



SPDSA AIR-SUPPORTED SOCCER CENTRE ANALYSIS

FINAL REPORT - APRIL 7, 2017

expedition
MANAGEMENT CONSULTING



April 7, 2017

Ian Johnston
Sherwood Park District Soccer Association
#102, 241 Kaska Road
Sherwood Park, Alberta
T8A 4E8

Dear Ian,

Please find enclosed the Final SPDSA Air-Supported Soccer Centre Analysis. It has been a pleasure working with you to develop this important document.

If you have any questions or require clarification, please feel free to contact me at (780) 266-7888 or justin@expeditionconsulting.ca.

Sincerely,

A handwritten signature in blue ink, reading "Justin Rousseau". The signature is stylized with a long horizontal stroke at the end.

Justin Rousseau, Managing Director
Expedition Management Consulting Ltd.

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EXECUTIVE SUMMARY

Project Overview

This report is intended to supplement the SPDSA Soccer Centre Business Case and Concept Design Report (2015). The purpose of this study is to review a third facility option (an air-supported structure). This report begins by providing an overview of the original concept and then goes on to describe the elements of a third facility option. An air-supported structure has the potential to be an excellent interim solution for the SPDSA and the County. In the medium to long term, the goal is still to build the brick and mortar facility.



Overview of the Air-Supported Soccer Centre

The total area for the proposed air-supported soccer centre is 96,596 ft². This includes a dome area (89,169 ft²) with the artificial turf field, warm up area and spectator seating, and a clubhouse (7,427 ft²) with change rooms, bathrooms, concession, office space, reception and a lobby. The total cost for this facility is approximately \$5.5 million (excluding land), and the total annual operating budget is approximately \$872K for seasonal operation (Oct. 1 – April 30) or \$1.1 million for year-round operation. For the purposes of this study, it is assumed that land will be acquired as an in-kind contribution from the County, School Board, or other partner.

Vision for the Air-Supported Structure Project

By the end of 2019, the SPDSA will work closely with its partners to develop a new multi-use fieldhouse that will accommodate a full-sized indoor soccer pitch. The facility will be an air-supported structure and will be an interim solution for a maximum of 10 years. Within this timeframe, a new brick and mortar facility will be developed that will serve the long term needs of Strathcona County soccer players.

Meeting Short and Long Term Needs

It is important to note that the legacy of the air-supported structure project could be a very strong one for the community. Once the useful life of the dome has expired, the community will be left with a high quality artificial turf field that could be used for decades. In this way, the project can serve both the short and long term recreational needs of the community.

Recommendation

If support from the membership is achieved for the third facility option, and there is expressed partner interest in developing this option as an interim solution, then the development of an air-supported structure should be pursued.

Next Steps

1. **Approval of the Study from the SPDSA Board**

2. **Form a Partnership Task Force**

This group will be important to develop and maintain relationships with key partners.

3. **Develop a Partnership Strategy**

The timing and message presented to partners should be done in a strategic and purposeful way. Developing a partnership strategy will ensure the right partners are consulted at the right time.

4. **Begin Discussions with Partners**

Discussion with potential funding partners will be critical to success of the project.

Conclusion

This document outlines key information for the SPDSA to consider moving forward. The option of developing an air-supported structure as a short – medium term option does have merit and should be considered further. The SPDSA will need to work closely with its partners over the coming months and years to further define this interesting and worthwhile opportunity.

A close-up photograph of a white soccer ball with blue and red patterns, resting on a green grass field. To the right, a yellow soccer cleat with black stripes is partially visible. The background is a blurred green field.

01

PROJECT OVERVIEW

01 PROJECT OVERVIEW

The Sherwood Park District Soccer Association (SPDSA) serves over 3000 Strathcona County residents with 95% of its programming focused on youth, through the provision of community and competitive soccer leagues. To meet the current demand from Strathcona County residents, and to facilitate future growth, the SPDSA wants to build a new full size indoor soccer facility.

Project Background¹

From January to June, 2015 the SPDSA commissioned Expedition Management Consulting Ltd. and Group2 Architecture Interior Design Ltd. to conduct a business case, functional program and concept design for a brick and mortar indoor soccer facility. The intent of this study was to put forward an initial vision for a new indoor soccer facility in Strathcona County, as well as determine the feasibility of such a facility. The purpose of this follow up study is to review a third facility option (an air-supported structure). This report begins by providing an overview of the original concept and then goes on to describe the elements of a third facility option. This air-supported structure has the potential to be an excellent interim solution for the SPDSA and the County. In the medium to long term, the goal is still to build the brick and mortar facility.

This report is intended to supplement (not replace) the original business case completed in 2015. To gain a more comprehensive understanding of the project, both this document and the original business case should be reviewed.

Overview of Option 1 and 2 Concept Design (2015)

The concept design phase of the project developed two facility options. Option 1 was 15,750 m² (169,533 ft²) and included a full-sized indoor soccer pitch, three lane running track, warm up area, offices, meeting room, partner space, 16 locker rooms and team fitness space. The total capital cost of Option 1 was approximately \$41.5 million (excluding land), and the total annual operating budget was \$1.7 million. Option 2 was 18,582 m² (200,017 ft²) and expanded upon the amenities of Option 1 with additional partner space, a restaurant and lounge, multi-purpose room, lease space, and court



space. The total capital cost of Option 2 was approximately \$51.5 million (excluding land), and the total annual operating budget was \$2 million. For the purposes of this study, it was assumed that land will be acquired as an in-kind contribution from the County, School Board, or other partner.

Overview of Option 1 and 2 Market Analysis

The market analysis for Option 1 and 2 suggested strong demand for the facility during prime time indoor season and moderate demand during non-prime time. Given the unique attributes of the proposed facility, there appeared to be solid interest from anchor tenants and partners to become involved. Relevant indicators included strategic alignment with the SPDSA, Strathcona County, Province of Alberta and others; population growth projections in the County and Capital Region supported the need for the facility; soccer trends indicating the high participate rates of the sport; strong primary and secondary target markets for the facility; strong demand from existing programs; support from the membership; positive impact on other community facilities; strong partner and anchor tenant interest; lack of supply of full-sized, non-boarded indoor soccer facilities in the Capital Region; and national benchmarks.

Overview of Third Option Air-Supported Structure

Air-supported structures, also known as 'domes' or 'bubbles', are a unique building system that can provide a lower cost alternative to more traditional brick and mortar buildings. They are particularly well suited for facilities that require large, open, clear span interior spaces.² Since the dome is supported by internal air pressure that is slightly higher than the air pressure outside the dome, there is no need for supporting beams or columns. It is also possible to take down air-supported structures and set them up again as needed. Air-supported structures are versatile facilities that have been proven to function well in Canada's harsh winter climate. For these reasons, an air-supported structure has been chosen as a third facility option to be investigated further.

Project Deliverable

At the completion of this project, the SPDSA will have evaluated an air-supported structure as a third facility option and will have a clear path forward that will identify next steps.

Vision for the Air-Supported Structure Project

By the end of 2019, the SPDSA will work closely with its partners to develop a new multi-use fieldhouse that will accommodate a full-sized indoor soccer pitch. The facility will be an air-supported structure and will be an interim solution for a maximum of 10 years. Within this timeframe, a new brick and mortar facility will be developed that will serve the long term needs of Strathcona County soccer players.

Process and Timelines

The Air-Supported Soccer Centre Analysis project had six, interconnected phases. The phases of the process are described below in Figure 1.

Figure 1. Planning Process



Overview of Research

In order to gather specific information on air-supported structures, a variety of primary and secondary research activities were conducted. Secondary research was gathered from comparator facilities and online reviews. Primary research was completed through one-on-one interviews with air-supported structure manufacturers, dome operators and soccer groups in the Edmonton Region.

1. Interviews Conducted:

- a. Comparator Facilities
 - i. Cheryl Harwardt – Foote Field Dome
 - ii. Dan Myers – Edmonton Sports Dome
 - iii. Tim Ward – Calgary West Soccer Centre
 - iv. Jon Kilmartin – Mississauga Sportzone Dome
 - v. Bronna Gerry – Bradford Sports Dome
 - vi. Brian Kropman – Saville Community Sports Centre

- b. Edmonton Region Soccer Groups
 - i. Chris Spaidal – Executive Director, St. Alberta Soccer Association
 - ii. Marty Scott – President, Spruce Grove Soccer Association
 - iii. Craig Cooper – Vice President, Leduc Soccer Association
 - iv. Peter Dolan – President, Edmonton Scottish Society
 - v. Mario Charpentier – President, Edmonton Minor Soccer Association
 - vi. Victoria Soccer Club (no response)
- c. Air-Supported Structure Manufacturers
 - i. Jason Aljoe – Vice President, The Farley Group
- d. Professional Project Manager and Architect
 - i. Rob Copeland – R Copeland I Project Consulting

2. Meetings Conducted:

- a. Committee Meeting #1
 - Date: December 21st, 2016
 - Purpose: To discuss program elements of an air-supported structure.
- b. Committee Meeting #2
 - Date: February 21st, 2017
 - Purpose: To review the draft Air-Supported Soccer Centre Analysis document.
- c. Committee Meeting #3
 - Date: April 10th, 2017
 - Purpose: Approve Final Report.

3. Site Tour

- a. Foote Field and Saville Centre
 - Location: Edmonton, AB
 - Dates: December 12th, 2016 and February 4th, 2017

4. Construction Quotes Received:

- a. The Farley Group
- b. ALTA-FAB
- c. ACTO
- d. Stanley Construction
- e. Lees + Associates

Project Steering Committee

The SPDSA Facilities Committee provided ongoing input and direction to the project. Below is a list of committee representatives:

SPDSA Facilities Committee	
Organization	Representatives
Sherwood Park District Soccer Association	Ian Johnston, Kristi Dubeau, Dave Friesen, Debbie Ballam
Consultant Team	
Expedition Management Consulting Ltd.	Justin Rousseau (Project Lead), Maxwell Harrison (Research and Analysis)

Document Overview

Section 2 of this document provides an update to some elements of the original business case (2015), and Section 3 gives an overview of the building program and the associated capital cost estimates for an air-supported structure. Section 4 contains the operational cost analysis. Section 5 goes on to describe the case for investment, and Section 6 outlines the next steps.

A close-up photograph of a soccer player's hand, wet with sweat, touching a white and black soccer ball on a green grass field. The ball features a FIFA Quality logo. Another hand is visible in the background, also reaching towards the ball.

02

UPDATES TO THE (2015) BUSINESS CASE

02 UPDATES TO THE (2015) BUSINESS CASE

The main purpose of a business case is to generate support and participation from the client and stakeholders in order to turn an idea into a reality. It explains what the idea entails, the problem or issue at hand, current opportunities, how and who will be impacted by the change, what others are doing, options for consideration and a cost-benefit analysis.³ The benefits of a comprehensive business case are to reduce risk, inform decision-making, provide clarity, create buy-in and drive performance.

Facility Need

Even though the supply of full-sized indoor soccer pitch facilities has increased slightly in the Edmonton market, the need still exists for such a facility in Strathcona County. The market analysis from the original business case (2015) suggested strong demand for the facility during prime time indoor season and moderate demand during non-prime time, and this is currently still the case. Further details on the market analysis are provided in the following table. For a full review of the market analysis, see the original business case.

Indicator	Key Findings
Strategic Alignment	The concept of the facility is aligned with the strategic direction of potential partners including the SPDSA, Strathcona County, the Province of Alberta and others.
Population Projections	Steady population growth projections in Strathcona County and the Capital region support the future need for the facility.
Soccer Trends	Soccer is the most popular team sport in Canada. There are 850,000 registered players in Canada, 90,000 in Alberta and 3000 in Strathcona County. A new facility will accommodate membership growth in Strathcona County in the coming years.
Target Market Identification	There are very strong primary and secondary markets for the facility. Organizations that have indicated interest in booking space in the facility include the SPDSA, ASA, EIYSA, Soccer Academies and a variety of other sport associations. There is also a significant opportunity to expand the Adult Soccer program in Strathcona County and to offer public programming.
Demand Indicators From Existing Programs	There is strong demand for more space for practices and for games. This demand is demonstrated by growth in participation and a need for more field time for existing programs.
Member Support	A preliminary survey completed by the SPDSA indicated support for the concept of the facility. Further consultation will be required during next steps.
Impacts on Other Community Facilities	The addition of the facility will free up much needed field space at Millennium Place and court space at many school gymnasiums throughout Strathcona County. This will increase community access for a variety of recreation and sport activities.

Partner Interest	Given the unique attributes of the facility, there appears to be solid interest from anchor tenants and partners to become involved. This interest may be affected if other similar facilities are developed in the Capital Region before the Strathcona County facility.
Current Supply of Facilities	There is currently a very limited supply of full-sized indoor soccer field facilities currently operating in Alberta (with the exception of the recently developed Foote Field Air Supported Structure).
National Benchmarks	There are currently 35 full-sized indoor soccer field facilities currently operating in Canada. Nunavut, NWT, Yukon, New Brunswick and Prince Edward Island are the only Provinces and Territories that do not have a full-sized indoor soccer pitch facility.

Impact to Existing Strathcona County Facilities⁴

The addition of a full-sized indoor soccer pitch facility will free up much needed field space at Millennium Place and court space at many school gymnasiums throughout Strathcona County. This will increase community access for a variety of recreation and sport activities. A new indoor soccer facility in Strathcona County would reduce the SPDSA's usage of the Millennium Place fields by 10 hours every week for a total of 260 hours over the course of the indoor season.⁵ Further, soccer's usage of school gyms will be reduced by 91 hours per week for a total of 2,366 hours throughout the indoor soccer season (this means an additional 4.5 gymnasiums will be made available every week).

The facility will free up 2,366 hours of school gymnasium space, and 260 hours of field space at Millennium Place. This will increase community access for a variety of recreation and sport activities.

In total, the addition of a new facility will open up 2,626 hours of space in existing recreation facilities for the rest of the community.

Situational Analysis Update

An update to the situational analysis is provided below. Highlights include new, non-boarded indoor soccer space introduced to the Edmonton market and other emerging non-boarded indoor soccer facilities in the Capital Region.

New Supply in the Edmonton Market

New, non-boarded indoor field space has been added to the Edmonton market since the completion of the original business case (see Figure 2 below).

Figure 2. New Indoor Field Space






Facility	Pitch Size	Location
Footie Field Dome	111,628 sq.ft	Central Edmonton
Victoria Soccer Club	34,444 sq.ft (9 v 9)	Northwest Edmonton

Note: A full-sized pitch is between 43,594 sq.ft (minimum) and 116,250 sq.ft (maximum).

Emerging Facilities in the Edmonton Region

There are several groups in the Edmonton Capital Region who are exploring the potential to build a full-sized indoor soccer facility. The St. Albert Soccer Association and the Edmonton Scottish Society are the closest to building a new facility, while the Spruce Grove and Leduc Soccer Associations are in the early stages of preliminary planning. An overview of the development cycle of each project is provided in Figure 3 below.

Figure 3. Competitor Analysis

	Concept Design	Business Case	Land	Capital Funding	Timeline
St. Albert Soccer Association		 (currently being updated)	- Consulting with CoE and City of St. Albert and have identified a piece of land in Northwest Edmonton.	NO - Working with CoE and City of St. Albert to secure funding.	Estimate 1 to 1.5 years to secure capital. Estimate 3 to 5 years to build.
Edmonton Scottish Society		NO		NO	Estimate 1 to 2 years to build once capital funding is secured.
Edmonton Minor Soccer Association	NO	NO		EMSA has some capital funding, however not sufficient for project.	5+ years.
Spruce Grove Soccer Association	NO	NO	NO	NO	5+ years.
Leduc Soccer Association	NO	NO	NO	NO	5+ years.

Comparative Analysis of Air Supported Structures

A comparative analysis was completed with five air-supported structures in Canada (three in Alberta and two in Ontario). These air-supported structures were chosen for comparison based on their alignment to the SPDSA's facility program needs and the climate in which they operate. The main findings from the comparative analysis are provided below in Figure 4.

Figure 4. Comparative Analysis

	Footie Field Dome	Edmonton Sportsdome	Calgary West Soccer Centre	Sportzone Dome	Bradford Sports Dome
Location	Edmonton, AB	Edmonton, AB	Calgary, AB	Mississauga, ON	Bradford, ON
Size	111,628 sq.ft	60,000 sq.ft (incl. 25,000 sq.ft Banquet Facility)	92,000 sq.ft (incl. 14,000 sq.ft Clubhouse)	70,000 sq.ft (estimate)	60,000 sq.ft (incl. 2,000 sq.ft Clubhouse)
Boarded vs. Non-Boarded	Non-Boarded	2 NHL-sized Rinks	3 Boarded Fields 1 Non-Boarded Field	Non-Boarded	Non-Boarded
Permanent vs. Seasonal	Seasonal (Nov. – Apr.)	Permanent	Permanent	Seasonal (Nov. – Apr.)	Permanent
Owner/Operator	University/University	Private/Private	Soccer Association/Contract Operator	City/City	P3/Private
Cost to Build	\$3.7 million (2016) ¹	N/A (1990)	\$3.5 million (2004)	\$2.85 million (2012) ¹	\$2.3 million (2010) ³
Revenues & Expenditures	Revenues ² \$876,000 Expenses \$838,000	N/A	Revenues \$950,338 Expenses \$922,684	Revenues \$675,000 Expenses N/A	N/A

¹ Turf field and clubhouse were already in place (this cost is for dome, foundation and servicing only).

² Revenue/expenses are projections based on business case.

³ Costs were much lower due to unique Public-Private Partnership model.

Strengths and Weaknesses of Air-Supported Structures

Air-supported structures have unique operational strengths and weaknesses that should be considered. Figure 5 provides a summary of the strengths and weaknesses of air-supported structures in relation to brick and mortar facilities.

Figure 5. Strengths and Weaknesses of Air-Supported Structures

Strengths	Weaknesses
<ul style="list-style-type: none"> • Significantly lower capital cost to build than brick and mortar • Can be built much faster than brick and mortar structures • Clubhouse can be built into the air-supported structure or connected to the bubble through an airlock • Structure can be taken down and put back up • Sophisticated sensors can detect changes in pressure, temperature and humidity and will automatically compensate 	<ul style="list-style-type: none"> • Can deflate due to power outages and/or damage to the bubble. Time to deflate depends on extent of damage (60 minutes to less than 1 minute). • Weather is a factor: <ul style="list-style-type: none"> – Heavy snow must be removed from the side of the dome immediately – Extreme cold temperatures will impact the temperatures inside the dome – Condensation/ice can build up on inside walls of the dome • Lifespans of 15 – 20 years (fabric only) • Space restrictions due to size and fire codes: <ul style="list-style-type: none"> – Spectator seating is limited – Occupancy limits will affect programming (e.g. large events) – Reduced program options (i.e. reception, change rooms, etc.) • Airlock entrances/egresses can create accessibility issues: <ul style="list-style-type: none"> – Difficult to move large amounts of equipment into/out of the dome – Airlocks can be challenging for persons with reduced mobility • If the structure is taken down each season, there is a high cost (approx. 150K/year) plus the structure is subject to wear and tear.



03

BUILDING PROGRAM AND CAPITAL COST

03 BUILDING PROGRAM AND CAPITAL COST

The purpose of this section is to examine the program elements that would be included in a new, domed soccer facility. It is important to remember that this is a proposed functional program, and only the specific spatial requirements have been included. The actual design of the facility has not been decided upon and is still open to change. A meeting was held with the SPDSA Facilities Committee on December 21, 2016 to determine the key program elements for the facility.



The following building program has been separated into components that will be included inside the dome, and those that will be included inside the clubhouse. The dome and clubhouse will be connected to each other by an airlock.

Functional Program Summary (Dome)

Program Element	Dimensions (per)		Area	
	(L)	(W)	m ²	ft ²
Turf Field	100m	64m	6,400	68,890
Pitch Sides*	100m	3m	600	6,458
Pitch Ends*	73m	4.5m	657	7,072
Warm-Up Area**	100m	3m	300	3,229
Seating Area**	109m	3m	327	3,520
Total			8,284	89,169

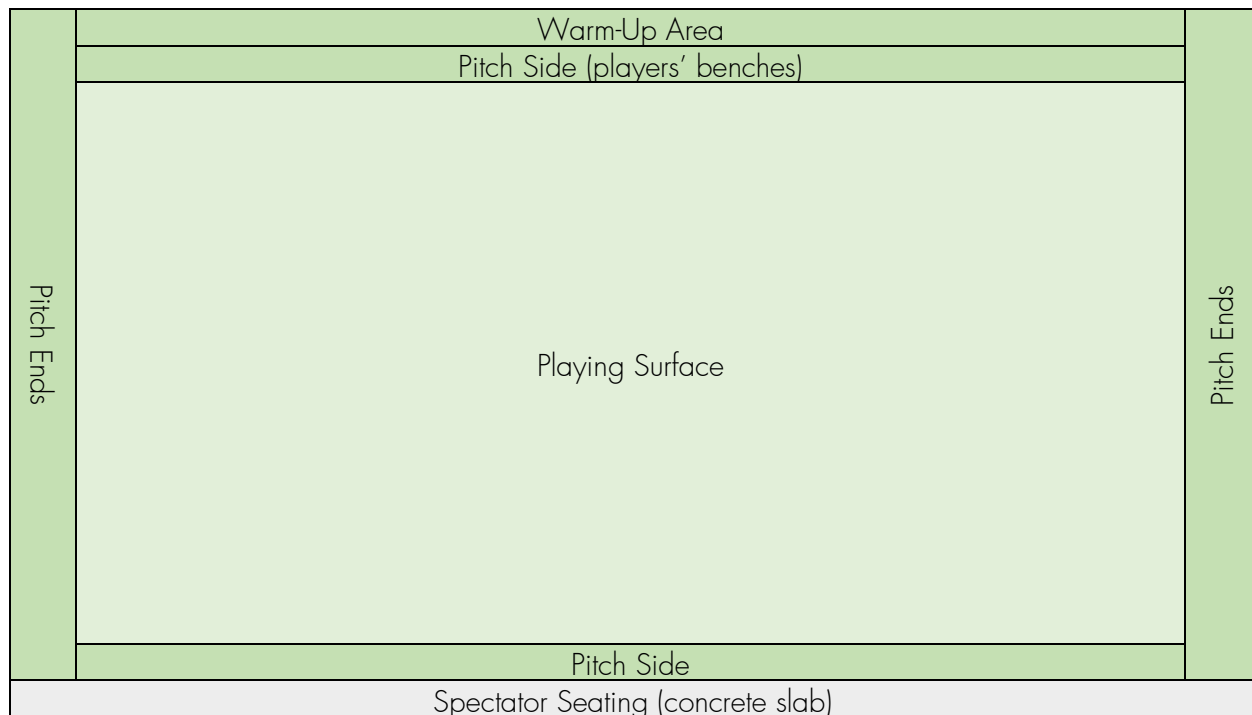
Notes

*On both sides of the field

**On one side of the field

Sketch of Inside the Dome

The drawing below offers a rough sketch of the facility components inside the dome. The drawing is not to scale.



Functional Program Summary (Clubhouse)

Program Element	Area	
	m ²	ft ²
Bathrooms*	100	1,076
Concession	25	269
Office	25	269
Reception	25	269
Lobby	250	2,691
Change Rooms* *	150	1,615
Circulation and Building Services (20%)	115	1,238
Total	690	7,427

Notes

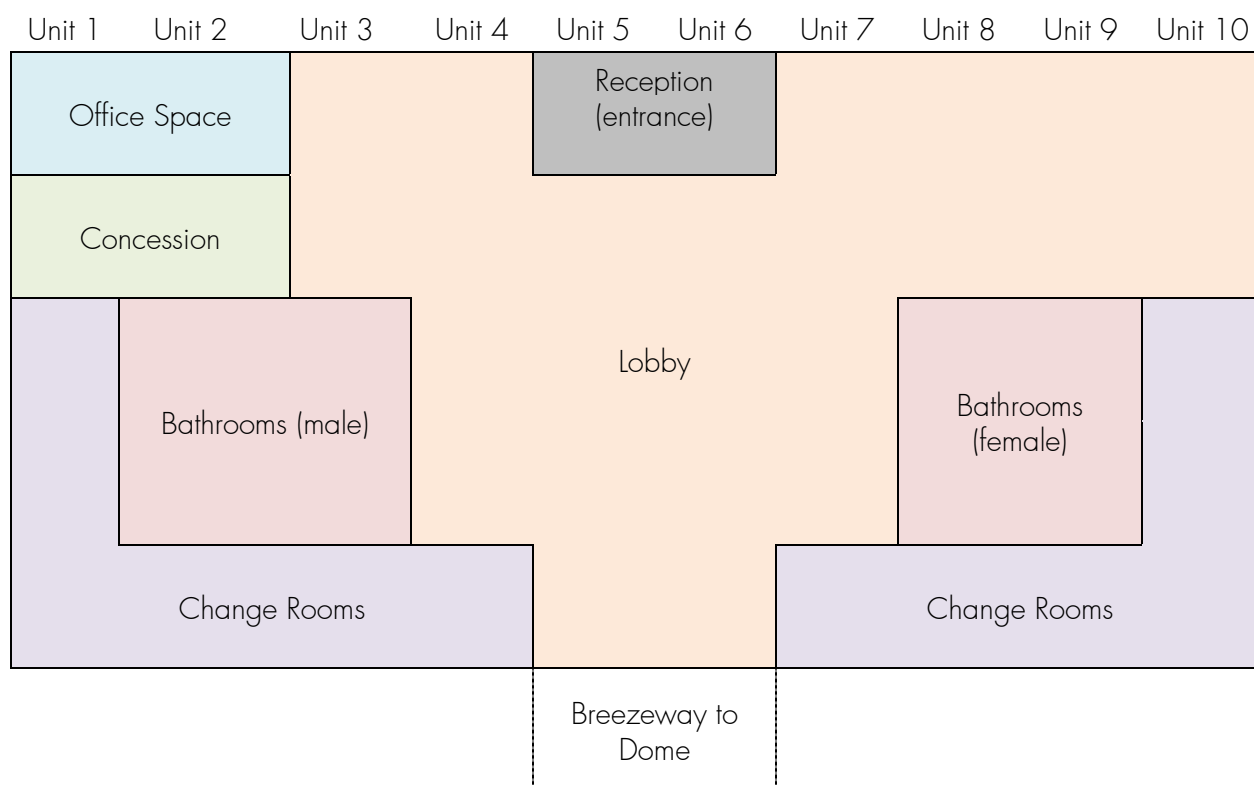
*2 bathrooms at 50m² each

**2 changerooms at 75m² each

The program objectives for the clubhouse could be met either with a modular (pre-fab) construction approach, or a traditional build. For further discussion and pricing options, see Figure 7 on page 25.

Sketch of a Modular Clubhouse

The drawing below offers a rough sketch of what a 10 unit modular clubhouse could look like. Since a single Unit is 720 ft², the total area of the drawing below would be 7,200 ft², which is close to the total area identified in the Functional Program Summary for the clubhouse above. The components have been included in the drawing approximately to scale.



Functional Program Summary (Entire Facility)

Facility Element	Area	
	m ²	ft ²
Dome	8,284	89,169
Clubhouse	690	7,427
Total	8,974	96,596

The proposed program components for the dome and the clubhouse include the following:

- The turf field meets the minimum FIFA international size requirements of 100m long by 64m wide. The Alberta Soccer Association has confirmed that this size meets their requirements.⁶ Along each side of the field is an allowance of 6m (20ft), while an allowance of 4.5m (15ft) has been included at either end of the field.
- The turf field can be split into 4 fields of sufficient size to accommodate U10 7v7 play (30m X 40m minimum) using nets suspended by wires from the ceiling or net stands.⁷
- The seating area component has room for movable bleachers for spectators. It is currently envisioned that this area will be a concrete slab (not turf).
- The 2 change rooms are sized to include bench seating and lockers in each.
- The public washrooms are sized accordingly, as per Alberta Building Code requirements.
- The concession, office and reception elements have all been minimally sized to save space.
- The lobby area has been sized to allow enough room for players and spectators to move around easily.
- A 20% gross up is included for circulation and building services, including mechanical and electrical rooms.

Capital Cost Estimate

The total project cost for the third facility option is estimated at \$5,490,333 (excluding land). The dome and its foundation will cost \$1.9 million, while a new turf field will cost \$1.3 million. The clubhouse will cost approximately \$1 million. The rest of the expenses will be made up of site costs, permits, contingencies, fees, general requirements and soft costs. A summary of the capital costs is provided next in Figure 6. Please refer to Appendices A, B and C for detailed costing quotes for the various components of the facility. It is important to note that land is not included in the capital cost estimate. It is assumed that land will be provided as an in-kind donation from the County, School Board, or other partner.

Figure 6. Capital Cost Estimate Summary for the Third Facility Option

Hard Construction Cost Components	Estimate
<i>Buildings</i>	
Dome	\$ 1,379,879
Foundation	\$ 532,000
Turf Field	\$ 1,300,000
Clubhouse (Modular) If stick built add \$495,640	\$ 1,004,360
Breezeway to Dome	\$ 11,500
<i>Site</i>	
Parking	\$ 100,000
Servicing (utilities, grading, traffic)	\$ 268,000
Landscaping, Pedestrian Improvements, Lights, etc.	\$ 50,000
Construction Contingency (10%)	\$ 464,576
Total Hard Construction Cost (Excluding GST)	\$ 5,110,333
Soft Construction Cost Components	
<i>Permits</i>	
Development Permit	\$ 15,000
Building Permit	\$ 30,000
<i>Design/Consulting/FFE</i>	
Dome Consulting (foundations, electrical connections, mechanical)	\$ 20,000
Clubhouse ¹	\$ 25,000
Site Design/Master Planning	\$ 35,000
Survey ²	\$ 10,000
Geotechnical	\$ 25,000
Project Management	\$ 50,000
Consulting Contingency	\$ 20,000
Furniture, Fixtures & Equipment (FF&E)	\$ 150,000
Total Project Cost (Including Hard Construction Cost and Soft Construction Cost Excluding GST)	\$ 5,490,333

¹Assumes a modular (pre-fab) clubhouse. There would be approximately \$120,000 in extra costs if the clubhouse was stick built.

²This item may not be needed depending on the site.

The following discussion describes how the capital cost estimate for each component of the facility was arrived at, and any component-specific factors that should be considered. All of the costs were reviewed and corroborated by R Copeland I Project Consulting.

Air-Supported Structure

The capital cost estimate for the dome was provided by The Farley Group to supply, deliver and supervise the erection of one 360' x 250' x 75' air-supported structure with rectangular ends. This dome is of sufficient size to cover all of the functional program components that are to be included inside the dome (see Section 2). The detailed quote can be found in Appendix A. The anticipated life cycle for the dome is 20 years.⁸

Foundation and Site Servicing

The quote for the foundation and site servicing was provided by Stanley Construction. Included in their quote is a 100m x 3m concrete pad inside the dome for bleacher seating. The detailed quote can be found in Appendix B.

Turf Field

The capital cost for the turf field was provided by Lees + Associates Landscape Architects and corroborated by the original business case and R Copeland I Project Consulting. The anticipated life cycle for an artificial turf field is 10 years.⁹

Clubhouse and Link to Dome

Capital cost estimates for a clubhouse were provided by ALTA-FAB, ATCO and Stanley Construction based on the functional program components described in Section 2. The specific offering from each company is described in Figure 7 below. For the purposes of this report, ALTA-FAB's quote for the 6 unit complex was used for the capital costing estimate. ALTA-FAB's quote can be found in Appendix C, while Stanley Construction's quote can be found in Appendix B.

Figure 7. Capital Cost Quotes for the Clubhouse

Company	Building Type	Description	Capital Cost
ALTA-FAB	Modular	- 6 Unit, new 20' x 60' (frameless) complex - Includes manufacturing, transportation, pile foundation, stairs and landings, as well as skirting around the complex base	\$1,004,360
ATCO	Modular	- 10 Unit building - Includes delivery, setup and install	\$935,800
Stanley Construction	Conventional Building	- 1 Permanent, stick-built structure	\$1,500,000
	Conventional Building	- 1 Permanent, stick-built structure - Includes steel stud (non-combustible) construction*	\$1,900,000

*Steel stud (non-combustible) construction makes future additions significantly less complex.¹⁰ While there are more up-front costs, there is potential for cost savings if the clubhouse is renovated or added on to.

There are important factors to consider when deciding whether to build a modular or conventional building for the clubhouse. Some of these factors include:

- A. A conventional building will have additional consulting/design fees.
- B. A conventional building can be tailored to an ideal layout, whereas a modular building will be limited by its shipping sizes and modularity.
- C. A conventional building can be renovated and added on to in ways that modular buildings cannot.
- D. A conventional building can be built at the same grade as the soccer dome and parking. A modular building will need to have stairs and ramps to enter the building and soccer dome.
- E. A conventional building is likely to be more attractive (as a building) than the modular option. Therefore, it may be more likely to receive community support.
- F. Modular buildings can be erected on a given site much faster than conventional buildings.
- G. Modular buildings can be moved from one site to another.

Parking

The capital cost for parking was provided by R Copeland I Project Consulting. The total amount of parking needed was calculated to be 2,000m², based on a 4 field scenario. An average cost of \$50/m² was applied to this area to produce the total price.

Other Costs (Landscaping, Permits, Design, FFE)

The capital costs for landscaping, permits, design work, FFE and other costs were developed by R Copeland I Project Consulting.

Construction Contingency

Construction contingency was set at 10%, which is consistent with the previous business case and industry standards.

Site Selection Considerations

Presently, no site has been identified for the facility, therefore selecting an appropriate site will be a key consideration moving forward. Although site selection is not within the scope of this study, the SPDSA should consider the following:

Potential New or Renovated Site

In order to make the project attractive to partners, site selection for the air-supported structure will be extremely important. The facility may be seen as an interim “indoor” solution, but it could be positioned as part of a long term “outdoor” solution. Assuming a new soccer pitch surface is constructed, when the dome comes to the end of its useful life, the County will not only have benefited from the service the dome provided for a decade, but the community will be left with an additional high quality artificial turf field that can be used for many more decades to come. Artificial outdoor surfaces are in high demand and will be well utilized by Strathcona County residents.

Emerald Hills Regional Park

Emerald Hills Regional Park is a 27-acre site in Sherwood Park. Facility amenities include an artificial turf facility, grass sports field and two baseball field. Erecting an air-supported structure over the existing artificial turf field (seasonally) may be a cost effective and expedited solution. This option would leverage existing site amenities such as parking, change rooms, the sports pavilion and concession area. There would also be operational and staffing efficiencies in utilizing existing facilities. This would be a similar approach that two of our comparators successfully used (the Foote Field Dome is attached to the existing stadium, and the Mississauga Sportzone Dome is attached to a recreation centre).



Site Selection Criteria

When considering a potential site, it will be important for the SPDSA to work closely with its partners to establish site selection criteria. These criteria can be weighted to reflect the relative importance of site attributes to the partners.



04

OPERATIONAL COST ANALYSIS

04 OPERATIONAL COST ANALYSIS

Operating Model Assumptions

The eventual operator for the facility will be determined during the detailed planning stages of the project.

For the purposes of this study, we have assumed that the facility would be owned by the County and run by the SPDSA (with the exception of the potential booking of the turf field if the SPDSA chooses to remove the dome for the outdoor season). There are strong precedents set throughout Alberta where Soccer Centres are successfully run by Soccer Associations. In addition, assuming a SPDSA operated facility enables the study to make accurate comparisons to existing facilities currently operating in Canada. It also gives the SPDSA a clear understanding of the stand-alone cost of developing and running the facility. This will be helpful when making business decisions moving forward and working with partners. For a more detailed discussion of the different operating model options see Appendix D.

*For the purposes of this study
we have assumed that the
facility would be owned by
the County and run by the
SPDSA*

Financial Analysis

Annual Operating Budget

The estimated annual operating budget for the air-supported option facility option is outlined below. Two options for operating the facility are described.

Option (3a) – The SPDSA operates the indoor facility from October – May and disassembles the facility to make way for outdoor field bookings in the outdoor season. It is assumed that the County would assume both the revenue and expense of booking the outdoor field.

Option (3b) – The SPDSA operates the indoor facility year-round and does not disassemble it during the outdoor season. It is assumed the SPDSA would assume revenue and expense with booking the field year-round.

Figure 8. Estimated Annual Operating Budget

Estimated Annual Operating Budget		
	Option 3a (Dome) Seasonal Operation (Oct. 1 - April 30)	Option 3b (Dome) Year-Round Operation
<u>Revenue</u>		
Indoor Season Field Bookings	773,472	773,472
Outdoor Season Field Bookings		251,182
Admissions	37,500	50,000
Programs	50,000	75,000
Lease Space/Other Bookings	6,573	6,573
Sponsorship and Advertising	5,000	7,500
Total Revenue	872,545	1,163,727
<u>Expense</u>		
Personnel (including Janitorial)	270,820	532,100
Maintenance/Repair	38,155	76,310
Utilities	115,989	154,266
Annual set up/take down/storage	150,000	
Marketing	5,000	10,000
Program Delivery Expense	35,000	52,500
Contribution to Capital Reserve	75,000	75,000
Administrative	20,000	40,000
Debt Servicing	86,904	86,904
Insurance	40,000	50,000
Total Expense	836,868	1,077,080
Sub-Total	\$ 35,677	\$ 86,647
Cost Recovery	104%	108%

Revenue

The main revenue sources for the facility are field bookings, followed by programs, admissions, sponsorship/advertising, and lease space/other bookings.

Bookings

Facility Utilization

Facility utilization is driven by field bookings and is the key to revenue generation in a large soccer facility. The highest utilization of the facility occurs during prime time of the indoor season. The prime time/non-prime time and season breakdown is as follows:

Prime Time

Weekdays 5:00pm – 10:00pm and Weekends 7:00am – 11:00pm

Non-Prime Time

Weekdays before 5:00pm

Indoor Season

October 1 – April 30

Outdoor Season

May 1 – September 30

Figure 9 below outlines the projected facility utilization for the facility. These projections are based on the original business case, and adjustments for market conditions. It is anticipated that facility usage will be composed of the following activities:

- Regular SPDSA indoor season programming.
- Growth in regular SPDSA indoor season programming (e.g. more participants and teams).
- Increasing the length of some of the SPDSA's regular indoor season programming.
- Expanding the SPDSA's indoor season program offering (e.g. adult programs).
- Hosting soccer tournaments in the new facility.
- Bookings from school groups.
- Hosting EIYSA games (assuming the league continues to grow).
- Bookings from soccer academies in the Edmonton Area.
- Alberta Soccer Association programs.
- Public fitness programming in Strathcona County.
- Competitive amateur soccer teams in the Edmonton Area.
- Other sports and recreation organizations (e.g. ESSC, football, lacrosse, ultimate frisbee, personal trainers, etc.).

Figure 9. Facility Utilization Projections

Time Slot	Season	Estimated for Strathcona County
Prime Time	Indoor	90% weekdays 90% weekends
Non-Prime Time	Indoor	25%
Prime Time	Outdoor	50% weekdays 50% weekends
Non-Prime Time	Outdoor	10%

Fees

Full-sized Air-Supported Structures in Canada

Figure 10 provides a comparison of hourly field rental fees in the Foote Field Dome, Calgary West Soccer Centre, Mississauga Sportzone Dome and the proposed facility for Strathcona County. Please see Appendix E for other fee comparison data collected from facilities in Saskatoon, Winnipeg, as well as boarded and non-boarded facilities in the Capital Region.

Figure 10. Fee Comparison – Select Full-sized Air-Supported Structures in Canada

Time Slot	Season	Mississauga Sportzone	Calgary West Soccer Centre*	Foote Field Dome	Proposed Strathcona County
Prime Time	Indoor	¼ \$180 ½ \$360 Full \$720	¼ \$151.20 – \$165.35 ½ N/A Full N/A	¼ \$150 ½ \$250 Full \$400	¼ \$150 ½ \$250 Full \$400
Non-Prime Time	Indoor	¼ \$95 ½ \$190 Full \$380	¼ \$116.55 ½ N/A Full N/A	¼ \$75 ½ \$125 Full \$200	¼ \$75 ½ \$125 Full \$200
Prime Time	Outdoor	Full \$116	¼ \$116.55 ½ N/A Full N/A	N/A	¼ \$84 ½ \$139 Full \$210
Non-Prime Time	Outdoor	N/A	N/A	N/A	¼ \$42 ½ \$69 Full \$105

*This facility has boarded and non-boarded fields

Estimated Revenue from Field Bookings

Applying the estimated utilization rate to the projected booking fees results in revenue projections of \$773,472 for the indoor season, and \$251,182 for the outdoor season. This analysis assumes the ¼ field configuration makes up 70% of field bookings, the ½ field configuration makes up 20% of field bookings, and the full field configuration makes up 10% of field bookings. Please see Appendix F for a detailed breakdown of field booking revenue.

It is also important to consider the potential revenue that could be gained from the turf field during the outdoor season, if there is not a dome over top of it. This revenue is estimated to be \$71,147. This revenue could be collected by either the SPDSA, or Strathcona County depending on the details of the partnership agreement. The projected revenues from the field without a dome over it in the outdoor season is further described in Appendix F.

Admissions

It is recommended that the facility charge admissions. This is a practice at many soccer facilities in the region and across Canada. A competitive rate is \$2 per visit or a season pass for \$30.

Programs

Offering a variety of public and sport-specific programs can be an excellent way to increase facility utilization and drive revenue. Programs are marked up at 30%.

Lease Space

Lease space includes the SPDSA office and the concession space (each at \$15/ft²/year).

Sponsorship and Advertising

It is assumed that sponsorship and advertising opportunities will be made available and sold to help generate revenue for the facility.

Revenue Growth Potential

The biggest opportunity for future revenue growth is through increasing utilization rates during non-prime time. Given the interest previously noted in the original business case (see Section 6) there is a real opportunity to grow this part of the business in the first 3 – 5 years of operation. With strong planning and execution, it is reasonable to assume that the facility could increase its revenue without a proportionate increase in expense.

Estimated Increase to SPDSA Indoor Program Fees

If the SPDSA shifts the majority of its indoor programming to the new full-sized indoor soccer facility, there will be an increase to the SPDSA's indoor program fees. The estimated impact is described in Figures 11 and 12 below.

Figure 11. Projected SPDSA Indoor Season Fee Increases for the Community Program in the Dome Facility

	U10 ¹	U12	U14	U16 Girls	U16 Boys	U18
SPDSA Indoor Fee Per Player (2016/2017)	\$310.00	\$330.00	\$330.00	\$333.00	\$365.00	\$365.00
Estimated Increase to Fees Per Player with the New Facility	\$35.45	\$65.08	\$57.99	\$11.87	\$12.46	\$33.83
Estimated Future Fees Per Player with the New Facility	\$345.45	\$395.08	\$387.99	\$344.87	\$377.46	\$398.83
Projected % Increase to Fees with the New Facility ²	11%	20%	18%	4%	3%	9%

Notes:

¹The U4, U6 and U8 programs are not included in this analysis because it is assumed that they will continue to utilize community and school gyms and Millennium Place.¹¹

²The large increase to the U10, U12 and U14 program fees is primarily due to the transition of their practices from community and school gyms, which cost between \$20 and 70\$/hour, to the new facility, which costs \$150/hour. The SPDSA should consider distributing the increased costs among all programs to lessen the burden on U10, U12 and U14.

Figure 12. Projected SPDSA Indoor Season Fee Increases for the Phoenix Program in the Dome Facility.

	U12	U14	U16 Girls	U16 Boys	U18
SPDSA Indoor Fee Per Player (2016/2017)	\$630.00	\$630.00	\$585.00	\$585.00	\$585.00
Estimated Increase to Fees Per Player with the New Facility	\$164.43	\$158.15	\$136.19	\$114.09	\$109.39
Estimated Future Fees Per Player with the New Facility	\$754.79	\$750.02	\$682.47	\$664.94	\$660.76
Projected % Increase to Fees with the New Facility ¹	26%	25%	23%	20%	19%

Notes:

¹The large increases to the Phoenix program fees are due to the transition of their indoor season practices to the new facility.

It should be noted that in the 2017/18 season the hourly rate for practices at Millennium Place will increase from \$113/hr to \$140/hr, while the rate for games will drop from \$160/hr to \$140/hr. Therefore, fee increases for some of the SPDSA's programs will be less than above.

User-Pay Model

The fee structure and associated increases described above are based on a User-Pay model for the facility. A User-Pay model is characterized by the end user of the facility absorbing the extra costs associated with using the facility. It should be noted that there is potential for fee increases to push certain SPDSA programs out of financial reach for some families. However, there is an opportunity to lower the fee increases, if the County is willing to help subsidize the higher facility fees to keep program fees down.

Expense

Personnel

See below for a breakdown of personnel costs for a seasonal dome and a year-round dome.

Personnel Budget					
<u>Position</u>	<u>Annual Salary</u>	<u>Seasonal Dome # FTE's</u>	<u>Seasonal Dome Cost</u>	<u>Year-Round Dome # FTE's</u>	<u>Year-Round Dome Cost</u>
Facility Manager	80,000	0.5	40,000	1	80,000
Facility Operations Foreman	70,000	0.5	35,000	1	70,000
Administration and Bookings	50,000	0.5	25,000	1	50,000
Maintenance/Custodian*	40,000	1.42	56,800	2.85	114,000
Guest Services	35,000	2	70,000	4	140,000
Sub-Total Personnel			\$226,800		\$454,000
Sub-Total Personnel (Incl. Benefits 15%)			\$260,820		\$522,100
Other					
Professional Services (e.g. Acct.)			5,000		5,000
Board and Staff			5,000		5,000
Total Personnel			\$270,820		\$532,100

*We obtained a cleaning quote from a well-known commercial cleaning company currently operating in Edmonton, AB. If the SPDSA chose to contract out cleaning of the facility, the cost would be \$1.18/sq.ft (which is the same cost as hiring janitorial staff as described above).

Maintenance and Repair

Maintenance and repair costs are assumed at \$.79/ft².

Utilities

Utilities will be at peak usage during the winter months, and will have an estimated winter monthly cost of \$19,332. This is a comparable rate to other sports dome operating in Edmonton.

Annual Set Up/Take Down/Storage

For a seasonal air-supported structure there will be additional costs to take down, store and re-erect the dome the following season. The cost to take down, store and then set up the dome again is approximately \$150,000/year.

Marketing

Advertising and promotional expenses.

Program Delivery Expense

Expense associated with delivering public and sport-specific programs (e.g. variable cost of labour for instructors).

Contribution to Capital Reserve

Annual allocation to reserves for future facility repair/replacement.

Administrative

Administrative costs associated with managing the facility.

Debt Servicing

The capital funding model could have a significant impact on debt servicing and consequently on operational costs. In order to develop a reasonable estimate of the operational costs we must make some assumptions about the capital funding approach. The capital funding assumptions are as follows:

1. The land for the facility would be an in-kind contribution from a partner organization (presumably the School Board or the County).
2. The SPDSA would contribute \$0.75M to the capital cost of the facility. To achieve this, it is assumed that the SPDSA would receive a \$0.75M loan from the County. Payments on the loan would come out of the operations of the facility (\$87K/yr) and would be made over a 10 year period (@ 3%). This approach has been utilized in many facilities across Western Canada, including the City of Edmonton (ESAF Facilities) and the City of Saskatoon (SaskTel Centre).
3. Significant government funding for capital is required for the project to be feasible. Government funding would account for \$4.75M of the total project cost. See Section 5 of the original business case for a description of available funding programs from government organizations.

Assumed Capital Funding Model for the Air-Supported Structure

SPDSA Loan	\$ 0.75M
Government Grants (All Levels)	\$ 4.75M
Total	\$ 5.5M*

*excluding land

Insurance

Liability and property insurance required to operate the facility. This rate is comparable to the insurance rate of the Calgary West Soccer Centre.

The background image shows the interior of a large, white, arched sports dome. The floor is covered in artificial green grass with white field markings. Numerous small, cylindrical lights are suspended from the ceiling, and a long, rectangular skylight is visible in the upper center. In the distance, several soccer goals are visible on the field.

05

RECOMMENDATION AND NEXT STEPS

05 RECOMMENDATION AND NEXT STEPS

An air-supported structure has the potential to be an excellent interim solution for the SPDSA and the County, recognizing that the end goal is still to build the brick and mortar facility in the medium to long term. There are a number of risks that should be considered before a final decision is made on whether or not to pursue the third facility option (see Figure 13).

Figure 13. Risk Analysis

Risks of Building the Third Facility Option	Risks of Not Building the Third Facility Option
<ul style="list-style-type: none"> – Air-supported structures (interim solutions) have been known to morph into long-term solutions (15 years +) as the community may feel the need is adequately met. One example is the Calgary West Soccer Centre. – The SPDSA may have to take on a considerable amount of debt to build the facility. This could impact future borrowing power. – Competing full-sized indoor soccer facility projects may be built in the region, thereby increasing the supply and potentially reducing the amount of partnership opportunities and funding. 	<ul style="list-style-type: none"> – SPDSA membership growth is limited by lack of program space. – Strathcona County recreation facilities continue to be at or beyond capacity. – The time required to wait for the brick and mortar facility to be built could be significant. – Potential partners move ahead on other projects and do not commit to building a full-sized indoor soccer pitch in the County. – Potential sites for the facility are developed. – Player development will be negatively impacted by having to play in gymnasiums and boarded soccer facilities.

While there are significant risks to consider, there are also opportunities related to moving forward with an air-supported structure. These include:

- Strong market demand for the facility,
- Strategic alignment with the SPDSA, Strathcona County, Province of Alberta and other groups,
- Expected population growth in the County and the Capital Region,
- Soccer trends indicating high participation rates in the sport,
- Clear primary and secondary target markets for the facility,
- Positive impact on other community facilities,
- Expressed partner interest,
- Lack of supply of full-sized, non-boarded indoor soccer facilities in the Capital Region,
- And national benchmarks.

In addition to the above, it is important to note that the legacy of the air-supported structure project could be a very strong one for the community. Once the useful life of the dome has expired, the community will be left with a high quality artificial turf field that could be used for decades. In this way, the project can serve both the short and long term recreational needs of the community.

Recommendation

If support from the membership is achieved for the third facility option, and there is expressed partner interest in developing this option as a 10 year (maximum) interim solution, then the development of an air-supported structure should be pursued. As described earlier in this report, we suggest the following vision for the air-supported structure project.

Vision for the Air-Supported Structure Project

By the end of 2019, the SPDSA will work closely with its partners to develop a new multi-use fieldhouse that will accommodate a full-sized indoor soccer pitch. The facility will be an air-supported structure and will be an interim solution for a maximum of 10 years. Within this timeframe, a new brick and mortar facility will be developed that will serve the long term needs of Strathcona County soccer players.

Next Steps

1. **Approval of the Study from the SPDSA Board**
2. **Form a Partnership Task Force**
This group will be important to develop and maintain relationships with key partners.
3. **Develop a Partnership Strategy**
The timing and message presented to partners should be done in a strategic and purposeful way. Developing a partnership strategy will ensure the right partners are consulted at the right time.
4. **Begin Discussions with Partners**
Discussion with potential funding partners will be critical to success of the project.

Conclusion

This document outlines key information for the SPDSA to consider moving forward. The option of developing an air-supported structure as a short – medium term option does have merit and should be considered further. The SPDSA will need to work closely with its partners over the coming months and years to further define this interesting and worthwhile opportunity.



APPENDICES

APPENDIX A: The Farley Group Quote (Air-Supported Structure)



Farley Manufacturing Inc.
Air-Supported Fabric Structures

Head Office
6 Kerr Crescent,
Puslinch, Ontario, Canada N0B 2J0

phone: (519) 821-5422
fax: (519) 821-5424

24 hr Service ph: 1-888-445-3223
fax: 1-888-445-3043

e-mail: info@thefarleygroup.com
www.farleygroup.com

February 10, 2017

SHERWOOD PARK SOCCER

Edmonton, Alberta, Canada

Attn: Maxwell Harrison

Dear Maxwell:

As discussed please find below the new air structure package at the new size. If you have any questions please do not hesitate to contact me at your earliest convenience.

AIR STRUCTURE PACKAGE

To supply, deliver and supervise the erection of one 360' x 250' x 75' air-supported structure with rectangular ends, including:

1. 28oz vinyl coated polyester OPAQUE outer fabric with 20 year pro-rated warranty
2. 15oz vinyl coated polyester liner fabric
3. 20 - restraining cables: 1 1/8 inch diameter PVC coated
4. 6 - lengthwise restraining cables: 1 1/8 inch diameter PVC coated
5. 88 - 560 watt hanging LED light fixtures with lighting wire from fixture to closest ground location, light cord plug sets, hang light mounting patches, hang light protective net enclosures
6. 10 - emergency exits (single door, 1 emergency light pack per exit)
7. 1 - combo unit (3-leaf revolving door & pedestrian air lock for barrier free access)
8. 1 - vehicle air lock (10' x 12' doors, 45' long)
9. 1 - 4.5 million BTU heat and inflation unit
10. Wind and snow sensor controls
11. 2 - secondary inflation fans
12. 1 - separate standby generator to power secondary fan upon power failure. Generator also powers the required LED lights to provide 1 foot candle for egress.
13. Supply and supervise the install of membrane insulation
14. Load calculations and detail drawings of the air structure stamped by a qualified structural engineer
15. Freight to jobsite
16. On-site supervision of installation of air structure
17. Start-up of mechanical equipment

18. 1230 lineal feet of retention profile for concrete grade beam
19. 52 - cast-in galvanized steel retention cable anchor plates

PACKAGE PRICE:**CDN \$ 1,379,897**

This quote is good for 60 days

All Taxes are Extra

Grade Beam Estimated Size for Package (Beam Installed By Others)

Based on an air structure size of 360' x 250' x 75'in Sherwood Park, Alberta we are pleased to provide you with an estimated grade beam size of 32" wide x 106" deep.

Please note that this estimate is based on typical conditions. On-site soil and weather conditions, as well as final engineering calculations may change this number.

Items Which Are Your Responsibility

- Architect's fees, payment of local taxes, and cost of obtaining permits, all mechanical, electrical architectural drawings and stamps as may be required.
- Review of local building codes and by-laws for permit application. Any additional components that may be necessary to meet the building code requirements before, after or at the time of a review by local building code officials, are considered as extras and are not included in this price.
- Concrete grade beam and equipment pads. Any site inspections by engineers to ensure conformity to drawings.
- Electrical service and natural gas to equipment locations. All tradesmen relating to all electrical and natural gas hook up.
- All temporary labour as required.
- All equipment such as all-terrain forklift, scissor lifts and cranes to unload components from truck, and equipment needed on site for the installation of all components including insulation.
- Provide an IT person to complete computer connections from the remote panel gateway to the office and provide an internet connection to the remote panel gateway including setting up a static IP address for online control and monitoring of the mechanical unit(s).
- All required electrical including line voltage, control and computer wiring, to be completed by electrician.

The Company

The Farley Group began manufacturing air-supported structures in 1999, however, our founder, Ralph Farley, brought the concept of air-supported structures to North America from Sweden in 1970. Ralph and his associates have

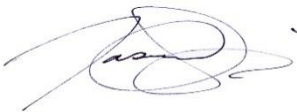
contributed to the sale and manufacture of over 800 air-structures worldwide. The Farley Group has manufactured or installed air-structures for the USA, Canada, China, Russia, Mexico, Panama, India, Estonia and Nigeria.

We maintain the most extensive service team in the industry with upwards of 200 years of experience in manufacturing and installations based in our Guelph, Ontario manufacturing facility. We also retain service representatives in Michigan, New York, Virginia, and Alberta. Our service department is available to our customers as well as our competitors' customers 24 hours a day through our emergency response telephone. **We take pride in never having lost one of our customers to a competitor because of service. In fact, our superior service has been very instrumental in our company's growth over the last 15 years.**

At The Farley Group we strive to be the leader in innovative covered space, we are always looking at new ideas to make our product more user friendly and cost effective for our customers. We will not manufacture and install your air structure and forget about you. We believe that once you have chosen The Farley Group to achieve your vision that we are partners in sustaining your vision for years to come. We are convinced that as a potential air-structure operator you will be completely satisfied with our quality product, user-friendly controls and experienced staff.

Yours very truly,

FARLEY MANUFACTURING INC.

A handwritten signature in blue ink, appearing to read 'Jason Aljoe', with a stylized flourish extending from the end.

Jason Aljoe

Vice President Operations/Sales

APPENDIX B: Stanley Construction Quote (Foundation/Site Servicing and Clubhouse)



Delivering worry free construction



FROM: Paul Gantar, President
Stanley Construction Ltd.

TO: Maxwell Harrison, BA
Associate
Expedition Management Consulting Ltd.

RE: Sherwood Park District Soccer Association - Bubble and Club House
Proposal

DATE: February 9, 2017



EXECUTIVE SUMMARY

Trust is the basis of all great partnerships and Stanley Construction Ltd. (Stanley) wants to demonstrate their ability to be a trusted partner by the Sherwood Park District Soccer Association (SPDSA). Here is what Stanley brings to this partnership:

- 1) Partnership Approach - We believe in partnering with you our subtrades, our customers and the community we work in to help all groups achieve their goals. Everyone at Stanley strives to ensure that our stakeholder needs are the focus and not our own.
- 2) Quality Team - The quality of the Stanley team is the best in the industry – bar none. We have a very high standard and we are committed to improving on that standard on every job we undertake.
- 3) Incented Team - Members of the Stanley team are incented through performance management, for all employees, on every job. The customer satisfaction is the majority of the final calculation. In other words, the final satisfaction score that you provide has a direct influence on members of the Stanley team.
- 4) Efficient Processes – Stanley processes are efficient – they are easy to work with. If at any moment they are not, we will strive to make changes that make your experience with us truly “worry free”.

If SPDSA is looking to partner with a construction company that has a combination of small company nimbleness and big company experience (our team has experience completing jobs worth nearly \$1 billion), then we believe that you are looking to work with Stanley.

Building on recent discussions in relation to the construction of a full sized indoor structure and club house and in the spirit of an executive summary, the following provides a budget summary.

Based on some preliminary analysis the following can be utilized as budget pricing (design is included):

Item	Budget Pricing	Adjustments
Air Supported Structure	\$1.5M	
Site Servicing and Foundation	\$0.7M	+\$0.1M (concrete pad for stands)
Turf Field and ground preparation	\$1.7M	
Club House	\$1.5M	+\$0.4M (metal structure)
TOTAL PRICE	\$5.4M	

This proposal should not be taken as a final version but as a platform for discussion in the journey to achieve the objectives of SPDSA. Looking forward to meeting with you to discuss how we will make your project worry free!

Sincerely,

Paul Gantar

President of the Stanley Team

Stanley's Mission: “Delivering worry free construction”



1. SPDSA PROJECT PROPOSAL

SPDSA has requested preliminary costing and scheduling for:

- 1) Air Supported Structure (for the turf field and stands area)
- 2) Site Servicing and Foundation (for the turf field)
- 3) Turf Field (standard international sized soccer field)
- 4) Club House (approximately 7500 sq. ft.)

The following sections outline the results of that preliminary analysis and have been split as per the Project Phases located in Appendix 1.

1.1 SPDSA HIGH LEVEL REQUIREMENTS

In advance and throughout any project, it is important to understand and document requirements of the work to be completed. In discussions with the SPDSA representative, Stanley captured the following requirements which form the basis for the other sections in this project proposal.

- i) Design and Build
 - a) Air Supported Structure that links to the Club House.
 - b) Site Servicing and Foundation work to support the Air Supported Structure
 - c) Turf Field (standard international sized soccer field)
 - d) Club House (approximately 7500) square feet that – meeting the general layout as outlined in the preliminary drawings from SPDSA.
- ii) Electrical, mechanical and structural components must be as per building standards & codes.
- iii) Ensure that heating and cooling systems will function effectively depending on time of year.

Other non-mandatory requirements include:

- a steel structure
- cement pad for the stands area inside the Air Supported Structure



Stanley's Mission is to Deliver Worry Free Construction



1.2 SPDSA DESIGN CONSIDERATIONS AND ASSUMPTIONS

Detailed summary (by division) of the design considerations and assumptions which determine the budget and scope (please note that this is for the Club House only and based on a wood framed structure)

Div. 1 – GENERAL REQUIREMENTS

- Development and Building Permit
- Insurance requirements for Course of Construction and Liability up to \$ 5,000,000.
- Design professional fees.
- Material testing required for compaction and concrete and pile monitoring scopes.
- SPDSA will be required to obtain the Geotechnical Schedules from the design professional they have hired.
- Qualified foreman present during course of work to co-ordinate construction and ensure schedule and QA/QC requirements are adhered to.
- All safety requirements.
- Temporary Sanitary facility.
- Intermittent clean-up and refuse.
- Site survey layout and control.
- Temporary power, light, ventilation and heat for construction areas.
- 50% Performance and Labour & Material Bonding has not been allowed but available should it be requested.

Div. 3 – CONCRETE

- Reinforcing steel for building foundations, slab-on-grade, and exterior concrete aprons.
- Complete cast-in-place concrete building foundation.

Div. 5 – METALS

- Depending on finalized structural design evolution we may need to construct portions of the structure with structural steel or keep it all wood framed construction.

Div. 6 – WOOD, PLASTICS AND COMPOSITES

- 2 x 6 SPF wood framed bearing walls.
- Engineered roof trusses.
- Millwork:
 - Interior Wood Doors
 - Wood door casings, painted.
 - Countertops for washrooms
 - Wood benches for change rooms with steel supports

Div. 7 – THERMAL AND MOISTURE PROTECTION

- Metal standing seam roofing, c/w metal soffits, fascia, eavestroughs/downspouts.
- Painted (to match SPDSA colors) metal cladding to exterior walls with related flashings.
- Damproofing applied to exterior concrete foundations.
- 50mm SM Insulation applied to exterior concrete foundations.
- Poly vap. Barrier at exterior walls and roof with R20 Batt Insulation at walls and R40 at roof.

Div. 8 – OPENINGS

- Four(4) welded pressed steel frames and hollow metal door single door openings have been allowed including associated commercial grade hardware.
- Durabuilt 450 Series PVC Slider Windows (15) have been allowed for.

Div. 9 – FINISHES

- Painted drywall walls for all exterior walls and interior partitions.

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- T-Bar ceilings will be provided.
- Polished concrete floor with salt and pepper finish.
- Rubber base.

Div. 10 – SPECIALTIES

- Washroom Accessories will be provided for the washrooms.

Div. 12 – FURNISHINGS

- There are no provisions for any furnishings allowed for.

Div. 21-23 – MECHANICAL

Supply of Equipment, Materials and Labor for Construction of Specified Mechanical Systems:

- Permits As Required
- Project Management, Supervision, Testing & Start-up
- Operation & Maintenance (O&M) Manuals
- 1-Year Standard Labor & Materials Warranty

Engineering: Complete mechanical system engineering and schedule submittals:

- Mechanical site inspections
- All proposed mechanical systems to conform to applicable Building Codes.

Plumbing & Gasfitting

- Mechanical Excavation and Backfill
- Excavation and native soil backfill for mechanical piping
- Existing Natural gas line to be utilized, assumed no modifications are required to the existing service.
- Six (6) Lavatories (sinks) have been allowed for with required hot/cold water, drainage and venting.

Sanitary and Venting:

- Sanitary drainage and venting lines allowed for.
- Drainage piping to be PVC. Venting piping to be PVC. Standard fixtures included.
- Storm Drainage: Roof drains as required for addition and discharged to grade.

Domestic Water:

- Existing watermain line to be utilized (if available).
- Domestic water heating for all washrooms and shop area sinks would be via a single direct fired 50 US-gal power vent gas water heater (DWH-1) installed in the mechanical room.

HVAC – Heating and Ventilation:

- Includes thermostats
- Four (4) Gas-fired furnaces.
- Wall mounted exhaust fans c/w ducting installed on interior wall.
- All required ducting and grills

Insulation

- Cold and hot water line thermal insulation for the domestic water; thermal and acoustic ductwork insulation as required by Code.

Controls

- Stand-alone control system for each piece of equipment.

Fire Protection

- Fire extinguishers

Div. 26 – ELECTRICAL

Electrical scope conforms to the Canadian Electrical Code. Scope includes:

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- Design and engineering fees
- Feed for Main distribution will be brought in by owner.
- Scope Includes:
 - Supply and install LED fixtures
 - Supply and install emergency/exit lighting as per code
 - Install power outlets as per code requirements
 - Wiring for bathroom exhaust fans – fans supplied and installed by mechanical
 - Wiring for forced air furnace.
 - Fire Alarm System has been allowed for.
- Exterior
 - Supply and install LED wall pacs controlled by photocell
 - No provisions allowed for car plug pedestals.
 - Install 2 weatherproof receptacles on building exterior.

Div. 31 – EARTHWORK

- We have allowed for excavation and backfill work association with: pile tailings removal, building foundations, backfill interior mechanical plumbing.

Div. 32 – EXTERIOR IMPROVEMENTS

- Landscaping: We have made no allowance or provisions for landscaping (topsoil, grass, or plant/tree material of any kind) or irrigation.
- Precast splash pad at downspout location.

Div. 33 – UTILITIES

- Screw Piling: Assuming Structural Engineer permits we have allowed for Fifty (50) engineered screw piles to take the building load. Depending on the geotechnical review it may be more cost effective to use a different piling design.
- Any costs required to be paid to the utility for the service modifications to Utility company or Strathcona County has not been allowed for. Storm connection should not be necessary as storm water will be retained on site.



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APPENDIX C: ALTA-FAB Quote (Clubhouse)

February 8, 2017

Justin Rousseau
Managing Director
Expedition Management Consulting Ltd.
justin@expeditionconsulting.ca
(780) 266-7888

Re: SPDSA Clubhouse Structure Quotation

Dear Justin,

Manufacturer of Modular Solutions

Alta-Fab provides innovative, high-quality modular solutions, designed to meet the industrial space and remote housing needs for any industry. Since we started operations in 1973, we have earned a reputation for creating quality solutions and cultivating a rigorous, innovative, start-to-finish approach to solving customer operations, housing, workforce, and industrial challenges. We believe that a win-win-win model is possible and operate with the intent to demonstrate this with our clients, partners, end-users, and community relationships; we manufacture the units that people want to live, work, and play in.

Taking into consideration both the provided preliminary layout and ballpark square footage requirements for each element that would be contained within the structure, we have prepared the following two options which are budgetary; specifications, layouts and final pricing to be determined:

- Ten-unit, new 12' x 60' (frameless) complex (roughly 7200 sq. ft.) \$ 1,490,400
- Six-unit, new 20' x 60' (frameless) complex (roughly 7200 sq. ft.) \$ 1,004,360
- Optional - new, 12' x 12' (frameless) breezeway corridor to dome \$ 11,500

*Both complex pricing amounts above (with the exception of the corridor) are a full turn-key solution which includes: manufacturing, transportation, pile foundation, stairs and landings as well as skirting around the complex base.

If you have any questions, please don't hesitate to contact me; I would be more than happy to meet and discuss the particulars of this project.

Sincerely,

Kyle Dillabough, BBA
Sales Representative - Structures
kd@altafab.com
Cell: (780) 660-0678

APPENDIX D: Operating Model Options

There are several approaches to operating a soccer centre that have been successful in municipalities across Alberta. Below is a brief description of three approaches that could be used to operate the facility.¹²

Municipally Operated

The Municipality is the direct provider of programs and services at the facility and manages all operations. The Municipality acts as the landlord in all lease space arrangements, controls facility revenues/expenses, assumes risk/rewards and sets service level standards via direct management. The Municipality may choose to contract out one or more components of the facility (e.g. concession, office space).

Non-Profit Sector

There are two options for the facility to be run by the non-profit sector.

Existing Non-Profit*

An existing NGO (or group of organizations) is the direct provider of programs and services in the facility and manages all operations. The Municipality acts as the landlord to the building proper, but the NGO may act as the landlord in all lease space arrangements, control facility revenues/expenses, assume risk/rewards and set service level standards via an agreement with the Municipality.

An existing NGO is often chosen to operate the facility when they are a contributing partner to the project. There must be an identifiable organization that has a high level of interest in the facility and a specific skill set that lends itself to the operation of the facility. In many cases (but not always) these are single sport facilities (e.g. Lethbridge Soccer Association operates the Lethbridge Soccer Centre).

*Note that this is the assumed operating model for the proposed indoor soccer facility in Strathcona County.

New Operating Board (i.e. Part 9 Company or Society)

A new operating board is usually established when there are partners in a project that contribute to facility construction and/or operations or there is an identifiable group of community members (or organizations) that have a vested interest in the facility (e.g. City of Spruce Grove, Town of Stony Plain and Parkland County formed a Part 9 Company to operate the Tri-Leisure Centre in the City of Spruce Grove).

Private Sector

A private organization is the direct provider of programs and services in the facility and manages all operations. If the Municipality owns the building, the Municipality acts as the landlord to the building proper, but the Private Sector Organization may act as the landlord in all lease space arrangements, control facility revenue/expenses, assume risks/rewards and set service level standards via an agreement with the Municipality. If the private sector operator owns the building, the operator would assume all facility risk/rewards.

APPENDIX E: Fee Comparison Data

Full-sized Indoor Facilities in Western Canada

Figure 14 provides a comparison of hourly field rental fees in the SaskTel Sports Centre, the Winnipeg Subway Soccer Centre, the Foote Field Dome and the proposed facility for Strathcona County.

Figure 14. Fee Comparison – Full-sized Indoor Facilities in Western Canada

Time Slot	Season	SaskTel	Winnipeg	Foote Field Dome	Proposed Strathcona County
Prime Time	Indoor	¼ \$126.50 ½ \$253 Full \$506	¼ \$175 ½ \$315 Full \$630	¼ \$150 ½ \$250 Full \$400	¼ \$150 ½ \$250 Full \$400
Non-Prime Time	Indoor	¼ \$67 ½ \$134 Full \$268	¼ \$105 ½ \$157.50 Full \$210	¼ \$75 ½ \$125 Full \$200	¼ \$75 ½ \$125 Full \$200
Prime Time	Outdoor	¼ \$99.95 ½ \$199.90 Full \$299	¼ \$105 ½ \$150 Full \$185	N/A	¼ \$84 ½ \$139 Full \$210
Non-Prime Time	Outdoor	¼ \$67 ½ \$130 Full \$260	N/A	N/A	¼ \$42 ½ \$69 Full \$105

Indoor Soccer Facilities in the Capital Region

Figures 15 and 16 provide a comparison of hourly field rental fees in boarded and non-boarded soccer facilities across the Capital Region and the proposed facility for Strathcona County.

Figure 15. Fee Comparison – Indoor Boarded Facilities in the Capital Region

Time Slot	Season	Edmonton ESAF Facilities	Millennium Place	St. Albert Servus	Ft. Sask. Dow Centre	Proposed Strathcona County
Prime Time	Indoor	¼ \$119	¼ \$112.93	¼ \$129	¼ \$120.75	¼ \$150
Non-Prime Time	Indoor	¼ \$88-\$98	¼ \$54.97 – \$78.49	¼ \$83	¼ \$84.53	¼ \$75
Prime Time	Outdoor	¼ \$92	¼ \$80.54	¼ \$82	¼ \$84.53	¼ \$84
Non-Prime Time	Outdoor	¼ \$82	N/A	N/A	N/A	¼ \$42

Figure 16. Fee Comparison – Indoor Non-Boarded Facilities in the Capital Region

Time Slot	Season	Commonwealth	Victoria	Proposed Strathcona County
Prime Time	Indoor	1/3 \$170 2/3 \$272	1/3 \$158 2/3 \$250	¼ \$150
Non-Prime Time	Indoor	1/3 \$85 2/3 \$136	1/3 \$158 2/3 \$250	¼ \$75
Prime Time	Outdoor	1/3 \$134 2/3 \$212	1/3 \$158 2/3 \$250	¼ \$84
Non-Prime Time	Outdoor	1/3 \$48 2/3 \$73	1/3 \$158 2/3 \$250	¼ \$42

APPENDIX F: Field Booking Revenue

Revenue Projections for Field Bookings (with Dome)

Indoor Season						
	#wks	#hrs/wk	Hrs/season	Utilization Rate	Rate/hr	Revenue
¼ Field Bookings (@ 70%)						
Prime – Weekdays 5-10pm	24	70	1680	0.90	150	\$226,800
Non-Prime – Weekdays 7am-5pm	24	140	3360	0.25	75	\$63,000
Prime – Weekends 7am-11pm	24	90	2150	0.90	150	\$290,304
½ Field Bookings (@ 20%)						
Prime – Weekdays 5-10pm	24	10	240	0.90	250	\$54,000
Non-Prime – Weekdays 7am-5pm	24	20	480	0.25	125	\$15,000
Prime – Weekends 7am-11pm	24	13	307	0.90	250	\$69,120
Full Field Bookings (@ 10%)						
Prime – Weekdays 5-10pm	24	2.5	60	0.90	400	\$21,600
Non-Prime – Weekdays 7am-5pm	24	5	120	0.25	200	\$6,000
Prime – Weekends 7am-11pm	24	3	77	0.90	400	\$27,648
Total Indoor						\$773,472
Outdoor Season						
	#wks	#hrs/wk	Hrs/season	Utilization Rate	Rate/hr	Revenue
¼ Field Bookings (@ 70%)						
Prime – Weekdays 5-10pm	26	70	1820	0.50	84	\$76,440
Non-Prime – Weekdays 7am-5pm	26	140	3640	0.10	42	\$15,288
Prime – Weekends 7am-11pm	26	90	2330	0.50	84	\$97,843
½ Field Bookings (@ 20%)						
Prime – Weekdays 5-10pm	26	10	260	0.50	139	\$18,018
Non-Prime – Weekdays 7am-5pm	26	20	520	0.10	69	\$3,604
Prime – Weekends 7am-11pm	26	13	333	0.50	139	\$23,063
Full Field Bookings (@ 10%)						
Prime – Weekdays 5-10pm	26	2.5	65	0.50	210	\$6,825
Non-Prime – Weekdays 7am-5pm	26	5	130	0.10	105	\$1,365
Prime – Weekends 7am-11pm	26	3	83	0.50	210	\$8,736
Total Outdoor						\$251,182
Total Annual Revenue¹						\$1,024,654

¹Year-round operation

Revenue Projections for Field Bookings (without Dome)

Outdoor Season						
	#wks	#hrs/wk	Hrs/season	Utilization Rate	Rate/hr	Revenue
May/June Full Field Bookings (@ 100%)						
Prime – Weekdays 5-10pm	8	25	200	0.95	67	\$12,730
Non-Prime – Weekdays 7am-5pm	8	50	400	0.10	67	\$2,680
Prime – Weekends 7am-11pm	8	32	256	0.95	67	\$16,294
April, July, Aug, Sept Full Field Bookings ¹						
Prime – Weekdays 5-10pm	14	25	350	0.65	67	\$15,243
Non-Prime – Weekdays 7am-5pm	14	50	700	0.10	67	\$4,690
Prime – Weekends 7am-11pm	14	32	448	0.65	67	\$19,510
Total Outdoor						\$71,147

¹Allows for 2 weeks for dome set up and 2 weeks for dome take down.

APPENDIX G: References

- ¹ Sherwood Park District Soccer Association. (2015). *Indoor Soccer Centre Business Case and Concept Design*.
- ² Retrieved from: <http://www.thefarleygroup.com/Products.htm>
- ³ Government of Alberta, Ministry of Infrastructure
- ⁴ Sherwood Park District Soccer Association. (2015). *Indoor Soccer Centre Business Case and Concept Design*.
- ⁵ D.Ballam, SPDSA. (2015).
- ⁶ D. O'Neil, Director, ASA. (2017).
- ⁷ The Farley Group. (2017).
- ⁸ The Farley Group. (2017).
- ⁹ K. Pipe. FieldTurf. (2017).
- ¹⁰ R.Copeland. (2017).
- ¹¹ D. Ballam. SPDSA. (2017).
- ¹² Expedition Management Consulting Ltd. (2012). City of Lethbridge Multi-Purpose Leisure Centre Needs Assessment and Concept Design.

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