Appendix 3A
Functional Program
Project 1 -Regina Schools

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1.0   OVERVIEW

The Saskatchewan Joint Use School Project is an exciting opportunity to develop nine new joint use Schools across the province. While the project is large in scale, the process has been customized to directly utilize input from front-line educators, curriculum experts, School representatives and students, to name only a few, through the Lean 3P process. The project will result in the opening of the new Schools in the Fall of 2017 to meet population demands in the Cities of Regina, Saskatoon, Warman and Martensville.

The project has been composed of three phases. Phase 1 focused on the development of the Core School Designs; Phase 2 the modifications required for specific Sites and Schools; and Phase 3 development of documentation to support a P3 (Public Private Partnership) procurement delivery.

Phase 1 commenced in January 2014 and concluded on April 11, 2014. Within this timeframe numerous meetings, workshops and Lean events were conducted including a Value Stream Mapping Workshop, Student/Teacher/Parent Interviews, 7 Ways Workshop, Lean 3P Event, 30 Day Review and 60 Day Review. In addition to the extensive user consultation, technical meetings have been held to advance engineering and architectural systems requirements as well as Site development.

Through the consultation process it has been determined that each site will accommodate two Schools (one public school and one Catholic school) and one Central Core shared space to form a single, cohesive joint use School. The Central Core shared area includes elements directly related to School programming and community use such as the gymnasia, multi-purpose rooms, and servery as well as a 90 seat Child Care Centre and a Community Resource Centre. The potential for collaborative and supportive uses which enhance opportunities for learners and the community has been a major consideration of this Student First project.

The original project for 9 joint use Schools has been divided into two separate projects; Project 1 and Project 2. Project 1 includes three joint use Schools in Regina, and Project 2 includes six joint use Schools in Saskatoon, Warman and Martensville. This Functional Program pertains only to Project 1-Regina Schools.

1.1   GUIDING PRINCIPLES

Early in the process, a Partnering Workshop conducted with the Strategic Issues Committee, resulted in the development of the Guiding Principles for the project. These principles serve to both guide the participants throughout the process and inform development of the facilities:

- Student First
- Collaboration
- Celebration
- Respect Diversity
- Integrity & Trust
- Innovative
- Open Communication

A key priority for the Saskatchewan Ministry of Education is a "Student First" approach. This means reorienting the educational system to focus on the student by individualizing and personalizing the experience and support for each student - by name, by strength and by need.

1.2   PROJECT OBJECTIVES

This project was anticipated by the Saskatchewan Ministry of Education in order to develop the educational model for Core School Designs for Schools that will:

- Meet the need of current students and future students,

• Address the current capacity of the School Boards,

• Consider the future state of education, and

• Provide the flexibility to enable differentiated learning.

2.0   PURPOSE OF THE FUNCTIONAL PROGRAM

The Functional Program describes the proposed services, activities and staffing of the Schools, together with a description of the Schools resources and space required to support them. It provides a comprehensive understanding of the activities and the functional needs of each program component, which must be accommodated in the Schools.

Functional Programs for the Core School Designs have been informed through the Phase 1 project activities, and significantly, the Lean 3P Event. The Saskatchewan Ministry of Education SA-1 tables and values form the basis for the functional program areas that are illustrated on subsequent pages and in the architectural layouts of the Indicative Design. While program names and area distribution has been modified, the total area allocated for each public school and Catholic school is maintained.

The Functional Program has been developed based upon the breakdown noted below:

- Regina Schools – RPS - 450 stable enrolment/650 peak enrolment and – RCS - 350 stable enrolment/400 peak enrolment.

Specifically, the Functional Program:

1.   Documents the scope of services, operational procedures and methods, projected workload and staffing assumptions, functional relationships, planning criteria, room-by-room space requirements and equipment for each program component.

2.   Is a tool for management – it documents scope of service, objectives and basic operational methods of the specific component; and specifies the human, technical, and building resources necessary to function as intended.

3.   Is a communication tool – it outlines what each component intends to do and why, and assists in securing the necessary resources and project approvals to proceed with the project.

4.   Is the foundation for the Design – it provides instruction to the architectural and engineering team for the preparation of schematic design and later detailed design and construction documents.

This Functional Program uses the following terms and defines them as follows:

"21st Century Learning Environment Describes a learning environment that promotes interaction and a sense of community, enabling formal and informal learning; spaces are flexible to accommodate the unique learning needs of every learner and encourage multiple modes of inquiry, all while supporting the positive human relationships required for effective learning**;**

"BGSM" or "Building Gross Area or Building Gross Square Meters" means the sum of all building floor areas measured to the outside face of exterior walls for all stories or areas having floor surfaces. Building gross area includes component gross areas, general circulation, mechanical and electrical space and exterior walls;

"Central Core" means the portions of the Schools that share a Central Core with a Child Care Centre, a Community Resource Centre, Gymnasiums and multipurpose rooms and is located centrally between the public school and the Catholic school;

"CGSM" or "Component Gross Square Meters" means that portion of a building assigned to a specific component, including net areas, internal circulation, partitions, building structure and small mechanical shafts. Component gross area is measured to the inside face of exterior walls and to the centre line of partitions adjoining other components or general circulation space;

"Close Adjacency" describes a direct or in-direct physical access between rooms or components through the use of a minimal amount of horizontal general or internal circulation, such as directly across a corridor or within one room away (excluding the gymnasium);

"Convenient Access" means physical access between rooms or components through the use of extended horizontal and/or vertical general circulation, fits in well with persons needs, activities and plans, situated to provide easy access, involving little trouble or effort;

"Core School Design" means the design developed from the input from the 5 School Boards and Ministry of Education, gathered through the Lean 3P process and concurrent technical meetings with School representatives;

"Core Structure" means the portion of the Schools composed of permanent construction. The Core Structure does not include portables. Bases are sized to accommodate the projected Peak Enrolment for the school and as such elements including gymnasia, washrooms, etc. are sized to accommodate the projected Peak Enrolment;

"FLS" means Functional Life Skills;

"Immediately Adjacent" means a direct physical relationship between rooms;

"LAT" means Learning Assisted Teaching;

"NSM" or "Net Area or Net Square Metres" means the horizontal area of space assignable to a specific function. The net area of rooms is measured to the inside face of wall surfaces;

"Opening Enrolment" means the enrolment which the school is designed to accommodate upon opening in Fall 2017;

"Peak Enrolment" means the enrolment for which the school is designed to accommodate with the addition of portables for a certain period of time. Peak Enrolment addresses the challenge of providing School infrastructure in new communities which typically experience a fluctuation in student enrolment based on the maturation of the community. Depending on the community, Peak Enrolment may occur at opening or at a future date, typically within 7 years of opening;

"RCS" means the Regina Catholic School Board;

"Regina Schools" means the Core School Design for RPS/RCS School Boards that approximates SA1 area allowances for 650 and 400 peak student populations;

"Relocatable Classroom" - Also known as a portable classroom or modular classroom in other jurisdictions. Relocatable Classrooms are designed to be of a construction type that allows the unit to be relocated to another site after Peak Enrolment has subsided to a Stable Enrolment. Due to site constraints and site efficiency, Relocatable classrooms are to be two storeys. Design of the Relocatable classrooms is to accommodate customization for flexible learning environments (i.e. accommodate large openings between classrooms, circulation and adjacent break out areas);

"RPS" means Regina Public Schools;

"**Schedule of Accommodations**" is a detailed list of spaces and the corresponding required net areas;

"SERT" means Special Education Resource Teacher;

"Stable Enrolment" means the enrolment which the school is expected to accommodate after the Peak Enrolment has subsided. The Stable Enrolment reflects the maturation of the surrounding community;

"Traditional Classroom" means a learning environment which typically accommodates 30 students in desks arranged in a lecture style format.

3.0   SCOPE OF SERVICES

3.1   SCHOOL LOCATIONS – PROJECT 1

Location	School Boards	Project Type
City of Regina - Harbour Landing	RPS / RCS	Joint-use Pre-K-8 Elementary School
City of Regina – Greens on Gardiner	RPS / RCS	Joint-use Pre-K-8 Elementary School
City of Regina – Skywood	RPS / RCS	Joint-use Pre-K-8 Elementary School

3.2   ENROLMENT

Student Enrolment: Indicates full time students enrolled in 2017 and at the planning horizon of 2025.

Note: Pre-Kindergarten is not included in enrolment numbers.

The Project #1 enrolment plan is as follows:

Table 3.2 – Student Enrolment						
School Name	**Grade**	**School Board**	**Opening Enrolment 2017**	**Peak Enrolment**	**First Year of Peak**	**Stable Enrolment**
Harbour - Regina	K-8	RPS	650	650	2017	450
	K-8	RCS	350	450	2022	350
Gardiner - Regina	K-8	RPS	500	650	2025	450
	K-8	RCS	350	400	2018	350
Skywood - Regina	K-8	RPS	450	450	2017	450
	K-8	RCS	350	450	2022	375

4.0   PRIMARY DESIGN CONSIDERATIONS

Each public school and Catholic school will have its distinct identity reflected in the design and operation of the School. The exterior design will create entrances to each public school and Catholic school that are separate and readily apparent as the facility is approached from the street. Specifically, the Catholic schools will have a demonstrably Catholic symbol/s recognizing their unique mandate. Within the Catholic Schools, the design will allow for displaying Catholic symbols, assisting in the School's delivery of Catholic faith-based education.

The public school and Catholic school are to be designed to allow for Personal Learning Communities (PLC), each with tailored supports based on usage and age-appropriate curriculum. The creation of learning communities is intended to promote a sense of identity and belonging among students of similar ages, producing a 'home-like' environment and fostering stronger relationships among students across classes. In addition, the formation of learning communities also cultivates connection between teachers and enables a collaborative approach to instruction, further benefiting the student. The design will accommodate the addition of Relocatable classrooms connecting and feeding into the Personal Learning Communities.

Learning Community Groupings:

Main Floor:
- Pre-Kindergarten, Kindergarten, Grade 1
- Grade 2 and Grade 3

Second Floor:
- Grade 4, Grade 5 and Grade 6
- Grade 7 and Grade 8

Each Learning Community includes the following:

Learning Commons

The concept of a learning commons is an inclusive, flexible, learner-centred, space for collaboration, inquiry, imagination and play to expand and deepen learning. A learning commons is an agile and responsive learning and teaching environment available to individuals and group to use for multiple, often simultaneous, purposes. It supports literacy, numeracy, competency development and student learning outcomes through access to and instruction in the effective use of print and digital resources. The learning commons approach functions best when learning experiences in the School community are coordinated to support student learning outcomes through collaborative planning, teaching and assessing.

Multi-Purpose Da Vinci Studio

Learning Communities for grades 4-8 will contain a project lab (also referred to as a Da Vinci Studio for science or art) that can support a variety of art and science project types, promoting inquiry and project based learning and collaborative teaching. The design will provide the flexibility to open some project labs to common areas (Learning Community or Student Commons), and their wet and messy areas, to be utilized for larger scales of instruction. This approach encourages an interdisciplinary approach to education and facilitates project based learning that simultaneously addresses multiple subject areas and a range of educational deliverables. Each Da Vinci Studio is Immediately Adjacent to a secure storage room with capacity for the storage carts. Da Vinci Studio shall have perimter walls and, large door opening access to Learning Community or Student Commons. Provide direct access to outdoor learning space where possible.

Instructional Areas

Each Personal Learning Community (PLC) will have instructional areas that open onto the Learning Commons with access to Break Out rooms to encourage collaboration and project based work. Proximity to Learning Commons, Da Vinci Studios, and Breakout Rooms will also serve to support multiple learning modalities and specialized education. The addition of garage and barn doors will allow classrooms to connect and expand, permitting a range of educational activities and instructional sizes, ultimately promoting a team teaching approach. Each area will contain whiteboards and flexible presentation technology.

Teacher Collaboration Areas

Each Learning Community will utilize a dedicated area for staff to work, prepare and collaborate. This shift from classroom to collaboration area facilitates a team teaching approach, allowing instructors to work collectively on lesson material and broader educational objectives – ultimately reinforcing the Learning Community concept. The area will be positioned to support passive visual supervision of the Learning Commons or Student Commons and the ability of students to access teachers when engaged in projects or inquiry. Collaboration rooms are Immediately Adjacent to storage rooms, sized to accommodate linear 900 mm wide assigned teacher personal storage racks, outerwear, secure personal storage lockers (300 x 300 mm) and with Convenient Access to a staff washroom within each Learning Community.

Breakout Rooms

Breakout Rooms will be located either Imeddiately Adjacent or in Close Adjacency to instructional spaces, allowing students to easily access these areas during class times for project based work or special instruction. Intended to facilitate group discussion and collaborative work, these areas support multiple learning modalities and may include technologies to assist students in connecting to resources outside of the classroom.

Outdoor Learning Space

Outdoor Learning spaces are to be located, at ground level, in Close Adjacency to School entrances for the various Learning Communities and at second floor level, on roof decks providing Convenient Access from interior and exterior learning environments. Roof deck learning spaces shall be accessed from common areas like the Learning Commons or from Multi-Purpose Art/Science spaces to allow enquiry based learning to happen both indoors and outdoors. Roof deck learning spaces shall be flexible in size and location and shall be designed to accommodate a minimum of one classroom of students at a time, depending on size, shall provide barrier free access from each public school and Catholic school and shall be designed for maximum occupancy based on area and appropriate exiting as required by Code.

Distinct Identity

Each public school and Catholic school will have its distinct identity reflected in the design and operation of the facilities. The exterior design will create entrances to each public school and Catholic school that are separate and readily apparent as the facility is approached from the street. Specifically, the Catholic schools will have a demonstrably Catholic symbol/s recognizing their unique mandate. Within the Catholic schools, the design will allow for displaying Catholic symbols, assisting in the school's delivery of Catholic faith-based education.

The Public School, Catholic School and Community Core shall each be identified by their own distinct colour, entrance canopy, and signage. The Catholic School is represented with warm colours: red on the exterior and warm yellows and oranges on the interior. Its main entrance is made distinct by a vertical entrance element. The Public School is represented by cool colours: blue on the exterior and blues and greens on the interior. Its main entrance is differentiated by a long horizontal entrance canopy. These colour strategies are continued on the interior of the building to help with school identity and way finding. Colours can change on each school site to help create unique identity within its community. The

Community Core has its own distinct colour, creating a fun and playful façade while providing an identity for the daycare. A pergola and waiting area marks the community entrance.

Additional design criteria applicable to each joint use School shall include the following:

Community Access

Community access plays an important role in the development of the facilities. Consideration to access during the School Day and Outside the School Day has been accommodated with visibility of entrances as well as controlled areas of accessibility for Outside the School Day hours with doors and security grilles. When the Schools are in use after the School Day, amenities such as the Child Care Centre, Community Resource Centre, gymnasia, and multi-purpose spaces will be open to the community as appropriate.

Child Care Centre

A 90 seat Child Care Centre is included in each facility within the shared Central Core. The Child Care Centre will accommodate infants, toddlers and preschoolers and have direct access to an outdoor play environment. The Child Care Centre will be operated in a lease arrangement to a third party operator.

Flexible Construction

Special consideration will be given to areas that are more likely to evolve as education transitions to be more individualized and project based. The design of these areas will anticipate an adaption from more traditional spaces to flexible project areas.

This adaptive design will be provided by utilizing the following:

- Select walls are designated for insertion of large openings with doors or complete removal, which will impact floor and ceiling finishes, internal wiring distribution and lighting controls in subsequent phases;

- A strategic approach to creating larger areas (larger flexible structural zones) has been implemented. This enables future flexibility by employing a big box, loose fit concept that can adapt more easily to future special requirements than a highly articulated plan;

- The use of flexible, large scale sliding or overhead doors will be considered in various areas to allow spaces to transition use and quickly expand project spaces.

Durable Construction

The durability of the Schools both inside and out will be of a high priority. The focus of material selections will be durability, aesthetics and functionality.

Integration of Technology

The School Boards develops a philosophy of accessibility to technology through integration both at the classroom and school wide levels. Traditional stand-alone computer laboratory facilities will not be conceived of as part of the central typical services for the school. Additional computer terminals will be considered for incorporation into the open areas throughout the School. The pervasive influence of computers and other technology devices will be incorporated into the other instructional spaces in the school, such as the Resource Centre. The influence of personal computing devises will require the consideration for charging stations as well as school wide wireless networking. Each public school and Catholic school will have multi-purpose or seminar rooms that have the capability for video / conference.

Daylighting and Views

Fundamentally, this includes the admission of natural light into the internalized spaces (including the Learning Commons for each Learning Community) within the Schools in addition to all Learning Spaces. Windows with glare control will also be considered for incorporation into the gymnasia to provide a controlled level of diffuse natural light.

5.0   CHILD CARE CENTRE AND COMMUNITY RESOURCE CENTRE

The Core School Design includes a shared Central Core with a Child Care Centre for 90 children and a Community Resource Centre. The placement and layout of these components will be developed in concert with each other to allow a common main entry access and exterior access to play areas. The incorporation of these spaces into the facility strengthens the community partnerships and commitment to learning at all ages.

The Child Care Centre shall be designed to accommodate 90 children and include spaces for Infants, Toddlers and Pre-school children. The breakdown of children for purposes of designing the space includes 12 infants, 25 toddlers, and 53 pre-school children. The centre shall be designed to accommodate flexibility to allow for a varying split between toddlers and preschoolers in the different communities.

The Child Care Centre shall be designed in accordance with the Government of Saskatchewan Child Care Centre Construction and Design Requirements and Considerations.

The Child Care Centre will be located in close proximity to the Community Resource Centre and the Community Entrance to the facility. At each site the Child Care Centre is to include the following spaces:

- An infant space accommodating an entry with cubbies, a general program space incorporating a food preparation area and a teacher preparation area, separate diaper change area, and 2 separate sleep rooms accommodating 6 cribs in each;

- A toddler space designed to accommodate 20 children;

- A toddler / preschool space accommodating 5 toddlers and 13 pre-school children;

- 2 pre-school rooms accommodating up to 40 children in total.

All program areas shall be designed to accommodate the appropriate space requirements per child in infant sleep areas. Shared washrooms shall be located between program areas incorporating change tables. All program areas to include a teacher preparation area and a child height hand washing sink. In addition, cubbies are to be provided within the program spaces or in an adjacent central alcove.

Toddler and pre-school program spaces have access to a shared vestibule that connects to the exterior enclosed play area.

The Child Care Centre is anticipated to be involved in the operation of before and after school care programs in a number of the Cities, utilizing the kitchen for preparation of snacks and multipurpose space within the shared Central Core of the facility. In addition, there is a strong synergy with the Community Resource Centre, through the desire to share space where possible and in the common goal of providing services for families within the communities.

Each Community Resource Centre site is anticipated to be unique in regards to programs and service offerings reflecting what is identified as needed in each respective community. The Community Resource Centre will provide student support spaces during the day and community support space Outside the School Day hours. This is viewed as a positive element to ensure that the new facilities are vibrant spaces during and after School hours providing holistic support for families and communities. The Community Resource Centre will be located in close proximity to the Community Entrance and the Child Care Centre at each site.

6.0   LEARNING SUPPORTS

The Schools will also have a variety of learning supports throughout the facility. These supports have been strategically placed throughout the plan to create clusters of activity to encourage spontaneous interaction and collaboration between students and staff in key areas of the School.

Administration

A centralized area has been developed adjacent to the main entry for administrative functions and to provide distinct entries into each public School and Catholic School. Student support spaces are dispersed throughout the School, integrating special services with regular programming.

7.0   GUIDING DESIGN PRINCIPLES

School design features determined through the functional programming process will inform the design parameters. Design of the Schools will incorporate the safety and efficiency of the delivery of education and the well-being of both staff and students, and will include the following nine characteristics:

1. The design of the Schools will include the following general aspects:

   o   ergonomic design features throughout all spaces in the Schools that specifically facilitate the physical activities of staff and students, including for example, appropriate millwork, lighting, security and safety elements;

   o   easily legible configuration for School circulation, and an interior way finding system that is simple, intuitive, and fully coordinated within the Schools;

   o   interior instructional areas must be on a maximum of two (2) floor levels per school; floor level transitions between schools (if required) shall occur only within the central shared core area and shall include barrier-free ramps or lower inclined transitions in the corridors.

   o   services distribution, building systems, footprint and room arrangements, that allow for efficient, economical and minimally-disruptive physical and operational changes throughout the life of the Schools; and

   o   provide a simple building perimeter and non-restrictive fenestration pattern that fits in a residential neighborhood.

2. "**Universal Design**" philosophies that address barriers to equitable access to education such as cultural diversity, physical capability and gender:

   o   Equitable use – the Schools will be easy to use by people with diverse abilities;

   o   Flexibility in use – the Schools will accommodate a wide range of individual preferences and abilities;

   o   Simple and intuitive – the Schools will be easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level;

   o   Perceptible information – the Schools will communicate necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities;

   o   Tolerance for error – the Schools will minimize hazards and the adverse consequences of accidental or unintended actions;

   o   Low physical effort – the Schools will be capable of being used efficiently and comfortably and with a minimum of fatigue; and

   o   Size and space for approach and use – provide appropriate size and space for approach, reach, manipulation, and use regardless of user's body size, posture or mobility.

3. The Schools will incorporate a **Pattern language** of schools including:

   o   self-contained space that serves daily needs of students attending there;

   o   culturally neutral, appeal to youth and be non-institutional, home-like in appearance;

   o   public foyer /entryway with appropriate security;

   o   safe furniture, finishes, and accessories;

   o   plentiful natural light and visual access to outdoor spaces;

- o physical access to outdoor playgrounds;
- o quiet spaces; and
- o invisible service areas (garbage, mechanical, electrical, IT, etc).

4. The Schools will integrate **Safety** including:

- o safe-use and strategies to reduce the spread of infection;
- o fire and safety systems as required by code;
- o system which monitors entry and exit to the Schools;
- o smooth indoor and outdoor surface transitions with barrier free access; and
- o kitchen spaces which drive good sanitation practices.

5. The Schools will exemplify a **Learning /Holistic Space** that:

- o is equitable and respectful - with all Facility Users valued, and student confidentiality and dignity maintained;
- o maximize, the use of natural daylight;
- o provides all season connection to the outdoors;
- o manages noise levels with acoustic treatments and design criteria;
- o includes art and recreation that is plentiful and interesting; and
- o promotes and supports the concept of sustainability (i.e. recycling, etc).

6. The Schools will demonstrate **Functional Competence** including the following elements:

- o efficiency - reducing School Users' distances to travel within the School;
- o generation - of communication and knowledge transfer among teachers and between teachers, students and families, teachers and visitors, and students, and reasonably lively in its public spaces;
- o flexibility - to accommodate continuous programmatic change and growth;
- o lever door handles;
- o color contrast provided between:
    - ▪ floor /wall junctures;
    - ▪ wall covering /wall;
    - ▪ furniture/floor;
    - ▪ floor/lavatory fixtures;
    - ▪ door jamb/door (except front door);
- o signage with adequate sized lettering and color contrast;
- o window coverings that provide levels of light control that are secure; and
- o heating/cooling controls that are legible and easy to operate.

7. The Design will create an **Environment** that promotes staff efficiency and safety including:

- o adjacencies which support efficiency;
- o universal room and floor plan design;
- o integrated wireless infrastructure and systems capable of supporting multiple and expanding technological systems including;
    - ▪ fire alarm systems;

- telephone, television, for students, teachers and administration staff;
- computers and handhelds devices for staff and students.

8. The Design will foster **Interconnectedness and Community** through incorporating:

   o shared multipurpose group spaces;

   o visual connection to outdoor space from all teaching and public spaces; and

   o internal corridor connectivity to the administration offices.

9. Design of the **Site** will incorporate the following design principles:

   o physical safety and security using CPTED design principles;

   o pedestrian and vehicular access and parking that are barrier free accessible, although there will not be the use of handicapped operators on all exterior doors;

   o bus drop-off locations shall be located on the side roads (wherever possible, subject to site constraints and Bylaw requirements), away from the parent drop-off locations;

   o students shall primarily enter the school from rear and side entrances located adjacent to their respective grade learning community;

   o visual access to nature from teaching areas, student areas and staff work areas;

   o management of micro-climatic effects on students, staff and visitor comfort and safety of building location and orientation, sheltering of building walkways and building entrances and access to light throughout the year in outdoor spaces;

   o regionally adapted environmental design will include restorative elements such as indigenous and drought tolerant planting;

   o provide safe and legible transitions between the Site and buildings, roadways and parking, and open space and public sidewalks;

   o provide appropriate access to the Site to meet the needs of emergency services vehicles to the Site for emergencies, school bus traffic, staff and visitor traffic, parent drop off and service and delivery vehicles during construction and operating periods;

   o safe and well lit spaces with appropriate exterior lighting levels near Building entrances and exits, walkways, public areas, and parking areas. Lighting will not cause glare, shadow, or high contrast with surrounding areas;

   o outdoor learning environments be designed to provide a suitable environment that takes student learning into consideration; and

   o outdoor play spaces will include playground areas complete with safety surfacing and headers. Each play area will include play equipment suited to ages 2-12 and have a minimum capacity of 20 children, supplied and installed by the School Boards.

10. The design will recognize the importance of creating sacred space within the Catholic Schools. This non-dedicated space may be accommodated in the learning commons or multi-purpose spaces for religious gatherings or services.

11. All Schools shall accommodate the flexibility to address the language and cultural educational opportunities of different cultures as part of the basic educational curriculum for these students.

8.0   PROGRAM COMPONENTS INTRODUCTION

The following program component groups provide a range of services, amenities and support spaces that the Ministry of Education envisions will be required for each public school and Catholic school. These nine (9) components are consolidated on each Site to provide enhanced quality of education.

The School services, amenities and support spaces have been organized on a component-by-component basis. A component is a cohesive grouping of activities or spaces related by function, and or service or physical arrangement. Within this Functional Program, the term component does not necessarily denote a department, as the term department refers to an administrative organization, but describes a functional organization of spaces and activities. Each component therefore constitutes a unique and definable building block within this Functional Program, that form the basis for the development options. It is envisioned that the component descriptions will be used as the foundation whereby the detailed design development will be developed at a later date.

8.1   COMPONENT GROUPS

The nine components are as follows:

1. General Instruction
2. Instructional Support
3. Resource Centre
4. Physical Activity
5. Program Arts / Science
6. Administration and Support Services
7. Program Flexibility
8. Building Services
9. Circulation

8.2   PROGRAM FRAMEWORK

A master program description of each component is detailed in parts 10 through 17, using the following in headings:

- Overview
- Functional Requirements

Overview: provides a general description of regional context of the program and planning parameters for development.

Functional Evaluation includes:
- Layout of space and location within the Schools;
- Proximity to related components;
- Adequacy of space: Identifies issues in the quality of the environment, the size of rooms compared to the Schedule of Accommodations. Room configuration and functionality issues are identified;
- Special requirements.

Internal Relationships addresses key adjacencies and zoning within the component group. This high level information is found in the detailed Room Data Sheets and is used for master planning purposes establishing key relationships and client flow.

8.3   SCHEDULE OF ACCOMMODATIONS

Schedule of Accommodations provides the detailed list of spaces and their required areas. The schedules illustrate the number of projected rooms or spaces (units), the Net Square Meters per unit (NSM/unit), and the total Net Square Meters for each room or space (NSM). Net Square Meters (NSM) is stated to the nearest 0.1 m^2 and is considered the desired minimum. At the end of each space list the total net space is summarized. The component gross factor is considered indicative and may vary to suit the proposed design.

Subject to acceptance by the Authority, some rooms may be combined or resized to suit the design. The cumulative total net area must equal the total NSM for that room or space as identified in the Schedule of Accomodations. (i.e. 6 storage rooms @ 15 NSM/unit may be a combination of 6 storage rooms of varying sizes totaling 90 NSM).

Refer to Attachment 1 for Schedule of Accommodations for Regina Schools

8.4   ROOM DATA SHEETS

Room Data Sheets establish specific physical and functional requirements, including furniture and equipment for each component.

Refer to Appendix 3B for Functional Program Room Data Sheets for Regina Schools

9.0   FUNCTIONAL DESCRIPTION BY AREA

1. **Pre K-8 School Program**: student and staff designated amenities include:

    o **General Instruction**:
        - G1.0   General Instruction
            - G1.1   Learning Space Grades 1-3
            - G1.2   Learning Space Grades 4-8
            - G1.3   Learning Space Kindergarten
    o **Instructional Support:**
        - G2.0   Instructional Support
            - G2.1   Not Used
            - G2.2   Break Out Room
            - G2.3   Not Used
            - G2.4   Not Used
            - G2.5   Tutorial/Student Support
            - G2.6   Learning Commons
            - G2.7   Not Used
            - G2.8   Personal Care W/C
            - G2.9   Not Used
            - G2.10   Not Used
            - G2.11   Not Used
            - G2.12   Not Used
            - G2.13   Not Used
            - G2.14   Not Used
            - G2.15   Not Used
            - G2.16   Storage
            - G2.17   IT Closet
            - G2.18   Perch
            - G2.19   IT Storage
            - G2.20   Not Used
            - G2.21   Not Used
            - G2.22   Not Used
            - G2.24   Student Commons
            - G4.0   Relocatable Classrooms
    o **Resource Centre**:
        - R1.0   Resource Centre
            - R1.1   Library
            - R1.2   Admin / Professional Office
            - R1.3   Resource Centre
            - R1.4   Not Used
            - R1.5   Storage
            - R1.6   Not Used
            - R2.1   Not Used
    o **Physical Activity**:
        - P1.0   Gymnasiums
            - P1.1   Gymnasium
            - P2.11   Multi-Purpose Physcial Activity
    o **Program Arts / Science**:
        - P2.0   Program Arts / Science
            - P2.1   Multi-Purpose Da Vinci
            - P2.2   Not Used
            - P2.3   Not Used
            - P2.4   Multi-Purpose Music
            - P2.6   Not Used
            - P2.7   Not Used
            - P2.8   Not Used
            - P2.10   Not Used
            - P2.12   Not Used

- P2.13 Not Used
- **Administration and Staff Support Services**:
  - A1.0 Reception
    - A1.0 Reception
    - A1.1 Not Used
  - A2.0 Infirmary
    - A2.0 Not Used
    - A2.1 Not Used
  - A3.0 Administration Offices
    - A3.1 Principal's Office
    - A3.2 Vice Principal's Office
    - A3.3 Not Used
    - A3.4 Meeting Room
    - A3.5 Not Used
    - A3.6 Work Station
    - A3.7 Not Used
  - A4.0 Staff Support
    - A4.1 Staff Room
    - A4.2 Teacher Collaboration
    - A4.3 Workroom
- **Program Flexibility**:
  - Program Flex Space
    - P3.1 Learning Space Pre-Kindergarten
    - P3.2 Pre-Kindergarten W/C
  - Child Care Centre
    - D1.2 Toddler/Preschool
    - D1.3 not used
    - D1.4 Infant Sleep
    - D1.5 Staff Room
    - D1.6 Office
    - D1.7 Cubbies
    - D2.1 Kitchen
    - D2.2 Pantry
    - D2.3 Tub Room
    - D2.4 Change Room
    - D2.5 Laundry
    - D2.6 Storage
    - D2.7 Vestibule
    - D2.8 W/C
    - D2.9 Corridor
    - D2.10 not used
    - D2.11 Janitor
    - D2.12 Infant Room
  - Community Resource Centre
    - D3.1 Community Resource Centre
    - D3.2 Meeting Room
    - D3.3 Office
    - D3.4 Washroom
    - D3.5 Community Storage
- **Building Services**:
  - B1.0 Servery
  - B2.0 Washrooms / Change rooms
    - B2.1 Girls Change Room
    - B2.2 Boys Change room
    - B2.3 Kindergarten Washroom
    - B2.4 Student Washroom
    - B2.5 Unisex Barrier Free WC for staff and students
    - B2.6 Staff Washrooms

- B2.7   Not Used
  - B4.0   Recycling Room
    - B4.1   Deliveries
  - B5.0   Janitor Rooms
  - B6.0   Mechanical / Electrical Rooms
  - B7.0   Elevators
    - B7.1   Elevators
    - B7.2   Elevator Machine Room
  - B8.0   Gym Services
    - B8.1   Not Used
    - B8.2   Gymnasium Storage
- **Circulation**
  - C1   Corridor
  - C2   Stairs
  - C3   Boot Room
  - C4   Vestibule/Entry

10.0 GENERAL INSTRUCTION

10.1   OVERVIEW

The intent of the General Instruction areas is:

- All classrooms will be sized in accordance with the Schedule of Accommodation and teaching areas most appropriate to their offered curriculum.

- The majority of general instruction classrooms will be of the same area and dimensions.

- All grade classrooms, considerations shall include:

    - Natural lighting;

    - Display area (tack boards);

    - Furniture flexibility for individual or group projects;

    - Provision for A/V viewing;

    - Cable drops for networked computer work terminals and peripherals;

    - Appropriate power accommodation on each wall;

    - Opportunities to connect to adjacent learning spaces or expand into learning commons;

    - Residential feel for floor and wall finishes where possible.

Prekindergarten and Kindergarten rooms, considerations shall include:

- Natural lighting.

- Ease of providing nutritional meals (Pre-Kindergarten program only).

- Pre-Kindergarten & Kindergarten Convenient Access to an outside exit.

- Pre-Kindergarten & Kindergarten Wet Areas and Storage.

- Dedicated access to toilets and sinks appropriately sized and located for young children. This washroom is to be included as part of the washroom fixture counts for the general student population, as indicated in Section 17 – Building Services. Shared washroom areas for adjacent rooms is allowable as this enhances teacher supervision but must not reduce the required fixture count.

- Storage areas will include open shelving units accessible to the students as well as lockable cabinets for equipment storage.

- Provision for sink(s) within the classroom.

10.2   FUNCTIONAL REQUIREMENTS

1. **G1.1   Learning Space Grades 1-3**
    - General instructional space, located on Main floor within Personal Learning Community;
    - Close Adjacency to wet/messy areas within the Learning Commons, proximity to breakout rooms for grades 2 and 3, access to Learning Commons and library.
    - Ceiling Height – 3000 AFF

2. **G1.2   Learning Space Grades 4-8**
    - General instructional space for grades 4-8, located on 2nd floor within Personal Learning Community;
    - Close Adjacency to Learning Commons and breakout rooms, proximity to Da Vinci studio, access to Learning Commons and presentation stair.
    - Ceiling Height – 3000 AFF

3. **G1.3   Learning Space Kindergarten**
   o Kindergarten instructional space, located on Main floor within Learning Community;
   o Close Adjacency to wet/messy areas within the Learning Commons, proximity to exit/entry and outdoor play areas;
   o Immediately Adjacent to washrooms.
   o Ceiling Height – 3000 AFF
   o Large door openings are not required between classrooms or learning commons/corridors

4. Catholic School Pre-K to Grade 3 students shall be provided with a shared locker cubby on castors close to the boot room entries; Grades 4-8 shall be provided with a single and double tier metal locker outside the classroom. Wet/messy areas and sinks are to be incorporated in main floor Learning Communities.

5. Public school Pre-K to Grade 6 students shall be provided with a shared locker cubby on castors close to the boot room entries; Grades 7-8 shall be provided with a full -height metal locker outside the classroom.

6. Sinks are to be incorporated where indicated on the Functional Program Room Data Sheets.

7. Each classroom shall have a wall mounted electronic data projector hook-ups including without limitation wiring and power surge protection.

8. Every classroom shall have current technology with power, data and telephone cabling as indicated in the Functional Program Room Data Sheets and/or on the Core School Designs.

9. Solid backing shall be incorporated into the School perimeter wall design allowing for the fastening of electronic whiteboards, whiteboards and tack boards.

10. Classroom millwork requirements are indicated on the Functional Program Room Data Sheets.

11. Natural light shall be incorporated into the School for each classroom.

12. Lighting control in instructional and learning spaces shall consist of:

   o A master ON/OFF switch located at the classroom entrance to provide control of all of the classroom lighting luminaires.

   o A 5-button (Bright/Dim/ON/OFF/Preset) switch located at the front of the classroom within 300 mm of the whiteboard or at the primary teaching location to provide dimming control of the classroom general lighting luminaires.

   o An ON/OFF switch located adjacent to the 5-button switch at the front of the classroom to provide control of the whiteboard luminaire.

   o Dual technology (PIR and ultrasonic) motion sensor(s), ceiling or corner wall mounted. Upon detection of occupancy, the sensor shall turn on all lights for a minimum period of 30 minutes. Manual switches within the classroom shall override the motion sensor control.

   o A daylight sensor to provide continuous dimming of the classroom general lighting luminaires relative to the natural light available via the dimming control/interface module. Fixtures shall be grouped in up to 3 zones with the first zone being closest to the windows. Each zone shall be individually dimmed proportionally to the daylight sensor input.

   o A dimming control/interface module. Control module shall interface with all switches, occupancy sensors, and daylight sensors to provide individual lighting control within each classroom. Control module shall be capable of providing either manual ON/automatic OFF, or automatic ON/automatic OFF control of room lighting

13. Classroom ceiling heights (3000 mm) may be varied over up to 25% of the room area with dropped ceiling finishes, to provide for enhanced learning spaces or to allow for concealed building services. Underside of dropped ceilings shall be a minimum of 2600 mm above finished floor.

11.0 INSTRUCTIONAL SUPPORT

11.1 OVERVIEW

Approximately 15–20% of the student population will require assistance and/or specific services to meet their individual education needs. Wherever possible, students requiring intensive supports will be integrated with the general student population. Provide area for services such as:

- Tutoring, resource/learning assistance, small group instruction rooms. "In-Class" storage refers to active, short term storage of teaching aids, computers, and books.

The Itinerant spaces will accommodate the following suggested services:

- Public Health Nurse or medical rest area.

11.2 FUNCTIONAL REQUIREMENTS

1. **G2.1**   **Activity Room**
   o   Not included.

2. **G2.2**   **Break Out Room**
   o   A small group room for collaboration and project based learning among students;
   o   Ability to hotel space for use by student support services or for small meetings when required;
   o   Located in Close Adjacency of learning spaces;
   o   Should accommodate up to 10-15 students.
   o   Physical and visual acess shall be provided from both classrooms and corridor or Learning Commons or Student Commons.

3. **G2.3**   **Resource – Cultural Room**
   o   Not included.

4. **G2.4**   **Seminar**
   o   Not included.

5. **G2.5**   **Tutorial/Student Support**
   o   A small group room for general use and to be used as a break-out or small meeting room with video conference capability;
   o   Centrally located with Close Adjacency to Learning Communities

6. **G2.6**   **Learning Commons**
   o   Shared learning space used for project based learning, large group activities, presentations, individual/independent study and cultural and/or spiritual celebration/events;
   o   Flexible area located off of learning spaces, in the heart of the Learning Community. Supports learning, socialization, and play among peers, contributing to a shared sense of identity and belonging among students and across grades;
   o   Immediately Adjacent to learning spaces and breakout rooms, Close Adjacency to Da Vinci studios. Each Learning Commons contains a wet/messy areas scaled to the age of the students in the PLC.
   o   Ceiling Height – 3000 AFF minimum
   o   Provide Learning Commons areas of varying size and quantity as defined in the Schedule of Accommodations. Remaining area may be dispersed within the Personal Learning Community to provide space adjacent to classrooms in each Learning Community to facilitate active, project based and collaborative work, supporting a range of learning groupings, from individual study to large projects across classes.
   o   NSM of Learning Commons does not include circulation space required for access to adjacent learning spaces. The design shall meet the required number of Learning Commons spaces and the total net area shall meet the area allocated area in the Schedule of Accomodations.

7. **G2.7**   **Counselling**
   o Not included.

8. **G2.8**   **Personal Care Washroom**
   o Fully accessible Washroom for students requiring assistance, complete with shower, ceiling track lift, and storage for personal care items;
   o In Close Adjacency to Central Core; one on main floor, one on second floor.

9. **G2.9**   **Sensory Room**
   o Not included.

10. **G2.10**   **EAL Classroom**
    o Not included.

11. **G2.11**   **FLS Classroom**
    o Not included.

12. **G2.12**   **LAT Instructional Space**
    o Not included.

13. **G2.13**   **LAT Office**
    o Not included.

14. **G2.14**   **Laundry**
    o Not included.

15. **G2.15**   **Laundry / Storage**
    o Not included.

16. **G2.16**   **Storage**
    o Storage rooms for RCS Instructional Support;
    o Storage rooms for RPS Instructional Support
    o Storage room for RPS for Program Arts
    o Refer to Schedule of Accommodations

17. **G2.17**   **IT Closet**
    o Communications room centrally located within each public school and Catholic school on both floors.

18. **G2.18**   **Perch**
    o Flexible learning area with Close Adjacency to second floor Learning Commons and overlooking to below Student Commons Commons, Library, and Presentation Stair.
    o Utilized for group work and quiet study.
    o Area to accommodate a group of 10-12 students in which 30-40% of the floor space cantilevers over the second floor presentation stair opening, allowing clear vistas to the lower level and adjacent second floor Student Commons.
    o The cantilevered sides of the Perch are to have a guard rail in matching height or greater as the adjacent railings.
    o Perch is to accommodate flexible furniture arrangements such as soft seating, tables, chairs.
    o At least one abutment within a continuous 8-10 m length of rail shall overhang the main floor below, providing an alternative vista to the space below.

19. **G2.19**   **IT Storage**
    o Storage closet for Laptop carts and other IT equipment, accessible by students with permission;
    o Centrally located within each learning community;

- o Immediately Adjacent to Learning Commons, Learning Spaces and circulation areas;
- o Close Adjacency to Break Out and Teacher Collaboration rooms, shared equally between Learning Communities, per floor, per public school and Catholic school.

20. **G2.20 FLS Kitchen**
    - o Not included.

21. **G2.21   Charging Station**
    - o Not included.

22. **G2.22 Therapy Room**
    - o Not included.

23. **G2.23 Not Used**
    - o Not included.

24. **G2.24 Student Commons**
    - o Signature gathering place for school, used at all times for instruction, independent student work, special events, large group activities and presentations;
    - o The conceptual 'heart' of the School;
    - o To be divisible with furniture for various simultaneous group activities;
    - o Ceiling Height – 3000 AFF minimum;
    - o Library, and Student Washrooms in Immediate Adjacency
    - o In Close Adjacency to Learning Spaces, and Da Vinci Studios

12.0 RESOURCE CENTRE

12.1 OVERVIEW

Resource Centre areas should be designed to accommodate the following criteria:

- House media collection centrally;
- Allow for adaptation and coordination of instructional media placement throughout the School;
- Sufficient electrical outlets to allow for flexible room layout;
- Security system;
- Story telling as part of presentation stair – no sunken pit through floor structure;
- Reference/periodical display – moveable free standing adjustable shelves;
- Cable drops for networked computer work station and internet/Ethernet ready;
- Photo copier.

12.2 FUNCTIONAL REQUIREMENTS

1. **R1.1   Library:**
    o   Centrally located space for library resources and general study – both individual and group work;
    o   To include story telling space on presentation stair;
    o   Flexible to accommodate casual and varied use;
    o   Immediately Adjacent to Learning Commons, the 'heart' of the school.

2. **R1.2   Admin / Professional Office:** (RCS Schools Only)
    o   Teacher Librarian office for private work and small meetings;
    o   Locate within Resource Centre;
    o   Located for visual control, security and supervision.

3. **R1.3   Resource Centre**:
    o   Main floor Central Resource Centre for school resources;
    o   Close Adjacency to Learning Commons;
    o   Lockable, facilitates coordination and distribution of resources across school;
    o   Can facilitate alternative, flexible uses depending on school needs;
    o   RCS – Immediately Adjacent to library area.

4. **R1.4   Not Used:**

5. **R1.5   Storage**: (RPS Schools Only)
    o   Locate Immediately Adjacent to Resource Centre;
    o   A/V storage to include cupboards and shelves for storage of audio-visual material, computer hardware and software; located within the staff work room and with access to corridor for rest of school.

6. **R1.6   Resource room:**
    o   Not included.

7. **R1.7   Computer & IT Closet:**
    o   Not included.

8. **R2.1   Library Mezzanine:**
    o   Not included.

9. Libraries shall be flexible enough to allow various options for the arrangement of furniture, bookcases and computer workstations

10. Library may be located either on exterior wall or centrally within building plan provided there is significant natural light penetration into core of School through library glazing.

11. Library shall be designed to allow for clear sight lines for ease of supervision.

12. The Resource Centre shall be separated from the Learning Commons by garage door, security grille or glazed partitions. Area must be secure with a lockable entrance.

13. RPS does not require an Immediate Adjacency between the Library and Resource Centre. Resource materials will be distributed throughout the school via moveable shelving/carts, and returned to the Resource Centre at end of day.

14. Presentation Stair: Circulation between floors in Library to accommodate large presentation stair. Presentation stair to allow direct movement from floor to floor and also act as social space and informal tiered amphitheater. Space for a Break Out Room should be accommodated under the stair where ceiling height is sufficient. Presentation stairs are to allow clear vistas from the second floor to the main floor level, suitable for presentations to all-school student assemblies.

13.0 PHYSICAL ACTIVITY

13.1 OVERVIEW

Physical Activity spaces should be designed to accommodate the following criteria:
- o Located within the shared Central Core of the facility;
- o Provide a minimum of 4 linear metres of continuous glazed views (may not include glazed doors but may be considered continuous if wrapped around a corner) from adjacent Central Core circulation space into each gymnasium. Glazing shall be from floor to 2200 mm height minimum, however the Authority will accept a maximum 200 mm high window sill at the floor;
- o Spaces will be shared between Schools Boards;
- o Provide efficient access to shared change rooms;
- o Public corridor space adjacent to Gymnasium and Multi-Purpose Rooms shall be suitably sized to provide crush space to accommodate the varied flow of large gatherings of occupants (minimum 350 people) utilizing the Gymnasiums for special events. Consideration shall be provided to student first design principals and balancing the access from both Schools.

13.2 FUNCTIONAL REQUIREMENTS

1. **P1.1   Gymnasium**:
    - o Physical education;
    - o Ceiling Height – clear 7500 AFF;
    - o Immediately Adjacent to Gym Storage, Change Rooms, Shared corridor with view into Gymnasium;
    - o Close Adjacency to Servery, Gymnasiums, and Multi-Purpose Physical Activity space if identified in the Schedule of Accommodations.

2. **P2.11   Multi-Purpose Physical Activity**:
    - o Multi-Purpose rooms shall be suitably designed to be used as mini-gymnasium/multi-purpose rooms for art presentations, stage productions, community dance class, exercise class, band or other similar functions;
    - o Ceiling Height – minimum 6000 mm AFF;
    - o Rooms to be located such that they can work together to act as 1 larger room and be separated from the corridor via movable walls;
    - o Immediately Adjacent to shared public corridor, both School Gymnasium, with operable walls to both Gymnasiums (6000 mm wide x 3400 mm high) and shared public corridor;
    - o Kitchen/Servery to be located directly across the public corridor to the Multi-Purpose Room
    - o Convenient Access to Change Rooms, Gym Storage.

3. Provide a dividing curtain to convert the larger gyms into two instructional areas, if identified in the Functional Program Room Data Sheets; and provide velcro gym mat hangers on gym walls.

4. Gymnasium will have mullion-less double doors or with a removable mullion, from the interior as well as from the exterior to handle large volume of people and over-sized objects.

5. The Gymnasium unobstructed ceiling height (7500 mm) shall take into consideration allowances for ceiling mounted items such as retracted basketball stops, dividing curtains and other building components.

6. Gymnasium will have two electric winch controlled ceiling mounted full court glass basketball backboards with keyed access and safety straps and four wall-mounted, swing-side, height adjustable, manually- operated cross court basketball backboards.

7. Gymnasium floor design shall be designed to Industry Best Practices and shall include without limitation:

    o basketball full-court (21.95 m x 12.8 m) and two cross-court layouts, volleyball full-court (18.0 m x 9.0 m) and two cross-court layouts (15.0 m x 9.0 m), and three badminton cross-courts (13.4 m x 6.1 m);

    o heavy duty recessed floor sockets for the badminton and volleyball layouts complete with flush-mounted covers.

    o The Authority with Project Co will coordinate appropriate game lines for the gymnasium spaces during Desigh Development phase.

8. Gymnasium storage room shall be flexible enough to allow various options for the arrangement of equipment and include without limitation:
    o gymnasium equipment shall be supplied by the School Boards;

    o solid backing shall be incorporated into perimeter wall design;

    o floor sockets without covers of same style as gymnasium floor sockets for volleyball and badminton poles.

9. Lighting control in the Gymnasium shall consist of:

    o A 5-button (Bright/Dim/ON/OFF/Preset) switch located at each gymnasium entrance for control of each half of the gymnasium, if gymnasiums have a natural light source;

    o Dual technology (PIR and ultrasonic) motion sensor(s), wall mounted. Upon detection of occupancy, the sensor shall turn on all lights for a minimum period of 30 minutes. Manual switches within the gymnasium shall override the motion sensor control;

    o A daylight sensor to provide continuous dimming of each half of the gymnasium lighting relative to the natural light available via the dimming control/interface module. Fixtures shall be grouped in up to 3 zones with the first zone being closest to the windows. Each zone shall be individually dimmed proportionally to the daylight sensor input.

14.0 PROGRAM ARTS / SCIENCE

14.1 OVERVIEW

Program Arts / Science Spaces contains shared amenities including:

- o Da Vinci / Science Studios
- o Home Economics
- o Industrial Arts
- o Music / Band
- o Performing Arts
- o Flex / Drama
- o Visual Arts
- o Activity Room

14.2 FUNCTIONAL REQUIREMENTS

1. **P2.1   Multi-Purpose DaVinci:**
   - o Flexible instructional space for arts and science project based learning;
   - o Closed instructional space with large door/operable wall openings to Learning Community, close to wet and messy area
   - o Immediately Adjacent to Learning Spaces and secure storage room;
   - o Centrally located within Learning Community;
   - o Direct access to outdoor learning space is desirable
   - o Direct access to daylighting;
   - o Da Vinci Studios for grades 4-8 only.

2. **P2.2   Multi-Purpose Home Economics:**
   - o Not included.

3. **P2.3   Multi-Purpose Industrial Arts:**
   - o Not included. This activity would occur within the DaVinci Studio.

4. **P2.4   Multi-Purpose Music:**
   - o Flexible instructional space for music/band education;
   - o Centrally located within School
   - o Locate away from quiet areas;
   - o Classroom shall include audio and small instrument storage.
   - o Public and Catholic Music rooms shall be isolated from each other and other instructional spaces by storage rooms or other non-instructional spaces, in addition to the required STC ratings.
   - o Ceiling Height – 3000 AFF minimum

5. **P2.6   Multi-Purpose Performance:**
   - o Not included.

6. **P2.7   Multi-Purpose Flex / Drama:**
   - o Not included.

7. **P2.8   Multi-Purpose Visual Arts:**
   - o Not included.

8. **P2.10   Multi-Purpose Band:**
   - o Not included.

9. **P2.11   Multi-Purpose Physical Activity**
   - See 13.0 Physical Activity

10. **P2.12   Multi-Purpose Audio Room (PSSD)**
    - Not included.

11. **P2.13   Multi-Purpose Kiln (PSSD)**
    - Not included.

15.0 ADMINISTRATION AND STAFF SUPPORT SERVICES

15.1 OVERVIEW

Administration Spaces contains amenities including:

- o Administration
- o Staff Support
- o Principal's Office
- o Vice Principal's Office
- o Work Room

15.2 FUNCTIONAL REQUIREMENTS

1. **A1.0   Reception:**
   - o Reception desk control point with good visual surveillance of main entry vestibule/corridor and Waiting areas;
   - o Reception desk to accommodate barrier free access and parent, teacher, and student inquiries;
   - o Waiting area to accommodate up to 4 visitors seated.
   - o Immediately Adjacent to waiting area and Principal/Vice Principal Offices.
   - o Receptionist is to have Immediate Adjacency to a small secure storage/file room
   - o Receptionist is to have direct supervision views of the main entrance

2. **A1.1   Waiting:**
   - o Not included.

3. **A2.0   Infirmary:**
   - o Not included.

4. **A2.1   Counselling / First Aid:**
   - o Not included.

5. **A3.1   Principal's Office:**
   - o Principal's Office for private work and small meetings with students, parents and staff
   - o Located within main administration area, Immediately Adjacent to administration reception complete with access door into admin area and public corridor; near main entry.
   - o Principal office is to have direct supervision views to the exterior

6. **A3.2   Vice Principal's Office:**
   - o Vice Principal's Office for private work and small meetings with students, parents and staff
   - o Within main administration area, Immediately Adjacent to Reception, Close Adjacency to Principal Office; near main entry.
   - o Vice Principal office is to have direct supervision views to the Student Commons

7. **A3.3   Office:**
   - o Not included.

8. **A3.4   Meeting Room:**
   - o General office or small meeting room for student support services.
   - o Close Adjacency to Staff room.

9. **A3.5   Itinerant Space:**
   - o Not included.

10. **A3.6   Workstation:**
    - o 2-4 Flexible work station/hoteling space, Close Adjacency to reception.

11. **A3.7   Building Services Office:**
   o Not included.

12. **A3.8   Not Used**

13. **A4.1   Staff Room:**
   o Staff lunch room and gathering space, informal meeting space;
   o Close Adjacency to staff washrooms, meeting room, workroom, workstations and view of first floor Learning Commons;
   o Provide flexibility between the staff room and meeting room;
   o Accommodate lockable storage lockers for outerwear and personal affects for itinerant staff;
   o Provide kitchenette space with full size fridges, microwave and plumbed coffee;
   o Located off corridor to provide passive supervision.

14. **A4.2   Teacher Collaboration:**
   o Collaboration workroom provides a think-tank type space for teachers to be able to relax, collaborate and share ideas and research materials;
   o Within Personal Learning Community – view of Learning Commons for passive supervision;
   o Close Adjacency to learning spaces and staff washrooms.
   o Teacher Collaboration storage shall be a separate room Immediately Adjacent and with direct access to the Teacher Collaboration Room. Storage room to accommodate linear storage racks (900 wide x 500 deep x 2100 high) and lockable storage lockers for outerwear and personal affects for each assigned teacher,

15. **A4.3   Workroom:**
   a. Central staff work area to provide for teachers and administration staff to layout and assemble materials related to their daily duties as well as office supply storage;
   o Located on main floor with Close Adjacency to administration area.

16. **A4.4   Storage:**
   o Secure storage/file room for student files with Immediate Adjacency to reception.

16.0 PROGRAM FLEXIBILITY

16.1 OVERVIEW

Program Flexibility Spaces contains shared amenities including:

- Learning Space – Pre-Kindergarten

- Child Care Centre
    o Toddler/Preschool
    o Infant Sleep
    o Staff Room
    o Office
    o Cubbies
    o Kitchen
    o Pantry
    o Tub Room
    o Change Room
    o Laundry
    o Storage
    o Vestibule
    o Washrooms
    o Janitor
    o Infant Room

- Community Resource Centre
    o Community Resource Centre
    o Meeting Room
    o Office
    o Washroom

2. Community Storage

16.2 FUNCTIONAL REQUIREMENTS

1. **P3.1**   **Learning Space – Pre-kindergarten:**
    o Pre-Kindergarten instructional space, located on Main floor within Learning Community adjacent to school main entrance;
    o Pre-kindergarten Washroom Immediately Adjacent;
    o In Close Adjacency Kindergarten, Grade 1, Library and access to common entrance.
    o Ceiling Height – 3000 AFF
    o Pre-Kindergaten students shall enter the school escorted by their caregiver through the main front entry and shall carry their boots and coats to the movable cubbies located within the classroom
    o Large door openings are not required between classrooms or learning commons/corridors

2. **P3.2**   **Pre-kindergarten W/C:**
    o Student washroom with direct access from the Pre-Kindergarten Learning Space;
    o May be shared without reducing fixture counts between adjacent Pre-kindergarten rooms;
    o Assume Pre-Kindergarten enrolments to be 50% boys and 50% girls.

3. **D1.2**   **Child Care Centre – Toddler / Preschool Program Space:**
    o Flexible program space for:
        ▪ 13 preschool children and 5 toddlers with appropriate dividers;
        ▪ 20 toddlers with appropriate partial walls subdividing the space into two maximum group size of 10 for toddlers;
        ▪ 2 rooms for 20 pre-school children with appropriate dividers;
    o Ceiling Height – 3000 AFF

o   Immediately Adjacent to teacher prep area, washrooms with changing station and hand wash sink;

o   Close Adjacency to storage cubbies and Convenient Access to corridor, exterior play space.

4. **D1.4   Child Care Centre – Infant Sleep:**
    o   Infant sleep room for maximum six cribs per room;
    o   Opening into Infant Program Space.

5. **D1.5   Child Care Centre – Staff Room:**
    o   Child Care Centre Staff lunch room and gathering space, informal meeting space.
    o   Daylighting requirements are not applicable to the staff room.

6. **D1.6   Child Care Centre – Office:**
    o   Office or small meeting space with a Close Adjacency to main entry for surveillance.

7. **D1.7   Child Care Centre – Cubbies:**
    o   Storage cubbies centrally located within Toddler and Preschool Program space, Immediately Adjacent to main corridor and program spaces.
    o   Ceiling Height – 3000 AFF

8. **D2.1   Child Care Centre – Kitchen:**
    o   Child Care Centre Kitchen for food preparation for children enrolled in the program;
    o   Close Adjacency to the School servery for efficiency.

9. **D2.2   Child Care Centre – Pantry:**
    o   Pantry for storing dry goods, located Immediately Adjacent to the Kitchen.

10. **D2.3   Child Care Centre – Tub Room:**
    o   Tub room and Barrier free staff and visitor washroom located Immediately Adjacent to the main corridor.

11. **D2.4   Child Care Centre – Change Room:**
    o   Infant diaper change room Immediately Adjacent to the Infant program space.

12. **D2.5   Child Care Centre – Laundry:**
    o   Child Care Centre laundry room with Close Adjacency to the Kitchen.

13. **D2.6   Child Care Centre – Storage:**
    o   Child Care Centre storage Immediately Adjacent to main corridor with Close Adjacency to the Community entrance.

14. **D2.7   Child Care Centre – Vestibule:**
    o   Main entrance vestibule Immediately Adjacent to the community entrance vestibule.

15. **D2.8   Child Care Centre – W/C:**
    o   Pre-school/Toddler washroom area Immediately Adjacent to and accessed from child care program spaces with change table area.

16. **D2.11   Child Care Centre – Janitor:**
    o   Child Care Centre janitor room with mop sink;
    o   Immediately Adjacent to main corridor;
    o   Electrical outlet for recharging of equipment.

17. D2.12   Child Care Centre – Infant Room:
- o Infant program space with one play area for 12 infants with appropriate dividers and teacher preparation area, food preparation area and cubbies;
- o Ceiling Height – 3000 AFF
- o Immediately Adjacent to and with direct access to Infant Sleep Rooms and Change Room;
- o Close Adjacency to Child Care Centre main corridor.

18. D3.1   Community Resource Centre:
- o Multipurpose space to be utilized by school staff and outside resources during the day and by the community Outside of School Day hours;
- o Ceiling Height – 3000 AFF
- o Accessed from the community entrance with Close Adjacency to the Child Care Centre and conveniently accessed from the school administration area.

19. D3.2   Community Resource Centre – Meeting Room:
- o Flexible meeting space;
- o Immediately Adjacent to Community Resource Centre, Meeting room and Washroom;
- o In Close Adjacency to Community entrance and main corridor.

20. D3.3   Community Resource Centre – Office:
- o Immediately Adjacent to Community Resource Centre, Meeting Room and washroom;
- o In Close Adjacency to Community entrance.

21. D3.4   Community Resource Centre – Washroom:
- o Barrier Free washrooms with baby change table;
- o Immediately Adjacent Community Resource Centre, Meeting room;
- o In Close Adjacency to office and Community Entrance.

22. D3.5   Community Storage
- o Area is specifically for community use
- o Locate within B8.2 Gymnasium Storage
- o   Separated Community Storage area with a chain link fence complete with lockable gate.

17.0 BUILDING SERVICES

17.1 FUNCTIONAL REQUIREMENTS

The following are building services provided to support services of the Schools.

1. **B1.0** **Kitchen / Servery**
   o Fully accessible prep kitchen used primarily for instruction, and special events, shared with partner School;
   o Immediately Adjacent to Gymnasium, Multi-Purpose space accessed from Community Corridor and Close Adjacency to Multi-Purpose Community Rooms;
   o Kitchen must accommodate student and public use for the preparation of simple foods.
   o Ceiling Height – 3000 AFF;
   o Servery shall contain, waste receptacles, counter space or a small kitchen.
   o The Kitchen/Servery shall be located adjacent to the circulation area to create a multi-purpose teaching space which could be easily converted into a noon hour eating/assembly area. Space may be opened/closed with operable walls or large doors.
   o Kitchen/Servery shall include locked storage furniture item for consumable goods
   o Opening to servery must be Immediately Adjacent to the crush space.
   o Must be accessible for after-hour use by Community users.

2. **B2.1** **Girls Change Room**
   o Change Room for girls Gym classes and special evening events, Immediately Adjacent to the gymnasium.
   o Provide direct access to gymnasia from change room
   o Space for designated change room washroom fixtures is included in change room space allocation
   o Student Washrooms and Change Rooms located within the Central Core shall be sized to suit the occupant load of the Central Core area during after School hours when the Schools are not accessible to Public.
   Provide two metal partition change cubicles complete with partition door, fixed bench and 2 heavy-duty robe hooks. Toilet stall is not to be considered as a change cubicle.

3. **B2.2** **Boys Change Room**
   o Change Room for boys Gym classes and special evening events, Immediately Adjacent to the gymnasium.
   o Provide direct access to gymnasia from change room
   o Space for designated change room washroom fixtures is included in change room space allocation
   o Student Washrooms and Change Rooms located within the Central Core shall be sized to suit the occupant load of the Central Core area during after School hours when the Schools are not accessible to Public.
   o Provide two metal partition change cubicles complete with partition door, fixed bench and 2 heavy-duty robe hooks. Toilet stall is not to be considered as a change cubicle.

4. **B2.3** **Kindergarten Washroom**
   o Kindergarten Washroom located within Kindergarten Learning Space.
   o 1 washroom per Kindergarten Classroom
   o Unisex washroom

5. **B2.4** **Student Washroom**
   a. For every 19 girls, or part include 1 WC and 1 hand basin for every 2 WC
   b. For every 23 boys, or part include 1 WC and 1 hand basin for every 2 WC
   c. Up to ½ of boys' WCs may be replaced by urinals

> o   Distribute student washrooms in each Learning Community with Convenient Access to the future Relocatables;
> o   All student washroom stalls shall be individual with floor to ceiling partition walls and standard door and sink area shared by both sexes.
> o   Circulation space outside of the toilet cubicles and sink areas shall be clearly visable from the adjacent corridor area for passive supervision
> o   Avoid deadend orientations
> o   Each toilet stall to be identified as unisex. Urinal stalls to be identified as boys

6.   **B2.5   Unisex Barrier Free Washroom for Staff and Students**
> o   Accessible washrooms shall include 1 WC, and 1 hand basin;
> o   Provide unisex barrier free washrooms in each Learning Community with Convenient Access to the future Relocatables.
> o   Provide unisex barrier free washrooms in Close Adjacency to Learning Commons, Library
> o   Doors to staff and unisex barrier-free staff/student washrooms shall be located off of the corridor. Access from student washrooms is not permitted.

7.   **B2.6   Staff Washroom**
> o   Designated staff washrooms are to be unisex.
> o   Staff washrooms shall have Close Adjacency to the Staff room.
> o   Doors to staff and unisex barrier-free staff/student washrooms shall be located off of the corridor. Access from student washrooms is not permitted.

8.   **B2.7   Shower**
> o   Not included.

9.   **B4.0   Recycling Room**
> o   The recycling room shall be located at ground level;
> o   Interior finishes should support easy clean up so a sealed concrete floor sloping to one or more floor drains is advisable.
> o   One room may be shared by both School Boards.

10. **B4.1   Deliveries**
> o   Lay/down storage space for delivery items.
> o   Convienent Access to exterior
> o   Located in Central Core, shared by both Schools

11. **B5.0   Janitor**
> o   Provide space for typical janitors' closets distributed within each public school and Catholic school, that include slop sinks and broom/mop storage, and cleaning supply storage and floor cleaning equipment
> o   Interior finishes should support easy clean up and floor drainage
> o   Provide 1 centrally located janitor room per School Board, to accommodate School Board supplied janitorial equipment including without limitation auto floor scrubbers, wet dry vacuums, and floor polishers
> o   Provide service connections for auto floor scrubbers with dedicated power

12. **B6.1   Electrical Room**
> o   Provide adequate area for all electrical equipment not associated with computer cabling or telecommunications equipment.

13. **B6.2   Mechanical Room**
> o   Provide adequate area for all furnace or boiler rooms, air duct service areas (but not wall-enclosed air ducts that pass through floor assemblies), all mechanical installations associated with meeting the selected LEED® Certification.

14. B6.3   Mechanical / Electrical Room
   o   Provide adequate combined mechanical/electrical area to suit system design.

15. B6.4   Water Meter Room
   a.   Located on exterior wall with exterior access door as well as interior access door

16. B6.5   Mechanical Room Stairs
   o   Located to provide Convenient Access to mechanical room equipment and provide roof access.

17. B7.1   Elevators
   o   Passenger 2 Stop Elevator, 3500# capacity, with side opening;
   o   Must fit stretcher, have capacity for floor scrubber, and be key operated for safety;
   o   One for each public school and Catholic school.

18. B7.2   Elevator Machine Room
   o   Elevator machine room located adjacent to elevator as required by elevator manufacturer.

19. B8.1   Gym Office:
   o   Not included.

20. **B8.2   Gymnasium Storage**:
   o   Gym equipment storage for indoor & outdoor Physical Education program;
   o   Equipment located with fenced area, shared space with partner School;
   o   Immediately Adjacent to Gymnasium and exterior;
   o   Provide access door to the exterior via double doors;
   o   Provide separated space within for gas powered exterior maintenance equipment storage to accommodate not withstanding small scale snow removal and lawn care equipment.
   o   D3.5 Community Storage area is located within the B8.2 Gymnasium Storage area.

17.2   WASHROOM REQUIREMENTS

The following washroom requirments are provided to guide the design of the Schools.

Student Washrooms and Change Rooms located within the Central Core shall be sized to suit a maximum occupant load of 325 people in the Central Core area (excluding the Child Care and Community Resource Centre area) during after School hours when the Schools are not accessible to the Public. After School Hours events that have a higher occupancy load will require permission and coordination with the School Boards to provide access to additional washrooms.

Project Co design includes washroom counts that exceed the minimum requirements of the NBC and Table 17.2 below. Technical Submission includes a total of 61 toilets (5 above the minimum); a total of 8 urinals (3 fewer than the minimum); and a total of 52 sinks (13 above the minimum). Barrier free stall shall be provided to each boys & girls change room as scheduled below. The double corridor doors shall be so that Staff Washroom P-B2.6 is located in the RPS School and the core washrooms will provide enough to accommodate 325 people.

17.2 MINIMUM WASHROOM FIXTURE

Room Type	Public (650) WC	Public (650) Urinal	Public (650) Sink	Catholic (400) WC	Catholic (400) Urinal	Catholic (400) Sink	Comments:
B2.1 Girls Change Room	1		1	1		1	at least 1 accessible WC per change room
B2.2 Boys Change Room	1		1	1		1	at least 1 accessible WC per change room
*B2.4 Student Washroom - Girls	17		8	11		5	for every 19 girls 1 WC is required.
*B2.4 Student Washroom - Boys	7	7	6	5	4	4	for every 23 boys 1 WC is required.
B2.6 Staff Washroom	2		2	2		2	unisex staff washrooms required on each floor
P3.2 Pre-Kindergarten Washroom	1		1				1 unisex washroom per Pre-K classroom
D3.2 Child Care Washroom	6		6				for every 15 children 1 WC is required
D3.4 Unisex Washroom	1		1				
Total Fixture Count:	36	7	26	20	4	13	

*Below are the Functional Program Washrooms that are to be included in the B2.4 Student Washroom calculations (not in addition to)

Room Type	WC	Urinal	Sink	WC	Urinal	Sink	Comments
B2.3 Kindergarten Washroom	2		2	1		1	1 unisex washroom per Kindergarten classroom
B2.5 Unisex Barrier Free Washroom for Staff and Students	8		8	4		4	All unisex barrier-free washrooms shall be accessible for use by staff and students when required.
G2.8 Personal Care Washroom	1		1	1		1	unisex

18.0 CIRCULATION

18.1 FUNCTIONAL REQUIREMENTS

1. Provide water fountains with bottle filler in close proximity to each student washroom or at key locations within the public circulation areas, Learning Commons and within each Learning Community.

2. Provide sufficient power and data within public circulation areas to accommodate notwithstanding the following:

    o Flat screen monitors for schools announcements and information;
    o Use of and charging of student technological devices;
    o General receptacles for teacher and staff use.

3. Within each Learning Community provide tackboards above lockers for student work display.

4. School configuration and global circulation shall take into consideration the following requirements:

5. **C3   Boot Room**:

    o Boot rooms shall act as the vestibule
    o Boot rooms shall accommodate the directional volume flow of students entering/exiting each Learning Community. Dead ends are not permitted.
    o Consideration shall be given to the traffic flow and interaction of primary and middle years in the bootroom.
    o Boot rooms shall include boot racks of sufficient quantity to accommodate the footwear of the stable school enrolment within the Learning Community. Boot racks shall be sufficiently robust to support climbing.
    o Boot rooms may include a stair but the area allocation for the stair must be in addition to the boot room area allocation.
    o Provide glazing in vestibule doors and sidelights to allow for passive supervision.

- o   Equip the interior and exterior vestibule doors with locking door security system;
- o   Boot rooms shall facilitate ease of cleaning mud, sand and dirt.

6. **C4   Vestibule / Entry**:

- o   Main entry vestibules shall be provided to each public school, Catholic school and Community Resource Centre/Child Care Centre of a size to accommodate Facility Users;
- o   All entries into the School from the exterior shall be protected from snow and rain by canopies, building overhangs or the like;
- o   Main entry vestibules shall provide complete transparency from the interior immediately in front of the vestibule, and from habited spaces adjacent the vestibule;
- o   Main entry vestibules shall be configured and sized with adequate distance between the sets of doors, with a minimum depth of 2400 mm;
- o   Main entry vestibules to each public school and Catholic school and the Child Care Centre/Community Resource Centre entrance, provide automatic doors activated by handicapped accessible push-button controls located on the inside and outside of both sets of doors. Doors shall be configured for push-pull manual operation in addition to automatic operation. Equip the interior and exterior vestibule doors with locking door security system;
- o   Main entry vestibules shall facilitate ease of cleaning mud, sand and dirt;
- o   Main entry vestibules shall include boot racks of sufficient quantity to accommodate the footwear of the visitors;

7. **C1   Corridors**:

- o   Provide the following minimum clear width student circulation corridors:
    - ▪   2400 mm clear width corridors without lockers;
    - ▪   2700 mm clear width corridors with lockers on one side;
    - ▪   3000 mm clear width corridors with lockers on both sides;
    - ▪   1800 mm clear width corridors when adjacent to open areas on one side (with lockers, includes locker area)
    - ▪   1500 mm clear width corridors when adjacent to open areas on one side (without lockers)
    - ▪   1200 mm clear width corridors when adjacent to open areas on both sides
    - ▪   1500 mm wide corridors in non-student areas;
    - ▪   3200 mm wide corridor in front of Gymnsaium and Multi-purpose Physical Activity
- o   Corridor circulation space shall be additional to the programmed open instructional space such as Learning Commons, Student Commons, Perch, etc.
- o   Corridor circulation space shall be allocated to the primary entries to all instructional spaces
- o   Ceiling Height – 3000 AFF minimum;
- o   Design corridor ceiling space to accommodate all mechanical and electrical services. Corridor ceilings to be accessible type.

8. Primary student entry from the exterior for Grades 1 to 8 shall be from the side and rear entrances located with Close Adjacency to their respective Learning Community. Boot rooms shall be Immediately Adjacent to the exterior entry.

9. Primary Pre-Kindergarten students and Caregivers, Parents, and Visitors entry from the exterior shall be through the main front entrances located with Convenient Access to their respective Learning Community. Provide one 1200 wide x four high tray boot rack in vestibule for Visitor boots.

10. Main entry interior vestibule doors shall prevent access to the Learning Commons and Administration office area, except during programmed student access times . Access shall be granted through remote access from the Reception desk.

11. Provide lockable doors between Central Core area and each public school and Catholic school on both floors, to provide after-hour security to public school and Catholic schools.

ATTACHMENT 1 - SCHEDULE OF ACCOMODATIONS FOR REGINA SCHOOLS

APPENDIX 3B - FUNCTIONAL PROGRAM ROOM DATA SHEETS FOR REGINA SCHOOLS

JOINT USE SCHOOLSPROJECT - ROOM DATA SHEETS
Legend of Abbreviations

Floor Finishes	
CT	Carpet Tile
EP	Epoxy Flooring
RSF	Resilient Sheet Flooring
CONC	Sealed Concrete

Ceiling Types	
ACT	Acoustic Ceiling Tile
GWB	Gypsum Wall Board
ES	Exposed Structure

Door Types	
PSF	Pressed Steel Frame

Refer to attached Documents
23614556.1