's needs and traditions.
4. **Sustainability:** The system should utilize renewable energy sources and sustainable technologies wherever possible, reducing reliance on non-renewable resources.

5. **Cost-effectiveness:** The design should balance performance and cost, ensuring the HVAC system is economically viable and within the project budget.
6. **Low / No-Carbon:** All efforts should be made to provide systems that allow for reduction in carbon emissions.

HVAC System Requirements:

1. **High Efficiency Heat to Air Pumps:** The system should incorporate high-efficiency heat to air pumps to provide heating and cooling. These pumps should be energy-efficient, reliable, and capable of maintaining desired indoor temperatures.
2. **Geothermal Displacement Ventilation Systems:** Utilize geothermal displacement ventilation systems to provide fresh air and maintain indoor air quality. These systems should be designed to minimize energy consumption and provide efficient air distribution.
3. **Natural Ventilation:** Incorporate natural ventilation techniques, such as operable windows and skylights, to allow for fresh air circulation and reduce reliance on mechanical systems.
4. **Zoning and Controls:** Implement a zoning system that allows for individual control of temperature and ventilation in different areas of the school. This will optimize energy usage and cater to varying occupancy levels.
5. **Integration with Building Design:** Ensure seamless integration of the HVAC system with the overall building design, considering architectural aesthetics, space utilization, and structural constraints.
6. **Maintenance and Serviceability:** Design the system for ease of maintenance and serviceability, allowing for regular inspections, filter replacements, and repairs without disrupting the school's operations.

Deliverables:

1. Detailed HVAC system design, including equipment specifications, layout plans, and control strategies.
2. Energy modeling and analysis to demonstrate the system's energy efficiency and environmental impact.

3. Documentation on the integration of Indigenous cultural values and practices into the HVAC system design.
4. Operation and maintenance manuals, including recommended maintenance schedules and procedures.
5. Cost estimates for the HVAC system installation, operation, and maintenance.

5. Plumbing

The objective of this plumbing brief is to outline the considerations and requirements for implementing sustainable water supply, drainage, wastewater management, water use practices, fixture specifications, and fire protection systems in an Indigenous school. The aim is to ensure efficient and environmentally friendly water management while meeting the specific needs of the school community.

1. Sustainable Water Supply:

- **Source:** Identify and evaluate potential water sources, such as groundwater, surface water, or rainwater harvesting. Consider the availability, quality, and reliability of each source.
- **Purification:** Design a water purification system that meets the school's water quality standards, considering filtration, disinfection, and other appropriate treatment methods.
- **Storage:** Determine the appropriate capacity and location for water storage tanks to ensure a reliable water supply during periods of low availability.

2. Drainage and Wastewater Management:

- **Drainage System:** Develop a comprehensive drainage system that effectively manages stormwater runoff and prevents flooding, considering the site's topography and local regulations.
- **Wastewater Treatment:** Design an on-site wastewater treatment system that complies with environmental regulations and minimizes the impact on surrounding ecosystems.

3. Sustainable Water Use Practices:

- **Rainwater Harvesting:** Incorporate rainwater harvesting systems to collect and store rainwater for non-potable uses, such as irrigation, toilet flushing, and cleaning.
- **Greywater Recycling:** Implement a greywater recycling system to treat and reuse water from sinks, showers, and laundry for non-potable purposes, reducing the demand for freshwater.

4. Fixture Specifications:

- Sinks and Toilets: Specify water-efficient fixtures that meet or exceed industry standards, such as low-flow faucets, dual-flush toilets, and waterless urinals, to minimize water consumption.
- Maintenance: Consider the ease of maintenance and repair for all fixtures to ensure long-term sustainability and cost-effectiveness.

5. Fire Protection Systems:

- Fire Sprinklers: Design and install an appropriate fire sprinkler system to ensure the safety of students, staff, and the school infrastructure.
- Water Storage: Determine the required water storage capacity for fire protection purposes, considering local fire safety regulations.

6. Electrical

The purpose of this electrical brief is to outline the electrical requirements and considerations for an Indigenous School project. The design will focus on providing reliable power supply, efficient lighting design, emergency backup systems, safety measures, and low-voltage systems to meet the specific needs of the school. Electrical - Power Requirements and Load Calculations:

1. Conduct a comprehensive assessment of the school's power requirements, considering the number of classrooms, administrative areas, common spaces, and any specialized facilities.
2. Determine the anticipated electrical load for each area, including lighting, equipment, and appliances, to ensure an adequate power supply.
3. Consider future expansion plans and potential increases in power demand to accommodate the school's growth.

Lighting Design Criteria:

1. Develop a lighting design plan that incorporates both artificial and natural lighting sources to create a comfortable and conducive learning environment.
2. Optimize natural lighting by strategically locating windows, skylights, or light wells to maximize daylight penetration while minimizing glare and heat gain.
3. Utilize energy-efficient lighting fixtures and controls to reduce energy consumption and maintenance costs.
4. Ensure lighting levels meet relevant standards and guidelines for educational facilities.

Emergency Backup Systems:

1. Design and install an emergency backup power system to provide uninterrupted power supply during power outages or emergencies.

2. Assess the critical areas that require backup power, such as emergency lighting, communication systems, and essential equipment.
3. Specify the appropriate backup power source, such as generators or battery systems, based on the school's specific needs and budget.

Safety Measures:

1. Implement proper grounding techniques to ensure electrical safety and protect against electrical faults.
2. Install circuit breakers and other protective devices to prevent electrical overloads and short circuits.
3. Adhere to local electrical codes and regulations to ensure compliance and safety. 4. Conduct regular inspections and maintenance to identify and address any potential safety hazards.

Low-Voltage Systems:

1. Design and integrate low-voltage systems, including data, communication, and security systems, to support the school's technological requirements.
2. Collaborate with relevant stakeholders to determine the specific needs and desired functionality of these systems.
3. Ensure proper cabling infrastructure and equipment placement to facilitate efficient and reliable low-voltage system operations.

Conclusion:

The above-mentioned key considerations for the electrical systems of an Indigenous School project. By addressing power requirements, lighting design, emergency backup systems, safety measures, and low-voltage systems, the aim is to create a safe, sustainable, and technologically advanced learning environment for the school community.

7. Sustainability

Building Standards:

Adoption of the Toronto Green Standard (TGS) which provides performance measures for sustainable site and building design. The TGS covers various aspects, including energy use, greenhouse gas emissions, and resilience to climate change. New developments in the city are often expected to meet these standards.

Energy Use Reduction:

Setting specific energy use intensity (EUI) targets for different types of buildings (commercial, residential, etc.).

Promote and incorporate passive design strategies, such as enhanced insulation, high-performance windows, and optimal building orientation, to reduce the need for active heating and cooling.

Greenhouse Gas Emission Targets: Toronto's TransformTO plan outlines strategies to significantly reduce local greenhouse gas emissions, aiming to achieve "net-zero" by 2050. This would involve improving energy efficiency across various sectors, including buildings.

Renewable Energy:

Promote the integration of renewable energy sources, such as solar panels and wind turbines, into the energy mix of buildings.

Encourage the implementation of district energy systems that can efficiently serve multiple buildings.

Green Roofs:

The Green Roof Bylaw in Toronto mandates the installation of green roofs on new commercial, institutional, and residential developments with a minimum Gross Floor Area. Green roofs have insulative properties, reducing the energy required for heating and cooling.

Water Efficiency:

Although not directly related to energy, water efficiency measures can indirectly reduce energy consumption, especially when considering the energy involved in water heating and treatment.

Transportation:

While not a building-specific energy goal, Toronto places a strong emphasis on promoting energy-efficient modes of transportation, like public transit, cycling, and walking, which in turn has indirect effects on urban energy consumption.

Public Awareness & Training:

Educate residents and businesses on the importance of energy efficiency, providing them with tools, resources, and training to reduce their energy consumption.

Continuous Monitoring and Reporting:

Encourage or require large buildings and businesses to monitor, benchmark, and publicly report their energy use, which can drive efficiency improvements through increased awareness and competition.

These goals and standards reflect Toronto's commitment to reducing its carbon footprint, promoting sustainability, and creating a healthier urban environment for its residents. Note that goals and regulations can evolve over time, so it's essential to consult current local by-laws, policies, and plans when undertaking new projects or initiatives.

8. Landscape

The objective is to create a regenerative landscape design for an Indigenous school that promotes sustainability, cultural preservation, and a harmonious connection with the natural environment. The design should incorporate site planning and land use strategies, local and sustainable plant selection, hardscape elements, water features and irrigation systems, as well as outdoor lighting and furniture.

Site Planning and Land Use:

1. Conduct a thorough analysis of the site, considering its topography, soil conditions, and existing vegetation.
2. Collaborate with Indigenous community members and stakeholders to understand their cultural and educational needs, ensuring the design reflects their values and traditions.
3. Develop a site plan that optimizes the use of available space, considering areas for outdoor classrooms, gathering spaces, play areas, and ceremonial spaces.
4. Incorporate sustainable land use practices, such as rainwater harvesting, composting, and organic waste management.

Plant Selection and Vegetation:

1. Prioritize the use of local and indigenous plant species that are well-adapted to the site's climate and require minimal maintenance.
2. Incorporate a diverse range of plant species to support biodiversity and provide educational opportunities for students to learn about traditional uses of plants.
3. Integrate edible gardens or medicinal plant areas to promote self-sufficiency and cultural knowledge.
4. Consider the use of native grasses and groundcovers to reduce the need for irrigation and minimize soil erosion.

Hardscape Elements:

1. Design paths, patios, and walls using locally sourced and sustainable materials, such as reclaimed wood or natural stone.
2. Ensure that hardscape elements are accessible and inclusive, considering the needs of individuals with disabilities.
3. Incorporate culturally significant symbols or patterns into the design of hardscape elements, reflecting the Indigenous community's heritage and identity.

Water Features and Irrigation Systems:

1. Integrate water features, such as rain gardens or small ponds, to promote water conservation and create habitats for local wildlife.

2. Design an efficient irrigation system that minimizes water waste through the use of smart controllers, drip irrigation, and rainwater harvesting.
3. Consider the incorporation of traditional water management techniques used by the Indigenous community.

Outdoor Lighting and Furniture:

1. Design outdoor lighting that enhances safety and security while minimizing light pollution and energy consumption.
2. Incorporate solar-powered lighting fixtures where possible to reduce reliance on the electrical grid.
3. Select outdoor furniture made from sustainable materials that are durable and comfortable, considering the needs of students, staff, and visitors.

This above outlines the key considerations for creating a regenerative landscape design for an Indigenous school. By incorporating site planning and land use strategies, local and sustainable plant selection, hardscape elements, water features and irrigation systems, as well as outdoor lighting and furniture, the design aims to provide a sustainable and culturally rich environment for the school community.

9. Materials

The objective of the design is to outline the criteria for material selection, local sourcing considerations, preferences for recycled or reclaimed materials, and maintenance and lifecycle considerations for an Indigenous School project. The aim is to create a sustainable, culturally sensitive, and visually appealing learning environment that reflects the values and traditions of the Indigenous community.

Criteria for Material Selection:

1. **Durability:** Materials should be selected based on their ability to withstand the demands of a school environment, ensuring longevity and minimizing the need for frequent replacements.
2. **Aesthetics:** Materials should align with the cultural identity and aesthetics of the Indigenous community, incorporating traditional patterns, colors, and textures where appropriate.
3. **Sustainability:** Preference should be given to materials with low environmental impact, such as those with low embodied energy, minimal carbon footprint, and non-toxic properties.
4. **Accessibility:** Materials should be chosen to ensure accessibility for all students, considering factors such as slip resistance, ease of use, and compliance with relevant accessibility standards.

Local Sourcing Considerations:

1. **Indigenous Community Involvement:** Whenever possible, materials should be sourced from local Indigenous communities, supporting their economic development and preserving traditional craftsmanship.
2. **Cultural Significance:** Materials that hold cultural significance to the Indigenous community should be prioritized, promoting a sense of connection and pride within the school environment.
3. **Environmental Impact:** Local sourcing should aim to minimize transportation distances, reducing carbon emissions and supporting regional sustainability.

Recycled or Reclaimed Material Preferences:

1. **Preference for Recycled Materials:** Whenever feasible, materials with recycled content should be selected, reducing the demand for virgin resources and promoting a circular economy.
2. **Reclaimed Materials:** Consideration should be given to incorporating reclaimed materials, such as salvaged wood or repurposed building components, to add character and reduce waste.

Maintenance and Lifecycle Considerations:

1. **Ease of Maintenance:** Materials should be selected with low maintenance requirements, ensuring efficient upkeep and reducing long-term costs.
2. **Longevity:** Emphasis should be placed on materials with a long lifecycle, minimizing the need for frequent replacements and reducing waste generation.
3. **Adaptability:** Materials should allow for future modifications or renovations, enabling the school to adapt to changing needs and technologies.

Conclusion:

The above outlines the criteria for material selection, local sourcing considerations, preferences for recycled or reclaimed materials, and maintenance and lifecycle considerations for the Indigenous School project. By adhering to these guidelines, the school will embody sustainability, cultural sensitivity, and longevity, creating a nurturing and inspiring environment for Indigenous students.

10. Miscellaneous Requirements

The following outlines the remaining requirements for the Wandering Spirit School project. This includes considerations for acoustic design, technology and automation integration, as well as universal design and accessibility considerations. The aim is to create a learning environment that promotes inclusivity, cultural sensitivity, and optimal functionality for all students and staff.

Acoustic Considerations:

1. **Noise Reduction:** Implement soundproofing measures to minimize external noise disturbances and create a conducive learning environment.
2. **Room Acoustics:** Optimize the acoustic properties of classrooms, auditoriums, and common areas to ensure clear communication and minimize reverberation.
3. **Sound System Integration:** Install high-quality audio systems in classrooms and assembly areas to facilitate effective communication and enhance learning experiences.

Technology and Automation:

1. **Automation Controls:** Implement automated systems for lighting, temperature control, and audio-visual equipment to improve operational efficiency and user experience.
2. **ICT Infrastructure:** Design a robust and scalable information and communication technology (ICT) infrastructure to support digital learning, connectivity, and administrative functions.

Universal Design and Accessibility Considerations:

1. **Inclusive Spaces:** Ensure that all areas of the school are designed to accommodate students and staff with diverse abilities, including wheelchair accessibility, ramps, and elevators.
2. **Assistive Technologies:** Incorporate assistive technologies such as braille signage, hearing loops, and adjustable furniture to support students with visual, hearing, or mobility impairments.
3. **Cultural Sensitivity:** Integrate Indigenous cultural elements into the design, such as artwork, storytelling spaces, and traditional gathering areas, while ensuring accessibility for all.

The above outlines the miscellaneous requirements for an Indigenous School project, focusing on acoustic considerations, technology and automation integration, as well as universal design and accessibility considerations. By incorporating these elements, the aim is to create an inclusive, technologically advanced, and culturally sensitive learning environment that caters to the needs of all students and staff.



Front of the School
During the Day



Front of the School at Night



Cladding Concept



Gathering Space for
the Urban Indigenous
Education Centre
(UIEC)



Rooftop Garden

Appendix D



Interior Greenhouse

MULTIPLE ESTIMATE SUMMARY
WANDERING SPIRIT SCHOOL TORONTO
 ROUND 2, CLASS D ESTIMATE (Rev.2)
 OCTOBER 16, 2023

A.W. HOOKER®
 QUANTITY SURVEYORS

Hard Construction Costs	GFA (m2)	Unit (Cost/m2)	Hard Construction Including Mark-ups	Hard Construction Before Mark-ups	Contractor's General Requirements	Contractor's Fees (OH&P)	Design & Pricing Contingency	Escalation Contingency	Construction Contingency	% of Total
1A TDSB School	5,767	\$6,846	\$39,483,599	\$26,310,302	8.4%	\$1,141,020	\$3,708,315	\$4,228,592	\$1,880,171	75.9%
1B Child Care Centre and EarlyOn	802	\$6,913	\$5,544,125	\$3,694,385	\$311,049	\$160,217	\$520,706	\$593,761	\$264,006	10.7%
2 Site	27,721	\$218	\$6,051,497	\$4,032,477	\$339,515	\$174,880	\$568,359	\$648,100	\$288,167	11.6%
3 Demolition	6,101	\$151	\$919,013	\$612,394	\$51,561	\$26,558	\$86,314	\$98,424	\$43,763	1.8%
Total Estimated Hard Construction Cost	6,669	\$7,916	\$51,998,235	\$34,649,658	\$2,917,324	\$1,502,675	\$4,883,695	\$5,568,877	\$2,476,106	
Imperial Conversion	70,709	\$735	Per SF							

The above cost estimate is an amendment to the full Class D cost report to reflect the scope of demolition and site in Phase1 only.

TDSB Wandering Spirit School

Round 2, Class D Estimate (Rev.1)



Prepared for:

Two Row Architect – Six Nations Office

Prepared by:

A.W. HOOKER®
QUANTITY SURVEYORS

2265 Upper Middle Rd. E Suite 400
Oakville, ON L6H 0G5

T 905.823.8111
F 905.823.5111
info@awhooker.com

www.awhooker.com

October 10, 2023

October 10, 2023

Two Row Architect – Six Nations Office
1804 6th Line, Ohswegen
Ontario N0A 1M0

Attn: Erik Skouris, BFA, M.Arch

Re: TDSB Wandering Spirit School, Round 2, Class D Estimate (R.1)

Dear Erik,

Please find enclosed our Class D Estimate for the above project. The estimate is based on design drawings and information provided by Two Row Architect – Six Nations Office received on March 15, 2023.

This estimate is meant to reflect the fair market value for the construction of this project; it is not intended to be the prediction of the lowest bid and should be representative of the median bid amount received in a competitive bidding scenario.

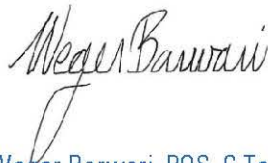
We recommend that the owner and/or the design team carefully review the cost estimate report, including line item descriptions, unit price clarifications, exclusions, inclusions and assumptions, contingencies, escalation, and mark-ups. This is to ensure that the design intent is captured within the content of the report.

Please refer to the preamble of our cost report for all exclusions, assumptions, and information pertaining to the estimate.

Requests for modifications of any apparent errors or omissions to this document must be made to A.W. Hooker Associates Ltd. within ten (10) business days of receipt of this estimate. Otherwise, it will be understood that the contents in this estimate have been concurred with and accepted as final version of the cost report.

We trust our work will assist in the decision making process and look forward to our continued involvement in this important project.

Sincerely,
A.W. Hooker Associates Ltd.



Weger Barwari, PQS, C.Tech
Senior Quantity Surveyor

Sincerely,
A.W. Hooker Associates Ltd



Glenn Hultzer, B.Sc (QS), PQS, MRICS
Partner

Encl. (Round 2, Class D Estimate (R.1) – October 10, 2023)

Table of Contents

1. Introduction to the Estimate	3
1.1 Project Description	3
1.2 Type of Estimate	3
2. Basis of the Estimate	3
2.1 General Information	3
2.2 Location Cost Base	4
2.3 Unit Rates.....	4
2.4 Taxes.....	4
2.5 Construction Schedule	4
2.6 General Requirements and Fees	4
2.7 Bonding and Insurance	4
2.8 Procurement.....	5
2.9 Specifications	5
2.10 Soft Costs.....	5
3. Contingencies	5
3.1 Design and Pricing Contingency	5
3.2 Escalation Contingency.....	6
3.3 Construction Contingency (Post Contract Changes)	6
4. General Liability	6
4.1 Statement of Probable Costs.....	6
4.2 Ongoing Cost Control	7
5. Estimate Scope Clarifications	7
5.1 List of Exclusions	7
5.2 List of Assumptions	7
6. Documentation Received	8
7. Gross Floor Area Summary	9
7.1 Summary of New Construction Area	9
7.2 Gross Floor Areas (graphical representations)	9
8. Multiple Estimate Summary	MES1
9. Elemental Estimate	A1 – A45

1. Introduction to the Estimate

1.1 Project Description

This project involves the demolition of the existing Eastern High School of Commerce and the construction of a new four-storey school with mechanical penthouse. The scope of work includes a gymnasium, pool, multipurpose hall, library, gathering spaces, auditorium, fitness room, child care centre and earlyon, urban indigenous education, and various teaching and related preparation spaces (approximately 9,512 m² or 102,387 sq. ft.). The project will be taking a three-phase approach: 1) Construct new school 2) Demolition Existing Eastern Commerce 3) Complete Site Work/Landscape.

Site development area 39,858 m² (429,032 SF).

1.2 Type of Estimate

This Class D Estimate is intended to establish a realistic elemental estimate of the hard construction costs based on the level of design information provided. Detailed quantities have been measured from drawings where possible for the proposed building and associated site development. This estimate reflects our opinion as to the fair market value for the hard construction of this project.

The accuracy of the estimate is based on the documentation provided and design stage is intended to be +/- 25%. This accuracy is based on the definition for Estimate Classifications (Class D) outlined in the *Guide to Cost Predictability in Construction prepared by the Joint Federal Government & an Industry Cost Predictability Taskforce. Contingencies are included to offset the accuracy risk, to the extent that the estimated amount represents the current opinion of the likely fair market value at the time of tender.

The intention of the estimate is not to predict the low bid price received; typically based on historical tender results estimates are more likely to be towards the median value of bids received under competitive conditions. This is a deliberate methodology due to the inherent risk in attempting to predict the low bid and numerous factors which can contribute to lower than anticipated tender submissions which are beyond our control.

*Reference: http://www.cca-acc.com/pdfs/en/CCA/Guide_to_Cost_Predictability.pdf

2. Basis of the Estimate

2.1 General Information

From the design information provided, we have measured quantities where possible and applied typical unit rates for each of the specific elements based on the project specifications. Where specific design information has not been provided, unit rates are based on historical cost data for this type of project. In some instances where design information is limited, we have made reasonable assumptions based on our experience with projects of a similar scope and design. Estimates for mechanical and electrical systems are developed based on historical projects and experience.

Significant changes to the basis of design will impact the estimate value; this is particularly critical where changes are made after the final estimate prior to tender. We recommend that all major design or scope changes be reviewed for their cost, time and constructability impact prior to incorporation in a finalized tender package.

2.2 Location Cost Base

The location cost base for this estimate is Toronto, Ontario.

2.3 Unit Rates

The unit rates in the preparation of the elemental estimate include labour and material, equipment, and subcontractors overheads and profits. We have assumed for pricing purposes that union contractors would perform the work. We have assumed the fair wage policy would be in effect. The unit rates for each of the elements are based on typical mid-range costs for the type of design, construction, and materials proposed.

Unit rates in all estimates combine the material, labour, and equipment components for a single unit cost for ease of presentation. This estimate is not a prediction of low bid. Pricing assumes competitive bidding for every aspect of the work.

2.4 Taxes

Harmonized Sales Tax (HST) is excluded from our estimate.

2.5 Construction Schedule

The estimate has been prepared on the assumption that the work will be performed within the timelines of a normal construction schedule. The duration of the schedule would be based on the work being performed during regular daytime work hours. We have assumed the structural components of the building would be constructed in predominantly non-winter months. No allowances have been included for premium time and after hours work associated with an accelerated construction schedule.

2.6 General Requirements and Fees

The General Requirements for the General Contractor are included as a percentage of the hard construction cost. This estimate of the prime contractor's site overheads includes site supervision and labour, access to the site, site accommodations, site protection, temporary utilities, clean up, equipment, and other miscellaneous project requirements provided by the General Contractor.

The Fee element of the estimate is meant to cover the General Contractor's fee to perform the work. The fee would be based on the competitive nature of the bidding process and the market conditions at the time of tender.

2.7 Bonding and Insurance

We have included the median estimated costs for 50% Performance, 50% Labour and Materials, and 10% bid bonds. These are the traditional bonding requirements commonly requested by the owner. The actual final bonding costs will vary depending on the selected contractors' performance history.

The estimate includes an allowance for general liability and builder's risk insurance based on an average cost per \$1,000 of estimated hard construction costs. The actual insurance costs would be subject to the insurance requirements for the project.

2.8 Procurement

It was assumed for the preparation of this estimate that the project would be tendered to a prequalified list of bidders with a project specific lump sum contract. Pricing is based on competitive tender results with a minimum of four (preferably six tender submissions) at general contractor and major trade level. Pre-qualification with a restrictive list of contractors or subcontractors may result in a higher tendered cost due to the inherent reduction in competitiveness. Tenders receiving two or less submissions (occasionally three) historically tend to have a much higher risk of an overrun in cost when compared to the budget established in an estimate. Ensuring adequate bonafide bidders is a prerequisite for competitive bidding scenarios, on which the estimate is predicated.

2.9 Specifications

Where detailed and comprehensive specifications are unavailable, we have assumed that no onerous special requirements will be applicable to this project. It was assumed that all materials and equipment could be substituted with an alternative product to avoid sole-sourcing which results in a non-competitive market condition.

2.10 Soft Costs

The estimated soft costs have been excluded from this estimate.

3. Contingencies

3.1 Design and Pricing Contingency

A design and pricing contingency has been included in the estimate as a percentage of the hard construction costs including the general requirements and fees. This contingency is meant to cover design and pricing unknowns in the preparation of this estimate and reflect the incomplete nature of the design information provided at the time the estimate is prepared.

The estimate includes the following design and pricing contingencies by discipline:

Design Contingencies		
Architectural	-	12.5%
Structural	-	12.5%
Mechanical	-	12.5%
Electrical	-	12.5%
Siteworks	-	12.5%

The contingency where included in our estimate is not meant to cover significant additional program space or quality modifications, but rather to provide some flexibility as the design develops. The design contingency typically decreases as the design progresses and more definition and detail is available to refine the basis of the cost estimate. If the owner anticipates significant changes to the basis of design we recommend additional contingency be retained as a reserve for the scope modifications.

3.2 Escalation Contingency

The estimate includes an allowance for escalation. This allowance is meant to provide for increases in construction costs due to changes in market conditions between the time of the estimate and the potential construction commencement. For projects with a schedule in excess of 12 months, the contingency is based on a timeframe that takes escalation to the midpoint of the construction phase.

Escalation during construction is included in the unit rates; essentially this allowance is the risk carried by the general contractor and trades with a fixed price made years before the work is completed or carried out for some trades.

Escalation	
Assumed Tender Date:	5/1/2024
Duration (months):	36
Construction End Date:	5/1/2026
Mid-Point if excess of 12 months duration	11/1/2026

Year	Assumed Tender Date - Construction End Date	Annual Escalation	# of Months	Monthly %	Total Escalation per annum
2023	Sep 2023 - Dec 2023	8.00%	3	0.67%	2.00%
2024	Jan 2024 - Dec 2024	6.00%	12	0.50%	6.00%
2025	Jan 2025 - May 2025	4.00%	12	0.33%	4.00%
2026	Jan 2026 - Oct 2026	4.00%	10	0.33%	3.33%
Total Compounded % Escalation					15.33%

3.3 Construction Contingency (Post Contract Changes)

The estimate includes a contingency for the construction phase of the project. This contingency is meant to cover the potential cost of post contract changes that may occur after the project is tendered.

This allowance of 5% is to provide for increases in construction costs due to Change Orders issued during construction.

This contingency excludes any major program or scope requests by the client; these should form part of an overall project management reserve or be reflected in increased funding.

4. General Liability

4.1 Statement of Probable Costs

A.W. Hooker Associates Ltd. (HOOKER) has no control over the cost of labour and materials, the general contractors or any subcontractors' methods of determining prices, or competitive bidding and market conditions. This opinion of probable cost of construction is based on the experience, qualifications, and best judgment of the professional consultant familiar with the construction industry. HOOKER does not warranty that proposals or actual construction costs will not vary from this or subsequent estimates.

4.2 Ongoing Cost Control

A.W. Hooker Associates Ltd. **recommends** that the owner and/or the design team carefully review the cost estimate report, including line item descriptions, unit price clarifications, exclusions, inclusions and assumptions, contingencies, escalation, and mark-ups. This is to ensure that the design intent is captured within the content of the report. This is especially important at early stage estimates which tend to be based on a lesser level of design completion.

If the project is over budget or there are unresolved budget issues, alternative systems or schemes should ideally be evaluated before proceeding with the design phase. We recommend that cost control be implemented throughout the various stages of the design process to ensure the proposed design remains within the overall budget. It is recommended that the final estimate be produced by HOOKER using Bid Documents to determine overall cost changes, which may have occurred since the preparation of this estimate. The final update estimate will address changes and additions to the documents as well as addenda issued during the bidding process. HOOKER cannot reconcile bid results to any estimate not produced from bid documents including all addenda.

5. Estimate Scope Clarifications

5.1 List of Exclusions

1. Harmonized Sales Tax (HST)
2. Project Soft Costs (as described in item 2.10 above and shown on Master Estimate Summary)
3. Furniture, furnishings, and equipment (except as noted in the estimate)
4. Premium time / after hours work
5. Accelerated construction schedule
6. Abatement and handling of asbestos and other hazardous materials
7. Handling and removal of contaminated soils
8. Special foundation systems such as caissons or pile foundations
9. Premium for construction management or alternate approaches to procurement
10. Sole sourced equipment or building control systems

5.2 List of Assumptions

Architectural / Structural / Landscaping:

1. The existing soils on the site are adequate to support standard strip and pad foundations to the minimum depth required for frost. No allowances have been made for larger or special foundations such as caissons or piles due to poor soil conditions.
2. The existing site is relatively flat and the finished floor and site elevations were set to work with the existing grades to avoid major cut and fill.
3. We have allowed for conventional reinforced concrete foundations comprising of strip footings, column pads, walls, stub columns, etc, 1.8m below finish grade due to soil conditions.
4. An allowance has been included for winter heating to foundation work, 5 months.
5. An allowance has been included for dewatering at pool, assumed 1 months.
6. It is assumed that the upper floor and roof construction to be structural steel with separate costing provide for mass timber construction.
7. Majority of cladding is assumed to be insulated metal panel with double glazed curtainwall system.
8. We have allowed for 2 ply modified bitumen roofing membrane with separate cost for green roof system.
9. Interior partitions are assumed to be architectural block with gypsum board partition.
10. We have assumed low ranges finishes (i.e. majority of floor finishes to be vct, ceramic tiles at washroom and pool, ACT ceiling, paint finish on walls, etc).
11. We have allowed for gym and AV equipment.
12. Pool construction is assumed to be concrete.
13. Refer to estimate for additional scope and assumptions.

Mechanical:

14. Work will be completed by union or fair wage labour
15. We have included plumbing fixtures as shown on plans. We have not included for typical TDSB fixture layouts of separate washrooms for kindergarten / day care areas. This would be a premium to our estimate. Please verify our fixture counts are appropriate.
16. We have utilized knowledge from working on various TDSB projects to price the base estimate. We have not yet worked on a TDSB net zero facility, however have applied premiums for air source and geo source heat pump systems for heating / cooling in the Separate Estimate Summary for potential costs. The base estimate is designed to TDSB standard (natural gas heating / dx cooling). We have utilized ASHP and GSHP pricing from other projects in our database, as no detailed design is provided.
17. Please refer to detailed backup estimate for further assumptions of scope / inclusions

Electrical:

18. Work will be performed using union labour during regular working hours.
19. An allowance for Utility connection charges of \$ 85,000 has been included in the estimate.
20. Power to the building will be through a 1200A 347/600V main switchboard fed via a secondary feeder from the HYDRO transformer.
21. Lighting will generally be provided using LED fixtures.
22. Lighting control will generally feature central LV control, occupancy sensors, daylight harvesting and dimming.
23. The fire alarm system will be a single stage addressable system with audible and visual signalization.
24. Refer to estimate for additional scope and assumptions.

General:

25. Various assumptions have been made based on the design information available and our experience with projects of a similar nature. Please refer to the specific items within the estimate for the detailed assumptions made.

6. Documentation Received

Drawings and design documentation were prepared by the following consultants:

Pages	Documentation Received	Documentation Issued
11 Drawings	2023-09-13_WANDERING SPIRIT SCHOOL-compressed	September 14, 2023
1 File	Revit Model	September 15, 2023
	Email	Various

7. Gross Floor Area Summary

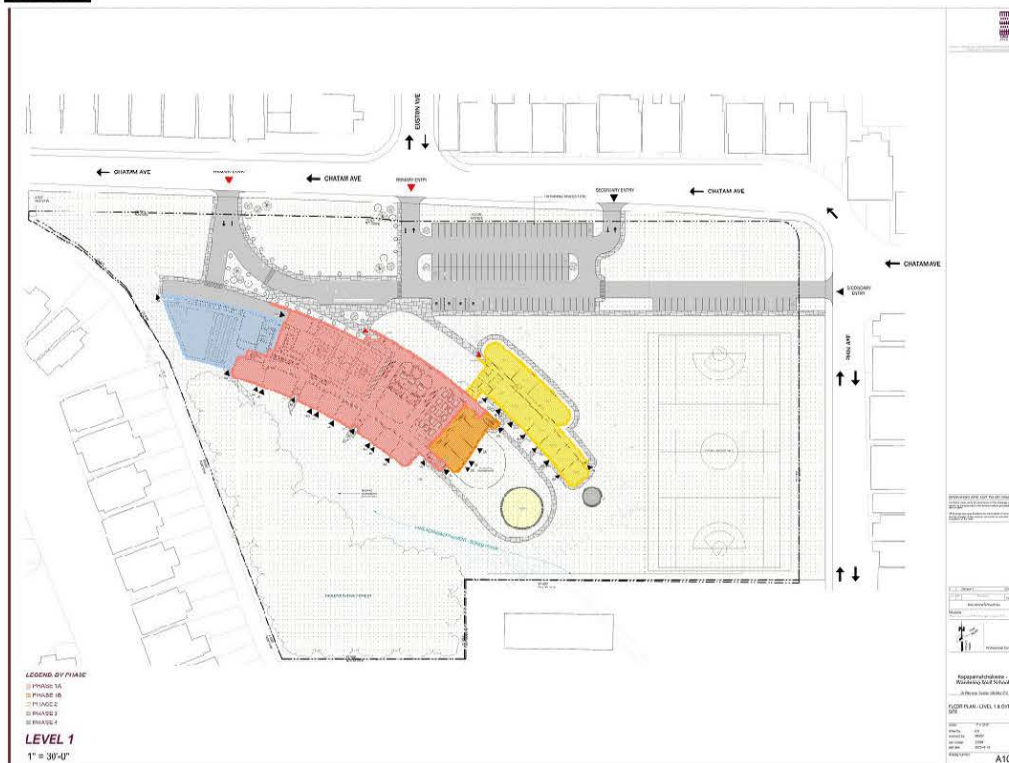
The following gross floor areas of new construction have been measured from floor plan drawings. The areas were measured electronically with a digitizer and checked longhand by dimensioning and scaling. The gross area calculations were performed in accordance with the Standard Method of Measurement published by the Canadian Institute of Quantity Surveyors.

7.1 Summary of New Construction Area

Area Description	Floor Elevation	Gross Floor Area					Total GFA
		TDSB School	Childcare Centre and EarlyOn	Urban Indigenous Education	Pool Addition	TDSB School Future Addition	
Ground Floor	0.0m	3,106	384	1,077	940	0	5,507
Second Floor	4.0m	1,968	390	0	124	76	2,558
Third Floor	8.0m	693	28	0	0	727	1,448
Total Gross Floor Area (square meters)		5,767	802	1,077	1,064	803	9,513
Total Gross Floor Area (square feet)		62,076	8,633	11,593	11,453	8,643	102,398

7.2 Gross Floor Areas (graphical representations)

Level 1

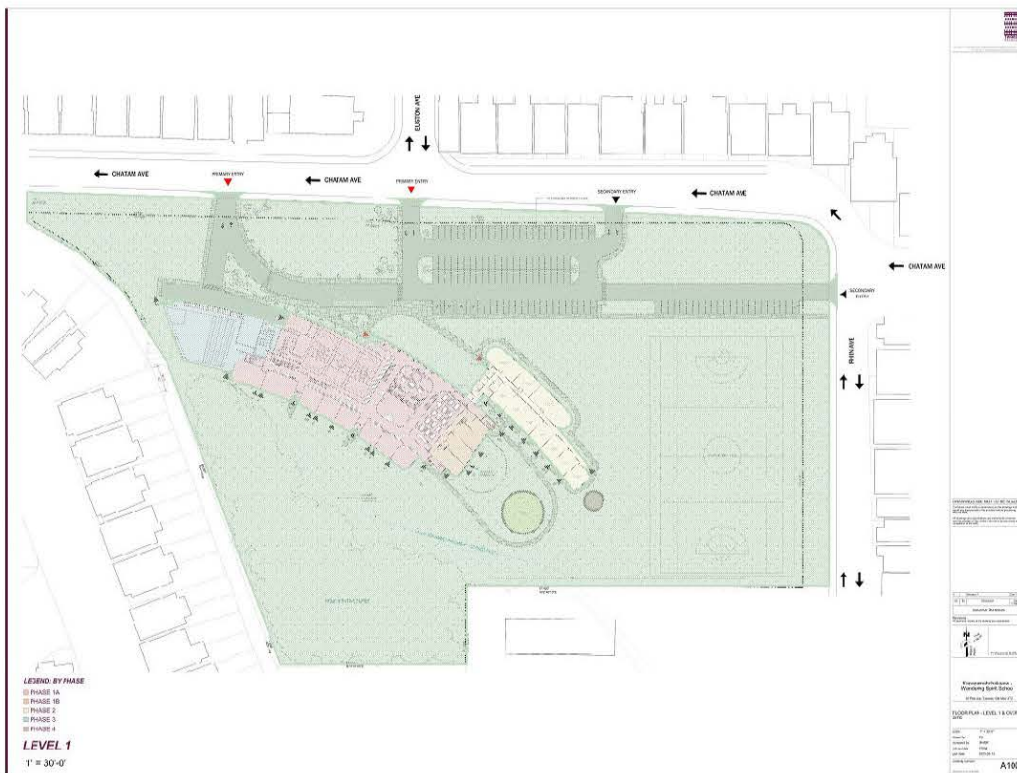


Revised cost summary sheet is attached to this report to reflect the cost and GFA for phase 1 only as an amendment to the Full Class D Cost report. Please Refer to the phasing plan for scope of each phase.

Level 2 and 3



Site Development (39,858 m2 or 429,032 SF)



MULTIPLE ESTIMATE SUMMARY
WANDERING SPIRIT SCHOOL TORONTO
 ROUND 2, CLASS D ESTIMATE (Rev.1)
 OCTOBER 10, 2023

Hard Construction Costs	GFA (m2)	Unit (Cost/m2)	Estimated Total	% of Total
1A TDSB School	5,767	\$7,008	\$40,416,000	45.9%
1B Child Care Centre and EarlyOn	802	\$7,076	\$5,675,000	6.4%
2 Urban Indigenous Education	1,077	\$5,966	\$6,425,000	7.3%
3 Pool	1,064	\$16,952	\$18,037,000	20.5%
4 TDSB School Future Addition	803	\$3,308	\$2,656,000	3.0%
5 Site	39,858	\$213	\$8,501,000	9.6%
6 Demolition	52,270	\$123	\$6,423,000	7.3%
Total Estimated Hard Construction Cost	9,513	\$9,264	\$88,133,000	
Imperial Conversion	102,398	\$861	Per SF	

Separate Estimates: (Not Included Above)

Revised cost summary sheet is attached to this report to reflect the cost for phase 1 only as an amendment to the Full Class D Cost report

**MASTER ESTIMATE SUMMARY
WANDERING SPIRIT SCHOOL TORONTO**

ROUND 2, CLASS D ESTIMATE (Rev.1)
OCTOBER 10, 2023

Hard Construction Costs		GFA (m2)	Unit (Cost/m2)	Sub Total	Estimated Total	% of Total
1	Building Shell	9,513	\$2,252.68		\$21,429,766	24.3%
	- Sub Structure		\$288.42	\$2,743,747		
	- Structure		\$952.55	\$9,061,566		
	- Exterior Enclosure		\$1,011.72	\$9,624,453		
2	Building Interiors	9,513	\$1,150.63		\$10,945,928	12.4%
	- Partitions and Doors		\$252.37	\$2,400,840		
	- Finishes		\$350.85	\$3,337,612		
	- Fittings and Equipment		\$547.41	\$5,207,476		
3	Mechanical	9,513	\$1,174.87		\$11,176,572	12.7%
	- Plumbing and Drainage		\$173.17	\$1,647,337		
	- Fire Protection		\$54.40	\$517,507		
	- Heating, Ventilation, Air Conditioning		\$853.95	\$8,123,638		
	- Controls		\$93.36	\$888,090		
4	Electrical	9,513	\$431.61		\$4,105,945	4.7%
	- Service and Distribution		\$133.31	\$1,268,143		
	- Lighting, Devices, and Heating		\$151.05	\$1,436,924		
	- Systems and Ancillaries		\$147.26	\$1,400,879		
5	Site Work	9,513	\$581.72		\$5,533,863	6.3%
	- Site Development (prep, surfaces, landscaping)		\$405.54	\$3,857,883		
	- Mechanical Site Services		\$133.65	\$1,271,450		
	- Electrical Site Services		\$42.52	\$404,529		
6	Ancillary Work	9,513	\$439.57		\$4,181,600	4.7%
	- Demolition		\$439.57	\$4,181,600		
	- Alterations		\$0.00	\$0		
7	Contractor's General Requirements	6.0%	\$507.79		\$4,830,584	5.5%
8	Contractor's Fees (OH&P)	4.0%	\$261.54		\$2,488,000	2.8%
9	Design & Pricing Contingency	12.5%	\$850.06		\$8,086,600	9.2%
Sub Total (current dollars)		9,513	\$7,650.47		\$72,778,900	
10	Escalation Contingency	15.3%	\$1,172.82		\$11,157,000	12.7%
Sub Total (including escalation to Q2 2026)		9,513	\$8,823.29		\$83,936,000	
11	Construction Contingency (Post Contract Changes)	5.0%	\$441.16		\$4,196,800	4.8%
Total Estimated Hard Construction Cost		9,513	\$9,264.48		\$88,133,000	
Imperial Conversion		102,398	\$860.69		Per SF	

Estimated Construction Costs (Breakdown by Major Component)		GFA m2	Unit Cost/m2	Estimated Total	% of Total
1	Building	9,513	\$7,695.68	\$73,209,000	83.1%
2	Alterations and Demolition	9,513	\$675.18	\$6,423,000	7.3%
3	Site Work (including M&E site services)	9,513	\$893.62	\$8,501,000	9.6%
4	Soft Costs	9,513	\$0.00	Excluded	0.0%
Total Estimated Hard and Soft Construction Costs		9,513	\$9,264.48	\$88,133,000	
Imperial Conversion		102,398	\$860.69	Per SF	

**ITEMIZED AND SEPARATE ESTIMATE SUMMARY
WANDERING SPIRIT SCHOOL TORONTO**

ROUND 2, CLASS D ESTIMATE (Rev.1)
OCTOBER 10, 2023

No.	Description	Quant.	Unit	Rate	Sub Total
Separate Estimates: (Not Included Above)					
<i>The Separate costs listed below are EXCLUDED from our estimate. The amount identified for each item is inclusive of all mark ups on a prorated basis (General Requirements, Fee and Contingencies).</i>					
1	Premium for mass timber wood construction in lieu of structural steel, including glulam columns, glulam beams, and clt decking				\$1,231,301
2	Premium for ASHP heating with backup electric boilers in lieu of natural gas heating / domestic water heating. Including electrical power connection with line and load side wiring for ASHP equipment				\$2,458,941
3	Premium for GSHP heating / cooling with backup electric boilers in lieu of natural gas heating / domestic water heating. Including electrical power connection with line and load side wiring for GSHP equipment				\$6,525,173
4	Provisional sum allowance for Irrigation system to green roof c/w valves, drip line, drip elements, controller and the like				\$46,084
5	Photovoltaic solar panels on roof (99 units), including roof structure to support additional loading, pv support framing and pv panels, 58.4kW PV system c/w associated infrastructure				\$449,930
6	PV Parking Canopies (106 units) including foundation, structure and pv panels, 32kW PV system c/w associated infrastructure				\$4,321,574
7	Bioswale, assumed 1129m2 including, geotextile, seed and topsoil, rip rap, and culverts				\$459,585
8	Green roofs (281m2 or 3,025 SF)				\$43,165
Sub Total of Separate Estimates					\$15,535,752
Total Itemized and Separate Estimates Cost					\$15,535,752

Revised cost summary sheet is attached to this report to reflect the cost for phase 1 only as an amendment to the Full Class D Cost report

MECHANICAL ESTIMATE SUMMARY
WANDERING SPIRIT SCHOOL TORONTO
 ROUND 2, CLASS D ESTIMATE (Rev.1)
 OCTOBER 10, 2023

Gross Floor Area **9,513** m2

Description Element/Sub-Element	Specialty Sub Break down	Sub Element Total	Element Total	\$ per m2 Sub Element	\$ per m2 Element	% Element
C1 Mechanical						
C1.1 Plumbing & Drainage			\$1,647,337		\$173.17	13.2%
C1.11 - Plumbing Fixtures		\$247,338		\$26.00		
C1.12 - Domestic Water		\$523,215		\$55.00		
C1.13 - Sanitary Waste & Vent		\$313,929		\$33.00		
C1.14 - Storm		\$266,364		\$28.00		
C1.15 - Natural Gas		\$66,591		\$7.00		
C1.16 - Specialty Systems:		\$15,000		\$1.58		
- C1.16.1 - Irrigation	\$15,000					
C1.17 - Miscellaneous Works and General Accounts		\$214,900		\$22.59		
C1.2 Fire Protection			\$517,507		\$54.40	4.2%
C1.21 - Standpipe		\$190,130		\$19.99		
C1.22 - Sprinklers		\$321,377		\$33.78		
C1.23 - Specialty Systems		\$0		\$0.00		
C1.24 - Fire Extinguisher		\$6,000		\$0.63		
C1.25 - Miscellaneous Works and General Accounts		\$0		\$0.00		
C1.3 Heating, Ventilation & Air Conditioning			\$8,123,638		\$853.95	65.3%
C1.31 - Liquid Heat Transfer (Heating)		\$1,522,080		\$160.00		
C1.32 - Liquid Heat Transfer (Cooling)		\$0		\$0.00		
C1.33 - Steam and Condensate		\$0		\$0.00		
C1.34 - Air Distribution		\$4,791,007		\$503.63		
C1.35 - Exhaust Systems		\$142,695		\$15.00		
C1.36 - Specialty Systems		\$225,000		\$23.65		
C1.37 - Support Systems and Works		\$383,856		\$40.35		
- C1.37.1 - Noise and Vibration Isolation	\$83,596					
- C1.37.3 - Balancing and Commissioning	\$190,260					
- C1.37.7 - Pool water heating System	\$110,000					
- C1.37.9 - 24/7 Cooling Systems	\$0					
C1.38 - Miscellaneous Works and General Accounts		\$1,059,000		\$111.32		
C1.4 Controls			\$888,090		\$93.36	7.1%
C1.41 - Controls and Automation		\$888,090		\$93.36		
C1.42 - Miscellaneous Works and General Accounts		\$0		\$0.00		
Total Building (C1) Mechanical			\$11,176,572		\$1,174.87 Per m2	
Imperial Conversion			102,398 SF		\$109.15 Per SF	
D1.2 Siteworks - Mechanical Summary						
D1.2 Site Works			\$1,271,450		\$133.65	10.2%
D1.21 - Water		\$75,000		\$7.88		
D1.22 - Sanitary		\$75,000		\$7.88		
D1.23 - Storm		\$1,071,450		\$112.63		
D1.24 - Natural Gas		\$0		\$0.00		
D1.25 - Specialty Systems		\$50,000		\$5.26		
D1.26 - Miscellaneous Works and General Accounts		\$0		\$0.00		
Total Siteworks (D1.2) Mechanical			\$1,271,450		\$133.65 Per m2	
Imperial Conversion			429,032 SF		\$2.96 Per SF	
Total Building (C1) and Siteworks (D1.2) Mechanical			\$12,448,022		\$1,308.53 Per m2	
Imperial Conversion			102,398 SF		\$121.57 Per SF	

ELECTRICAL ESTIMATE SUMMARY
WANDERING SPIRIT SCHOOL TORONTO
 ROUND 2, CLASS D ESTIMATE (Rev.1)
 OCTOBER 10, 2023

Gross Floor Area **9,513** m2

Description Element\Sub-Element	Sub Element Total	Element Total	\$ per m2 Sub Element	\$ per m2 Element	% Element
C2 Electrical					
C2.1 Service & Distribution		\$1,268,143		\$133.31	28.1%
C2.11 - Main Service	\$127,700		\$13.42		
C2.12 - Emergency Power	\$272,780		\$28.67		
C2.13 - Distribution	\$242,582		\$25.50		
C2.14 - Feeders	\$260,265		\$27.36		
C2.15 - Motor Controls & Wiring	\$102,863		\$10.81		
C2.16 - Miscellaneous	\$90,556		\$9.52		
C2.17 - Electrical Contractors Overhead	\$171,398		\$18.02		
C2.2 Lighting, Devices & Heating		\$1,436,924		\$151.05	31.9%
C2.21 - Lighting	\$951,298		\$100.00		
C2.22 - Branch Devices & Wiring	\$268,062		\$28.18		
C2.23 - Heating	\$0		\$0.00		
C2.24 - Electrical Contractors Overhead	\$217,564		\$22.87		
C2.3 Systems & Ancillaries		\$1,400,879		\$147.26	31.1%
C2.31 - Fire Alarm System	\$216,623		\$22.77		
C2.32 - Security System	\$247,931		\$26.06		
C2.33 - Communications	\$307,968		\$32.37		
C2.34 - P.A. System	\$186,726		\$19.63		
C2.35 - Miscellaneous	\$237,027		\$24.92		
C2.36 - Electrical Contractors Overhead	\$204,604		\$21.51		
Total Building (C2) Electrical		\$4,105,945		\$431.61 Per m2	
Imperial Conversion		102,398 SF		\$40.10 Per SF	
D1.3 Siteworks - Electrical Summary					
D1.3 Electrical Site Services		\$404,529		\$42.52	9.0%
D1.31 - Site - Power	\$210,986		\$22.18		
D1.32 - Site - Communications	\$47,839		\$5.03		
D1.33 - Site - Lighting	\$96,400		\$10.13		
D1.34 - Site - Electrical Contractors Overhead	\$49,304		\$5.18		
Total Siteworks (D1.3) Electrical		\$404,529		\$42.52 Per m2	
Imperial Conversion		429,032 SF		\$0.94 Per SF	
Total Building (C2) and Siteworks (D1.3) Electrical		\$4,510,474		\$474.14 Per m2	
Imperial Conversion		102,398 SF		\$44.05 Per SF	

**ELEMENTAL SUMMARY
WANDERING SPIRIT SCHOOL TORONTO**

ROUND 2, CLASS D ESTIMATE (Rev.1)
OCTOBER 10, 2023

Gross Floor Area **9,513 m2**

Description Element/Sub-Element	Ratio	Quantity	Unit	Unit Rate	Elemental Cost		\$ per m2 Sub Element	\$ per m2 Element	%
					Sub Element	Element Total			
A. SHELL									
A1. Sub-Structure						\$2,743,747		\$288.42	3.1%
A1.1 Foundations	0.58	5,507	m2	\$457.85	\$2,521,367		\$265.04		
A1.2 Basement Excavation	0.24	2,284	m3	\$97.36	\$222,380		\$23.38		
A2. Structure						\$9,061,566		\$952.55	10.3%
A2.1 Lowest Floor Construction	0.58	5,507	m2	\$173.78	\$956,984		\$100.60		
A2.2 Upper Floor Construction	0.42	4,006	m2	\$939.51	\$3,763,682		\$395.64		
A2.3 Roof Construction	0.58	5,507	m2	\$788.25	\$4,340,900		\$456.31		
A3. Exterior Enclosure						\$9,624,453		\$1,011.72	10.9%
A3.1 Walls Below Grade	0.00	0	m2	\$0.00	\$0		\$0.00		
A3.2 Walls Above Grade	0.57	5,407	m2	\$1,199.02	\$6,482,521		\$681.44		
A3.3 Windows & Entrances	0.07	631	m2	\$1,455.92	\$918,800		\$96.58		
A3.4 Roof Finish	0.58	5,507	m2	\$341.80	\$1,882,292		\$197.87		
A3.5 Projections	1.00	9,513	m2	\$35.83	\$340,840		\$35.83		
B. INTERIORS									
B1 Partitions & Doors						\$2,400,840		\$252.37	2.7%
B1.1 Partitions	0.66	6,324	m2	\$258.34	\$1,633,690		\$171.73		
B1.2 Doors	0.03	289	m2	\$2,655.68	\$767,150		\$80.64		
B2 Finishes						\$3,337,612		\$350.85	3.8%
B2.1 Floor Finishes	0.90	8,562	m2	\$140.75	\$1,205,142		\$126.68		
B2.2 Ceiling Finishes	0.90	8,562	m2	\$82.28	\$704,451		\$74.05		
B2.3 Wall Finishes	1.68	16,005	m2	\$89.22	\$1,428,019		\$150.11		
B3 Fittings & Equipment						\$5,207,476		\$547.41	5.9%
B3.1 Fittings & Fixtures	1.00	9,513	m2	\$151.65	\$1,442,680		\$151.65		
B3.2 Equipment	1.00	9,513	m2	\$378.41	\$3,599,796		\$378.41		
B3.3 Conveying Systems	1.00	9,513	m2	\$17.34	\$165,000		\$17.34		
C. SERVICES									
C1 Mechanical						\$11,176,572		\$1,174.87	12.7%
C1.1 Plumbing & Drainage	1.00	9,513	m2	\$173.17	\$1,647,337		\$173.17		
C1.2 Fire Protection	1.00	9,513	m2	\$54.40	\$517,507		\$54.40		
C1.3 HVAC	1.00	9,513	m2	\$853.95	\$8,123,638		\$853.95		
C1.4 Controls	1.00	9,513	m2	\$93.36	\$888,090		\$93.36		
C2 Electrical						\$4,105,945		\$431.61	4.7%
C2.1 Service & Distribution	1.00	9,513	m2	\$133.31	\$1,268,143		\$133.31		
C2.2 Lighting, Devices & Heating	1.00	9,513	m2	\$151.05	\$1,436,924		\$151.05		
C2.3 Systems & Ancillaries	1.00	9,513	m2	\$147.26	\$1,400,879		\$147.26		
D. SITE & ANCILLARY WORK									
D1 Site Work						\$5,533,863		\$581.72	6.3%
D1.1 Site Development	4.19	39,858	m2	\$96.79	\$3,857,883		\$405.54		
D1.2 Mechanical Site Services	4.19	39,858	m2	\$31.90	\$1,271,450		\$133.65		
D1.3 Electrical Site Services	4.19	39,858	m2	\$10.15	\$404,529		\$42.52		
D2 Ancillary Work						\$4,181,600		\$439.57	4.7%
D2.1 Demolition	1.00	9,513	m2	\$439.57	\$4,181,600		\$439.57		
D2.2 Alterations	0.00	0	m2	\$0.00	\$0		\$0.00		
Z. GENERAL REQUIREMENTS & CONTINGENCIES									
Z1 General Requirements & Fees						\$7,318,584		\$769.32	8.3%
Z1.1 General Requirements	1.00	9,513	m2	\$507.79	\$4,830,584		\$507.79		
Z1.2 Fees	1.00	9,513	m2	\$261.54	\$2,488,000		\$261.54		
Z2 Allowances						\$23,440,400		\$2,464.04	26.6%
Z2.1 Design & Pricing Contingency	1.00	9,513	m2	\$850.06	\$8,086,600		\$850.06		
Z2.2 Escalation Contingency	1.00	9,513	m2	\$1,172.82	\$11,157,000		\$1,172.82		
Z2.3 Construction Contingency	1.00	9,513	m2	\$441.16	\$4,196,800		\$441.16		
TOTAL ESTIMATED CONSTRUCTION COST (nearest ,000)						\$88,133,000		\$9,264	100.0%

No.	Description	Quant.	Unit	Rate	Sub Total	Total
A. SHELL						
<u>A1.1 SUB-STRUCTURE - Foundations</u>						
<u>A1.11 - Standard Foundations</u>						
<i>Note: We have assumed normal soil conditions exist in the proposed building location and that load bearing soil is present at the levels shown on the architectural/structural drawings.</i>						
1	Strip topsoil and stockpile on site				Included in Site	
<i>TDSB School:</i>						
2	Excavation to foundations	3,258	m3	\$16.00	\$52,128	
3	Backfill with excavated material, assumed 50%	1,548	m3	\$18.00	\$27,855	
4	Backfill with imported granular, assumed 50%	1,548	m3	\$60.00	\$92,850	
5	Dispose excess excavated material off site	1,538	m3	\$25.00	\$38,438	
6	Exterior strip footings, assumed 1200mm x 200mm, including:	178	m	\$277.76		\$49,442
6.1	- hand trim	214	m2	\$10.00	\$2,140	
6.2	- formwork	72	m2	\$240.00	\$17,280	
6.3	- reinforcing steel, assumed 68kg/m3	2.9	TN	\$3,600.00	\$10,440	
6.4	- concrete, 25MPa	43	m3	\$414.00	\$17,802	
6.5	- keyway	178	m	\$10.00	\$1,780	
7	Exterior pad footings, assumed 1400mm x 1400mm x 200mm, including:	39	NO	\$521.48		\$20,338
7.1	- hand trim	76	m2	\$10.00	\$764	
7.2	- formwork	44	m2	\$240.00	\$10,483	
7.3	- reinforcing steel, assumed 56kg/m3	0.8	TN	\$3,600.00	\$2,880	
7.4	- concrete, 25MPa	15	m3	\$414.00	\$6,210	
8	Interior pad footings, assumed 1200mm x 1200mm x 200mm, including:	49	NO	\$421.86		\$20,671
8.1	- hand trim	71	m2	\$10.00	\$706	
8.2	- formwork	47	m2	\$240.00	\$11,290	
8.3	- reinforcing steel, assumed 56kg/m3	0.8	TN	\$3,600.00	\$2,880	
8.4	- concrete, 25MPa	14	m3	\$414.00	\$5,796	
9	Exterior foundation walls including:	293	m2	\$638.44		\$187,062
9.1	- formwork	586	m2	\$240.00	\$140,640	
9.2	- reinforcing steel, assumed 62kg/m3	4.5	TN	\$3,600.00	\$16,200	
9.3	- concrete, 25MPa	73	m3	\$414.00	\$30,222	
10	Exterior pilasters, assumed 600mm x 600mm x 1400mm, including:	39	NO	\$556.92		\$21,720
10.1	- formwork	14	m2	\$240.00	\$3,360	
10.2	- reinforcing, assumed 140kg/m3	2.8	TN	\$3,600.00	\$10,080	
10.3	- concrete, 25MPa	20	m3	\$414.00	\$8,280	
11	Interior piers, assumed 400mm x 400mm x 1000mm, including:	49	NO	\$187.59		\$9,192
11.1	- formwork	8	m2	\$240.00	\$1,920	
11.2	- reinforcing, assumed 140kg/m3	1.1	TN	\$3,600.00	\$3,960	
11.3	- concrete, 25MPa	8	m3	\$414.00	\$3,312	
12	Perimeter weeping tile and granular	178	m	\$60.00	\$10,680	
13	Perimeter insulation	293	m2	\$80.00	\$23,440	
14	Miscellaneous embedded metals	1	LS	\$8,000.00	\$8,000	
15	Elevator foundations	1	NO	\$18,000.00	\$18,000	
16	Stair foundations	5	NO	\$12,000.00	\$60,000	
17	Allowance for winter heating, assumed 2 months	1	LS	\$50,000.00	\$50,000	

No.	Description	Quant.	Unit	Rate	Sub Total	Total
<u>Child Care Centre and EarlyON:</u>						
18	Excavation to foundations	1,688	m3	\$16.00	\$27,008	
19	Backfill with excavated material, assumed 50%	789	m3	\$18.00	\$14,202	
20	Backfill with imported granular, assumed 50%	789	m3	\$60.00	\$47,340	
21	Dispose excess excavated material off site	787	m3	\$25.00	\$19,675	
22	Exterior strip footings, assumed 1200mm x 200mm, including:	153	m	\$278.22		\$42,568
22.1	- hand trim	184	m2	\$10.00	\$1,840	
22.2	- formwork	62	m2	\$240.00	\$14,880	
22.3	- reinforcing steel, assumed 68kg/m3	2.5	TN	\$3,600.00	\$9,000	
22.4	- concrete, 25MPa	37	m3	\$414.00	\$15,318	
22.5	- keyway	153	m	\$10.00	\$1,530	
23	Exterior pad footings, assumed 1400mm x 1400mm x 200mm, including:	18	NO	\$529.40		\$9,529
23.1	- hand trim	35	m2	\$10.00	\$353	
23.2	- formwork	20	m2	\$240.00	\$4,838	
23.3	- reinforcing steel, assumed 56kg/m3	0.4	TN	\$3,600.00	\$1,440	
23.4	- concrete, 25MPa	7	m3	\$414.00	\$2,898	
24	Interior pad footings, assumed 1200mm x 1200mm x 200mm, including:	7	NO	\$414.51		\$2,902
24.1	- hand trim	10	m2	\$10.00	\$101	
24.2	- formwork	7	m2	\$240.00	\$1,613	
24.3	- reinforcing steel, assumed 56kg/m3	0.1	TN	\$3,600.00	\$360	
24.4	- concrete, 25MPa	2	m3	\$414.00	\$828	
25	Exterior foundation walls including:	225	m2	\$639.04		\$143,784
25.1	- formwork	450	m2	\$240.00	\$108,000	
25.2	- reinforcing steel, assumed 62kg/m3	3.5	TN	\$3,600.00	\$12,600	
25.3	- concrete, assumed 250mm, 25MPa	56	m3	\$414.00	\$23,184	
26	Exterior pilasters, assumed 600mm x 600mm x 1400mm, including:	18	NO	\$547.00		\$9,846
26.1	- formwork	6	m2	\$240.00	\$1,440	
26.2	- reinforcing, assumed 140kg/m3	1.3	TN	\$3,600.00	\$4,680	
26.3	- concrete, 25MPa	9	m3	\$414.00	\$3,726	
27	Interior piers, assumed 400mm x 400mm x 1000mm, including:	7	NO	\$144.86		\$1,014
27.1	- formwork	1	m2	\$240.00	\$240	
27.2	- reinforcing, assumed 140kg/m3	0.1	TN	\$3,600.00	\$360	
27.3	- concrete, 25MPa	1	m3	\$414.00	\$414	
28	Perimeter weeping tile and granular	153	m	\$60.00	\$9,180	
29	Perimeter insulation	225	m2	\$80.00	\$18,000	
30	Miscellaneous embedded metals	1	LS	\$2,000.00	\$2,000	
31	Stair foundations	1	NO	\$12,000.00	\$12,000	
32	Allowance for winter heating, assumed 0.5 months	1	LS	\$12,500.00	\$12,500	
<u>Urban Indigenous Education Centre:</u>						
33	Excavation to foundations	575	m3	\$16.00	\$9,200	
34	Backfill with excavated material, assumed 50%	273	m3	\$18.00	\$4,914	
35	Backfill with imported granular, assumed 50%	273	m3	\$60.00	\$16,380	
36	Dispose excess excavated material off site	270	m3	\$25.00	\$6,750	
37	Exterior strip footings, assumed 1200mm x 200mm, including:	33	m	\$278.85		\$9,202
37.1	- hand trim	40	m2	\$10.00	\$400	
37.2	- formwork	14	m2	\$240.00	\$3,360	
37.3	- reinforcing steel, assumed 68kg/m3	0.5	TN	\$3,600.00	\$1,800	
37.4	- concrete, 25MPa	8	m3	\$414.00	\$3,312	
37.5	- keyway	33	m	\$10.00	\$330	

No.	Description	Quant.	Unit	Rate	Sub Total	Total
38	Exterior pad footings, assumed 1400mm x 1400mm x 200mm, including:	7	NO	\$568.69		\$3,981
38.1	- hand trim	14	m2	\$10.00	\$137	
38.2	- formwork	8	m2	\$240.00	\$1,882	
38.3	- reinforcing steel, assumed 56kg/m3	0.2	TN	\$3,600.00	\$720	
38.4	- concrete, 25MPa	3	m3	\$414.00	\$1,242	
39	Interior pad footings, assumed 1200mm x 1200mm x 200mm, including:	8	NO	\$393.30		\$3,146
39.1	- hand trim	12	m2	\$10.00	\$115	
39.2	- formwork	8	m2	\$240.00	\$1,843	
39.3	- reinforcing steel, assumed 56kg/m3	0.1	TN	\$3,600.00	\$360	
39.4	- concrete, 25MPa	2	m3	\$414.00	\$828	
40	Exterior foundation walls including:	54	m2	\$647.33		\$34,956
40.1	- formwork	108	m2	\$240.00	\$25,920	
40.2	- reinforcing steel, assumed 62kg/m3	0.9	TN	\$3,600.00	\$3,240	
40.3	- concrete, assumed 250mm, 25MPa	14	m3	\$414.00	\$5,796	
41	Exterior pilasters, assumed 600mm x 600mm x 1400mm, including:	7	NO	\$648.00		\$4,536
41.1	- formwork	3	m2	\$240.00	\$720	
41.2	- reinforcing, assumed 140kg/m3	0.6	TN	\$3,600.00	\$2,160	
41.3	- concrete, 25MPa	4	m3	\$414.00	\$1,656	
42	Interior piers, assumed 400mm x 400mm x 1000mm, including:	8	NO	\$126.75		\$1,014
42.1	- formwork	1	m2	\$240.00	\$240	
42.2	- reinforcing, assumed 140kg/m3	0.1	TN	\$3,600.00	\$360	
42.3	- concrete, 25MPa	1	m3	\$414.00	\$414	
43	Perimeter weeping tile and granular	33	m	\$60.00	\$1,980	
44	Perimeter insulation	54	m2	\$80.00	\$4,320	
45	Miscellaneous embedded metals	1	LS	\$2,000.00	\$2,000	
46	Allowance for winter heating, assumed 0.5 months	1	LS	\$12,500.00	\$12,500	
	<u>Pool:</u>					
47	Excavation to foundations	1,356	m3	\$16.00	\$21,696	
48	Backfill with excavated material, assumed 50%	643	m3	\$18.00	\$11,574	
49	Backfill with imported granular, assumed 50%	643	m3	\$60.00	\$38,580	
50	Dispose excess excavated material off site	639	m3	\$25.00	\$15,975	
51	Exterior strip footings, assumed 1200mm x 200mm, including:	80	m	\$274.83		\$21,986
51.1	- hand trim	96	m2	\$10.00	\$960	
51.2	- formwork	32	m2	\$240.00	\$7,680	
51.3	- reinforcing steel, assumed 68kg/m3	1.3	TN	\$3,600.00	\$4,680	
51.4	- concrete, 25MPa	19	m3	\$414.00	\$7,866	
51.5	- keyway	80	m	\$10.00	\$800	
52	Exterior pad footings, assumed 1400mm x 1400mm x 200mm, including:	18	NO	\$529.40		\$9,529
52.1	- hand trim	35	m2	\$10.00	\$353	
52.2	- formwork	20	m2	\$240.00	\$4,838	
52.3	- reinforcing steel, assumed 56kg/m3	0.4	TN	\$3,600.00	\$1,440	
52.4	- concrete, 25MPa	7	m3	\$414.00	\$2,898	
53	Interior pad footings, assumed 1200mm x 1200mm x 200mm, including:	15	NO	\$403.20		\$6,048
53.1	- hand trim	22	m2	\$10.00	\$216	
53.2	- formwork	14	m2	\$240.00	\$3,456	
53.3	- reinforcing steel, assumed 56kg/m3	0.2	TN	\$3,600.00	\$720	
53.4	- concrete, 25MPa	4	m3	\$414.00	\$1,656	

No.	Description	Quant.	Unit	Rate	Sub Total	Total
54	Exterior foundation walls including:	133	m2	\$636.86		\$84,702
54.1	- formwork	266	m2	\$240.00	\$63,840	
54.2	- reinforcing steel, assumed 62kg/m3	2.0	TN	\$3,600.00	\$7,200	
54.3	- concrete, assumed 250mm, 25MPa	33	m3	\$414.00	\$13,662	
55	Exterior pilasters, assumed 600mm x 600mm x 1400mm, including:	18	NO	\$547.00		\$9,846
55.1	- formwork	6	m2	\$240.00	\$1,440	
55.2	- reinforcing, assumed 140kg/m3	1.3	TN	\$3,600.00	\$4,680	
55.3	- concrete, 25MPa	9	m3	\$414.00	\$3,726	
56	Interior piers, assumed 400mm x 400mm x 1000mm, including:	15	NO	\$159.20		\$2,388
56.1	- formwork	2	m2	\$240.00	\$480	
56.2	- reinforcing, assumed 140kg/m3	0.3	TN	\$3,600.00	\$1,080	
56.3	- concrete, 25MPa	2	m3	\$414.00	\$828	
57	Perimeter weeping tile and granular	80	m	\$60.00	\$4,800	
58	Perimeter insulation	133	m2	\$8,000.00	\$1,064,000	
59	Miscellaneous embedded metals	1	LS	\$4,000.00	\$4,000	
60	Allowance for winter heating, assumed 2 months	1	LS	\$50,000.00	\$50,000	

A1.12 - Special Foundations

61 NIL

TOTAL FOR SUB-STRUCTURE - Foundations

0.58	5,507	m2	\$457.85	\$2,521,367
------	-------	----	----------	-------------

A1.2 SUB-STRUCTURE - Basement Excavation

Pool:

62	Bulk excavation to pool	1,356	m3	\$16.00	\$21,696	
63	Trench excavation to perimeter	928	m3	\$18.00	\$16,704	
64	Backfill trench with imported material, assumed 100%	928	m3	\$60.00	\$55,680	
65	Dispose excess excavated material off site	2,284	m3	\$25.00	\$57,100	
66	Allowance for dewatering, 2 months	1	LS	\$20,000.00	\$20,000	
67	Dewatering, assumed minor, including:	26 days		\$1,933.86	\$51,200	
		0.9	MOS	\$56,888.89		
67.1	- discharge of Water Permit					
67.2	- mobilization / demobilization					
67.3	- building dewatering system installation					
67.4	- building dewatering system rental (pump + manifold + fittings + connection + filtration tank + monitoring + maintenance (daily site maintenance)					
67.5	- treatment for water mobilization / demobilization					
67.6	- discharge of water (assumed no charge for sanitary sewer discharge)					Excluded
67.7	- treatment of water (assumed a carbon treatment process that meets sanitary sewer requirements, treated through a granular sand system)					Excluded

TOTAL FOR SUB-STRUCTURE - Basement Excavation

0.24	2,284	m3	\$97.36	\$222,380
------	-------	----	---------	-----------

No.	Description	Quant.	Unit	Rate	Sub Total	Total
<u>A2.1 STRUCTURE - Lowest Floor Construction</u>						
<i><u>TDSB School:</u></i>						
68	Level and compact subgrade	3,106	m2	\$5.00	\$15,530	
69	Concrete slab on grade at change rooms, including:	3,106	m2	\$128.71		\$399,782
69.1	- granular sub base, assumed 200mm	621	m3	\$60.00	\$37,260	
69.2	- air vapour barrier	3,106	m2	\$15.00	\$46,590	
69.3	- wire mesh reinforcing	3,106	m2	\$25.00	\$77,650	
69.4	- concrete, assumed 125mm thick, 25MPa	388	m3	\$414.00	\$160,632	
69.5	- screed and cure	3,106	m2	\$15.00	\$46,590	
69.6	- steel trowel finish	3,106	m2	\$10.00	\$31,060	
70	Allowance for slab thickening at CMU walls	408	m	\$200.00	\$81,600	
71	Pits and trenches	1	LS	\$8,000.00	\$8,000	
72	Curbs and pads for mechanical equipment	1	LS	\$15,000.00	\$15,000	
<i><u>Child Care Centre and EarlyON:</u></i>						
73	Level and compact subgrade	384	m2	\$5.00	\$1,920	
74	Concrete slab on grade at change rooms, including:	384	m2	\$128.78		\$49,452
74.1	- granular sub base, assumed 200mm	77	m3	\$60.00	\$4,620	
74.2	- air vapour barrier	384	m2	\$15.00	\$5,760	
74.3	- wire mesh reinforcing	384	m2	\$25.00	\$9,600	
74.4	- concrete, assumed 125mm thick, 25MPa	48	m3	\$414.00	\$19,872	
74.5	- screed and cure	384	m2	\$15.00	\$5,760	
74.6	- steel trowel finish	384	m2	\$10.00	\$3,840	
75	Allowance for slab thickening at CMU walls	100	m	\$200.00	\$20,000	
76	Pits and trenches	1	LS	\$2,000.00	\$2,000	
<i><u>Urban Indigenous Education Centre:</u></i>						
77	Level and compact subgrade	1,077	m2	\$5.00	\$5,385	
78	Concrete slab on grade at change rooms, including:	1,077	m2	\$128.87		\$138,795
78.1	- granular sub base, assumed 200mm	215	m3	\$60.00	\$12,900	
78.2	- air vapour barrier	1,077	m2	\$15.00	\$16,155	
78.3	- wire mesh reinforcing	1,077	m2	\$25.00	\$26,925	
78.4	- concrete, assumed 125mm thick, 25MPa	135	m3	\$414.00	\$55,890	
78.5	- screed and cure	1,077	m2	\$15.00	\$16,155	
78.6	- steel trowel finish	1,077	m2	\$10.00	\$10,770	
79	Allowance for slab thickening at CMU walls	216	m	\$200.00	\$43,200	
80	Pits and trenches	1	LS	\$2,000.00	\$2,000	
81	Curbs and pads for mechanical equipment	1	LS	\$2,000.00	\$2,000	
<i><u>Pool:</u></i>						
82	Level and compact subgrade	940	m2	\$5.00	\$4,700	
83	Concrete slab on grade at change rooms, including:	480	m2	\$188.75		\$90,600
83.1	- granular sub base, assumed 200mm	96	m3	\$60.00	\$5,760	
83.2	- air vapour barrier	480	m2	\$15.00	\$7,200	
83.3	- insulation	480	m2	\$60.00	\$28,800	
83.4	- wire mesh reinforcing	480	m2	\$25.00	\$12,000	
83.5	- concrete, assumed 125mm thick, 25MPa	60	m3	\$414.00	\$24,840	
83.6	- screed and cure	480	m2	\$15.00	\$7,200	
83.7	- steel trowel finish	480	m2	\$10.00	\$4,800	

No.	Description	Quant.	Unit	Rate	Sub Total	Total
84	Concrete slab on grade to Swimming Pool, including:	460	m2	\$97.87		\$45,020
84.1	- granular sub base	92	m3	\$60.00	\$5,520	
84.2	- air vapour barrier	460	m2	\$15.00	\$6,900	
84.3	- insulation	460	m2	\$60.00	\$27,600	
84.4	- concrete pump, excluded from Pool budget	1	LS	\$5,000.00	\$5,000	
84.5	- reinforcement				Included in item 339	
84.6	- concrete, assumed 300mm thick, 35MPa				Included in item 339	
84.7	- screed and cure				Included in item 339	
84.8	- steel trowel finish				Included in item 339	
84.9	- membrane + water stops + water test				Included in item 339	
85	Allowance for slab thickening at CMU walls	60	m	\$200.00	\$12,000	
86	Pits and trenches	1	LS	\$10,000.00	\$10,000	
87	Curbs and pads for mechanical equipment	1	LS	\$10,000.00	\$10,000	
TOTAL FOR STRUCTURE - Lowest Floor Construction		0.58	5,507 m2	\$173.78	\$956,984	

A2.2 STRUCTURE - Upper Floor Construction

A2.21 - Upper Floor Construction

TDSB School:

88	Structural steel upper floor construction, including:	2,660	m2	\$900.00	\$2,394,000	
88.1	- base plates and anchor bolts					
88.2	- structural steel columns					
88.3	- structural steel beams, assumed some beams will need to be cranked for curved building shape					
88.4	- open web steel joists					
88.5	- bridging and bracing					
88.6	- metal deck					
88.7	- concrete topping					
88.8	- screed and cure					
88.9	- steel trowel finish					
89	Framing to floor openings	1	LS	\$8,000.00	\$8,000	
90	Allowance for spray fireproofing to upper floor structure, assumed 20%	532	m2	\$80.00	\$42,560	

Child Care Centre and EarlyON:

91	Structural steel upper floor construction, including:	418	m2	\$800.00	\$334,400	
91.1	- base plates and anchor bolts					
91.2	- structural steel columns					
91.3	- structural steel beams, assumed some beams will need to be cranked for curved building shape					
91.4	- open web steel joists					
91.5	- bridging and bracing					
91.6	- metal deck					
91.7	- concrete topping					
91.8	- screed and cure					
91.9	- steel trowel finish					
92	Framing to floor openings	1	LS	\$4,000.00	\$4,000	
93	Allowance for spray fireproofing to upper floor structure, assumed 20%	84	m2	\$80.00	\$6,688	

No.	Description	Quant.	Unit	Rate	Sub Total	Total
<u>Pool:</u>						
94	Structural steel upper floor construction, including:	124	m2	\$800.00	\$99,200	
94.1	- base plates and anchor bolts					
94.2	- structural steel columns					
94.3	- structural steel beams					
94.4	- open web steel joists					
94.5	- bridging and bracing					
94.6	- metal deck					
94.7	- concrete topping					
94.8	- screed and cure					
94.9	- steel trowel finish					
95	Structural support and CTL deck	124	m2	\$400.00	\$49,600	
96	Framing to floor openings	1	LS	\$8,000.00	\$8,000	
97	Allowance for spray fireproofing to upper floor structure, assumed 100%	124	m2	\$80.00	\$9,920	
<u>TDSB School Future Addition:</u>						
98	Structural steel upper floor construction, including:	804	m2	\$800.00	\$643,200	
98.1	- base plates and anchor bolts					
98.2	- structural steel columns					
98.3	- structural steel beams, assumed some beams will need to be cranked for curved building shape					
98.4	- open web steel joists					
98.5	- bridging and bracing					
98.6	- metal deck					
98.7	- concrete topping					
98.8	- screed and cure					
98.9	- steel trowel finish					
99	Framing to floor openings	1	LS	\$8,000.00	\$8,000	
100	Allowance for spray fireproofing to upper floor structure, assumed 20%	161	m2	\$80.00	\$12,864	
<u>A2.22 - Stair Construction</u>						
<u>TDSB School:</u>						
101	Metal pan concrete filled stairs, including:					
101.1	- tread	86	m	\$350.00	\$30,100	
101.2	- landing	43	m2	\$450.00	\$19,350	
102	Feature staircase					
102.1	- tread	115	m	\$500.00	\$57,500	
102.2	- landing	10	m2	\$600.00	\$6,000	
<u>Child Care Centre and EarlyON:</u>						
103	Metal pan concrete filled stairs, including:					
103.1	- tread	57	m	\$350.00	\$19,950	
103.2	- landing	23	m2	\$450.00	\$10,350	
TOTAL FOR STRUCTURE - Upper Floor Construction		0.42	4,006	m2	\$939.51	\$3,763,682

No.	Description	Quant.	Unit	Rate	Sub Total	Total
<u>A2.3 STRUCTURE - Roof Construction</u>						
<u>A2.31 - Roof Construction</u>						
<i><u>TDSB School:</u></i>						
104	Structural steel roof construction including:	3,106	m2	\$700.00	\$2,174,200	
104.1	- base plates and anchor bolts					
104.2	- structural steel columns					
104.3	- structural steel beams					
104.4	- open web steel joists					
104.5	- bridging and bracing					
104.6	- metal deck					
105	Framing to roof openings	1	LS	\$4,000.00	\$4,000	
<i><u>Child Care Centre and EarlyON:</u></i>						
106	Structural steel roof construction including:	384	m2	\$700.00	\$268,800	
106.1	- base plates and anchor bolts					
106.2	- structural steel columns					
106.3	- structural steel beams					
106.4	- open web steel joists					
106.5	- bridging and bracing					
106.6	- metal deck					
107	Framing to roof openings	1	LS	\$4,000.00	\$4,000	
<i><u>Urban Indigenous Education Centre:</u></i>						
108	Structural steel roof construction including:	1,077	m2	\$700.00	\$753,900	
108.1	- base plates and anchor bolts					
108.2	- structural steel columns					
108.3	- structural steel beams					
108.4	- open web steel joists					
108.5	- bridging and bracing					
108.6	- metal deck					
109	Framing to roof openings	1	LS	\$4,000.00	\$4,000	
<i><u>Pool:</u></i>						
110	Structural steel roof construction including:	940	m2	\$800.00	\$752,000	
110.1	- base plates and anchor bolts					
110.2	- structural steel columns					
110.3	- structural steel beams					
110.4	- open web steel joists					
110.5	- bridging and bracing					
110.6	- metal deck					
111	Structural support and CTL deck	940	m2	\$400.00	\$376,000	
112	Framing to roof openings	1	LS	\$4,000.00	\$4,000	
TOTAL FOR STRUCTURE - Roof Construction		0.58	5,507 m2	\$788.25	\$4,340,900	

No.	Description	Quant.	Unit	Rate	Sub Total	Total
<u>A3.2 EXTERIOR ENCLOSURE - Walls Above Grade</u>						
<u>A3.21 - Walls Above Grade</u>						
<i><u>TDSB School:</u></i>						
113	Insulated metal panel cladding, assembly assumed, including:	1,287	m2	\$788.00		\$1,014,156
113.1	- prefinished insulated metal panel	1,287	m2	\$600.00	\$772,200	
113.2	- thermally improved cladding support	1,287	m2		Included above	
113.3	- 200mm insulation	1,287	m2		Included above	
113.4	- air/vapour barrier	1,287	m2		Included above	
113.5	- exterior gypsum sheathing	1,287	m2	\$45.00	\$57,915	
113.6	- load bearing metal studs	1,287	m2	\$110.00	\$141,570	
113.7	- gypsum board	1,287	m2	\$33.00	\$42,471	
114	Insulated metal panel cladding (structural) at North facade, assembly assumed, including:	1,832	m2	\$1,700.00		\$3,114,400
114.1	- prefinished insulated metal panel	1,832	m2	\$600.00	\$1,099,200	
114.2	- thermally improved cladding support	1,832	m2		Included above	
114.3	- 200mm insulation	1,832	m2		Included above	
	- air / vapour barrier		m2		Included above	
114.4	- concrete block wall, grout filled and reinforced	1,832	m2	\$500.00	\$916,000	
114.5	- air / vapour barrier	1,832	m2		Included below	
114.6	- 200mm insulation	1,832	m2		Included below	
	- thermally improved cladding support				Included below	
114.7	- prefinished insulated metal panel	1,832	m2	\$600.00	\$1,099,200	
115	Elevator overrun, assembly assumed, including:	38	m2	\$750.00		\$28,500
115.1	- Insulated metal panel with furring channels	38	m2	\$250.00	\$9,500	
115.2	- air space	38	m2		Info Only	
115.3	- 400mm concrete block wall	38	m2	\$500.00	\$19,000	
<i><u>Child Care Centre and EarlyON:</u></i>						
116	Insulated metal panel cladding, assembly assumed, including:	264	m2	\$788.00		\$208,032
116.1	- prefinished insulated metal panel	264	m2	\$600.00	\$158,400	
116.2	- thermally improved cladding support	264	m2		Included above	
116.3	- 200mm insulation	264	m2		Included above	
116.4	- air/vapour barrier	264	m2		Included above	
116.5	- exterior gypsum sheathing	264	m2	\$45.00	\$11,880	
116.6	- load bearing metal studs	264	m2	\$110.00	\$29,040	
116.7	- gypsum board	264	m2	\$33.00	\$8,712	
117	Insulated metal panel cladding (structural) at North facade, assembly assumed, including:	248	m2	\$1,700.00		\$421,600
117.1	- prefinished insulated metal panel	248	m2	\$600.00	\$148,800	
117.2	- thermally improved cladding support	248	m2		Included above	
117.3	- 200mm insulation	248	m2		Included above	
117.4	- air / vapour barrier	248	m2		Included above	
117.5	- concrete block wall, grout filled and reinforced	248	m2	\$500.00	\$124,000	
117.6	- air / vapour barrier	248	m2		Included below	
117.7	- 200mm insulation	248	m2		Included below	
	- thermally improved cladding support	248	m2		Included below	
	- prefinished insulated metal panel	248	m2	\$600.00	\$148,800	
<i><u>Urban Indigenous Education Centre:</u></i>						
118	Insulated horizontal hardboard siding wall (W1), assembly assumed, including:	758	m2	\$523.00		\$396,434
118.1	- insulated horizontal hardboard siding	758	m2	\$200.00	\$151,600	
118.2	- air/vapour barrier	758	m2	\$30.00	\$22,740	
118.3	- rigid insulation	758	m2	\$80.00	\$60,640	
118.4	- exterior gypsum sheathing	758	m2	\$45.00	\$34,110	
118.5	- load bearing metal studs	758	m2	\$110.00	\$83,380	
118.6	- batt insulation	758	m2	\$25.00	\$18,950	
118.7	- gypsum board	758	m2	\$33.00	\$25,014	

No.	Description	Quant.	Unit	Rate	Sub Total	Total
<u>Pool:</u>						
119	Insulated metal panel cladding, assembly assumed, including:	348	m2	\$788.00		\$274,224
119.1	- prefinished insulated metal panel	348	m2	\$600.00	\$208,800	
119.2	- thermally improved cladding support	348	m2		Included above	
119.3	- 200mm insulation	348	m2		Included above	
119.4	- air/vapour barrier	348	m2		Included above	
119.5	- exterior gypsum sheathing	348	m2	\$45.00	\$15,660	
119.6	- load bearing metal studs	348	m2	\$110.00	\$38,280	
119.7	- gypsum board	348	m2	\$33.00	\$11,484	
120	Insulated metal panel cladding (structural) at North facade, assembly assumed, including:	438	m2	\$1,700.00		\$744,600
120.1	- prefinished insulated metal panel	438	m2	\$600.00	\$262,800	
120.2	- thermally improved cladding support	438	m2		Included above	
120.3	- 200mm insulation	438	m2		Included above	
120.4	- air / vapour barrier	438	m2		Included above	
120.5	- concrete block wall, grout filled and reinforced	438	m2	\$500.00	\$219,000	
120.6	- air / vapour barrier	438	m2		Included below	
120.7	- 200mm insulation	438	m2		Included below	
	- thermally improved cladding support	438	m2		Included below	
	- prefinished insulated metal panel	438	m2	\$600.00	\$262,800	
<u>A3.22 - Structural Walls Above Grade</u>						
121	NIL					
<u>A3.23 - Glazed Curtain Wall</u>						
<u>TDSB School:</u>						
122	Aluminum framed curtain wall system, assumed double glazed, low e coating, and argon filled, reduced by 20% and added as cladding system	126	m2	\$1,450.00	\$182,700	
<u>Child Care Centre and EarlyON:</u>						
123	Aluminum framed curtain wall system, assumed double glazed, low e coating, and argon filled, reduced by 20% and added as cladding system	14	m2	\$1,450.00	\$20,300	
<u>Urban Indigenous Education Centre:</u>						
124	Aluminum framed curtain wall system, assumed double glazed, low e coating, and argon filled	3.5	m2	\$1,450.00	\$5,075	
<u>Pool:</u>						
125	Aluminum framed curtain wall system, assumed double glazed, low e coating, and argon filled, reduced by 20% and added as cladding system	50	m2	\$1,450.00	\$72,500	
TOTAL FOR EXT. ENCLOSURE - Walls Above Grade		0.57	5,407	m2	\$1,199.02	\$6,482,521

A3.3 EXTERIOR ENCLOSURE - Windows & Entrances

A3.31 - Windows & Louvers

TDSB School:

126	Aluminum framed windows, assumed double glazed, low e coating, and argon filled, reduced by 20% and added as cladding system	218	m2	\$1,200.00	\$261,600	
127	Small aluminum framed windows at North facade, assumed double glazed, low e coating, and argon filled, reduced by 20% and added as cladding system	64	m2	\$900.00	\$57,600	
128	Louvers to mechanical room	100	m2	\$1,200.00	\$120,000	

No.	Description	Quant.	Unit	Rate	Sub Total	Total
<u>Child Care Centre and EarlyON:</u>						
129	Aluminum framed windows, assumed double glazed, low e coating, and argon filled, reduced by 20% and added as cladding system	62	m2	\$1,200.00	\$74,400	
<u>Urban Indigenous Education Centre:</u>						
130	Aluminum framed windows, assumed double glazed, low e coating, and argon filled, reduced by 20% and added as cladding system	70	m2	\$1,200.00	\$84,000	
<u>Pool:</u>						
131	Small aluminum framed windows at North facade, assumed double glazed, low e coating, and argon filled, reduced by 20% and added as cladding system	20	m2	\$900.00	\$18,000	
<u>A3.32 - Entrance Glazed Screens</u>						
132	Aluminum framed glazed entrance screens					
<u>A3.33 - Exterior Doors</u>						
<u>TDSB School:</u>						
133	Aluminum framed fully glazed doors including installation, hardware and finish					
133.1	- single, assumed 950mm x 2450mm	9	NO	\$6,200.00	\$55,800	
133.2	- double, assumed 2 - 915mm x 2450mm	5	PR	\$12,000.00	\$60,000	
134	Insulated hollow metal door and frame including installation and paint finish					
134.1	- single, assumed 950mm x 2150mm	2	NO	\$3,100.00	\$6,200	
135	Door hardware supply allowance				Included Above	
136	Barrier free operators	5	NO	\$4,500.00	\$22,500	
137	Overhead doors, 3048mm x 2743mm	1	NO	\$15,000.00	\$15,000	
<u>Child Care Centre and EarlyON:</u>						
138	Aluminum framed fully glazed doors including installation, hardware and finish					
138.1	- single, assumed 950mm x 2450mm	4	NO	\$6,200.00	\$24,800	
139	Door hardware supply allowance				Included Above	
140	Barrier free operators	3	NO	\$4,500.00	\$13,500	
<u>Urban Indigenous Education Centre:</u>						
141	Aluminum framed fully glazed doors including installation, hardware and finish					
141.1	- single, assumed 950mm x 2450mm	8	NO	\$6,200.00	\$49,600	
142	Insulated hollow metal door and frame including installation and paint finish					
142.1	- single, assumed 950mm x 2150mm	1	NO	\$3,100.00	\$3,100	
143	Door hardware supply allowance				Included Above	
144	Barrier free operators	2	NO	\$4,500.00	\$9,000	
<u>Pool:</u>						
145	Aluminum framed fully glazed doors including installation, hardware and finish					
145.1	- single, assumed 950mm x 2450mm	1	NO	\$6,200.00	\$6,200	
145.2	- double, assumed 2 - 915mm x 2450mm	1	PR	\$12,000.00	\$12,000	
146	Door hardware supply allowance				Included Above	
147	Barrier free operators	2	NO	\$4,500.00	\$9,000	

No.	Description	Quant.	Unit	Rate	Sub Total	Total
<u>TDSB School Future Addition:</u>						
148	Aluminum framed fully glazed doors including installation, hardware and finish					
148.1	- double, assumed 2 - 915mm x 2450mm	1	PR	\$12,000.00	\$12,000	
149	Door hardware supply allowance				Included Above	
150	Barrier free operators	1	NO	\$4,500.00	\$4,500	
TOTAL FOR EXT. ENCLOSURE - Windows & Entrances		0.07	631	m2	\$1,455.92	\$918,800

A3.4 EXTERIOR ENCLOSURE - Roof Covering**A3.41 - Roofing**TDSB School:

151	2 ply modified bitumen roofing including membrane, vapour barrier, insulation, and sheathing	3,106	m2	\$350.00	\$1,087,100	
152	Green roof including membrane, soil, and growing medium				Included as Separate Cost	
153	Tapered insulation				Included Above	
154	Flashing to vertical surfaces	354	m	\$80.00	\$28,320	
155	Flashing to openings	1	LS	\$4,000.00	\$4,000	
156	Concrete pads and curbs for mechanical equipment	1	LS	\$10,000.00	\$10,000	
157	Allowance for roof fall protection system including welded roof anchors, lifeline cable and testing	1	LS	\$40,000.00	\$40,000	
158	Allowance for roof pavers, assumed 20% of roof area	621	m2	\$80.00	\$49,696	

Child Care Centre and EarlyON:

159	2 ply modified bitumen roofing including membrane, vapour barrier, insulation, and sheathing	384	m2	\$350.00	\$134,400	
160	Tapered insulation				Included Above	
161	Flashing to vertical surfaces	28	m	\$80.00	\$2,240	
162	Flashing to openings	1	LS	\$2,000.00	\$2,000	
163	Concrete pads and curbs for mechanical equipment	1	LS	\$2,000.00	\$2,000	
164	Allowance for roof fall protection system including welded roof anchors, lifeline cable and testing		LS	\$20,000.00	\$0	
165	Allowance for roof pavers, assumed 20% of roof area	77	m2	\$80.00	\$6,144	

Urban Indigenous Education Centre:

166	2 ply modified bitumen roofing including membrane, vapour barrier, insulation, and sheathing	1,077	m2	\$350.00	\$376,950	
167	Tapered insulation				Included Above	
168	Flashing to vertical surfaces	5	m	\$80.00	\$400	
169	Flashing to openings	1	LS	\$2,000.00	\$2,000	
170	Concrete pads and curbs for mechanical equipment	1	LS	\$2,000.00	\$2,000	
171	Allowance for roof fall protection system including welded roof anchors, lifeline cable and testing	1	LS	\$20,000.00	\$20,000	
172	Allowance for roof pavers, assumed 20% of roof area	215	m2	\$80.00	\$17,232	

No.	Description	Quant.	Unit	Rate	Sub Total	Total
	<u>Pool:</u>					
173	2 ply modified bitumen roofing including membrane, vapour barrier, insulation, and sheathing	151	m2	\$350.00	\$52,850	
174	Green roof	789	m2	\$0.00	\$0	
175	Tapered insulation				Included Above	
176	Flashing to openings	1	LS	\$2,000.00	\$2,000	
177	Concrete pads and curbs for mechanical equipment	1	LS	\$4,000.00	\$4,000	
178	Allowance for roof fall protection system including welded roof anchors, lifeline cable and testing	1	LS	\$20,000.00	\$20,000	
179	Allowance for roof pavers	237	m2	\$80.00	\$18,960	
	TOTAL FOR EXT. ENCLOSURE - Roof Covering	0.58	5,507 m2	\$341.80	\$1,882,292	

A3.5 EXTERIOR ENCLOSURE - Projections

A3.51 - Projections

TDSB School:

180	Exterior wall parapets including roofing membrane, cant strip, blocking, and prefinished cap flashing (exterior wall assembly included A3.2)	566	m	\$240.00	\$135,840	
181	Soffit finish to roof overhangs, assumed wood	1	LS	\$20,000.00	\$20,000	
182	Roof ladder, galvanized including safety guard, assumed	6	NO	\$900.00	\$5,400	
183	Bollards at overhead doors, assumed	2	NO	\$1,000.00	\$2,000	
184	Sun airfoil blades, including					
184.1	- assumed 800mm x 800mm	12	NO	\$300.00	\$3,600	
184.2	- assumed 1600mm x 800mm	9	NO	\$610.00	\$5,490	
184.3	- assumed 2400mm x 800mm	1	NO	\$910.00	\$910	
184.4	- assumed 3200mm x 800mm	18	NO	\$1,210.00	\$21,780	
184.5	- assumed 4000mm x 800mm	5	NO	\$1,510.00	\$7,550	
185	Roof terrace, including:				Excluded	
185.1	- pavers on adjustable pedestal					
185.2	- furniture					
185.3	- landscaping					
185.4	- small potted trees					
185.5	- large potted trees					
185.6	- planter boxes, assumed 3500mm x 600mm x 762mm high					
186	Exterior building signature signage	1	LS	\$60,000.00	\$60,000	
	<u>Child Care Centre and EarlyON:</u>					
187	Exterior wall parapets including roofing membrane, cant strip, blocking, and prefinished cap flashing (exterior wall assembly included A3.2)	96	m	\$240.00	\$23,040	
188	Roof ladder, galvanized including safety guard, assumed	1	NO	\$900.00	\$900	
189	Sun airfoil blades, assumed 1600mm x 800mm	3	NO	\$610.00	\$1,830	

No.	Description	Quant.	Unit	Rate	Sub Total	Total
<u>Urban Indigenous Education Centre:</u>						
190	Exterior wall parapets including roofing membrane, cant strip, blocking, and prefinished cap flashing (exterior wall assembly included A3.2)	215	m	\$240.00	\$51,600	
191	Roof ladder, galvanized including safety guard, assumed	1	NO	\$900.00	\$900	
<u>Pool:</u>						
192	Exterior wall parapets including roofing membrane, cant strip, blocking, and prefinished cap flashing (exterior wall assembly included A3.2)	148	m	\$240.00	\$35,520	
193	Roof ladder, galvanized including safety guard, assumed	1	NO	\$900.00	\$900	
TOTAL FOR EXT. ENCLOSURE - Projections		1.00	9,513	m2	\$35.83	\$340,840

B. INTERIORS

B1.1 PARTITIONS & DOORS - Partitions

B1.11 - Fixed Partitions

TDSB School:

194	CMU walls, assumed 10%	409	m2	\$350.00	\$143,115	
195	Gypsum board partitions (P1), including:	3,680	m2	\$171.00		\$629,297
195.1	- gypsum board	3,680	m2	\$33.00	\$121,443	
195.2	- metal stud	3,680	m2	\$80.00	\$294,408	
195.3	- sound attenuation batts	3,680	m2	\$25.00	\$92,003	
195.4	- gypsum board	3,680	m2	\$33.00	\$121,443	
196	Hollow metal framed glazed partitions, assumed	17	m2	\$800.00	\$13,360	
197	Rough carpentry	5,767	m2	\$10.00	\$57,670	
198	Caulking, sealing, and firestopping	5,767	m2	\$8.00	\$46,136	

Child Care Centre and EarlyON:

199	CMU walls, assumed 10%	58	m2	\$350.00	\$20,335	
200	Gypsum board partitions (P1), including:	523	m2	\$171.00		\$89,416
200.1	- gypsum board	523	m2	\$33.00	\$17,256	
200.2	- metal stud	523	m2	\$80.00	\$41,832	
200.3	- sound attenuation batts	523	m2	\$25.00	\$13,073	
200.4	- gypsum board	523	m2	\$33.00	\$17,256	
201	Rough carpentry	802	m2	\$10.00	\$8,020	
202	Caulking, sealing, and firestopping	802	m2	\$8.00	\$6,416	

Urban Indigenous Education Centre:

203	CMU walls, assumed 10%	68	m2	\$350.00	\$23,765	
204	Gypsum board partitions (P1), including:	611	m2	\$171.00		\$104,498
204.1	- gypsum board	611	m2	\$33.00	\$20,166	
204.2	- metal stud	611	m2	\$80.00	\$48,888	
204.3	- sound attenuation batts	611	m2	\$25.00	\$15,278	
204.4	- gypsum board	611	m2	\$33.00	\$20,166	
205	Rough carpentry	1,077	m2	\$10.00	\$10,770	
206	Caulking, sealing, and firestopping	1,077	m2	\$8.00	\$8,616	

No.	Description	Quant.	Unit	Rate	Sub Total	Total
<u>Pool:</u>						
207	CMU walls, assumed 60%	89	m2	\$350.00	\$31,080	
208	Gypsum board partitions (P1), including:	59	m2	\$161.00		\$9,531
208.1	- gypsum board	59	m2	\$33.00	\$1,954	
208.2	- metal stud	59	m2	\$80.00	\$4,736	
208.3	- sound attenuation batts	59	m2	\$15.00	\$888	
208.4	- gypsum board	59	m2	\$33.00	\$1,954	
209	Rough carpentry	1,064	m2	\$15.00	\$15,960	
210	Caulking, sealing, and firestopping	1,064	m2	\$20.00	\$21,280	
<u>TDSB School Future Addition:</u>						
211	CMU walls, assumed 40%	221	m2	\$350.00	\$77,280	
212	Gypsum board partitions (P1), including:	331	m2	\$161.00		\$53,323
212.1	- gypsum board	331	m2	\$33.00	\$10,930	
212.2	- metal stud	331	m2	\$80.00	\$26,496	
212.3	- sound attenuation batts	331	m2	\$15.00	\$4,968	
212.4	- gypsum board	331	m2	\$33.00	\$10,930	
213	Rough carpentry	803	m2	\$15.00	\$12,045	
214	Caulking, sealing, and firestopping	803	m2	\$20.00	\$16,060	
<u>B1.12 - Moveable Partitions</u>						
<u>NIL</u>						
<u>B1.13 - Structural Partitions & Shear Walls</u>						
<u>TDSB School:</u>						
215	Concrete partitions at elevator and stair, including	258	m2	\$913.63		\$235,716
215.1	- formwork	516	m2	\$240.00	\$123,840	
215.2	- reinforcing steel, assumed 140 kg/m3	14	TN	\$3,600.00	\$50,400	
215.3	- concrete, assumed 400mm, 25MPa	103	m3	\$414.00	\$42,642	
215.4	- metal furring	258	m2	\$40.00	\$10,320	
215.5	- gypsum board	258	m2	\$33.00	\$8,514	
TOTAL FOR INTERIOR PARTITIONS & DOORS - Partitions		0.66	6,324	m2	\$258.34	\$1,633,690
<u>B1.2 PARTITIONS & DOORS - Interior Doors</u>						
<u>B1.21 - Interior Doors & Hardware</u>						
<u>TDSB School:</u>						
216	Aluminum framed fully glazed doors including installation, hardware and finish					
216.1	- single, 950mm x 2450mm	5	NO	\$6,000.00	\$30,000	
216.2	- double, 2 - 915mm x 2450mm	3	PR	\$12,000.00	\$36,000	
217	Hollow metal door and frame including installation and paint finish					
217.1	- single, 950mm x 2150mm	39	NO	\$2,300.00	\$89,700	
217.2	- double, 2 - 915mm x 2150mm	14	PR	\$4,400.00	\$61,600	
218	Door hardware supply allowance	67	NO	\$1,800.00	\$120,600	
219	Barrier free operators, assumed to all barrier free washrooms, change rooms	10	NO	\$4,500.00	\$45,000	
220	Glazed sidelights and windows	61	m2	\$800.00	\$48,800	
221	View panels, door glazing, and transoms	1	LS	\$13,000.00	\$13,000	

No.	Description	Quant.	Unit	Rate	Sub Total	Total
<u>Child Care Centre and EarlyON:</u>						
222	Aluminum framed fully glazed doors including installation, hardware and finish					
222.1	- single, 950mm x 2450mm	1	NO	\$6,000.00	\$6,000	
223	Hollow metal door and frame including installation and paint finish					
223.1	- single, 950mm x 2150mm	17	NO	\$2,300.00	\$39,100	
224	Door hardware supply allowance	17	NO	\$1,800.00	\$30,600	
225	Glazed windows	8	m2	\$800.00	\$6,400	
226	Barrier free operators	3	NO	\$4,500.00	\$13,500	
227	View panels, door glazing, and transoms	1	LS	\$3,000.00	\$3,000	
<u>Urban Indigenous Education Centre:</u>						
228	Aluminum framed fully glazed doors including installation, hardware and finish					
228.1	- single, 950mm x 2450mm	1	NO	\$6,000.00	\$6,000	
229	Hollow metal door and frame including installation and paint finish					
229.1	- single, 950mm x 2150mm	15	NO	\$2,300.00	\$34,500	
229.2	- double, 2 - 915mm x 2150mm	3	PR	\$4,400.00	\$13,200	
230	Door hardware supply allowance	21	NO	\$1,800.00	\$37,800	
231	View panels, door glazing, and transoms	1	LS	\$4,000.00	\$4,000	
<u>Pool:</u>						
232	Hollow metal door and frame including installation and paint finish					
232.1	- single, 950mm x 2150mm	2	NO	\$2,300.00	\$4,600	
232.2	- double, 2 - 915mm x 2150mm	2	PR	\$4,400.00	\$8,800	
233	Door hardware supply allowance	6	NO	\$1,800.00	\$10,800	
234	Barrier free operators	2	NO	\$4,500.00	\$9,000	
235	View panels, door glazing, and transoms	1	LS	\$1,000.00	\$1,000	
<u>TDSB School Future Addition:</u>						
236	Hollow metal door and frame including installation and paint finish					
236.1	- single, 968mm x 2150mm	13	NO	\$2,300.00	\$29,900	
236.2	- double, 2 - 968mm x 2150mm	2	PR	\$4,400.00	\$8,800	
237	Door hardware supply allowance	17	NO	\$1,800.00	\$30,600	
238	Barrier free operators	4	NO	\$4,500.00	\$18,000	
239	Glazed sidelights	7	m2	\$550.00	\$3,850	
240	View panels, door glazing, and transoms	1	LS	\$3,000.00	\$3,000	
TOTAL FOR INTERIOR PARTITIONS & DOORS - Doors		0.03	289	m2	\$2,655.68	\$767,150

B2.1 FINISHES - Floor Finishes

B2.11 - Floor Finishes

TDSB School:

241	Allowance for low ranges finishes expect at gym	5,190	m2	\$183.00	\$949,770	
242	Flooring bases					Included above

Child Care Centre and EarlyON:

243	Allowance for low ranges finishes	722	m2	\$78.00	\$56,316	
244	Flooring bases					Included above

No.	Description	Quant.	Unit	Rate	Sub Total	Total
<u>Urban Indigenous Education Centre:</u>						
245	Allowance for low ranges finishes	969	m2	\$60.00	\$58,140	
246	Flooring bases				Included above	
<u>Pool:</u>						
247	Allowance for mid ranges finishes	958	m2	\$132.00	\$126,456	
248	Ceramic tile to lane pool and leisure pool				Included in Aquatics Budget	
249	Flooring bases				Included above	
<u>TDSB School Future Addition:</u>						
250	Concrete sealer only	723	m2	\$20.00	\$14,460	
TOTAL FOR FINISHES - Floor Finishes		0.90	8,562 m2	\$140.75	\$1,205,142	
 <u>B2.2 FINISHES - Ceiling Finishes</u>						
<u>B2.21 - Ceiling Finishes</u>						
<u>TDSB School:</u>						
251	Allowance for low ranges finishes	5,190	m2	\$85.00	\$441,150	
252	Gypsum board bulkheads	1	LS	\$44,000.00	\$44,000	
<u>Child Care Centre and EarlyON:</u>						
253	Allowance for low ranges finishes	722	m2	\$80.00	\$57,760	
254	Gypsum board bulkheads	1	LS	\$6,000.00	\$6,000	
<u>Urban Indigenous Education Centre:</u>						
255	Allowance for low ranges finishes	969	m2	\$65.00	\$62,985	
256	Gypsum board bulkheads	1	LS	\$6,000.00	\$6,000	
<u>Pool:</u>						
257	Allowance for low ranges finishes, assumed expose treated glulam structure at pool area	958	m2	\$82.00	\$78,556	
258	Gypsum board bulkheads	1	LS	\$8,000.00	\$8,000	
<u>TDSB School Future Addition:</u>						
259	No finishes	723	m2		Info Only	
TOTAL FOR FINISHES - Ceiling Finishes		0.90	8,562 m2	\$82.28	\$704,451	

No.	Description	Quant.	Unit	Rate	Sub Total	Total
<u>B2.3 FINISHES - Wall Finishes</u>						
<u>B2.31 - Wall Finishes</u>						
<u>TDSB School:</u>						
260	Allowance for mid ranges finishes	10,381	m2	\$106.00	\$1,100,386	
261	Allowance for feature walls				Excluded	
<u>Child Care Centre and EarlyON:</u>						
262	Allowance for mid ranges finishes	1,444	m2	\$46.00	\$66,424	
263	Allowance for feature walls				Excluded	
<u>Urban Indigenous Education Centre:</u>						
264	Allowance for mid ranges finishes	1,939	m2	\$57.00	\$110,523	
265	Allowance for feature walls				Excluded	
<u>Pool:</u>						
266	Allowance for mid ranges finishes	1,277	m2	\$118.00	\$150,686	
267	Ceramic tile to Pool				Included in pool budget	
<u>TDSB School Future Addition:</u>						
268	Allowance for mid ranges finishes	964	m2		Info Only	
TOTAL FOR FINISHES - Wall Finishes		1.68	16,005	m2	\$89.22	\$1,428,019

B3.1 FITTINGS & EQUIPMENT - Fittings & Fixtures**B3.11 - Miscellaneous Metals****\$287,150**TDSB School:

269	Miscellaneous metals including lintels, bracing, and so forth	5,767	m2	\$10.00	\$57,670	
270	Wall mounted handrails at stair wall, assumed painted metal	80	m	\$250.00	\$20,000	
271	Floor mounted handrails and balustrades at featured stairs, assumed glazed	205	m	\$350.00	\$71,750	
272	Floor mounted handrails and balustrades at featured stairs, assumed glazed	49	m	\$1,800.00	\$88,200	
273	Elevator pit ladder	1	NO	\$1,000.00	\$1,000	
274	Elevator hoist beam	1	NO	\$1,500.00	\$1,500	
275	Wall mounted bracket to sinks	7	PR	\$250.00	\$1,750	

Child Care Centre and EarlyON:

276	Miscellaneous metals including lintels, bracing, and so forth	802	m2	\$10.00	\$8,020	
277	Wall mounted handrails at stair wall, assumed painted metal	34	m	\$250.00	\$8,500	
278	Floor mounted handrails and balustrades at stair wells, assumed painted metal	21	m	\$350.00	\$7,350	

Urban Indigenous Education

279	Miscellaneous metals including lintels, bracing, and so forth	1,077	m2	\$10.00	\$10,770	
-----	---	-------	----	---------	----------	--

No.	Description	Quant.	Unit	Rate	Sub Total	Total
	<u>Pool</u>					
280	Miscellaneous metals including lintels, bracing, and so forth	1,064	m2	\$10.00	\$10,640	
281	Floor mounted handrails to pool, assumed stainless steel				Included in Pool Budget	
282	Pool ladders, assumed stainless steel				Included in Pool Budget	
	<u>TDSB School Future Addition:</u>					
283	NIL					
	<u>B3.12 - Millwork</u>					\$320,300
	<u>TDSB School:</u>					
284	Washroom vanities counters at washroom rooms, assumed solid surface	14	m	\$1,400.00	\$19,600	
285	Reception desk, assumed solid surface	4	m	\$4,500.00	18,000	
286	Allowance for unspecified millwork	1	LS	\$100,000.00	\$100,000	
	<u>Child Care Centre and EarlyON:</u>					
287	Washroom vanities counters at washroom rooms, assumed solid surface	3	m	\$1,400.00	\$4,200	
288	Kitchen type counter with lower cabinets	39	m	\$1,500.00	\$58,500	
289	Allowance for unspecified millwork	1	LS	\$40,000.00	\$40,000	
	<u>Urban Indigenous Education</u>					
290	Allowance for unspecified millwork	1	LS	\$20,000.00	\$20,000	
	<u>Pool</u>					
291	Allowance for unspecified millwork	1	LS	\$60,000.00	\$60,000	
	<u>TDSB School Future Addition:</u>					
292	NIL					
	<u>B3.13 - Specialties</u>					\$835,230
	<u>TDSB School:</u>					
293	Washroom partitions, assumed powder coated steel					
293.1	- standard	20	NO	\$1,200.00	\$24,000	
293.2	- barrier free	9	NO	\$1,500.00	\$13,500	
293.3	- urinals	1	NO	\$500.00	\$500	
294	Washroom accessories including:					
294.1	- toilet paper dispenser	26	NO	\$75.00	\$1,950	
294.2	- soap dispenser	20	NO	\$100.00	\$2,000	
294.3	- paper towel dispenser	12	NO	\$450.00	\$5,400	
294.4	- grab bars	19	PR	\$450.00	\$8,550	
294.5	- swing grab bars	9	PR		\$0	
294.6	- sanitary dispenser				Excluded	
294.7	- sanitary disposal	2	NO	\$60.00	\$120	
294.8	- shower soap dish	14	NO	\$40.00	\$560	
294.9	- fold down shower seat	2	NO	\$400.00	\$800	
294.10	- shower curtain and rod	14	NO	\$40.00	\$560	
294.11	- shower grab bars	2	PR	\$250.00	\$500	
294.12	- mirrors	38	NO	\$400.00	\$15,200	
294.13	- waste receptacles	12	NO	\$400.00	\$4,800	
294.14	- hand dryers	4	NO	\$1,800.00	\$7,200	
294.15	- adult change table				Excluded	
294.16	- coat hooks	15	NO	\$60.00	\$900	

No.	Description	Quant.	Unit	Rate	Sub Total	Total
295	Lockers, assumed three tier power coated steel lockers, 305mm W x 380mm D x 1800mm H at north east corridor on first and second level and at changing rooms on third and fourth level	173	NO	\$500.00	\$86,500	
296	Allowance for Tack boards and White boards class rooms, HSP rooms, FNST rooms, head start center rooms, special education room, visual arts, drama/dance, language and music rooms	24	NO	\$1,000.00	\$24,000	
297	Entrance pedimat	22	m2	\$1,400.00	\$30,800	
298	Allowance for tactile warning strips, assumed at stairs	1	LS	\$30,000.00	\$30,000	
299	Comer guards, assumed stainless steel	34	NO	\$350.00	\$11,900	
300	Window shades, assumed manually operated	218	m2	\$90.00	\$19,620	
301	Interior signage (doors only)	67	NO	\$150.00	\$10,050	
302	Allowance for wayfinding signage	1	LS	\$100,000.00	\$100,000	
303	Nookpod					Excluded
304	Bench cubbies	37	m	\$4,000.00	\$148,000	
305	Acoustic panels	1	LS	\$150,000.00	\$150,000	
	<u>Child Care Centre and EarlyON:</u>					
306	Washroom partitions, assumed powder coated steel					
306.1	- privacy screen	3	NO	\$500.00	\$1,500	
307	Washroom accessories including:					
307.1	- toilet paper dispenser	4	NO	\$75.00	\$300	
307.2	- soap dispenser	4	NO	\$100.00	\$400	
307.3	- paper towel dispenser	4	NO	\$450.00	\$1,800	
307.4	- grab bars	2	PR	\$450.00	\$900	
307.5	- mirrors	4	NO	\$400.00	\$1,600	
307.6	- waste receptacles	4	NO	\$400.00	\$1,600	
307.7	- hand dryers	2	NO	\$1,800.00	\$3,600	
307.8	- adult change table					Excluded
308	Allowance for Tack boards and White boards class rooms, HSP rooms, FNST rooms, head start center rooms, special education room, visual arts, drama/dance, language and music rooms	4	NO	\$1,000.00	\$4,000	
309	Allowance for tactile warning strips, assumed at stairs	1	LS	\$5,000.00	\$5,000	
310	Comer guards, assumed stainless steel	6	NO	\$350.00	\$2,100	
311	Window shades, assumed manually operated	62	m2	\$90.00	\$5,580	
312	Interior signage (doors only)	17	NO	\$150.00	\$2,550	
313	Allowance for wayfinding signage	1	LS	\$20,000.00	\$20,000	
	<u>Urban Indigenous Education</u>					
314	Allowance for Tack boards and White boards class rooms, HSP rooms, FNST rooms, head start center rooms, special education room, visual arts, drama/dance, language and music rooms	10	NO	\$1,000.00	\$10,000	
315	Window shades, assumed manually operated	70	m2	\$90.00	\$6,300	
316	Interior signage (doors only)	21	NO	\$150.00	\$3,150	
317	Allowance for wayfinding signage	1	LS	\$10,000.00	\$10,000	

No.	Description	Quant.	Unit	Rate	Sub Total	Total
<u>Pool</u>						
318	Washroom partitions, assumed powder coated steel					
318.1	- standard	20	NO	\$1,200.00	\$24,000	
319	change rooms accessories including:					
319.1	- shower soap dish	8	NO	\$40.00	\$320	
319.2	- fold down shower seat	3	NO	\$400.00	\$1,200	
319.3	- shower curtain and rod	8	NO	\$40.00	\$320	
319.4	- shower grab bars	2	PR	\$250.00	\$500	
319.5	- mirrors	8	NO	\$400.00	\$3,200	
319.6	- coat hooks	20	NO	\$60.00	\$1,200	
320	Lockers, assumed three tier power coated steel lockers, 305mm W x 380mm D x 1800mm H at north east corridor on first and second level and at changing rooms on third and fourth level	38	NO	\$500.00	\$19,000	
321	Window shades, assumed manually operated	20	m2	\$90.00	\$1,800	
322	Interior signage (doors only)	6	NO	\$150.00	\$900	
323	Allowance for wayfinding signage	1	LS	\$5,000.00	\$5,000	
<u>TDSB School Future Addition:</u>						
324	NIL					
B3.14 - Furniture						\$0
325	Loose furniture				Excluded	
TOTAL FOR FITTINGS & EQUIP. - Fittings & Fixtures		1.00	9,513	m2	\$151.65	\$1,442,680
 <u>B3.2 FITTINGS & EQUIPMENT - Equipment</u>						
<u>B3.21 - Equipment</u>						
<u>TDSB School:</u>						
326	Kitchen equipment				Excluded	
327	Office and classroom equipment				Excluded	
328	Wrestling equipment				Excluded	
329	Gymnasium equipment					
329.1	- Timing and Scorekeeping, assumed 6NO	6	NO	\$14,000.00	\$84,000	
329.2	- Gymnasium divider	1	LS	\$24,000.00	\$24,000	
329.3	- Basketball Backstops & Volleyball/Badminton Poles	1	LS	\$92,000.00	\$92,000	
329.4	- Volleyball equipment					
329.5	- Badminton equipment					
329.6	- Pickle ball equipment					
329.7	- Shuffleboard equipment					
329.8	- Basketball equipment (6 x ceiling mounted, retractable basketball backstops)					
329.9	- Telescopic bleachers	39	m	\$2,400.00	\$93,600	
330	AV equipment, including:	5,767	m2	\$4.00	\$23,068	
331	Services & Warranty	5,767	m2	\$3.60	\$20,761	
331.1	- av systems mock-up					
331.2	- training sessions					
331.3	- warranty, support & maintenance (1-year standard)					
331.4	- close-out documentation					

No.	Description	Quant.	Unit	Rate	Sub Total	Total
<u>Child Care Centre and EarlyON:</u>						
332	Kitchen equipment				Excluded	
333	Office and classroom equipment				Excluded	
334	AV equipment, including:	802	m2	\$4.00	\$3,208	
335	Services & Warranty	802	m2	\$3.60	\$2,887	
335.1	- av systems mock-up					
335.2	- training sessions					
335.3	- warranty, support & maintenance (1-year standard)					
335.4	- close-out documentation					
<u>Urban Indigenous Education Centre:</u>						
336	Office and classroom equipment				Excluded	
337	AV equipment, including:	1,077	m2	\$4.00	\$4,308	
338	Services & Warranty	1,077	m2	\$3.60	\$3,877	
338.1	- av systems mock-up					
338.2	- training sessions					
338.3	- warranty, support & maintenance (1-year standard)					
338.4	- close-out documentation					
<u>Pool including change rooms:</u>						
339	Leisure and Lane pool, including:	450	m2	\$7,200.00	\$3,240,000	
339.1	- Concrete Swimming Pools Tanks and Decks Works including Formwork, reinforcing, accessories, poured concrete, waterproofing admixture, water stops, inserts and control joints					
339.2	- Concrete Swimming Pools Tiling Finishes					
339.3	- Swimming Pools Accessories					
339.4	- Swimming Pools Equipment					
339.5	- Swimming Pools Commissioning & Submittals					
339.6	- Swimming Pool Warranties					
340	AV equipment, including:	1,064	m2	\$4.00	\$4,256	
341	Services & Warranty	1,064	m2	\$3.60	\$3,830	
341.1	- av systems mock-up					
341.2	- training sessions					
341.3	- warranty, support & maintenance (1-year standard)					
341.4	- close-out documentation					
<u>TDSB School Future Addition:</u>						
342	NIL					
TOTAL FOR FITTINGS & EQUIP. - Equipment		1.00	9,513	m2	\$378.41	\$3,599,796
<u>B3.3 FITTINGS & EQUIPMENT - Conveying Systems</u>						
<u>B3.31 - Elevators</u>						
<u>TDSB School:</u>						
343	Elevator, hydraulic, including:					
343.1	- Passenger elevator, serving 3 stops	3	STP	\$55,000.00	\$165,000	
TOTAL FOR FITTINGS & EQUIP. - Conveying Systems		1.00	9,513	m2	\$17.34	\$165,000

No.	Description	Quant.	Unit	Rate	Sub Total	Total
C1. SERVICES - MECHANICAL						
<u>C1.1 Plumbing & Drainage</u>						
<u>C1.11 - Plumbing Fixtures</u>						
						\$247,338
344	Commercial quality, water conserving fixtures and fittings serving new area c/w drain/waste assembly fittings, hoses, mounting accessories and hardware for fully functional operation:					
344.1	- Water closet - wall mounted c/w electronic flush valve					Included
344.2	- Urinal - wall hung c/w electronic flush valve					Included
344.3	- Lavatories - wall hung c/w electronic no touch faucet					Included
344.4	- Shower assembly - hand held shower c/w manual mixing valve and trim					Included
344.5	- Janitor mop sink - Precast floor mounted, faucet with hose set.					Included
344.6	- Eyewash station for every janitor mop room					Included
344.7	- Classroom counter sinks - double compartments sinks					Included
344.8	- Kitchen counter sinks - double compartments sinks					Included
344.9	- Drinking water fountain - wall mounted, barrier free					Included
344.10	- TDSB School	5,767	m2	\$26.00	\$149,942	
344.11	- Child Care Centre and EarlyOn	802	m2	\$26.00	\$20,852	
344.12	- Urban Indigenous Education	1,077	m2	\$26.00	\$28,002	
344.13	- Pool	1,064	m2	\$26.00	\$27,664	
344.14	- TDSB School Future Addition	803	m2	\$26.00	\$20,878	
<u>C1.12 - Domestic Water</u>						
						\$523,215
345	Allowance to provide new domestic cold/hot/recirculation piping to serve the building new washrooms including all necessary valving and accessories.					
345.1	- Incoming domestic water service c/w backflow preventor					Included
345.2	- Packaged duplex booster pump set					Included
345.3	- Indirect hot water storage tank equal to PVI (capacity unknown)					Included
345.4	- Recirculation loop and recirculation pump					Included
345.5	- Replaceable bladder expansion tank					Included
345.6	- Thermostatic mixing valve (electronic type)					Included
345.7	- Domestic water piping, copper type "L" c/w joints, fittings and supports					Included
345.8	- Thermal insulation for above piping					Included
345.9	- Isolation, check and balancing valves					Included
345.10	- Exterior non-freeze hosebibbs					Included
345.11	- Interior hose bibbs serving washrooms and mech rooms					Included
345.12	- Piping accessories such as shock absorbers, vents, drain valves, etc.					Included
345.13	- Make-up water for hydronic system, swimming pool c/w BFP					Included
345.14	- Electronic trap seal primers c/w PVC tubing					Included
345.15	- TDSB School	5,767	m2	\$55.00	\$317,185	
345.16	- Child Care Centre and EarlyOn	802	m2	\$55.00	\$44,110	
345.17	- Urban Indigenous Education	1,077	m2	\$55.00	\$59,235	
345.18	- Pool	1,064	m2	\$55.00	\$58,520	
345.19	- TDSB School Future Addition	803	m2	\$55.00	\$44,165	
<u>C1.13 - Sanitary Waste & Vent</u>						
						\$313,929
346	Allowance to provide new sanitary sewer piping to serve the building washrooms and shower areas including all necessary drains.					
346.1	- Connection to outgoing sanitary sewer line c/w main cleanout					Included
346.2	- Below grade sanitary sewer piping, PVC / DWV copper c/w fittings					Included
346.3	- Excavation, trenching, bedding and backfilling					Included
346.4	- Above grade sanitary piping copper DWV/cast iron hubless system					Included
346.5	- Above grade vent piping, copper DWV c/w joints, fittings and supports					Included
346.6	- Floor / Funnel Floor / trench drains c/w trap primer assembly					Included
346.7	- Cleanouts and line items					Included
346.8	- TDSB School	5,767	m2	\$33.00	\$190,311	
346.9	- Child Care Centre and EarlyOn	802	m2	\$33.00	\$26,466	
346.10	- Urban Indigenous Education	1,077	m2	\$33.00	\$35,541	
346.11	- Pool	1,064	m2	\$33.00	\$35,112	
346.12	- TDSB School Future Addition	803	m2	\$33.00	\$26,499	

No.	Description	Quant.	Unit	Rate	Sub Total	Total
<u>C1.14 - Storm</u>						\$266,364
347	Allowance for full flow rain/storm water drainage system serving main and ancillary roofs c/w roof drains, leaders and laterals					
347.1	- TDSB School	5,767	m2	\$28.00	\$161,476	
347.2	- Child Care Centre and EarlyOn	802	m2	\$28.00	\$22,456	
347.3	- Urban Indigenous Education	1,077	m2	\$28.00	\$30,156	
347.4	- Pool	1,064	m2	\$28.00	\$29,792	
347.5	- TDSB School Future Addition	803	m2	\$28.00	\$22,484	
<u>C1.15 - Natural Gas</u>						\$66,591
348	Allowance for natural gas system to boilers, water heaters and generator - cost prorated to all areas.					
348.1	- TDSB School	5,767	m2	\$7.00	\$40,369	
348.2	- Child Care Centre and EarlyOn	802	m2	\$7.00	\$5,614	
348.3	- Urban Indigenous Education	1,077	m2	\$7.00	\$7,539	
348.4	- Pool	1,064	m2	\$7.00	\$7,448	
348.5	- TDSB School Future Addition	803	m2	\$7.00	\$5,621	
<u>C1.16 - Specialty Systems:</u>						\$15,000
<u>C1.16.1 - Irrigation</u>						\$15,000
349	Provisional sum allowance for Irrigation system to green roof c/w valves, drip line, drip elements, controller and the like				See separate estimate	
350	Provisional sum allowance for Irrigation system to green roof terrace garden c/w valves, drip line, drip elements, controller and the like	1	LS	\$15,000.00	\$15,000	
<u>C1.17 - Miscellaneous Works and General Accounts</u>						\$214,900
351	Supervision, job set up, clean up, small tools, rentals, submittal, permits & inspections, site and office, overhead and profit, etc.	1	NO	\$128,900.00	\$128,900	
352	Supervision, job set up, clean up, small tools, rentals, submittal, permits & inspections, site and office, overhead and profit, etc.	1	NO	\$17,900.00	\$17,900	
353	Supervision, job set up, clean up, small tools, rentals, submittal, permits & inspections, site and office, overhead and profit, etc.	1	NO	\$24,100.00	\$24,100	
354	Supervision, job set up, clean up, small tools, rentals, submittal, permits & inspections, site and office, overhead and profit, etc.	1	NO	\$23,800.00	\$23,800	
355	Supervision, job set up, clean up, small tools, rentals, submittal, permits & inspections, site and office, overhead and profit, etc.	1	NO	\$20,200.00	\$20,200	
TOTAL FOR MECHANICAL - Plumbing & Drainage		1.00	9,513	m2	\$173.17	\$1,647,337
<u>C1.2 Fire Protection</u>						
<u>C1.21 - Standpipe</u>						\$190,130
356	Incoming fire water services c/w BFP and double check valve assembly	1	NO	\$15,000.00	\$15,000	
357	An electric fire water booster pump assembly	1	NO	\$75,000.00	\$75,000	
358	Fire department connection c/w check valve	1	NO	\$5,000.00	\$5,000	
359	Fire hose coverage is provided at each side of stage connected to sprinkler mains. Fire hose valves are provided at each level at egress stairs and supplemented throughout as required.					
359.1	- TDSB School	5,767	m2	\$10.00	\$57,670	
359.2	- Child Care Centre and EarlyOn	802	m2	\$10.00	\$8,020	
359.3	- Urban Indigenous Education	1,077	m2	\$10.00	\$10,770	
359.4	- Pool	1,064	m2	\$10.00	\$10,640	
359.5	- TDSB School Future Addition	803	m2	\$10.00	\$8,030	

No.	Description	Quant.	Unit	Rate	Sub Total	Total		
<u>C1.22 - Sprinklers</u>						\$321,377		
360	A complete sprinkler system to ordinary hazard NFPA 13 standards consisting of supervised valve & alarm check valve assembly, sch.40 black steel piping c/w joints, fittings, supports, drops and/or sprigs, & upright/concealed sprinkler heads will be provided. supervised sprinkler shutoff valve, flow switch, and test valve arrangement shall be provided at each level.							
360.1	- TDSB School	5,767	m2	\$33.00	\$190,311			
360.2	- Child Care Centre and EarlyOn	802	m2	\$33.00	\$26,466			
360.3	- Urban Indigenous Education	1,077	m2	\$33.00	\$35,541			
360.4	- Pool	1,064	m2	\$40.00	\$42,560			
360.5	- TDSB School Future Addition	803	m2	\$33.00	\$26,499			
<u>C1.24 - Fire Extinguisher</u>						\$6,000		
361	Fire extinguishers will be provided and located in accordance with Ontario Fire Code and City of Toronto requirements							
361.1	- TDSB School	14	NO	\$250.00	\$3,500			
361.2	- Child Care Centre and EarlyOn	2	NO	\$250.00	\$500			
361.3	- Urban Indigenous Education	3	NO	\$250.00	\$750			
361.4	- Pool	3	NO	\$250.00	\$750			
361.5	- TDSB School Future Addition	2	NO	\$250.00	\$500			
<u>C1.25 - Miscellaneous Works and General Accounts</u>						\$0		
362	Supervision, site office, head office overheads, submittals, clean up, small tools, rentals and the like, rigging and preparation of 3D co-ordination drawings				Included in above			
TOTAL FOR MECHANICAL - Fire Protection		1.00	9,513	m2	\$54.40	\$517,507		
<u>C1.3 Heating, Ventilation & Air Conditioning</u>								
<u>C1.31 - Liquid Heat Transfer (Heating)</u>						\$1,522,080		
363	Allowance for heating water plant including: natural gas boilers, circulation pumps, expansion tanks, air separator, chemical treatment plant, perimeter radiators, cabinet heaters, distribution pipes, line valves and hook-up connections							
363.1	- TDSB School	5,767	m2	\$160.00	\$922,720			
363.2	- Child Care Centre and EarlyOn	802	m2	\$160.00	\$128,320			
363.3	- Urban Indigenous Education	1,077	m2	\$160.00	\$172,320			
363.4	- Pool	1,064	m2	\$160.00	\$170,240			
363.5	- TDSB School Future Addition	803	m2	\$160.00	\$128,480			
<u>C1.34 - Air Distribution</u>						\$4,791,007		
TDSB School		5,767		m2				
364	Heat recovery units - variable air volume unit consisting of dampers, mixing section, filters, glycol heating coil, split dx cooling with remote condenser, enthalpy wheel, supply fan with VSD, return fan with VSD, safeties and accessories - equal to Engineered Air				46,540	CFM	\$22.00	\$1,023,880
365	Allowance for air distribution system including:							
365.1	- VAV units	47	NO	\$1,500.00	\$69,810			
365.2	- Galvanized steel sheet metal distribution c/w thermal insulation	18,300	KG	\$26.00	\$475,800			
365.3	- Thermal insulation	2,820	m2	\$50.00	\$141,000			
365.4	- Air diffusion devices	5,767	m2	\$18.00	\$103,806			
365.5	- Motorized dampers	1	LS	\$10,000.00	\$10,000			
365.6	- Fire dampers	1	LS	\$10,000.00	\$10,000			
365.7	- Ductwork components such as dampers, turning vanes and duct connector	1	NO	\$47,580.00	\$47,580			

No.	Description	Quant.	Unit	Rate	Sub Total	Total
Child Care Centre and EarlyOn		802 m2				
366	Heat recovery units - variable air volume unit consisting of dampers, mixing section, filters, glycol heating coil, split dx cooling with remote condenser, enthalpy wheel, supply fan with VSD, return fan with VSD, safeties and accessories - equal to Engineered Air	6,500	CFM	\$22.00	\$143,000	
367	Allowance for air distribution system including:					
367.1	- VAV units	7	NO	\$1,500.00	\$9,750	
367.2	- Galvanized steel sheet metal distribution c/w thermal insulation	2,900	KG	\$26.00	\$75,400	
367.3	- Thermal insulation	450	m2	\$50.00	\$22,500	
367.4	- Air diffusion devices	802	m2	\$18.00	\$14,436	
367.5	- Motorized dampers	1	LS	\$5,000.00	\$5,000	
367.6	- Fire dampers	1	LS	\$5,000.00	\$5,000	
367.7	- Ductwork components such as dampers, turning vanes and duct connector	1	NO	\$7,540.00	\$7,540	
Urban Indigenous Education		1,077 m2				
368	Heat recovery units - variable air volume unit consisting of dampers, mixing section, filters, glycol heating coil, split dx cooling with remote condenser, enthalpy wheel, supply fan with VSD, return fan with VSD, safeties and accessories - equal to Engineered Air	8,700	CFM	\$22.00	\$191,400	
369	Allowance for air distribution system including:					
369.1	- VAV units	9	NO	\$1,500.00	\$13,050	
369.2	- Galvanized steel sheet metal distribution c/w thermal insulation	4,000	KG	\$26.00	\$104,000	
369.3	- Thermal insulation	620	m2	\$50.00	\$31,000	
369.4	- Air diffusion devices	1,077	m2	\$18.00	\$19,386	
369.5	- Motorized dampers	1	LS	\$5,000.00	\$5,000	
369.6	- Fire dampers	1	LS	\$5,000.00	\$5,000	
369.7	- Ductwork components such as dampers, turning vanes and duct connector	1	NO	\$10,400.00	\$10,400	
Pool Addition		1,064 m2				
370	100% Outdoor constant air volume dehumidification/Natorium unit c/w mixing dampers, mixing section, filters, split dx cooling with remote condenser, glycol heating coil, reheat coil, exhaust air heat recovery coil, associated outside air pre-heat coil, supply and return fans	31,900	CFM	\$40.00	\$1,276,000	
371	Allowance for air distribution system including terminal units including:					
371.1	- Aluminum ductwork to pool / change room areas	7,975	KG	\$75.00	\$598,125	
371.2	- Air diffusion devices	1,064	m2	\$50.00	\$53,200	
371.3	- Motorized dampers	1	LS	\$5,000.00	\$5,000	
371.4	- Fire dampers	1	LS	\$5,000.00	\$5,000	
371.5	- Ductwork components such as dampers, turning vanes and duct connector	1	NO	\$17,900.00	\$17,900	
TDSB School Future Addition		803 m2				
372	Heat recovery units - variable air volume unit consisting of dampers, mixing section, filters, glycol heating coil, split dx cooling with remote condenser, enthalpy wheel, supply fan with VSD, return fan with VSD, safeties and accessories - equal to Engineered Air	6,900	CFM	\$22.00	\$151,800	
373	Allowance for air distribution system including:					
373.1	- VAV units	7	NO	\$1,500.00	\$10,350	
373.2	- Galvanized steel sheet metal distribution c/w thermal insulation	2,900	KG	\$26.00	\$75,400	
373.3	- Thermal insulation	450	m2	\$50.00	\$22,500	
373.4	- Air diffusion devices	803	m2	\$18.00	\$14,454	
373.5	- Motorized dampers	1	LS	\$5,000.00	\$5,000	
373.6	- Fire dampers	1	LS	\$5,000.00	\$5,000	
373.7	- Ductwork components such as dampers, turning vanes and duct connector	1	NO	\$7,540.00	\$7,540	

No.	Description	Quant.	Unit	Rate	Sub Total	Total
C1.35 - Exhaust Systems						\$142,695
374	Central washroom / locker exhaust system with roof mounted exhaust fan, exhaust sheetmetal ductwork and grilles. Exhaust air is exhausted via a heat reclaim device. Kitchenette's are ducted to general exhaust. Mechanical and electrical rooms are provided with inline exhaust fan, intake and exhaust louvers, exhaust sheetmetal ductworks and grilles.					
374.1	- TDSB School	5,767	m2	\$15.00	\$86,505	
374.2	- Child Care Centre and EarlyOn	802	m2	\$15.00	\$12,030	
374.3	- Urban Indigenous Education	1,077	m2	\$15.00	\$16,155	
374.4	- Pool	1,064	m2	\$15.00	\$15,960	
374.5	- TDSB School Future Addition	803	m2	\$15.00	\$12,045	
C1.36 - Specialty Systems						\$225,000
<u>Kitchen Exhaust</u>						
375	Provisional sum allowance for NFPA rated kitchen exhaust c/w ecology unit	1	NO	\$150,000.00	\$150,000	
<u>Smudging Exhaust</u>						
376	Provisional sum allowance for smudging exhaust	1	NO	\$75,000.00	\$75,000	
C1.37 - Support Systems and Works						\$383,856
C1.37.1 - Noise and Vibration Isolation						\$83,596
377	Vibration isolators and ductwork silencers will be provided to ensure quiet operation and to ensure noise levels from operation do not exceed above the required levels					
377.1	- TDSB School	5,767	m2	\$8.00	\$46,136	
377.2	- Child Care Centre and EarlyOn	802	m2	\$10.00	\$8,020	
377.3	- Urban Indigenous Education	1,077	m2	\$10.00	\$10,770	
377.4	- Pool	1,064	m2	\$10.00	\$10,640	
377.5	- TDSB School Future Addition	803	m2	\$10.00	\$8,030	
C1.37.2 - Mechanical Wiring and Starters						\$0
378	All starters, motor control centers, line and load side wiring by Electrical Contractor					
C1.37.3 - Balancing and Commissioning						\$190,260
379	The HVAC systems are balanced to design flow rates and equipment placed into prime operating condition via enhanced commissioning practices.					
379.1	- TDSB School	5,767	m2	\$20.00	\$115,340	
379.2	- Child Care Centre and EarlyOn	802	m2	\$20.00	\$16,040	
379.3	- Urban Indigenous Education	1,077	m2	\$20.00	\$21,540	
379.4	- Pool	1,064	m2	\$20.00	\$21,280	
379.5	- TDSB School Future Addition	803	m2	\$20.00	\$16,060	
C1.37.6 - Generator Support						\$0
380	Assume self contained outdoor mounted natural gas generator with integral ventilation system. No mechanical support is required				Info Only	

No.	Description	Quant.	Unit	Rate	Sub Total	Total
C1.37.7 - Pool water heating System						\$110,000
<i>Pool Water Heating System</i>						
381	Allowance for pool heating water heat exchanger c/w titanium plates					
381.1	- Heat exchanger for the pool	2	NO	\$20,000.00	\$40,000	
381.2	- Heat exchanger heat-up for the pool	2	NO	\$25,000.00	\$50,000	
382	Hook-up connection for pool heat exchangers c/w capped and valved connection for pool system connection	4	NO	\$5,000.00	\$20,000	
<i>Secondary side piping and associated system accessories by pool contractor</i>						<i>Info Only</i>
C1.37.8 - Selective Demolition						\$0
<i>Demolition of existing school building is carried elsewhere in this estimate</i>						<i>By G.C</i>
C1.38 - Miscellaneous Works and General Accounts						\$1,059,000
383	Supervision, job set up, clean up, small tools, rentals, submittal, permits & inspections, site and office, overhead and profit, etc.	1	NO	\$480,000.00	\$480,000	
384	Supervision, job set up, clean up, small tools, rentals, submittal, permits & inspections, site and office, overhead and profit, etc.	1	NO	\$67,000.00	\$67,000	
385	Supervision, job set up, clean up, small tools, rentals, submittal, permits & inspections, site and office, overhead and profit, etc.	1	NO	\$101,000.00	\$101,000	
386	Supervision, job set up, clean up, small tools, rentals, submittal, permits & inspections, site and office, overhead and profit, etc.	1	NO	\$343,000.00	\$343,000	
387	Supervision, job set up, clean up, small tools, rentals, submittal, permits & inspections, site and office, overhead and profit, etc.	1	NO	\$68,000.00	\$68,000	
TOTAL FOR MECHANICAL - HVAC		1.00	9,513	m2	\$853.95	\$8,123,638
C1.4 MECHANICAL - Controls						
C1.41 - Controls and Automation						\$888,090
388	A new Building Automation System (BAS) consisting of direct digital controls (DDC) connected to TDSB central controls system is provided. The BAS controls and monitors all HVAC systems and equipment. System allows operators to start and stop equipment and will automatically control zone temperatures, air and water flow rates. System and system graphics allow full monitoring, trending and reporting of set points, equipment control and alarm functions. Damper and valve actuators are electric/electronic type with direct digital control (DDC). Ventilation rates are controlled by carbon dioxide sensors (demand ventilation) throughout the facility.					
388.1	- TDSB School	5,767	m2	\$90.00	\$519,030	
388.2	- Child Care Centre and EarlyOn	802	m2	\$90.00	\$72,180	
388.3	- Urban Indigenous Education	1,077	m2	\$90.00	\$96,930	
388.4	- Pool	1,064	m2	\$120.00	\$127,680	
388.5	- TDSB School Future Addition	803	m2	\$90.00	\$72,270	
C1.42 - Miscellaneous Works and General Accounts						\$0
389	Supervision, site office, head office overheads, submittals, clean up, small tools, rentals and the like, rigging and preparation of 3D co-ordination drawings					Included in above rates
TOTAL FOR MECHANICAL - Controls		1.00	9,513	m2	\$93.36	\$888,090
				Total Mech Unit Rate	\$1,174.87	

No.	Description	Quant.	Unit	Rate	Sub Total	Total
C2. SERVICES - ELECTRICAL						
<u>C2.1 ELECTRICAL - Service & Distribution</u>						
<u>C2.11 - Main Service</u>						\$127,700
<i><u>TDSB School</u></i>						
390	1200A 347/600V main switchboard with main LSIG breakers, distribution breakers, SPD, DM ...	1	NO	\$126,000.00	\$126,000	
391	HYDRO meter	1	NO	\$1,700.00	\$1,700	
<u>C2.12 - Emergency Power</u>						\$272,780
<i><u>TDSB School</u></i>						
392	130kW 347/600V natural gas generator	1	NO	\$135,900.00	\$135,900	
393	200A 347/600V generator distribution panel	1	NO	\$7,100.00	\$7,100	
394	100A 347/600V ATS c/w bypass	2	NO	\$21,800.00	\$43,600	
395	Emergency power distribution system with 347/600V mechanical distribution panels, 120/208V power and lighting panels and associated transformers	5,767	m2	\$10.20	\$58,823	
<i><u>Child Care Centre and EarlyOn</u></i>						
396	Emergency power distribution system with 347/600V mechanical distribution panels, 120/208V power and lighting panels and associated transformers	802	m2	\$10.20	\$8,180	
<i><u>Urban Indigenous Education</u></i>						
397	Emergency power distribution system with 347/600V mechanical distribution panels, 120/208V power and lighting panels and associated transformers	1,077	m2	\$10.20	\$10,985	
<i><u>TDSB School Future Addition</u></i>						
398	Emergency power distribution system with 347/600V mechanical distribution panels, 120/208V power and lighting panels and associated transformers	803	m2	\$10.20	\$8,191	
<u>C2.13 - Distribution</u>						\$242,582
<i><u>TDSB School</u></i>						
399	Normal power distribution system with 347/600V mechanical distribution panels, 120/208V power and lighting panels and associated transformers	5,767	m2	\$25.50	\$147,059	
<i><u>Child Care Centre and EarlyOn</u></i>						
400	Normal power distribution system with 347/600V mechanical distribution panels, 120/208V power and lighting panels and associated transformers	802	m2	\$25.50	\$20,451	
<i><u>Urban Indigenous Education</u></i>						
401	Normal power distribution system with 347/600V mechanical distribution panels, 120/208V power and lighting panels and associated transformers	1,077	m2	\$25.50	\$27,464	
<i><u>Pool</u></i>						
402	Normal power distribution system with 347/600V mechanical distribution panels, 120/208V power and lighting panels and associated transformers	1,064	m2	\$25.50	\$27,132	
<i><u>TDSB School Future Addition</u></i>						
403	Normal power distribution system with 347/600V mechanical distribution panels, 120/208V power and lighting panels and associated transformers	803	m2	\$25.50	\$20,477	

No.	Description	Quant.	Unit	Rate	Sub Total	Total
<u>C2.14 - Feeders</u>						\$260,265
<i><u>TDSB School</u></i>						
404	Feeders for the above distribution equipment using rw90 copper conductors in EMT conduit	5,767	m2	\$28.56	\$164,706	
<i><u>Child Care Centre and EarlyOn</u></i>						
405	Feeders for the above distribution equipment using rw90 copper conductors in EMT conduit	802	m2	\$28.56	\$22,905	
<i><u>Urban Indigenous Education</u></i>						
406	Feeders for the above distribution equipment using rw90 copper conductors in EMT conduit	1,077	m2	\$28.56	\$30,759	
<i><u>Pool</u></i>						
407	Feeders for the above distribution equipment using rw90 copper conductors in EMT conduit	1,064	m2	\$22.44	\$23,876	
<i><u>TDSB School Future Addition</u></i>						
408	Feeders for the above distribution equipment using rw90 copper conductors in EMT conduit	803	m2	\$22.44	\$18,019	
<u>C2.15 - Motor Controls & Wiring</u>						\$102,863
<i><u>TDSB School</u></i>						
409	Elevator power connection including line and load side wiring and disconnect switch	1	NO	\$3,680.00	\$3,680	
410	Power connection with line and load side wiring for mechanical equipment	5,767	m2	\$10.20	\$58,823	
<i><u>Child Care Centre and EarlyOn</u></i>						
411	Power connection with line and load side wiring for mechanical equipment	802	m2	\$10.20	\$8,180	
<i><u>Urban Indigenous Education</u></i>						
412	Power connection with line and load side wiring for mechanical equipment	1,077	m2	\$10.20	\$10,985	
<i><u>Pool</u></i>						
413	Power connection with line and load side wiring for mechanical equipment	1,064	m2	\$15.30	\$16,279	
<i><u>TDSB School Future Addition</u></i>						
414	Power connection with line and load side wiring for mechanical equipment	803	m2	\$6.12	\$4,914	
<u>C2.16 - Miscellaneous</u>						\$90,556
<i><u>TDSB School</u></i>						
415	Building grounding system	5,767	m2	\$2.55	\$14,706	
416	Lightning protection system	1	LS	\$60,000.00	\$60,000	
417	Supply and install roof-mounted 34.65kW PV system (99 solar panels)				See separate price	
418	Infrastructure for roof mounted 34.65kW PV system				See separate price	
419	Supply and install carport mounted 37.1kW PV system (106 solar panels)				See separate price	
420	Infrastructure for carport mounted 37.1kW PV system				See separate price	

No.	Description	Quant.	Unit	Rate	Sub Total	Total
<u>Child Care Centre and EarlyOn</u>						
421	Building grounding system	802	m2	\$2.55	\$2,045	
<u>Urban Indigenous Education</u>						
422	Building grounding system	1,077	m2	\$2.55	\$2,746	
<u>Pool</u>						
423	Building grounding system	1,064	m2	\$2.55	\$2,713	
424	Pool grounding system	1	LS	\$6,300.00	\$6,300	
<u>TDSB School Future Addition</u>						
425	Building grounding system	802	m2	\$2.55	\$2,045	
C2.17 - Electrical Contractors Overhead						\$171,398
426	Supervision			\$51,795.00	\$0	
427	Premium time, etc.			\$0.00	\$0	
428	Job set-up, etc.			\$80,611.00	\$0	
429	Rentals, small tools, etc.			\$23,032.00	\$0	
430	Permits & inspections			\$14,971.00	\$0	
431	Insurance			\$2,303.00	\$0	
432	Performance bond			\$0.00	\$0	
433	Labour & material bond			\$0.00	\$0	
434	Contingency			\$0.00	\$0	
435	TDSB School	1	LS	\$129,461.24	\$129,461	
436	Child Care Centre and EarlyOn	1	LS	\$9,726.09	\$9,726	
437	Urban Indigenous Education	1	LS	\$13,061.10	\$13,061	
438	Pool	1	LS	\$11,023.47	\$11,023	
439	TDSB School Future Addition	1	LS	\$8,125.93	\$8,126	
TOTAL FOR ELECTRICAL - Service & Distribution		1.00	9,513	m2	\$133.31	\$1,268,143
 C2.2 ELECTRICAL - Lighting, Devices & Heating						
C2.21 - Lighting						\$951,298
Fixture costs include the supply and installation of fixtures with associated wiring and supports						
<u>TDSB School</u>						
440	LED lighting to be provided throughout and based on the following:	5,767	m2	\$96.90	\$558,822	
440.1	- Classroom, program room, offices, staff room, activity room using recessed troffers and potlights dimmable LED fixture					
440.2	- GYM using highbay LED fixtures					
440.3	- Changerooms and washrooms using surface mounted vapour tide LED fixtures					
440.4	- Circulation space using recessed potlights and wall mounted fixtures					
440.5	- Storage and service rooms using suspended industrial fixtures					
441	Exit signage, supplemental battery units, and emergency lighting control system				Included in above rate	
<u>Child Care Centre and EarlyOn</u>						
442	LED lighting to be provided throughout and based on the following:	802	m2	\$96.90	\$77,714	
442.1	- Classroom, program room, offices, staff room, activity room using recessed troffers and potlights dimmable LED fixture					
442.2	- Washrooms using surface mounted vapour tide LED fixtures					
442.3	- Circulation space using recessed potlights and wall mounted fixtures					
442.4	- Storage and service rooms using suspended industrial fixtures					
443	Exit signage, supplemental battery units, and emergency lighting control system				Included in above rate	

No.	Description	Quant.	Unit	Rate	Sub Total	Total
<u>Urban Indigenous Education</u>						
444	LED lighting to be provided throughout and based on the following:	1,077	m2	\$96.90	\$104,361	
444.1	- Classroom, program room, offices, staff room, activity room using recessed troffers and potlights dimmable LED fixture					
444.2	- Washrooms using surface mounted vapour tide LED fixtures					
444.3	- Circulation space using recessed potlights and wall mounted fixtures					
444.4	- Storage and service rooms using suspended industrial fixtures					
445	Exit signage, supplemental battery units, and emergency lighting control system				Included in above rate	
<u>Pool</u>						
446	LED lighting to be provided throughout and based on the following:	1,064	m2	\$178.50	\$189,924	
446.1	- Pool area using dual pendant highbay and surface mounted IP66 wet location LED fixtures					
446.2	- Changerooms and washrooms using surface mounted vapour tide LED fixtures					
446.3	- Circulation space using recessed potlights and wall mounted fixtures					
447	Exit signage, supplemental battery units, and emergency lighting control system				Included in above rate	
<u>TDSB School Future Addition</u>						
448	LED lighting to be provided throughout and based on the following:	803	m2	\$25.50	\$20,477	
448.1	- Using suspended industrial fixtures					
449	Exit signage, supplemental battery units, and emergency lighting control system				Included in above rate	
<u>C2.22 - Branch Devices & Wiring</u>						\$268,062
<u>TDSB School</u>						
450	Specialty/convenience receptacles and power connections c/w conduit and wire	5,767	m2	\$17.85	\$102,941	
451	Lighting control system including local switch/dimmer, occupancy sensors, daylight harvesting, etc...	5,767	m2	\$12.75	\$73,529	
<u>Child Care Centre and EarlyOn</u>						
452	Specialty/convenience receptacles and power connections c/w conduit and wire	802	m2	\$17.85	\$14,316	
453	Lighting control system including local switch/dimmer, occupancy sensors, daylight harvesting, etc...	802	m2	\$12.75	\$10,226	
<u>Urban Indigenous Education</u>						
454	Specialty/convenience receptacles and power connections c/w conduit and wire	1,077	m2	\$17.85	\$19,224	
455	Lighting control system including local switch/dimmer, occupancy sensors, daylight harvesting, etc...	1,077	m2	\$12.75	\$13,732	
<u>Pool</u>						
456	Specialty/convenience receptacles and power connections c/w conduit and wire	1,064	m2	\$15.30	\$16,279	
457	Lighting control system including local switch/dimmer, occupancy sensors, daylight harvesting, etc...	1,064	m2	\$10.20	\$10,853	
<u>TDSB School Future Addition</u>						
458	Specialty/convenience receptacles c/w conduit and wire	803	m2	\$5.10	\$4,095	
459	Lighting control system including local switch, etc...	803	m2	\$3.57	\$2,867	

No.	Description	Quant.	Unit	Rate	Sub Total	Total
C2.23 - Heating						\$0
460	Power connection with line and load side wiring for heating equipment				See C2.15 - Motor Controls & Wiring	
C2.24 - Electrical Contractors Overhead						\$217,564
461	Supervision			\$83,129.00		\$0
462	Premium time, etc.			\$0.00		\$0
463	Job set-up, etc.			\$89,623.00		\$0
464	Rentals, small tools, etc.			\$25,607.00		\$0
465	Permits & inspections			\$16,644.00		\$0
466	Insurance			\$2,561.00		\$0
467	Performance bond			\$0.00		\$0
468	Labour & material bond			\$0.00		\$0
469	Contingency			\$0.00		\$0
470	TDSB School	1	LS	\$131,194.43	\$131,194	
471	Child Care Centre and EarlyOn	1	LS	\$18,244.83	\$18,245	
472	Urban Indigenous Education	1	LS	\$24,500.85	\$24,501	
473	Pool	1	LS	\$38,728.18	\$38,728	
474	TDSB School Future Addition	1	LS	\$4,895.71	\$4,896	
TOTAL FOR ELECTRICAL - Lighting, Devices & Heating		1.00	9,513	m2	\$151.05	\$1,436,924

C2.3 ELECTRICAL - Systems & Ancillaries

C2.31 - Fire Alarm System

\$216,623

TDSB School

475	Addressable single stage fire alarm system consisting of a control panel c/w integral annunciator, pullstations, smoke/heat detectors, audible/visual alarms, etc...	5,767	m2	\$23.46	\$135,294	
-----	--	-------	----	---------	-----------	--

Child Care Centre and EarlyOn

476	Addressable single stage fire alarm system c/w integral annunciator, pullstations, smoke/heat detectors, audible/visual alarms, etc...	802	m2	\$23.46	\$18,815	
-----	--	-----	----	---------	----------	--

Urban Indigenous Education

477	Addressable single stage fire alarm system c/w integral annunciator, pullstations, smoke/heat detectors, audible/visual alarms, etc...	1,077	m2	\$23.46	\$25,266	
-----	--	-------	----	---------	----------	--

Pool including changing room

478	Addressable single stage fire alarm system c/w integral annunciator, pullstations, smoke/heat detectors, audible/visual alarms, etc...	1,064	m2	\$23.46	\$24,961	
-----	--	-------	----	---------	----------	--

TDSB School Future Addition

479	Addressable single stage fire alarm system c/w integral annunciator, pullstations, smoke/heat detectors, audible/visual alarms, etc...	803	m2	\$15.30	\$12,286	
-----	--	-----	----	---------	----------	--

C2.32 - Security System

\$247,931

TDSB School

480	Security empty infrastructure system for access control system, video surveillance system, intercom system, and duress and intrusion system	5,767	m2	\$10.20	\$58,823	
-----	---	-------	----	---------	----------	--

481	Supply, programming, and installation of new security equipment	5,767	m2	\$18.36	\$105,882	
-----	---	-------	----	---------	-----------	--

Child Care Centre and EarlyOn

482	Security empty infrastructure system for access control system, video surveillance system, intercom system, and duress and intrusion system	802	m2	\$10.20	\$8,180	
-----	---	-----	----	---------	---------	--

483	Supply, programming, and installation of new security equipment	802	m2	\$18.36	\$14,725	
-----	---	-----	----	---------	----------	--

No.	Description	Quant.	Unit	Rate	Sub Total	Total
<u>Urban Indigenous Education</u>						
484	Security empty infrastructure system for access control system, video surveillance system, intercom system, and duress and intrusion system	1,077	m2	\$10.20	\$10,985	
485	Supply, programming, and installation of new security equipment	1,077	m2	\$18.36	\$19,774	
<u>Pool</u>						
486	Security empty infrastructure system for access control system, video surveillance system, intercom system, and duress and intrusion system	1,064	m2	\$8.16	\$8,682	
487	Supply, programming, and installation of new security equipment	1,064	m2	\$15.30	\$16,279	
<u>TDSB School Future Addition</u>						
488	Trunk conduit running to shell space	1	LS	\$4,600.00	\$4,600	
<u>C2.33 - Communications</u>						\$307,968
<u>TDSB School</u>						
489	Communications empty infrastructure system consisting of wall, floor, furniture, and ceiling mounted outlets, cable tray, plywood backboards, and sleeves	5,767	m2	\$10.20	\$58,823	
490	Vertical and horizontal cabling system c/w racks, patch-panels, and wire management	5,767	m2	\$25.50	\$147,059	
491	Allowance for backbone cabling	1	LS	\$8,700.00	\$8,700	
<u>Child Care Centre and EarlyOn</u>						
492	Communications empty infrastructure system consisting of wall, floor, furniture, and ceiling mounted outlets, cable tray, plywood backboards, and sleeves	802	m2	\$10.20	\$8,180	
493	Vertical and horizontal cabling system c/w racks, patch-panels, and wire management	802	m2	\$25.50	\$20,451	
<u>Urban Indigenous Education</u>						
494	Communications empty infrastructure system consisting of wall, floor, furniture, and ceiling mounted outlets, cable tray, and sleeves	1,077	m2	\$10.20	\$10,985	
495	Vertical and horizontal cabling system	1,077	m2	\$25.50	\$27,464	
<u>Pool</u>						
496	Communications empty infrastructure system consisting of wall, floor, furniture, and ceiling mounted outlets, cable tray, and sleeves	1,064	m2	\$5.10	\$5,426	
497	Vertical and horizontal cabling system	1,064	m2	\$15.30	\$16,279	
<u>TDSB School Future Addition</u>						
498	Trunk conduit running to shell space	1	LS	\$4,600.00	\$4,600	
<u>C2.34 - P.A. System</u>						\$186,726
<u>TDSB School</u>						
499	Public Address system c/w equipment devices and wiring	5,767	m2	\$12.75	\$73,529	
500	Audio visual device outlets and conduit infrastructure	5,767	m2	\$5.10	\$29,412	
501	Supply and installation of Audio visual cabling - equipment by others	5,767	m2	\$3.06	\$17,647	
<u>Child Care Centre and EarlyOn</u>						
502	Public Address system c/w equipment devices and wiring	802	m2	\$12.75	\$10,226	
503	Audio visual device outlets and conduit infrastructure	802	m2	\$5.10	\$4,090	
504	Supply and installation of Audio visual cabling - equipment by others	802	m2	\$3.06	\$2,454	

No.	Description	Quant.	Unit	Rate	Sub Total	Total
<u>Urban Indigenous Education</u>						
505	Public Address system c/w equipment devices and wiring	1,077	m2	\$12.75	\$13,732	
506	Audio visual device outlets and conduit infrastructure	1,077	m2	\$5.10	\$5,493	
507	Supply and installation of Audio visual cabling - equipment by others	1,077	m2	\$3.06	\$3,296	
<u>Pool</u>						
508	Public Address system c/w equipment devices and wiring	1,064	m2	\$12.75	\$13,566	
509	Audio visual device outlets and conduit infrastructure	1,064	m2	\$5.10	\$5,426	
510	Supply and installation of Audio visual cabling - equipment by others	1,064	m2	\$3.06	\$3,256	
<u>TDSB School Future Addition</u>						
511	Trunk conduit running to shell space	1	LS	\$4,600.00	\$4,600	
C2.35 - Miscellaneous						\$237,027
<u>TDSB School</u>						
512	Allowance for miscellaneous systems (Delivery intercom, gymnasium equipment, clocks...)	5,767	m2	\$5.10	\$29,412	
513	Interspec classroom control panel	28	NO	\$4,500.00	\$126,000	
<u>Child Care Centre and EarlyOn</u>						
514	Allowance for miscellaneous systems (Delivery intercom, gymnasium equipment, clocks...)	802	m2	\$5.10	\$4,090	
515	Interspec classroom control panel	3	NO	\$4,500.00	\$13,500	
<u>Urban Indigenous Education</u>						
516	Allowance for miscellaneous systems (clocks...)	1,077	m2	\$2.55	\$2,746	
517	Interspec classroom control panel	10	NO	\$4,500.00	\$45,000	
<u>Pool</u>						
518	Allowance for miscellaneous systems (Pool equipment outlet, clocks...)	1,064	m2	\$15.30	\$16,279	
C2.36 - Electrical Contractors Overhead						\$204,604
519	Supervision			\$72,715.00	\$0	
520	Premium time, etc.			\$0.00	\$0	
521	Job set-up, etc.			\$87,926.00	\$0	
522	Rentals, small tools, etc.			\$25,122.00	\$0	
523	Permits & inspections			\$16,329.00	\$0	
524	Insurance			\$2,512.00	\$0	
525	Performance bond			\$0.00	\$0	
526	Labour & material bond			\$0.00	\$0	
527	Contingency			\$0.00	\$0	
528	TDSB School	1	LS	\$135,216.41	\$135,216	
529	Child Care Centre and EarlyOn	1	LS	\$17,909.25	\$17,909	
530	Urban Indigenous Education	1	LS	\$28,176.33	\$28,176	
531	Pool	1	LS	\$18,840.43	\$18,840	
532	TDSB School Future Addition	1	LS	\$4,461.58	\$4,462	
TOTAL FOR ELECTRICAL - Systems & Ancillaries		1.00	9,513	m2	\$147.26	\$1,400,879
				Total Elec Unit Rate	\$431.61	

No.	Description	Quant.	Unit	Rate	Sub Total	Total
D. SITE & ANCILLARY WORK						
<u>D1.1 SITEWORK - Site Development</u>						
<u>D1.11 - Preparation</u>						\$1,489,359
533	Clear and grub site	39,858	m2	\$5.00	\$199,290	
534	Strip topsoil and stockpile on site, assumed 150mm	5,979	m3	\$16.00	\$95,659	
535	Rough grading including cut and fill	45,365	m2	\$18.00	\$816,570	
536	Site protection and erosion control	932	m	\$80.00	\$74,560	
537	Temporary mud mat	1	LS	\$20,000.00	\$20,000	
538	Demolition of existing site elements including:					
538.1	- hard surfaces, assumed asphalt paving	6,582	m2	\$40.00	\$263,280	
538.2	- soft surfaces, assumed sod	33,276	m2		Included Above	
538.3	- trees	1	LS	\$20,000.00	\$20,000	
<u>D1.12 - Hard Surfaces</u>						\$913,030
539	Asphalt paving to parking and laneways	5,414	m2	\$90.00	\$487,260	
540	Concrete curbs	2,117	m	\$80.00	\$169,360	
541	Concrete paving to walkways	1,911	m2	\$120.00	\$229,320	
542	Allowance for concrete equipment pads	1	LS	\$5,000.00	\$5,000	
543	Line painting to parking lot					
543.1	- standard stalls	116	NO	\$50.00	\$5,800	
543.2	- disable signage (paint on parking lot)	4	NO	\$250.00	\$1,000	
543.3	- arrow markings	8	NO	\$250.00	\$2,000	
543.4	- handicapped stalls	26	m2	\$40.00	\$1,040	
543.5	- pedestrian crossing line paint	49	NO	\$250.00	\$12,250	
<u>D1.13 - Improvements</u>						\$521,922
544	Chain link fence	903	m	\$150.00	\$135,450	
545	Allowance for parking signage	18	NO	\$1,200.00	\$21,600	
546	Sweat lodge	43	m2	\$2,000.00	\$86,000	
547	Lacrosse Field	5,854	m2	\$18.00	\$105,372	
548	Outdoor Gathering Space/Pavilion	225	m2	\$500.00	\$112,500	
549	Children playground	305	m2	\$200.00	\$61,000	
<u>D1.14 - Landscaping</u>						\$933,572
550	Seed and topsoil	19,734	m2	\$5.00	\$98,672	
551	Regenerative forest, assume heavily forested trees and ground covers	6,054	m2	\$100.00	\$605,400	
552	Allowance for planting beds including topsoil and planting material	1	LS	\$100,000.00	\$100,000	
553	Allowance for trees (larger, small)	53	NO	\$1,500.00	\$79,500	
554	Allowance for shrubs, plantings, and ground covers	1	LS	\$50,000.00	\$50,000	
TOTAL FOR SITE WORK - Site Development		4.19	39,858	m2	\$96.79	\$3,857,883

No.	Description	Quant.	Unit	Rate	Sub Total	Total
<u>D1.2 SITEWORK - Mechanical Site Services</u>						
<u>D1.21 - Water</u>						\$75,000
555	Provide new incoming water service to building	1	NO	\$75,000.00	\$75,000	
<u>D1.22 - Sanitary</u>						\$75,000
556	Provide new outgoing sanitary service	1	NO	\$75,000	\$75,000	
<u>D1.23 - Storm</u>						\$1,071,450
557	Provide new outgoing storm service	1	NO	\$75,000.00	\$75,000	
558	Provide storm water drainage to site including catchbasins, manholes, oil/grit interceptor, storm water management tanks, piping, etc.	39,858	m2	\$25.00	\$996,450	
<u>D1.24 - Natural Gas</u>						\$0
559	New incoming gas service by Enbridge					
<u>D1.25 - Specialty Systems</u>						\$50,000
560	Allowance for irrigation	1	LS	\$50,000.00	\$50,000	
<u>D1.26 - Miscellaneous Works and General Accounts</u>						\$0
561	Included in above rates					
TOTAL FOR SITE WORK - Mechanical Site Services		4.19	39,858	m2	\$31.90	\$1,271,450

D1.3 SITEWORK - Electrical Site Services

D1.31 - Site - Power

No.	Description	Quant.	Unit	Rate	Sub Total	Total
<u>D1.31 - Site - Power</u>						\$210,986
562	Allowance for Utility cabling and connection charge	1	LS	\$85,000.00	\$85,000	
563	Transformer and generator concrete pad and grounding	2	NO	\$13,600.00	\$27,200	
564	4-103mm PVC concrete encased ductbank for primary power	30	m	\$385.98	\$11,579	
565	6-103mm PVC concrete encased ductbank for secondary power	40	m	\$551.83	\$22,073	
566	#500 rwu90 secondary conductor	600	m	\$69.23	\$41,538	
567	#2/0 rwu90 secondary ground conductor	150	m	\$21.20	\$3,180	
568	2-103mm PVC concrete encased ductbank for generator	30	m	\$385.98	\$11,579	
569	#3/0 rwu90 generator conductor	160	m	\$25.94	\$4,150	
570	#2 rwu90 generator ground conductor	40	m	\$12.14	\$486	
571	Power and communication connection to exterior pylon sign	1	NO	\$4,200.00	\$4,200	

No.	Description	Quant.	Unit	Rate	Sub Total	Total
<u>D1.32 - Site - Communications</u>						\$47,839
572	4-103mm incoming communications ductbank	40	m	\$385.98	\$15,439	
573	Allowance for exterior CCTV camera	1	LS	\$32,400.00	\$32,400	
<u>D1.33 - Site - Lighting</u>						\$96,400
574	Allowance for efficient LED lighting to be provided throughout and based on the following:	1	LS	\$94,600.00	\$94,600	
574.1	- Surface mounted fixtures	40				
574.2	- Bollard lights for walkway	6				
574.3	- Pole mounted fixtures	8				
575	Exterior lighting controller c/w contactor, photocell, timeclock	1	LS	\$1,800.00	\$1,800	
<u>D1.34 - Site - Electrical Contractors Overhead</u>						\$49,304
576	Supervision			\$10,140.00	\$0	
577	Premium time, etc.				NA	
578	Job set-up, etc.			\$26,109.00	\$0	
579	Rentals, small tools, etc.			\$7,460.00	\$0	
580	Permits & inspections			\$4,849.00	\$0	
581	Insurance			\$746.00	\$0	
582	Performance bond			\$0.00	\$0	
583	Labour & material bond			\$0.00	\$0	
584	Contingency			\$0.00	\$0	
585	Site	1	LS	\$49,304.00	\$49,304	
TOTAL FOR SITE WORK - Electrical Site Services		4.19	39,858	m2	\$10.15	\$404,529
 <u>D2.1 ANCILLARY WORK - Demolition</u>						
<u>D2.11 - Demolition</u>						
586	Demolish and dispose existing building	52,270	m2	\$80.00	\$4,181,600	
<u>D2.12 - Hazardous Materials</u>						
587	This estimate excludes allowances for asbestos abatement and the handling of hazardous materials					Excluded
TOTAL FOR ANCILLARY WORK - Demolition		1.00	9,513	m2	\$439.57	\$4,181,600
 <u>D2.2 ANCILLARY WORK - Alterations</u>						
<u>D2.21 - Alterations</u>						
588	NIL					
TOTAL FOR ANCILLARY WORK - Alterations		0.00	0	m2	\$0.00	\$0

No.	Description	Quant.	Unit	Rate	Sub Total	Total
Z. GENERAL REQUIREMENTS & CONTINGENCIES						
<u>Z1.1 GENERAL REQUIREMENTS & FEES - General Requirements</u>						
<u>Z1.11 - Supervision & Labour Expenses</u>						
589	Allowance for the General Contractor's supervision & labour expenses as follows:	1	LS	\$3,442,420	\$3,442,400	6.0%
589.1	- supervision and coordination of subcontractors					
589.2	- site superintendent and vehicle					
589.3	- general labour expenses					
<u>Cash Allowances</u>						\$0
590	Independent inspection and testing				Excluded	
591	Door hardware supply				Included in B 1.2	
<u>Z1.13 - Permits, Insurance & Bonds</u>						\$1,388,184
592	Building permit	1	LS	\$412,184	\$412,184	
593	General Liability and Builder's Risk insurance	1	LS	\$402,000	\$402,000	
594	Labour & Material and Performance bonding	1	LS	\$574,000	\$574,000	
TOTAL FOR GEN. REQ'MENTS & FEES - Gen. Req'ments		1.00	9,513	m2	\$507.79	\$4,830,584
<u>Z1.2 GENERAL REQUIREMENTS & FEES - Fees</u>						
<u>Z1.21 - General Contractor's Fees</u>						
595	Allowance for the General Contractor's Fees (Head Office Overhead, Profit and Risk). (applied to measured works plus general requirements)	1	LS	\$2,488,170	\$2,488,000	4.0%
TOTAL FOR GEN. REQ'MENTS & FEES - Fees		1.00	9,513	m2	\$261.54	\$2,488,000
<u>Z2.1 ALLOWANCES - Design Contingency</u>						
596	Design Contingency as a percentage of the above to cover increases in the overall scope of the design during the remaining stages of the design phase (applied to measured works plus general requirements and fees)					
596.1	- Architectural	1	LS	\$3,488,700	\$3,488,700	12.5%
596.2	- Structural	1	LS	\$1,663,900	\$1,663,900	12.5%
596.3	- Siteworks	1	LS	\$780,000	\$780,000	12.5%
596.4	- Mechanical Services	1	LS	\$1,575,300	\$1,575,300	12.5%
596.5	- Electrical Services	1	LS	\$578,700	\$578,700	12.5%
TOTAL FOR ALLOWANCES - Design Contingency		1.00	9,513	m2	\$850.06	\$8,086,600

No.	Description	Quant.	Unit	Rate	Sub Total	Total
<u>Z2.2 ALLOWANCES - Escalation Contingency</u>						
597	Contingency for escalation that might occur between the date of the estimate and the anticipated tender date (applied to measured works plus general requirements, fees and Design Contingency)	1	LS	\$11,157,000	\$11,157,000	15.3%
TOTAL FOR ALLOWANCES - Escalation Contingency		1.00	9,513 m2	\$1,172.82	\$11,157,000	
<u>Z2.3 ALLOWANCES - Construction Contingency</u>						
598	Construction Contingency for post contract changes (applied to measured works plus general requirements, fees, Design Contingency and Escalation Contingency)	1	LS	\$4,196,800	\$4,196,800	5.0%
TOTAL FOR ALLOWANCES - Construction Contingency		1.00	9,513 m2	\$441.16	\$4,196,800	

Summary of Extraordinary Costs

Appendix F

Kapapamahchakwew - Wandering Spirit School		Total	School	Childcare
Unique Costs			80%	20%
Building				
PREMIUM FOR NET ZERO MEASURES - PHASE 1				
Premium for mass timber wood		\$850,000	\$680,000	\$136,000
Premium for ASHP heating with backup electric boiler		\$1,698,000	\$1,358,400	\$271,680
Premium for GSHP heating / cooling with		\$4,506,000	\$3,604,800	\$720,960
Provisional sum allowance for Irrigation		\$32,000	\$25,600	\$5,120
Photovoltaic solar panels on roof		\$311,000	\$248,800	\$49,760
PV Parking Canopies including foundation		\$3,006,000	\$2,404,800	\$480,960
Bioswale including, geotextile		\$320,000	\$256,000	\$51,200
	Total	\$10,723,000	\$8,578,400	\$1,715,680
Building				
Premium for Deep Foundation		\$420,000	\$336,000	\$84,000
Site				
Abatement & Disposal				
Estimated Abatement Fees		\$4,277,650	\$3,422,120	\$855,530
Soil Disposal and Re-use				
contaminated soils, poor soils, construction dewatering		\$5,458,471	\$4,366,777	\$1,091,694.25
Municipal / Other Costs				
Air Quality - Short Term Bicycle Parking		\$7,280	\$5,824	\$1,456
Air Quality - Connectivity & Sidewalk Space		\$58,348	\$46,678	\$11,670
Urban Heat Island Reduction at Grade		\$14,586	\$11,669	\$2,334
Air Quality - Green & Cool Roofs		\$165,984	\$132,787	\$26,557
Ecology - Tree Protection \$		\$20,000	\$16,000	\$3,200
Ecology - Tree Planting/Urban Forest		\$18,480	\$14,784	\$2,957
Ecology - Soil Volumes		\$19,320	\$15,456	\$3,091
Ecology - Bird Friendly Glazing		\$106,120	\$84,896	\$16,979
Stormwater Management		\$65,000	\$52,000	\$10,400
Sidewalk widening and reconstruction		\$75,797	\$60,638	\$12,128
Off-Site Infrastructure Improvements - Storm		\$112,000	\$89,600	\$17,920
Municipal Servicing City Works Premium - Sanitary & We		\$22,400	\$17,920	\$3,584
Hydro Vault		\$42,860	\$34,288	\$6,858
Toronto Hydro Premium \$		\$22,400	\$17,920	\$3,584
Enbridge Gas Premium \$		\$4,000	\$3,200	\$640
	Total	\$754,575	\$603,660	\$123,357

Kapapamahchakwew - Wandering Spirit School

Appendix G

		Start	Finish
Pre-Design	Ministry Project Approval	April 2024	
	Architect Selection	May 2024	July 2024
Design	Schematic Design	July 2024	Nov 2024
	Background Site Studies	Oct 2024	
	Class C Estimate (25%)	Dec 2024	Feb 2025
	Design Development	Feb 2025	July 2025
Approvals	SPA Pre-Consultation Meeting	Jan 2025	
	Zoning Review	Jan 2025	Feb-25
	Site Plan Approval	Dec 2024	June 2026
	Minor Variance (if required)		
	NOAC		June 2026
	Building Permit	June 2026	Sep-26
Construction Documents	30% Construction doc Submission	July 2025	Nov-25
	85% Construction doc Submission	Nov 2025	May-26
	Class B Estimate and Board Review	May 2026	Jun-26
Bidding & Negotiation	Tender	Sept 2026	Nov 2026
	Award Construction Contract	Nov 2026	Dec 2026
Construction	Construction (incl partial demolition of eastern commerce)	Jan 2027	Jul-28
	Occupancy	July 2028	Aug-28
	School Opening	Sept 2028	Sep-28