



**Site Planning Team  
School Site Design Standards  
For new and existing development of Joint Use Sites:  
April 2016 version**



# Site Planning Team Draft School Site Design Standards

## Site Planning Team Design Standards: Table of Contents:

<b>Item</b>	<b>Page:</b>
1. General Joint Use Site Requirements	3
I. General Information	3
A. Role of SPT Design Standards	
B. Submission Requirements	
C. Role of SPT Committee	
II. Submission Requirements	3
III. Location Criteria	4
2. Site Design Requirements	4
I. JUS Building Envelope Requirements	4
A. Site size and design	
B. Parking Lot	
C. Drainage	
D. Servicing	
E. Creative Playground Design	
II. Playfield Envelope Requirements	5
A. Size and Layout	
B. Drainage	
C. Soccer Field Design	
D. Baseball Field Design	
III. Joint Joint Use Site Requirements	6
IV. High School Site Requirements	7
3. Transportation Requirements	7
I. General	7
II. Frontages, School, Bus, Parent Drop off / Pick up	7
III. Roundabouts	8
IV. Access Points	9
V. Adjacent Streets	9
4. Community Association Requirements	9
I. Location and Number of CA Sites	9
II. CA Site Sizing	9
III. Site Grading	9
<b>Appendices:</b>	
Appendix I – Summary of School Site Design Requirements	10
Appendix II – Example Site Concept Plan	12

# Site Planning Team Draft School Site Design Standards

## **1. General Joint Use Site Requirements**

### **I. General Information**

#### **A. Role of Site Planning Team (SPT) Design Standards:**

The SPT Design Standards are intended to provide direction on site design requirements and preferred standards for Joint Use Sites (JUS) at the Area Structure Plan (ASP), Outline Plan (OP) and Development Permit (DP) stages.

#### **B. Composition of the SPT Committee:**

The SPT committee consists of representatives from the: Calgary Board of Education (CBE); Calgary Separate School District (CSSD); the Federation of Calgary Communities; The City of Calgary Parks Department; The City of Calgary Transportation Department; The City of Calgary Corporate Properties; and The City of Calgary Planning Department. Other specialists contribute to SPT discussions as required.

#### **C. Role of SPT Committee:**

Site Planning Team (SPT) is a sub-committee of the Joint Use Co-ordinating Committee (JUCC). The role of SPT is to review application proposals for JUS and high school site requirements throughout the planning and development processes to determine the consistency with the SPT Design Standards. The intent is that the approved SPT Design Standards are to be followed. However, in instances where that is not practical due to unique challenges and site specific considerations, SPT will evaluate the unique design challenges, consider the rationale provided by the Applicant and alternatives, and provide a recommendation on how to best proceed.

### **II. Submission and Review Requirements**

- An Outline Plan application for a JUS shall include all the information as included in this guideline.
- A Development Permit application for a school site in a JUS shall include all the information required information in the Complete Application Requirements List (CARL) for *Addition and New Building in a Commercial, Industrial or Special Land Use District*.
- When a new JUS application is proposed (at any of the ASP, OP, or DP stages), the proposal information shall be submitted to the SPT Committee early in the application review process, for review and acceptance by the SPT Committee.
- At the outline plan stage, the proposal information shall include a concept plan for the JUS, which includes a conceptual layout and grading plan for both the school building envelope and the playfield envelope, which meets the requirements of these SPT Design Standards.
- The intent of the conceptual layout is to demonstrate that the proposed JUS land use area can accommodate all school and park requirements; however, it is the Development Permit which sets the actual site layout.
- The direction from the SPT Committee will generally include whether a) the proposal needs to be re-submitted for further review; b) is approved by the SPT with recommended changes; c) is approved without any further action required.

## Site Planning Team Draft School Site Design Standards

- If the proposal needs to be re-submitted for further review to the SPT Committee, the previous meeting minutes and date(s) in which it was discussed shall be submitted by the Applicant, to inform further discussions.

### III. Location Criteria

- The location of a JUS shall be generally indicated as identified in an approved Area Structure Plan and specifically determined through the Outline Plan / Land Use Amendment process.
- JUS should be located along dual frontages that have a primary collector or collector classification of which at least one street should be a through street that connects to a similar or higher order street.
- JUS shall be located to maximize the walkability within a community.
- JUS should not be located in, on, or adjacent to: the edge of a community; industrial and regional commercial areas; arterial streets; highways; railway lines; hydro-electric corridors; oil and gas lines and wells (active or abandoned); cell phone towers; or water courses.

## **2. Site Design Requirements**

### I. JUS Building Envelope Requirements

#### A. Site Size and Design

- Refer to Appendix I: Summary of School Site Design Requirements for school type, school area size requirements, parcel minimum frontage requirements, and playfield requirements.
- The majority of the school bus drop off frontage shall be located within the building envelope site area.
- Building envelope should be rectangular with a length to width ratio that does not exceed 1:1.5 with 90 degree corners to avoid inefficient areas.
- Transportation related requirements are included in Section 3 – Transportation Requirements.

#### B. Parking Lot

- At the outline plan stage, indicate two options for potential parking lot locations by showing two access points, with one on each street frontage.
- Parking lot access points onto adjacent streets are to be designed for all-turns access.
- Parking lot access points are to align to the opposite street centre line where applicable.
- At the Development Permit stage, comprehensive parking lot site design information is required, in accordance with the City Complete Application Requirements LIST (CARL).

#### C. Drainage

- Drainage for the school building envelope should:
  - Not have a slope greater than 2.0% over the entire site. On sites which cannot be designed with slopes 2.0% or less, additional Municipal Reserve /



## Site Planning Team Draft School Site Design Standards

Municipal and School Reserve lands may be requested by the Site Planning Team in order to ensure sufficient lands are available for future school development purposes;

- Be designed so that drainage it is sloped away from the corner of the street intersection so modular classrooms can be accommodated;
  - Show all trap lows on drawings;
  - Avoid internal drainage swales;
  - Not be encumbered by runoff from adjacent sites;
  - Be designed to retain the majority of runoff on-site;
  - Not include backfilling or cutting onto the JUS from adjacent roads or parcels.
- School building envelope shall tie into the proposed adjacent road property line elevations with a maximum slope of 2.0%.
  - Wet ponds shall not be located on JUS.

### D. Servicing

- Location criteria for JUS service connections for storm, sanitary, water, gas, 3 phase power, utility boxes and / or easements, shall include:
  - Placement of easements and / or utility boxes in locations along the perimeter of the JUS that do not interfere with: future access; future school or ancillary building locations; future playfield; and future playground areas.
  - Placement of utility boxes in areas which are not in prominent sight line locations or along the primary frontage of the school building envelope.
- Services shall be appropriately sized to allow service connection to the school site.
- Utility boxes should not be located on the JUS area unless they are needed to service the JUS. If no other viable options exist, the proponent shall: provide a summary of all other options explored; justify the need for it at the proposed location; and minimize the disturbance and use of public lands.
- Catch-basins shall be located along the curb, and away from the centre of T-intersections so they do not interfere with future potential driveway locations.
- Hydrant coverage shall be provided for the entire building envelope portion of the site.

### E. Creative Playground Design

- The creative playground location should typically be located within the school building envelope.
- The Applicant is not required to show a conceptual location for a proposed creative playground; however, space must be allocated within the school building envelope to provide for one.

## II. JUS Playfield Envelope Requirements

### A. Size and Layout

- Refer to Appendix I: Summary of School Site Design Requirements for playfield requirements.

## Site Planning Team

### Draft School Site Design Standards

- The playfield envelope should:
  - Be located and designed in a way which establishes strong connectivity to any adjacent park sites and regional pathways.
  - Accommodate the required functional playfield(s) as defined by The City Parks Department.
  - Include playfields and buffers that meet the *City of Calgary Parks Development Guidelines and Standard Specifications: Landscape Construction* specifications, as amended.
  - Include buffer areas from edge of playfield to JUS property line that are 10 metres wide.
  - Also provide areas for programmable active space and field events.
  - Not have easements extending through the playfield.
  - Be generally rectangular with 90 degree corners to avoid inefficient areas.

#### B. Drainage

- Drainage for the playfield envelope should:
  - Account for stormwater management. Sheet drainage is preferred for playfield envelopes as per the overall stormwater management plan.
  - Not have a slope greater than 2.0% over the entire site.
  - Not drain onto the school building envelope site.
  - Not include backfilling or cutting onto the JUS from adjacent roads or parcels.
- Dry ponds may be considered pending review of an appropriate location, sufficient justification, and consistency with engineering specifications.
- Wet ponds shall not be located on the JUS.

#### C. Soccer Field Design

- Soccer field design shall adhere to the *City of Calgary Parks Development Guidelines and Standard Specifications: Landscape Construction* specifications, as amended.
- A Combination Major-Minor Soccer Field is required on all sites;
- Soccer field design specifications include:
  - Soccer fields located adjacent to the school building envelope.
  - Soccer fields which are adjacent to a street may require fencing to retain playfield activities depending on buffer and grading details.

#### D. Baseball Field Design

- 76 meter baseball diamonds are required on all school sites, but are optional on elementary sites. If they are not required, a soccer field can be added instead;
- Orient ball diamonds with backstops to north or south, where possible, in order to keep the principal line of play away from the setting sun.
- Orient ball diamonds with back stops at street frontage location, where possible, in order to reduce complaints from neighbours about noise and runaway balls.

### III. Joint Joint Use Sites (J-JUS) Requirements

## Site Planning Team Draft School Site Design Standards

- Refer to Appendix I: Summary of School Site Design Requirements for school type, school area size requirements, parcel minimum frontage requirements, and playfield requirements.
- J-JUS are to only be used in exceptional circumstances when there are limitations, restrictions, and/or issues related to Municipal Reserves that are specific to an ASP.
- With J-JUS sites, each school building envelope will require dual collector street frontage. The playfield areas shall have a minimum of one street frontage.
- An Outline Plan application for a J-JUS shall include all the information included within Appendices III: Checklist for Joint Use Sites.

### IV. High School Site Requirements

- Refer to Appendix I: Summary of School Site Design Requirements for school type, school area size requirements, parcel minimum frontage requirements, and playfield requirements.
- An application for a JUS shall include all the information included within Appendices III and IV: Checklist for Joint Use Sites.
- High School sites should be located along dual frontages that have a primary collector or Arterial Street classification, of which at least one street should be a through street that connects to a similar or higher order street.
- High School sites shall be located to maximize access to primary transit services and walkability within a community.
- High school site should not be located in, on, or adjacent to: industrial areas; highways; railway lines; hydro-electric corridors; oil and gas lines and wells (active or abandoned); cell phone towers; or adjacent to another High School site.
- High School sites should be adequately setback from any significant environmental areas (wetlands, water courses, major topographical features).

## **3. Transportation Requirements**

### I. General

- A general framework for transportation analysis near a JUS should include:
  - An assessment of walking and cycling connections to the JUS.
  - A review of the circulations of bus and parent pick-up and drop-off vehicles.
  - Identification of high pedestrian crossing areas, and potential need for crosswalks, other pedestrian infrastructure and / or traffic controls, and / or traffic calming in the area.
  - Review of locations requiring curb extension installation.
- All street requirements are to be addressed at the outline plan stage, and are the responsibility of the area Developer to implement concurrent with the construction of all roads adjacent to a JUS.

### II. Adjacent Street Frontages

## Site Planning Team

### Draft School Site Design Standards

- JUS are to be located along dual frontage roads that have a Primary Collector or Collector Classification.
- Frontage roads must connect with the full collector road network. They should not connect to P-loops, cul-de-sacs, or lower order roads.
- Road geometry (horizontal and vertical profiles) shall be reviewed by The City Transportation Department to ensure appropriate visibility and safety requirements are met. This review includes an assessment of excessive road curvature, odd intersection angles, hill crest visibility, etc.

#### III. School, Bus, Parent Drop off / Pick up Zones

- School Bus and Parent drop-off / pick-up frontages shall be sized to meet the minimum frontages as defined in Appendix I: Summary of School Site Design Requirements.
- Sizing of drop-off / pick-up frontages shall recognize the clear zone and corner clearance requirements. The total School Bus and Parent drop-off / pick-up frontage requirements may extend across the entire JUS property limits as required.
- Note that parking is not permitted within the below street areas which also require a 5 metre setback on either side. These are not to be included within the calculation of the minimum School Bus and Parent drop-off/pick-up frontages:
  - Edge of flare of all access points to a JUS;
  - Crosswalks;
  - Fire hydrants;
  - Transit stops;
  - T-intersection crosswalks across from a JUS;
  - Roundabouts.
- School staff parking requirements shall be located within the school building envelope area.

#### IV. Roundabouts

- Roundabouts are generally supported at or near a JUS as it may facilitate improved vehicular circulation.

#### V. Access Points

- Site access points shall:
  - Align opposite street centre lines
  - Provide appropriate corner clearances
  - Provide appropriate visibility triangles
  - Meet minimum spacing requirements
- Potential site access locations shall be free of fixtures that would require future relocation, including but not limited to: catch basins, fire hydrants, street lighting, utility boxes, etc.

#### VI. Intersections and Crosswalks

- Pedestrian crossings in drop-off / pick-up frontages require curb extensions to improve pedestrian visibility.

## Site Planning Team Draft School Site Design Standards

### VII. Sidewalks

- Monowalks shall be provided, at a minimum, along the entire school building envelope frontages.
- Monowalks may need to extend beyond the school building envelope frontages to the JUS playfield frontages in order to accommodate the required amount of pick-up / drop-off frontages.
- Monowalks shall be a minimum width of 2.0 metres.

### **4. Community Association Site Requirements**

#### I. Location and Number of Community Association (CA) Sites

- One CA site per community (as defined in the New Community Planning Guidebook) shall be allocated from Municipal Reserve land to accommodate a community centre and/or community association facility or uses.
- The CA site should be highly accessible. Location selection should consider density and multi-modal connectivity to activity centres and corridors.
- CA site should be located to maximize the walkability within the community, as per the MDP, which includes the below considerations:
  - Integrated connections to regional pathways, bike routes, LRT stations, and bus routes.
  - Be located in areas with anticipated high volumes of pedestrian traffic.
  - Be in close proximity to school sites, multi-residential units, or other complementary civic uses.
- Community Association/ Community Center sites should be located on or adjacent to complimentary civic uses such as a JUS. The size of the site may be adjusted where facilities and open space are shared with other compatible and complementary civic uses.

#### II. CA Site Sizing

- CA sites are to be between 1.2 and 1.6 hectares (3 to 4 acres) in size.
- The site should follow one or both of the below dimension requirements:
  - The site shall be rectangle trending towards square with a ratio of sides not to exceed 1:1.5 to accommodate functional and programmable playfields, or
  - The site dimensions shall allow for one outdoor rink and two tennis courts , inclusive of buffers, as per Development Guidelines and Standard Specification for Landscape Construction

#### III. Site Grading

- Site grading should be no greater than 2.0% over the entire site to allow for proper drainage and flexibility of use. On sites which cannot be designated with slopes 2.0% or less, additional Municipal Reserve / Municipal and School Reserve lands may be requested by the Site Planning Committee in order to ensure sufficient lands are available for future commercial uses.

Site Planning Team  
Draft School Site Design Standards

## Appendix I – Summary of School Site Design Requirements

### Single School Sites

Type of School	School Building Envelope		Playfield Envelope		Total Area	Minimum Parent and School Bus Frontages	
	Area	Minimum Frontage	Area	Activity Field Requirements		Bus	Parent Drop-off / Pick-up
Elementary (K-4, K-6)	1.62 ha 4.0 ac	108 m 354.3 ft	2.43 ha 6.0 ac	<ul style="list-style-type: none"> <li>• 1 major soccer field</li> <li>• 2 minor soccer fields</li> <li>• 1 76 m ball diamond</li> </ul>	4.05 ha 10 ac	108m	144m
Middle School or Elementary / Junior High (5-9, K-9)	1.92 ha 4.75 ac	144 m 472.4 ft	2.93 ha 7.25 ac	<ul style="list-style-type: none"> <li>• 1 major soccer field</li> <li>• 2 minor soccer fields</li> <li>• 1 76 m ball diamond</li> </ul>	4.85 ha 12 ac	144m	144m
High School (10-12)	4.85 ha 10 ac	144 m 472.4 ft	5.26 ha 13 ac	<ul style="list-style-type: none"> <li>• 1 major soccer field</li> <li>• 2 minor soccer fields</li> <li>• 1 football field</li> <li>• 1 track &amp; field area</li> <li>• 2 76 m ball diamonds</li> </ul>	10.11 ha 23 ac	144m	144m



Site Planning Team  
Draft School Site Design Standards

**Joint-Joint School Sites**

Type of School	School Building Envelope		Playfield Envelope		Total Area	Minimum Parent and School Bus Frontages	
	Area	Minimum Frontage	Area	Activity Field Requirements		Bus	Parent Drop-off / Pick-up
Elementary (K-4)	1.62 ha 4.0 ac	108 m 354.3 ft	4.05 ha 10 ac	<ul style="list-style-type: none"> <li>• 2 major soccer field</li> <li>• 4 minor soccer fields</li> <li>• 1 76 m ball diamond</li> </ul>	7.29 ha 18.0 ac	108m	144m
Elementary (K-6)	1.62 ha 4.0 ac	108 m 354.3 ft				108m	144m
Elementary (K-4 or K-6)	1.62 ha 4.0 ac	108 m 354.3 ft	4.05 ha 10 ac	<ul style="list-style-type: none"> <li>• 2 major soccer field</li> <li>• 4 minor soccer fields</li> <li>• 1 76 m ball diamond</li> </ul>	7.59 ha 18.75 ac	108m	144m
Middle School or Elementary/Junior High (5-9 or K-9)	1.92 ha 4.75 ac	144 m 472.4 ft				144m	144m
Middle School (5-9)	1.92 ha 4.75 ac	144 m 472.4 ft	4.05 ha 10 ac	<ul style="list-style-type: none"> <li>• 2 major soccer field</li> <li>• 4 minor soccer fields</li> <li>• 1 76 m ball diamond</li> </ul>	7.89 ha 19.5 ac	144m	144m
Elementary /Junior High (K-9)	1.92 ha 4.75 ac	144 m 472.4 ft				144m	144m

Site Planning Team  
Draft School Site Design Standards

**Appendix II – Example Site Concept Plan: Elementary School Joint Use Site  
(for outline plan submission)**

