

GIBBS GAGE ARCHITECTS

EAST OF THE RED REC PLEX

FEASIBILITY STUDY

FINAL REPORT

DRAFT APRIL 25, 2018 | PROJECT # 17059

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The City of Winnipeg has an aging group of sports, recreational and wellness assets, with very little new construction of facilities in the past 30 years to keep pace with evolution and changes in the industry over that time. Providing recreation and wellness programming has become a primary focus of many municipalities across the prairies, with varying service delivery models. Services relating to organized sport and leisure activities vary across western Canada, but fundamentally the health of a community, a City, is reflected in strength and vitality of its facilities.

There is often a perception, with respect to learning to swim, that it is less a recreational pastime and more a life skill. Physical literacy has become an increasingly important emphasis of the education and program delivery of sport and recreation centres. The existing inventory of aquatic facilities in Winnipeg consists mainly of more-traditional rectangular lap pools ,with the exception of a newly-built exterior leisure pool in Transcona by the Transcona Kinsmen Centennial Indoor Pool. While lap pools remain an important part of aquatic programming, there are sufficient lap lanes and venues for competitive swimming in the City. Further, much of the innovation in aquatics in recent years has been in providing animation and activity as a draw while addressing the need for warmer water for programming and lessons. There is an obvious need for more leisure water as an amenity for new recreation centres

The East of the Red Rec Plex project (ERRP) proposes a natatorium of 2980 sm or 30,000 sf, including a wave pool and lazy river, hot pool, waterslide, and 25 m 8-lane lap pool. The objective of this natatorium is to create several basins with the operational flexibility to provide a range of programming and temperatures to appeal to diverse ages, as well as to minimize down time with any contamination issues. To make the delivery of aquatic programs effective, meet health regulations, provide safety and security for users, 9000 sf of deck space is also necessary within the natatorium.

In a review of City needs and policy, indoor ice was deemed not to be required, and further, to be more appropriately delivered through Community Associations. To support the operational impact of the natatorium we suggested multi-purpose community space with community kitchens, a double gymnasium, movement studios and approximately 10,000 sf of fitness space should be included in the facility. The benefit of these programs is to create a multi-use centre where families and individuals can spend more time pursuing different activities, often simultaneously in the case of families. The notion of "one stop shopping" for recreation needs is a growing trend that provides more benefit to the regional community, reduces maintenance and operation costs and creates a focal point for social interaction. This is reflected in, and contributes to, the benefit of physically connecting to the Library which is currently under construction. While the gap in construction and design timing will not permit the mechanical/electrical efficiencies of one large complex, maintenance efficiencies and the larger community benefit can and will be realized.

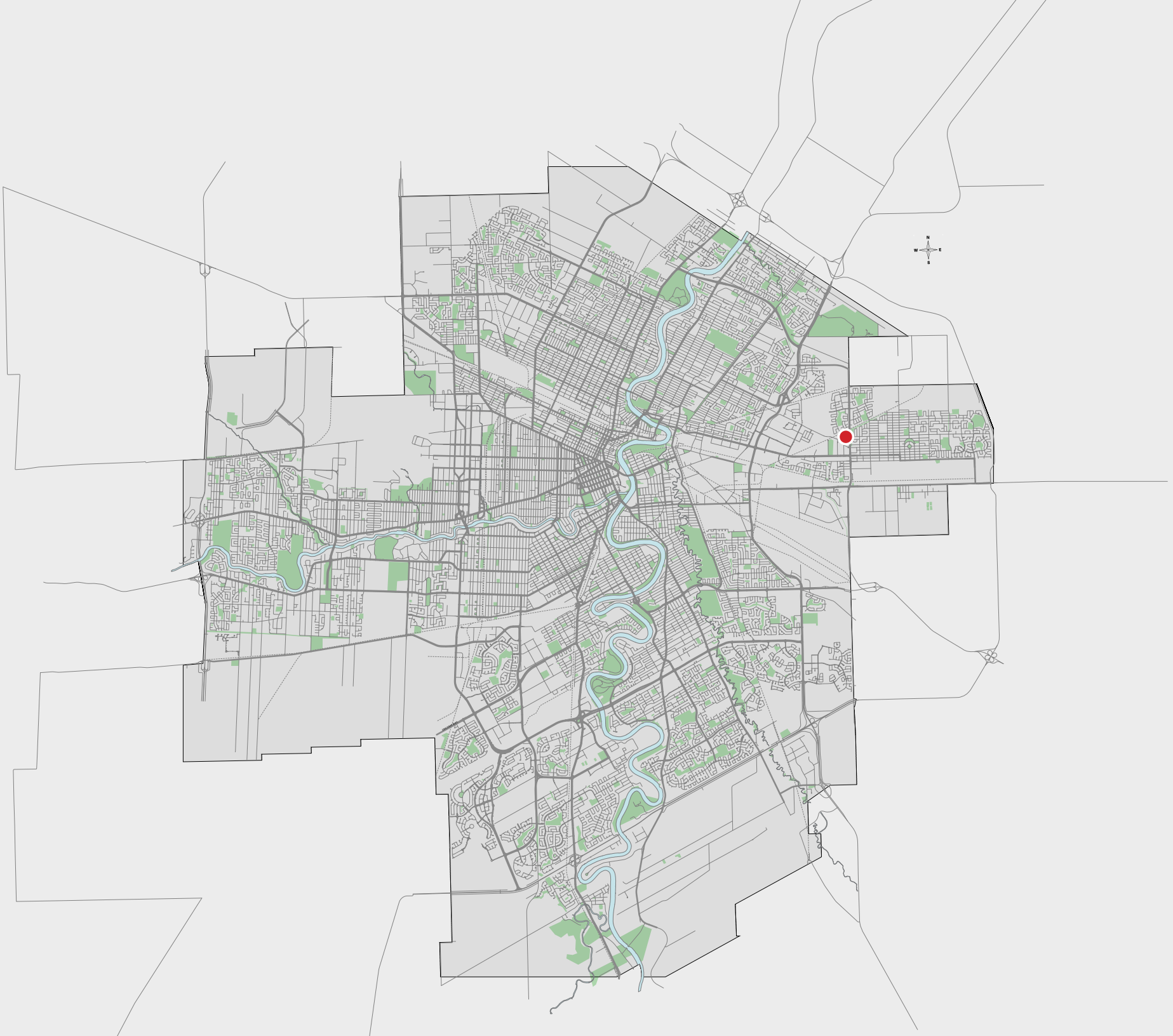
EXECUTIVE SUMMARY

Considering the gross-up and support spaces required for a facility of this size, the suggested full build-out of the complex is 8,700 sm or 92,000 sf. Many of the uses in the building are large and only a few spaces should be stacked, resulting in a significant footprint on the existing site.

Another challenge with a large multi-use complex is the amount of parking required to support the uses. Along with the need for easy drop off and pick up, parking lots must be clear and legible to ensure the safety of all users, especially those with young children and mobility challenges. Parking requirements are not easily determined through bylaw because of the shared use of programs, and would need to be assessed by a parking study, but would range from 250-500 stalls. A parking lot of this size is daunting to design safely, efficiently and without a sea of asphalt that creates detrimental experiences and negative environmental conditions. With the constraints of site access, library location and the potential need for a BRT stop or station on or near the site, our recommendation is to create multiple lots connected from the same site access point. This would require two primary entrances to the common area, and suggests an atrium or galleria approach to designing the community space. A right-in/right-out on Plessis Rd. should be reviewed to minimize cueing at the main entrance and provide access for vehicles from the north. A park-and-ride area for BRT use will also create operational challenges for the parking lot, as use times do not necessarily align with a regional recreation centre. Promoting BRT and bus access on site is important and has been achieved in the concept design with the separation of buses from vehicle and pedestrian traffic by locating the bus zone on the south-west portion of the site.

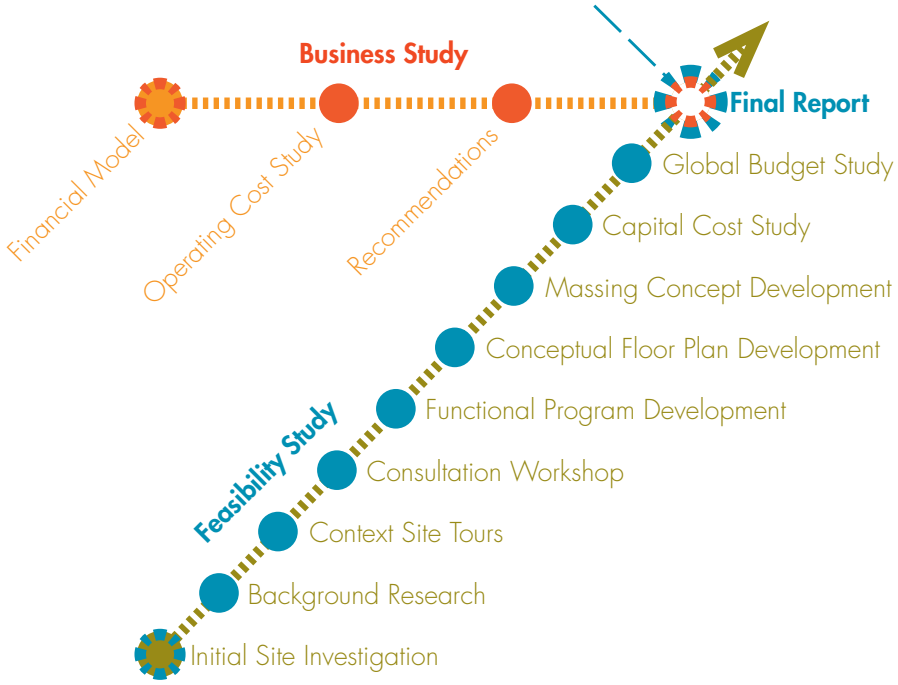
A facility of this size and use requires strong, durable detailing and finishing. Aquatic spaces and recreational spaces have a high wear condition and necessitate an intensive mantainence regimen. The timeframe of previous investments in recreation assets and the size of the financial investment mean careful consideration should be given to the design and construction of this type of facility. We have prepared an order-of-magnitude budget in 2018 dollars that considers similar facilities built in Western Canada. The estimated hard construction costs are $40.5M, and the inclusion of soft costs bring the global project budget to $55M. The business case appended to this report suggests that Tax Incremental Financing from the adjacent land could fund a significant portion (50-81%) of the total project cost. The time frame of that development and the scarcity of other funding sources lend urgency to the development of a plan and funding strategy for City Council.

It was assumed that the City of Winnipeg Community Services would entirely operate this facility. It was assumed that the Transcona Kinsmen Centennial Indoor Pool would be closed and the operational and deferred maintenance budgets for that facility be reallocated. Other partnering opportunites for the operation of the facility were not considered as part of this report but may bring in other specific requirements that would change this progam and model.


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TERMS OF REFERENCE

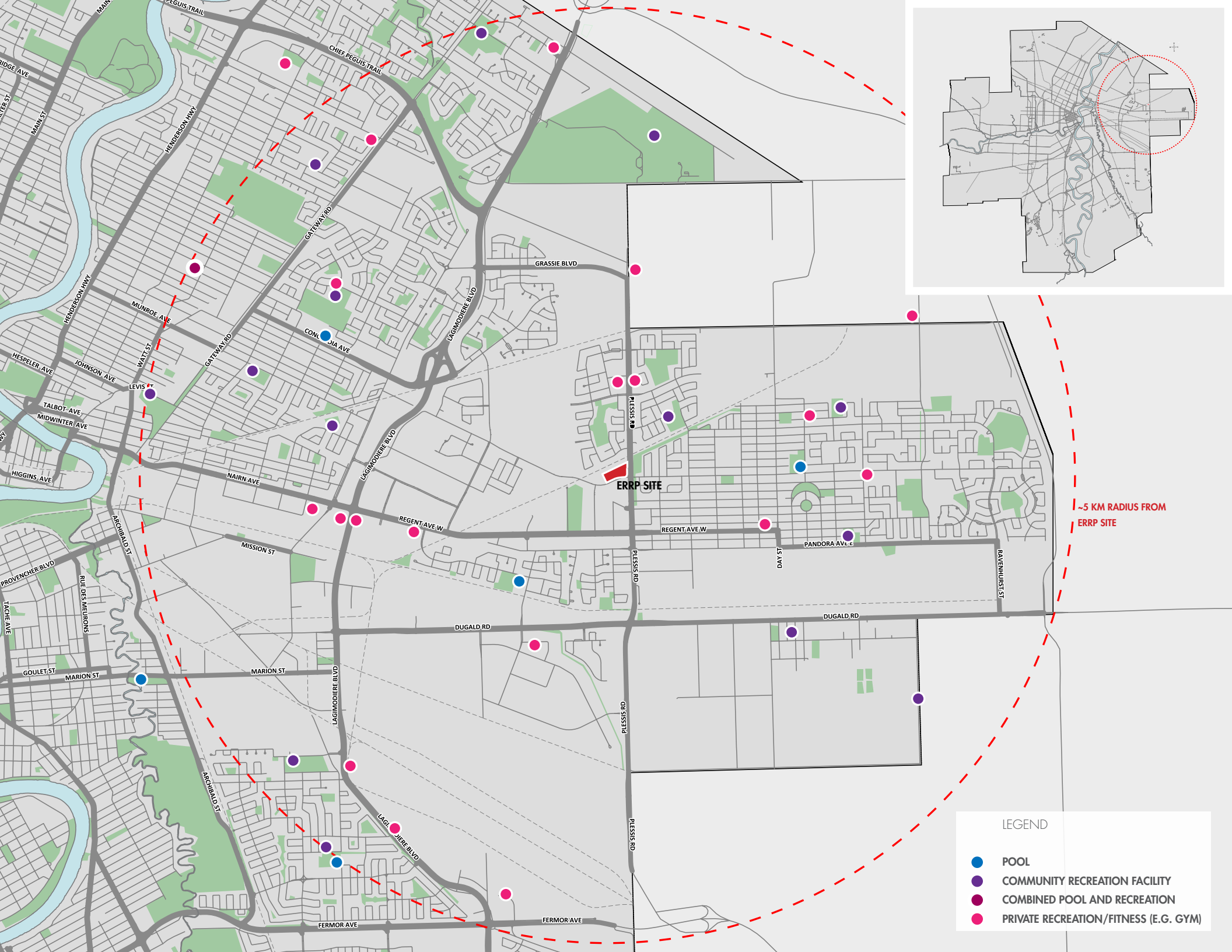
Study Process



Gibbs Gage Architects were engaged by the City of Winnipeg in October of 2017 to prepare a functional program and prepare a feasibility study for a site in Transcona. In a separate study prepared by DHP+PM, a business plan and financial model was completed and carried as an appendix to this study. Gibbs Gage worked with Ken McKim, Manager –Asset Management Office of Community Services Department. Engagement with senior staff and management at the City of Winnipeg was coordinated through this department.

Initial site investigation and background research on the site at Transcona Blvd and Plessis Rd. occurred in December. Site tours of Cindy Classen, Pan Am Pool, Transcona Kinsmen Centennial Indoor Pool were undertaken at that time. An initial consultation workshop to establish needs and priorities occurred on the same trip with staff and senior administration from Community Services Department.

Over the next couple of months, Gibbs Gage Architects in collaboboration with DHP+PM developed a functional program, conceptual floor plan, massing concept, an order of magnitude capital cost and a global budget for the proposed site in Transcona. Under a separate scope, DHPPM prepared a business case that include a financial model, operating cost and recommendations for advancing the project.


CHIEF PEGUIS TRAIL
MAIN ST
HENDERSON HWY
GATEWAY RD
GRASSIE BLVD
LAGIMODIERE BLVD
MUNROE AVE
HESPELER AVE
JOHNSON AVE
WATT ST
TALBOT AVE
MIDWINTER AVE
HIGGINS AVE
NAIRN AVE
REGENT AVE W
MISSION ST
PROVENCHER BLVD
RUE DES MEURONS
TACHE AVE
ARCHIBALD ST
DUGALD RD
GOULET ST
MARION ST
FERMOR AVE
PLESSIS RD
DAY ST
PANDORA AVE E
RAVENHURST ST
ERRP SITE
~5 KM RADIUS FROM ERRP SITE
LEGEND
POOL
COMMUNITY RECREATION FACILITY
COMBINED POOL AND RECREATION
PRIVATE RECREATION/FITNESS (E.G. GYM)

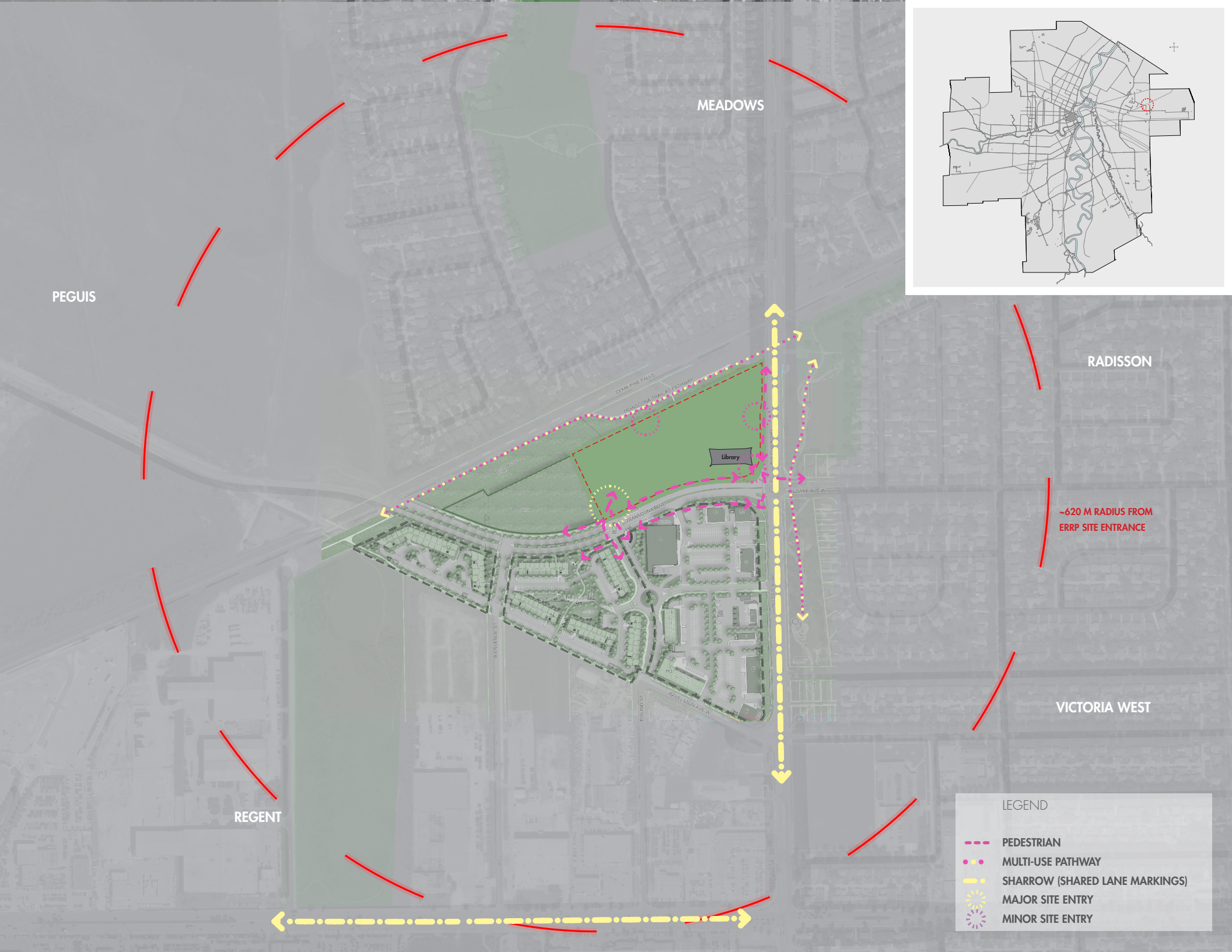
CONTEXT ANALYSIS

EAST OF THE RED RIVER RECREATION PROJECT SITE

Site Context

The East of the Red Rec Plex project (ERRP) site sits at the corner of Transcona Blvd. and Plessis Rd., within the Park City Commons development area on the former Transcona Public Works Yard. It is in the heart of the Transcona city ward, in the north-east corner of the Regent neighbourhood, adjacent to the neighbourhoods of Meadows and Radisson.

There are 39 recreational facilities in the surrounding area of eastern Winnipeg (see map), of which: 5 are pools unconnected to other recreation centres, 14 are community recreation facilities like community centres and arenas, 19 are private fitness facilities like gyms and martial arts studios, and only one - the Elmwood Kildonan Y - is an integrated pool and recreation facility similar to what is being proposed for the ERRP.


MEADOWS
PEGUIS
RADISSON
VICTORIA WEST
REGENT
~620 M RADIUS FROM
ERRP SITE ENTRANCE
Library
LEGEND
PEDESTRIAN
MULTI-USE PATHWAY
SHARROW (SHARED LANE MARKINGS)
MAJOR SITE ENTRY
MINOR SITE ENTRY

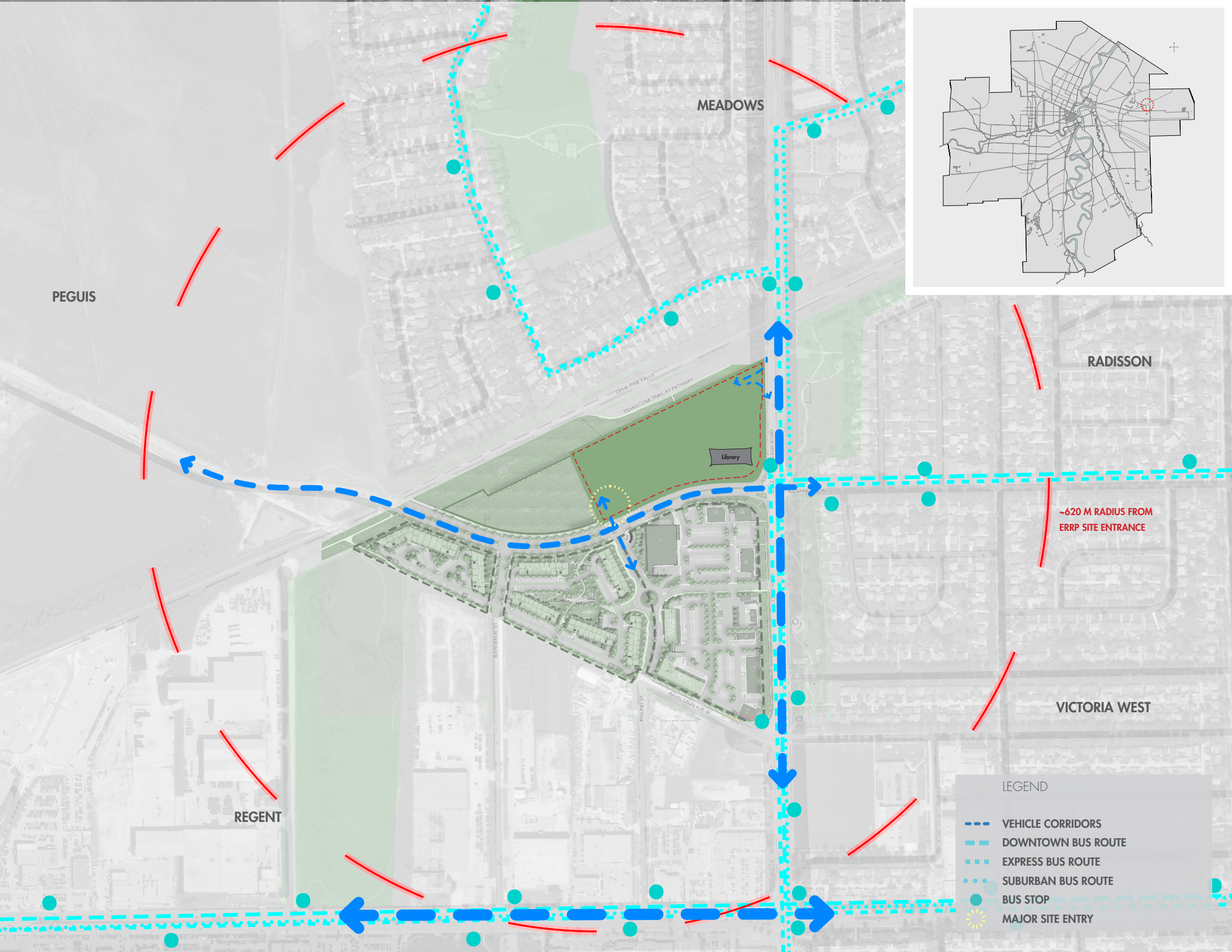
SITE ANALYSIS

PEDESTRIAN AND CYCLIST MOVEMENT

Site Access and Circulation

Pedestrian access to the ERRP site is via sidewalks on the east (Plessis Rd) and south (Transcona Blvd) edges of the site, and via the Transcona Trail multi-use pathway along the north edge of the site.

Transcona Trail is also used by cyclists, as are paths in the Kiwanis and Rotary Centennial Parks, immediately across Plessis Rd to the east of the ERRP site. Plessis Rd itself has a bicycle sharrow, as does Regent Ave to the south.


MEADOWS
PEGUIS
RADISSON
VICTORIA WEST
REGENT
Library
~620 M RADIUS FROM
ERRP SITE ENTRANCE
LEGEND
VEHICLE CORRIDORS
DOWNTOWN BUS ROUTE
EXPRESS BUS ROUTE
SUBURBAN BUS ROUTE
BUS STOP
MAJOR SITE ENTRY

SITE ANALYSIS

TRANSIT AND MOTOR VEHICLE MOVEMENT

Site Access and Circulation

Transit access to the ERRP site is via bus routes which run along Plessis Rd. These include Downtown route number 47, Suburban route number 92, and Express routes 42,46, and 48.

While the Winnipeg Transportation Master Plan identifies the CEMR rail corridor as a future Rapid Transit Corridor, and while the Area of Opportunity identified in the Eastern Corridor Study for Winnipeg Rapid Transit encompasses part of the ERRP site, as of this writing no actual route maps or stop locations for that project have been released.

Vehicle access to the site is primarily via Transcona Blvd, though a right in/ right out is also proposed on Plessis Rd, which is a more major route. To the south, Regent Ave has been identified as a Regional Mixed-Use Corridor in the Winnipeg Transportation Master Plan.


MEADOWS
PEGUIS
RADISSON
VICTORIA WEST
REGENT
Sunset
Sunrise
Sunset
Sunrise
Sunset
Noon
Noon
Noon
Sunrise
Library
~620 M RADIUS FROM
ERRP SITE ENTRANCE
LEGEND
SUMMER SOLSTICE SUN
EQUINOX SUN
WINTER SOLSTICE SUN
RELATIVE WIND FREQUENCY
MAJOR NOISE SOURCE

SITE ANALYSIS

ENVIRONMENTAL CONSIDERATIONS

Site Environmental Considerations

Situated just south of the 50th parallel, the ERRP site experiences seasonal fluctuations in sun direction and intensity typical of a southern Canadian prairie city. Daylight is both longest and most intense at the summer solstice, and sunshine comes from the broadest range of directions. Conversely, at the winter solstice daylight is shorter, less intense, and comes predominantly from the south-east-through-south-west.

By frequency, the single most-common wind direction in Winnipeg is from the south, though winds also commonly come from the range of directions from due west through north-north east. These directions should be considered both in terms of facility entrance orientation and wind shelter - expecially tree planting - on site.

The ERRP site sits between the active Central Manitoba Railway (CEMR) line to the north, Plessis Rd to the east, and Trancona Blvd to the south, all of which are significant sources of noise. Noise from rail lines is typically less frequent but more intense than road traffic noise.


MEADOWS
PEGUIS
RADISSON
VICTORIA WEST
REGENT
Library
~620 M RADIUS FROM
ERRP SITE ENTRANCE
LEGEND
RESIDENTIAL
COMMERCIAL
PARKS AND RESERVES
RAIL CORRIDOR (CEMR)
SCHOOLS AND INSTITUTIONS

SITE ANALYSIS

SURROUNDING LAND USES

Developed Land Uses

The ERRP site sits within the Park City Commons development area, and is directly surrounded by commercial retail uses to the south, residential to the south-west, and park and recreation space to the north and east.

Beyond Park City Commons in the broader Transcona context, residential uses predominate to the north and east, and commercial uses to the south and south-west, with school, park, and environmental reserve space peppered throughout. The entire area is bisected by the CEMR rail corridor which runs south-east to north-west and passes just north of the ERRP site.

Lands to the west and north-west of Park City Commons area are currently under development, the result of which will be the residential neighbourhoods of Devonshire Village and Devonshire Park.

	Square Metres	Square Feet
1.0 NATATORIUM		
1.1 Program Water		
1.1.1 Lap Pool 25m - 8 Lane w. Ramp (bather load 500 swimmers)	525	5652
1.1.2 Deck Area (average width 3M, 5M on ends)	425	4575
Sub-Total	**950**	**10227**
1.2 Leisure Water: Wave Pool Configuration		
1.2.1 Wave Pool 37m x 15m (bather load 490 swimmers)	540	5813
1.2.2 Hot Pool (25-person capacity) with Ramp	50	538
1.2.3 Deck Area (average width 5-6M)	410	4414
1.2.4 Viewing Area (capacity 25 persons)	50	538
1.2.5 Waterslide Tower and Run-out (slides over deck and water)	120	1292
Sub-Total	**1050**	**11303**
1.3 Ancillary Spaces		
1.3.1 Lifeguarding Office / First Aid	20	215
1.3.2 Steam Room / Sauna / On-Deck Shower	25	269
1.3.3 Pool Storage	60	646
1.3.4 Chemical Storage (located with Pool Mechanical)	15	161
Sub-Total	**120**	**1292**
Assigned Area Sub-Total	**2120**	**22822**
Pool Mechanical (40% of water area); Wave Generator Mec'l.)	571	4801
Pool Tunnel (on 2 sides of Lap Pool tank, 1 side of wave pool)	90	431
Building Mechanical Pro-Rated 6%	161	1657
Walls and Structure Pro-Rated 2%	54	552
Circulation included in Deck Area	0	0
Component Gross Area	**2996**	**30263**
2.0 CHANGE ROOMS		
2.1 Universal Change Rooms (400 bathers)		
2.1.1 Universal Change Cubicles (with Shower) x 35	170	1830
2.1.2 Full-Height Locker Columns and Aisle (200 columns)	120	1292
2.1.3 Accessible Washrooms x 6	30	323
2.1.4 Vanity Stations x 5	10	108
2.1.5 Stroller / Wheelchair Area	10	108
Sub-Total	**340**	**3660**
2.2 Gender Locker Rooms (200 bathers each)		
2.2.1 Women's Locker Room (70 columns, 100 lockers)	50	538
2.2.2 Women's WCs, Showers, Vanities (3 of each)	20	215
2.2.3 Men's Locker Room (70 columns, 100 lockers)	50	538
2.2.4 Men's WCs, Showers, Vanities (3 of each)	20	215
2.2.5 Staff Universal Change Cubicles (w. Shower) x 4	20	215
2.2.6 Staff Universal Change Lockers (30 columns)	20	215
2.2.7 Custodial Closet x 3	10	108
Sub-Total	**190**	**2045**
Component Assigned Area Sub-Total	**530**	**5705**
Pro-Rated Building Mechanical / Electrical 6%	32	342
Pro-Rated Walls and Structure 3%	17	181
Component Internal Circulation 5%	28	302
Component Gross Area Total	**607**	**6532**

	Square Metres	Square Feet
3.0 FITNESS CENTRE		
3.1 Fitness Centre		
3.1.1 Reception	10	108
3.1.2 Stretching / Balls and Circulation	50	538
3.1.3 Cardio Machines and Circulation	400	4306
3.1.4 Strength Machines and Circulation	300	3230
3.1.5 Fitness Free Weights / Open Area and Circulation	200	2153
3.1.6 Convenience HC-Accessible Washrooms x 2	10	108
3.1.7 Office	10	108
Component Assigned Area Sub-Total	**980**	**10550**
Pro-Rated Building Mechanical / Electrical 6%	59	633
Pro-Rated Walls and Structure 2%	21	224
Circulation included in Equipment Areas	0	0
Component Gross Area Total	**1060**	**11406**
4.0 MULTI-PURPOSE / GYMNASIUM / TRACK		
4.1 Multi-Purpose Studios, Gymnasiums and Indoor Track		
4.1.1 Double Gymnasium (high school basketball court, sub-dividable)	1150	12380
4.1.2 Gymnasium Storage	60	646
4.1.3 Indoor Jogging / Walking Track (3-metre W x +/-115-metre L; non-standard configuration and small radius turns)	345	3714
4.1.4 Large Movement Studio (capacity 50 for movement)	250	2691
4.1.5 Medium Movement Studio (cap. 40 for movement)	185	1992
4.1.6 Yoga Studio (capacity 20)	120	1292
4.1.7 Medium Multi-Purpose Rooms (2 x capacity 60 each; one room located off the pool deck as classroom / birthday party room)	185	1992
4.1.8 Serving Kitchen (adjacent to Gym and Multi-Purpose Rooms)	75	807
4.1.9 Multi-Purpose / Group Fitness Storage (distributed)	80	861
Component Assigned Area Sub-Total	**2450**	**26374**
Pro-Rated Building Mechanical / Electrical 6%	147	1582
Pro-Rated Walls and Structure 2%	52	559
Component Internal Circulation 5%	130	1398
Component Gross Area Total	**2779**	**29914**

FUNCTIONAL PROGRAM

SPACE AND USES

		Square Metres	Square Feet
5.0 FACILITY OPERATIONS			
5.1 Front-of-House Functions			
5.1.1 Reception / Control Desk		32	344
5.1.2 Administration Offices (5)		50	538
5.1.3 Copy / Office Storage		20	215
5.1.4 First Aid Room		9	97
	Sub-Total	**111**	**1195**
5.2 Back-of-House Functions			
5.2.1 Loading Dock		10	108
5.2.2 Storage / Staging Area		20	215
5.2.3 Waste / Recycling Management		10	108
5.2.4 Maintenance Shop		20	215
5.2.5 Custodial Storage		10	108
5.2.6 Facility Operations Office		10	108
5.2.7 Staff Room		30	323
	Sub-Total	**110**	**1184**
Component Assigned Area Sub-Total		**221**	**2379**
Entry Lobby and Public Area		300	3232
Facility Major Circulation / Washrooms 10%		630	6783
Component 5.0 Internal Circulation 10%		59	635
Pro-Rated Building Mechanical / Electrical 5%		69	743
Pro-Rated Walls and Structure 3%		36	390
Component Gross Area Total		**1315**	**14162**

Facility Area Summary

Total Assigned Area	**6301**	**67830**
Total Gross Area	**8757**	**92277**
Net to Gross Ratio	1.39	
Assignable Area / Gross Area	72%	

Program Development

The functional program was developed in conjunction with David Hewko Planning + Program Management (DHP+PM) for this study and the business and operational study developed by DHP+PM (see Appendix 1). The program was developed using both quantitative input, in particular, a survey of similar facilities across western Canada; and qualitative input, gathered from staff over two workshops.

The program proposed includes a natatorium with a wave pool and lazy river, hot pool, waterslide, and 25 m 8-lane lap pool, providing a range of programming and temperatures to appeal to diverse ages minimize operational down time. Sufficient deck space is included to deliver aquatic programs effectively, meet health regulations, and provide safety and security for users.

To support the operation of the natatorium, a multi-purpose community space with community kitchens, a double gymnasium, movement studios and fitness space are included in the program. These uses will help create a "one-stop shop" multi-use centre where families and individuals can spend more time pursuing different activities, providing more benefit to the regional community, reducing maintenance and operation costs, and creating a focal point for social interaction.



Option 1



Option 2



Option 4



Option 5

PRELIMINARY TEST FITS



Option 3

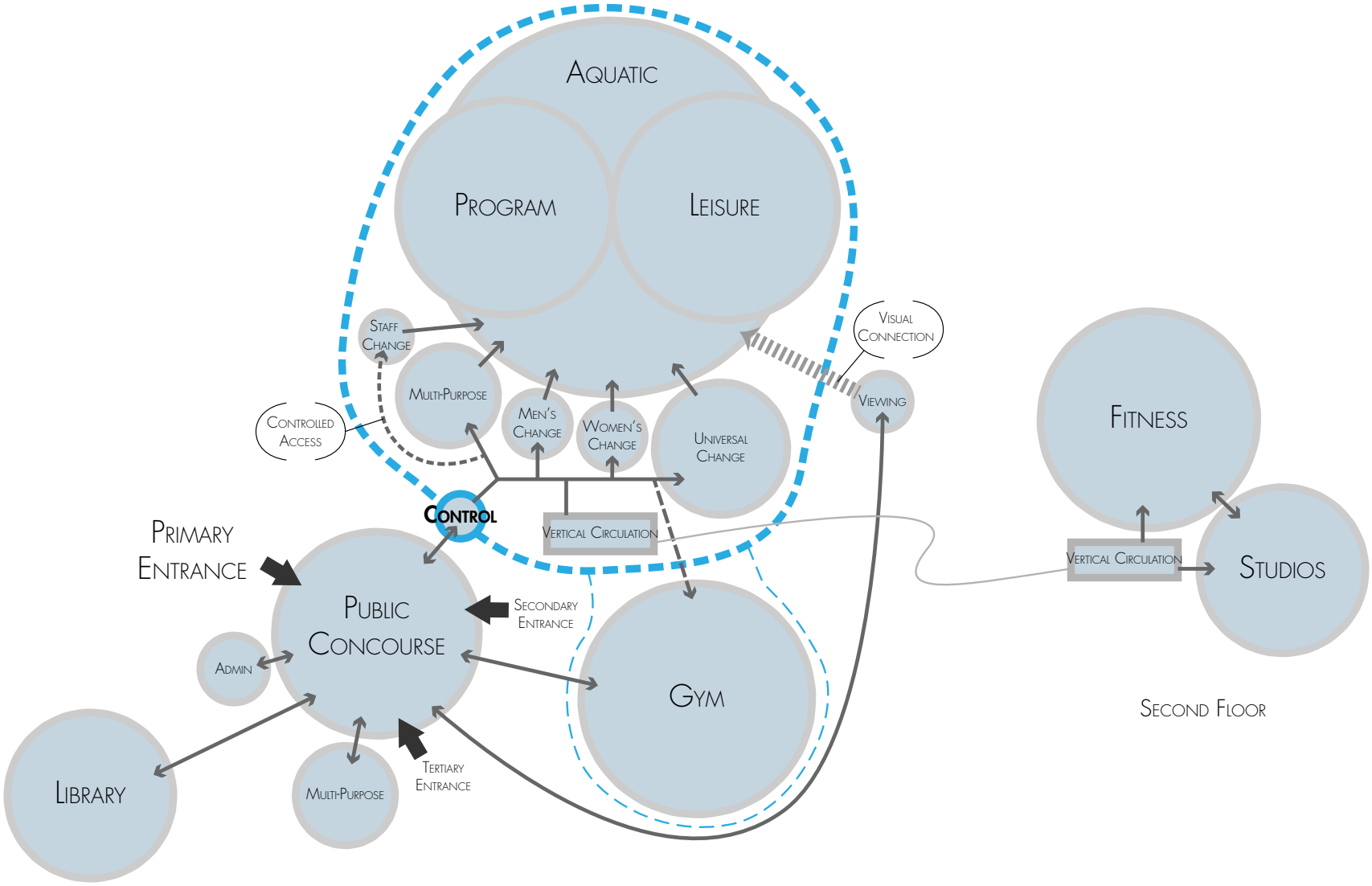
Preliminary Concepts

These concepts were developed for the project's first collaborative design charrette in January, to assess the response of various arrangements of the programs to each other and to the site as a whole. The 5 different plans that were developed looked at the following considerations:

- adjacency of key program elements
- location of control point in relation to public access and viewing
- relationship to the library
- scale and orientation of parking
- separation of vehicle, pedestrian and drop off access
- distance from the street and urban fit
- environmental orientation

As expected, no single option was deemed to match exactly the intent of the project, however several consistent themes and design principles emerged from the discussion. It became clear that a connection or close proximity to the library was desirable as well as the separation of bus traffic from car traffic. While not a driver of the design, the idea that there were smaller but contiguous parking lots that provided closer proximity to multiple front doors was preferred. In the end, option 3 best reflected the direction to refine the design. Key considerations in the planning of the program elements that needed further review included:

- the scale of the gymnasium and the inclusion of the a community kitchen over food kiosk
- leisure water over more lap or rectangular lanes
- access to pool viewing outside of control


AQUATIC
PROGRAM
LEISURE
STAFF CHANGE
MULTI-PURPOSE
MEN'S CHANGE
WOMEN'S CHANGE
UNIVERSAL CHANGE
VISUAL CONNECTION
VIEWING
CONTROLLED ACCESS
CONTROL
VERTICAL CIRCULATION
PRIMARY ENTRANCE
PUBLIC CONCOURSE
SECONDARY ENTRANCE
ADMIN
GYM
LIBRARY
MULTI-PURPOSE
TERTIARY ENTRANCE
FITNESS
VERTICAL CIRCULATION
STUDIOS
SECOND FLOOR
GROUND FLOOR

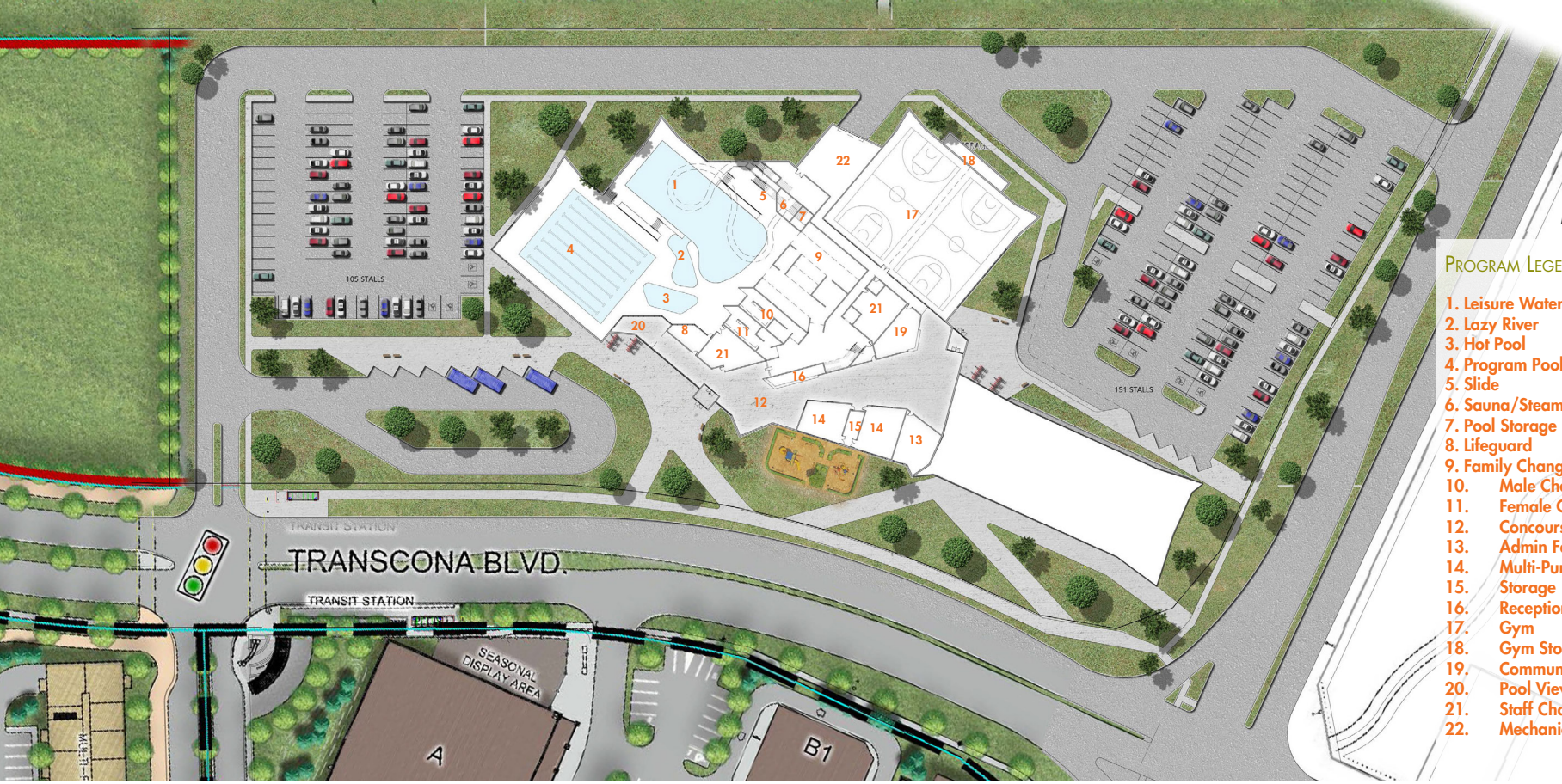
CONCEPT PLAN REFINEMENT

ADJACENCIES AND SPATIAL ORGANIZATION

With a refinement of the program elements and the analysis of the business case running in parallel, a refined program adjacency plan was prepared. Key considerations that emerged from the previous design charrette were:

- Strong physical connection to the library
- Multiple entrances into a common lobby/hall/atrium/gathering space
- Separation of bus access from car and drop off (reflected in site plans and not internal program adjacency)

The resulting program adjacency plan was developed into to two new concept designs, which differ only in the scale of the gymnasium and composition of the leisure water. The variations of the layout were focused on the layout and orientation of program components. The critical spatial relationships were maintained in both concepts.

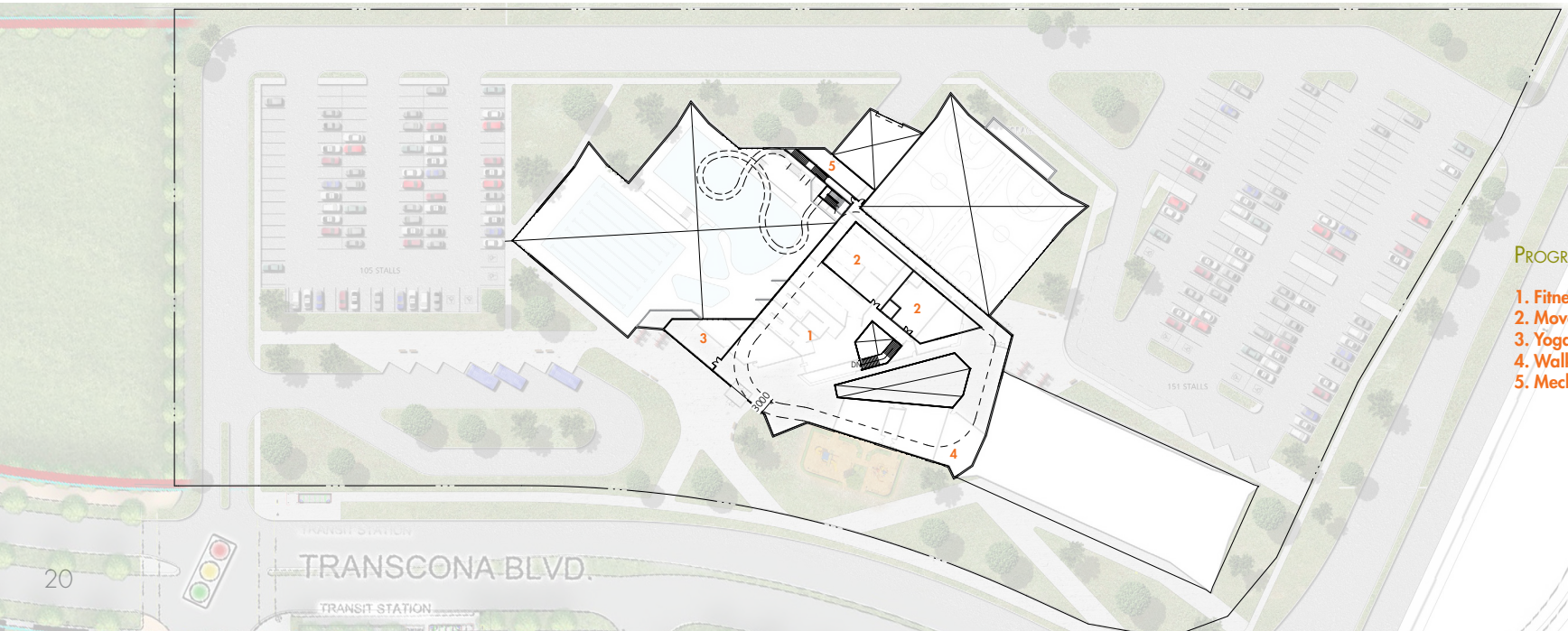


0 20m

Main Floor Plan

Program Legend

1. Leisure Water (with wave generator)
2. Lazy River
3. Hot Pool
4. Program Pool
5. Slide
6. Sauna/Steam
7. Pool Storage
8. Lifeguard
9. Family Changing
10. Male Changing
11. Female Changing
12. Concourse
13. Admin Facilities
14. Multi-Purpose Room
15. Storage
16. Reception
17. Gym
18. Gym Storage
19. Community Kitchen
20. Pool Viewing
21. Staff Changing and Facilities
22. Mechanical and Loading



Second Floor Plan

Program Legend

1. Fitness Facility
2. Movement Studio
3. Yoga Studio
4. Walking/Running Track
5. Mechanical Mezzanine

FINAL OPTIONS

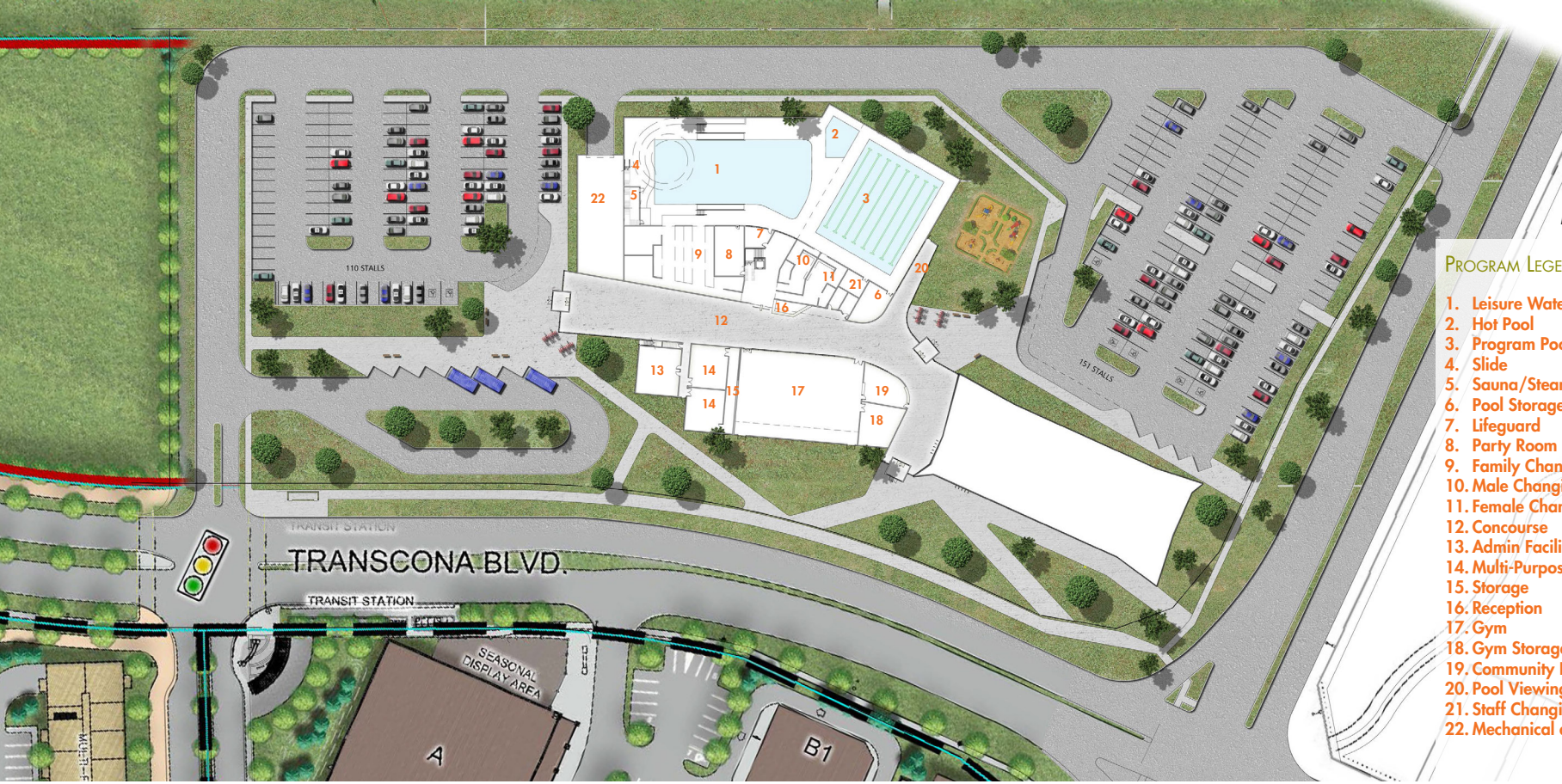
OPTION 1



The first option has only two entrances and the orientation of the main entrance is more towards Transcona Blvd and the south BRT drop off loop. This was achievable by keeping all major activities behind the control point. A double gymnasium would have a controllable access point on the public side but would generally be accessed behind the control point. This results in a more square natatorium which is turned to the northwest.

With respect to the natatorium and location of the locker room this option provides some of the better sight lines and circulation movements, putting the most vulnerable pool users (kids and the infirm) at the safest entry to the safest body of water (the zero beach pool).

The location of many of the other elements are similar between the two options, and reinforce notions of efficient access, control and maintenance. The designs both look to optimize views and interaction with Transcona Blvd. and they both fundamentally create a unique and meaningful "place" for regional recreation in Winnipeg

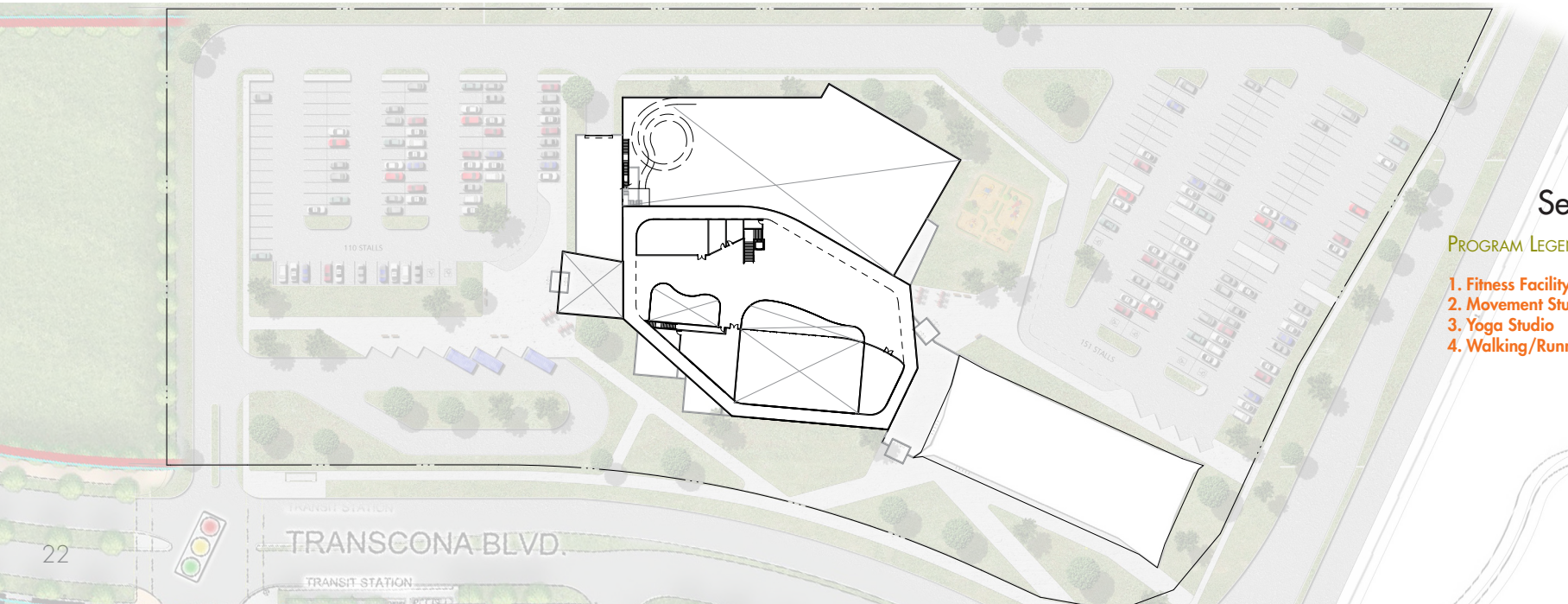


0 20m

Main Floor Plan

Program Legend

1. Leisure Water (with wave generator)
2. Hot Pool
3. Program Pool
4. Slide
5. Sauna/Steam
6. Pool Storage
7. Lifeguard
8. Party Room
9. Family Changing
10. Male Changing
11. Female Changing
12. Concourse
13. Admin Facilities
14. Multi-Purpose Room
15. Storage
16. Reception
17. Gym
18. Gym Storage
19. Community Kitchen
20. Pool Viewing
21. Staff Changing and Facilities
22. Mechanical and Loading



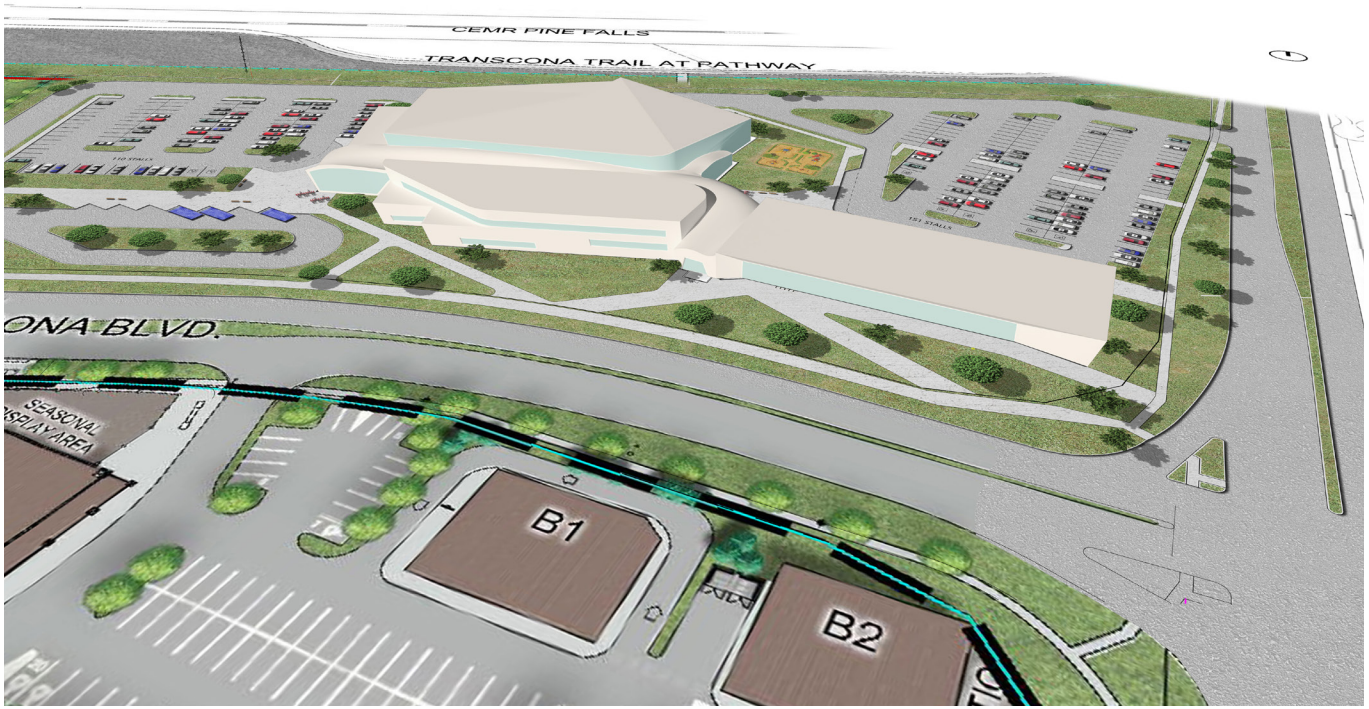
Second Floor Plan

Program Legend

1. Fitness Facility
2. Movement Studio
3. Yoga Studio
4. Walking/Running Track

FINAL OPTIONS

OPTION 2



The second option has three entrances to the public concourse, and the natatorium viewing area is closer to both the library and a potential outdoor play area just west of the facility. In this second option, a single gymnasium is on the other side of the main corridor from the other major programs, and would be supervised from across the public space. This results in a more rectangular natatorium oriented along the north side.

Sight lines and circulation within the natatorium and locker rooms are not as strong in this option, and the most vulnerable pool users (kids and the infirm) emerge alongside the leisure pool rather than in front of the zero-beach entry.

The location of many of the other elements are similar between the two options, and reinforce notions of efficient access, control and maintenance. The designs both look to optimize views and interaction with Transcona Blvd. and they both fundamentally create a unique and meaningful "place" for regional recreation in Winnipeg

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APPENDIX 1

BUSINESS PLAN

PREPARED BY DHP+PM

Final Report - March 2018

- Executive Summary and Recommendations
- 1.0 Context and Study Goals
- 2.0 Functional Space Program and Operational Overview
- 3.0 Capital Cost and TIF Financing Model
- 4.0 Operating Costs and Revenue Targets

Note: The purpose of the business case report is to primarily assist the City of Winnipeg in decision-making and budget prioritization. The information and high-level and is subject to changing variables such as how quickly development occurs (impacting TIF revenues schedule), possible new collective labour agreements that could impact staff costs or, interest rate changes that would impact the cost of borrowed money.

Executive Summary and Recommendations

The new East of the Red River aquatic and fitness recreation centre located at the soon-to-be-redeveloped Transcona Public Works Yard site has been functionally programmed to be 92,000 square feet or 8,760 square metres in area. This new facility would cost in the order of $40 million construction (Class 5 order-of-magnitude estimate), to which 33% in site and soft costs were added, increasing the project cost to $55 million in current 2018 dollars. About $1.5 million was also added to demolish the old Transcona pool and construct a new lifeguard building for the remaining outdoor pool. Above this, 3.5% annual escalation was added for four additional years to realize the building, increasing the total cost to $64.2 million in 2022.

Co-located with the ERRD site, a developer plans to build approximately 955,000 square feet or 88,700 square metres of mixed-use space at the Transcona Public Works Yard site on about 32 acres of the 42-acre site. Commercial, multi-family medium-rise rental housing and mixed-use commercial / housing will be realized in phases over a six-year period. Tax revenue from the new asset would be incrementally increasing and the mill rate forecasted to increase 2% annually. In 2018, approximately $590,000 will be collected in TIF-applied tax revenue and by 2027 that amount will reach $3,000,000 annual and continue in perpetuity.

As laid out in Section 3.0 of this report, Tax Incremental Funding (TIF) if wholly applied from the redevelopment of the defunct City of Winnipeg Transcona Public Works Yard to the new East of the Red River Aquatic and Fitness recreation centre could fund between 50% and 81% of the total project cost. If TIF funding is not available for the project, conventional tax-based financing will be necessary, possibly augmented by Impact Fees should the City of Winnipeg implement that type of vehicle.

RECOMMENDATION #1

TIF as a funding vehicle should be secured immediately and for the exclusive use of this project.

TIF could fund between $30 million, or 50% of project cost (15-year amortization at 3.5%); and $43 million, or 75% of project cost (25-year amortization at 3.5%); plus TIF would cover an expected $500,000 increase in annual operating subsidy (the current Kinsmen Transcona Kinsmen Centennial Indoor Pool subsidy would be transferred to the new facility as well).

RECOMMENDATION #2

If the City of Winnipeg can borrow capital for a period of 25-years instead of 15-years, it should, as in doing so it will gain access to about 17% more capital immediately.

If the new additional operating subsidy can be funded from other sources and all of the annual tax revenue from the development can be applied to capital debt repayment, the the TIF income would finance as much as $35 million, or 56% of project cost (15-year amortization window) to $51 million, or 81% of total project cost in 2022.

RECOMMENDATION #3

If the City of Winnipeg can absorb the new recreation facility's additional annual operating subsidy of $500,000 and pay for it from other outside sources, the project would immediately gain access to a further 17% more capital. Combined with recommendation #2, this would be worth an additional $15 million in capital for the project.

TIF-applied revenue must be collected and held in trust for the next five years (2018-2022), while the project is approved, designed and constructed. The $7.5 million would be banked earning interest instead of paying interest (if borrowed, a $3-4 million cost) as well as there to cover front-end obligations for the project.

RECOMMENDATION #4

TIF-applied revenue must be collected and held in trust for the next five years.

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The new facility will see per-year operating costs increase from the current Transcona Kinsmen Centennial Indoor Pool's $1.1 million to about $2.4 million – only a 120% increase, though the facility will increase eight-fold in size. The comparatively low increase speaks to the inefficiencies of the moribund old facility, including the high-ratio of labour to area and high maintenance and repairs costs.

The business model projects the aggressive target of increasing revenue by 400% in the new facility. This would be realized through a combination of increasing the number of admissions, programs and rentals, plus an increase in user fees. The revenue side of the equation has to equal the expenditure side, either through revenue earned from users or through subsidy, currently about $875,000 per year. The business model projects a likelihood that the subsidy will have to increase by $500,000 annually to $1,375,000 in the new facility.

RECOMMENDATION #5

Despite expected significant increase in demand and revenues, the City of Winnipeg should consider increasing the user fees or, like the City of Edmonton, create a new two-tiered pricing system for new regional multi-purpose facilities.

Corporate sponsorship such as naming rights can be of consequence with major venues such as stadiums and spectator arenas, but likely will not yield a significant enough capital contribution with community recreation facilities.

RECOMMENDATION #6

The City of Winnipeg should seek other sources of funds such as partnerships with other levels of government or grants.



Fig. 1 Site Plan for defunct Transcona Public Works Yard

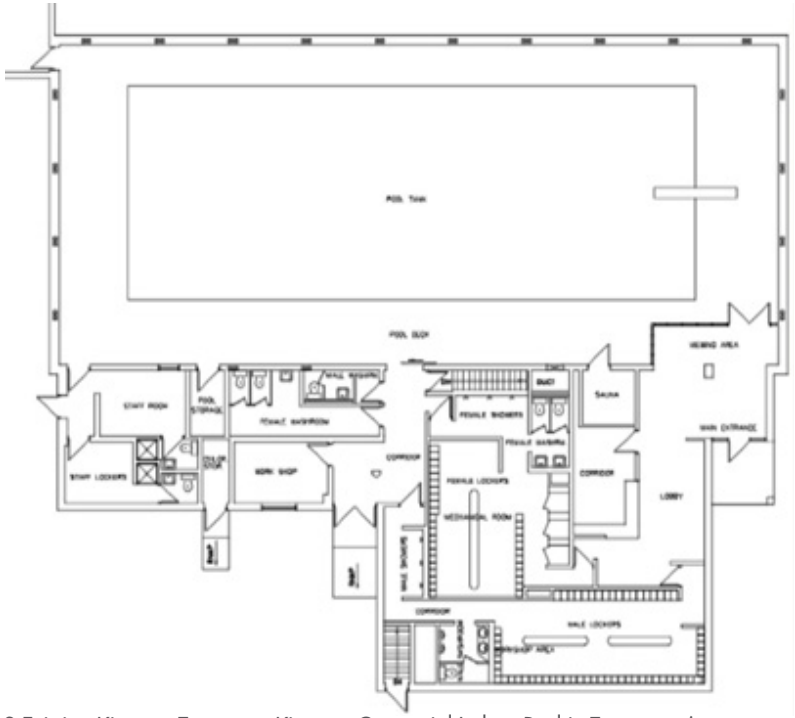


Fig. 2 Existing Kinsmen Transcona Kinsmen Centennial Indoor Pool in Transcona (entrance on right side)

1.0 Context and Study Goals

The City of Winnipeg is exploring the feasibility of developing a new regional aquatic and fitness recreation centre and potentially decomissioning other end-of-life facilities in Transcona. A site has been identified (fig. 1, upper right corner of site) within the defunct Public Works Yard in Transcona, and the site would be shared with a new branch library (currently under construction) and a transit park-and-ride hub.

The Transcona Kinsmen Centennial Indoor Pool (fig. 2), which was constructed in the 1960s and, at 50+ years, has reached the end of expected service life. Extending the life of the building with building system upgrades was budgeted in 2016 at $6.0 million before estimates rose to over $7.2 million and the project halted. In 2017, a new outdoor water park was opened adjacent to the Kinsmen indoor pool. If the old structure is demolished, a new support building for the outdoor pool would be constructed.

Even if the 10,500 square foot Kinsmen Transcona Kinsmen Centennial Indoor Pool was to be renovated, the pool is functionally obsolete and limited in its ability and capacity to offer programs and services, and consequently limited in it's ability to effectively generate revenues to offset expenditures. With cost recovery being quite low, the City has to heavily subsidize annual operations.

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The floor plan of the existing indoor pool (fig. 2) illustrates some of the deficiencies and constraints. Key to these limitations are:

- The program tank is 25 yards (75 feet) long x 30 feet wide. The standard pool length for the past 30 years has been 25 metres (82 feet), and the accepted width by current FINA standards would be 48-feet wide for 6 lanes.
- There is no leisure body of water, limiting both water capacity and the possibility of concurrent use between instruction, fitness and lane swim; and leisure and play activities. Also, there is no hot pool, though there is a sauna.
- There are no proper family / handicapped change rooms, and there are too few washroom stalls, limiting occupant load.

By contemporary standards, the aquatic component alone of a new recreation facility would be over 30,000 square feet and would include two large bodies of water, a cool-water program tank (ideally with eight lanes instead of six), a warm-water leisure body of water with either zero-beach entry or ramp entry, and a 25-person capacity hot pool.

This would almost triple the bather load calculation, which is critical for meeting peak-period demand during the weekday 4-7 pm prime time and all day on weekends. The new facility would also have support functions such as large, modern change facilities, a multi-purpose room and adequate staff and mechanical spaces.

One of the goals of this study and project would be to develop a regional facility template that could be replicated in other quadrants of the city. The City of Winnipeg operates 11 other pools (and programs a school district-owned pool), all of them at least 30 years old and many approaching the end of projected service life at over 50 years old.

2.0 Functional Program and Operational Overview

The financing and operating business case for a new facility is highly dependent on specific assumptions regarding areas, sizes and capacities. The functional spacelist was developed by David Hewko Planning + Program Management for this study in concert with the architectural concept developed by Gibbs Gage Architects (report under separate cover). The type of building envisioned impacts capital cost and the GGA study also had to assess necessary functional adjacencies, stacking opportunities and confirm that site fit and parking requirements could be met.

The functional program was developed using quantitative and qualitative input. The quantitative input involves a comparison with similar facilities developed across western Canada, especially in British Columbia and Alberta where DHP+PM has been involved in over one hundred new aquatic facilities in the past two decades. The qualitative input came from staff in two workshops where the consultant team tapped into their experience, knowledge and customer sense.

Essential to new recreation facilities are three major parts:

- Program water paired with leisure water
- Fitness and dryland spaces which have a higher cost recovery offsetting the relatively low cost recovery of aquatics
- Modern organization and support spaces such as change rooms that move more people through with less burden on staff

Pool Tank Types

Generally speaking, program tanks provide value through scheduled activities, but those tend to occur only at certain times of day, hence the unused flat-water downtimes seen in some facilities. Uses include lessons, aquafit, lane swim clubs and swim teams. The cooler water temperature is preferred by lane swimmers.

Staff indicated eight lanes would provide greater capacity and flexibility (such as two activities running concurrently) and supported the idea that leisure water further enhances utility of the program tank by removing casual leisure play or some lessons (younger children) or aquafit programs (older adults in warmer water). Handicapped access is required for all tanks, with ramps generally preferred over lifts even though they take up more space and add cost (but simplify use and reduce operating costs through staff time).

Conversely, warmer leisure water is less suitable for scheduled activities, but tends to be busy at all times of day, generating revenue at all operating hours. At some times of day the program tank can be shut down and access limited to the leisure pool, thereby reducing labour costs. Also, should a contamination accident occur, clientele from one basin could be relocated rather than being asked to leave.

Warm water pools with play and spray features provide safe entertainment opportunities for parents with small children. Older youth are less attracted to leisure water that draws parents with babies and young children. Themed pools (e.g. pirate ships, whales) are no more successful than those with spray features only.

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Youth will be attracted by waterslides, moving water (wave pools, lazy river, flowriders) or even jungle ropes and climbing walls in the cool-water tank. Wave pools will generate more revenue than flat water leisure pools, but the staffing costs and energy use are higher negating any cost recovery benefit.

Across western Canada, 20 to 25-person hot pools with ramp access are now the norm in new pool facilities. In many facilities the warm leisure water is popular as soaking pools when co-located with hot pools to create a 'spa experience' for users. These events tend to be very social but are only successful if the time slot is restricted to older adults. On-deck and co-ed steam rooms are common in most facilities, saunas less so due to perceptions about sanitation and slightly higher maintenance.

Fitness and Dryland

Many patrons will use more than one component in a recreation facility, or in many cases allow family members to participate concurrently in different activities (i.e. parents in fitness while child is in swimming lessons). The dryland option creates more reasons for residents to come to the recreation centre, more often. Regular fitness users will come on average three times per week, generating 150 annual user visits – and expending over 250 hours of their valuable free-time in your facility.

On a per square foot basis fitness centres have the highest density of users (most occupants per area), highest revenue generation per square foot and lowest operating cost of any activity function found in a recreation centre. Fitness centres average 80-100 sf / user, compared with 400-600 sf / user in gymnasiums or racquet courts or 200 sf /user in lane pools. Fitness centres do not require clear span or very large height spaces and are economical to build. Fitness centre staffing cost is low and depending on location can be passively supervised by staff in offices or performing other functions.

Fitness centres are consistently the only component in a recreation center that 'makes' money, a positive cash flow and offsets other important but costlier functions such as pools.

Multi-Purpose / Gymnasium / Indoor Track

Multi-purpose rooms and gymnasia are always in demand and while the net revenue per square foot is as low (comparable with pools), the operating cost is negligible (unlike pools). Spaces tend to be block-booked for programs and rentals, and locked when not in use requiring very little staff time and only passive supervision. The program includes a double gymnasium (sub-dividable). Indoor tracks when the square footage is added up occupy a significant area footprint area (almost half the area of a gymnasium) but the density of users can be low and revenues low. The appeal however is attracting and engaging new users or older adults into a healthier lifestyle. Less intimidating than fitness equipment, walking and jogging is a gateway into regular activity.

	Square Metres	Square Feet
1.0 NATATORIUM		
1.1 Program Water		
1.1.1 Lap Pool 25m - 8 Lane w. Ramp (bather load 500 swimmers)	525	5652
1.1.2 Deck Area (average width 3M, 5M on ends)	425	4575
Sub-Total	**950**	**10227**
1.2 Leisure Water: Wave Pool Configuration		
1.2.1 Wave Pool 37m x 15m (bather load 490 swimmers)	540	5813
1.2.2 Hot Pool (25-person capacity) with Ramp	50	538
1.2.3 Deck Area (average width 5-6M)	410	4414
1.2.4 Viewing Area (capacity 25 persons)	50	538
1.2.5 Waterslide Tower and Run-out (slides over deck and water)	120	1292
Sub-Total	**1050**	**11303**
1.3 Ancillary Spaces		
1.3.1 Lifeguarding Office / First Aid	20	215
1.3.2 Steam Room / Sauna / On-Deck Shower	25	269
1.3.3 Pool Storage	60	646
1.3.4 Chemical Storage (located with Pool Mechanical)	15	161
Sub-Total	**120**	**1292**
Assigned Area Sub-Total	**2120**	**22822**
Pool Mechanical (40% of water area); Wave Generator Mec'l.)	571	4801
Pool Tunnel (on 2 sides of Lap Pool tank, 1 side of wave pool)	90	431
Building Mechanical Pro-Rated 6%	161	1657
Walls and Structure Pro-Rated 2%	54	552
Circulation included in Deck Area	0	0
Component Gross Area	**2996**	**30263**
2.0 CHANGE ROOMS		
2.1 Universal Change Rooms (400 bathers)		
2.1.1 Universal Change Cubicles (with Shower) x 35	170	1830
2.1.2 Full-Height Locker Columns and Aisle (200 columns)	120	1292
2.1.3 Accessible Washrooms x 6	30	323
2.1.4 Vanity Stations x 5	10	108
2.1.5 Stroller / Wheelchair Area	10	108
Sub-Total	**340**	**3660**
2.2 Gender Locker Rooms (200 bathers each)		
2.2.1 Women's Locker Room (70 columns, 100 lockers)	50	538
2.2.2 Women's WCs, Showers, Vanities (3 of each)	20	215
2.2.3 Men's Locker Room (70 columns, 100 lockers)	50	538
2.2.4 Men's WCs, Showers, Vanities (3 of each)	20	215
2.2.5 Staff Universal Change Cubicles (w. Shower) x 4	20	215
2.2.6 Staff Universal Change Lockers (30 columns)	20	215
2.2.7 Custodial Closet x 3	10	108
Sub-Total	**190**	**2045**
Component Assigned Area Sub-Total	**530**	**5705**
Pro-Rated Building Mechanical / Electrical 6%	32	342
Pro-Rated Walls and Structure 3%	17	181
Component Internal Circulation 5%	28	302
Component Gross Area Total	**607**	**6532**

	Square Metres	Square Feet
3.0 FITNESS CENTRE		
3.1 Fitness Centre		
3.1.1 Reception	10	108
3.1.2 Stretching / Balls and Circulation	50	538
3.1.3 Cardio Machines and Circulation	400	4306
3.1.4 Strength Machines and Circulation	300	3230
3.1.5 Fitness Free Weights / Open Area and Circulation	200	2153
3.1.6 Convenience HC-Accessible Washrooms x 2	10	108
3.1.7 Office	10	108
Component Assigned Area Sub-Total	**980**	**10550**
Pro-Rated Building Mechanical / Electrical 6%	59	633
Pro-Rated Walls and Structure 2%	21	224
Circulation included in Equipment Areas	0	0
Component Gross Area Total	**1060**	**11406**
4.0 MULTI-PURPOSE / GYMNASIUM / TRACK		
4.1 Multi-Purpose Studios, Gymnasiums and Indoor Track		
4.1.1 Double Gymnasium (high school basketball court, sub-dividable)	1150	12380
4.1.2 Gymnasium Storage	60	646
4.1.3 Indoor Jogging / Walking Track (3-metre W x +/-115-metre L; non-standard configuration and small radius turns)	345	3714
4.1.4 Large Movement Studio (capacity 50 for movement)	250	2691
4.1.5 Medium Movement Studio (cap. 40 for movement)	185	1992
4.1.6 Yoga Studio (capacity 20)	120	1292
4.1.7 Medium Multi-Purpose Rooms (2 x capacity 60 each; one room located off the pool deck as classroom / birthday party room)	185	1992
4.1.8 Serving Kitchen (adjacent to Gym and Multi-Purpose Rooms)	75	807
4.1.9 Multi-Purpose / Group Fitness Storage (distributed)	80	861
Component Assigned Area Sub-Total	**2450**	**26374**
Pro-Rated Building Mechanical / Electrical 6%	147	1582
Pro-Rated Walls and Structure 2%	52	559
Component Internal Circulation 5%	130	1398
Component Gross Area Total	**2779**	**29914**

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	Square Metres	Square Feet
5.0 FACILITY OPERATIONS		
5.1 Front-of-House Functions		
5.1.1 Reception / Control Desk	32	344
5.1.2 Administration Offices (5)	50	538
5.1.3 Copy / Office Storage	20	215
5.1.4 First Aid Room	9	97
Sub-Total	**111**	**1195**
5.2 Back-of-House Functions		
5.2.1 Loading Dock	10	108
5.2.2 Storage / Staging Area	20	215
5.2.3 Waste / Recycling Management	10	108
5.2.4 Maintenance Shop	20	215
5.2.5 Custodial Storage	10	108
5.2.6 Facility Operations Office	10	108
5.2.7 Staff Room	30	323
Sub-Total	**110**	**1184**
Component Assigned Area Sub-Total	**221**	**2379**
Entry Lobby and Public Area	300	3232
Facility Major Circulation / Washrooms 10%	630	6783
Component 5.0 Internal Circulation 10%	59	635
Pro-Rated Building Mechanical / Electrical 5%	69	743
Pro-Rated Walls and Structure 3%	36	390
Component Gross Area Total	**1315**	**14162**

Facility Area Summary

Total Assigned Area	**6301**	**67830**
Total Gross Area	**8757**	**92277**
Net to Gross Ratio	1.39	
Assignable Area / Gross Area	72%	

Functional Space Program for New Facility

The space program for the East of the Red River Aquatic Centre is 92,000 square feet or 8,700 square metres. Contemporary recreation centres can range in size from 60,000 sf or 5,600 sm to in excess of 300,000 sf or 29,000 sm and can include 2-4 arenas, libraries, theatres and childcare facilities. In this case, the library will be a pre-existing, free-standing but possibly connected building. The site parking calculation would account for both uses.

Typically about 70% of the gross building area is assignable or usable space with the remainder being building systems or grossing factors. These include public circulation (including vertical circulation such as stairwells and elevators), lobby space, public washrooms, controlled circulation (paid admission area), mechanical spaces and allowance for walls and columns.

3.0 Capital Cost and TIF Financing Model

Tax Incremental Funding or TIF if wholly applied from the redevelopment of the defunct City of Winnipeg Transcona Public Works Yard to the new East of the Red River Aquatic and Fitness recreation centre could fund between 50% and 81% of the total project cost.

The Public Works Yard site is an estimated 42 acres total, of which about 32 acres is now in the hands of a private developer partner. Seven acres would be available for the recreation centre, library, parking and transit hub.

According to documents provided by the developer, approximately 955,000 square feet or 88,700 square metres will be developed in stages over a six year period into commercial space, multi-family medium-rise rental housing and mixed-use commercial / housing.

The developer provided a schedule indicating the tax revenue to be collected based on the progressively increasing assessment of occupied space. The schedule assumes a 2% per year increase in the mill rate. In 2018, approximately $590,000 will be collected in property tax and by 2027 that amount will exceed $3,000,000 annual in perpetuity.

Capital cost

The new 92,000 square foot or 8,550 square metre recreation centre will cost in the order of $40 million for construction, to which 33% in site and soft costs were added including fees, contingencies and FF&E, increasing the project cost to $55 million in current 2018 dollars. About $1.5 million was added for demolishing the old pool and constructing a new lifeguard building for the remaining outdoor pool. Above this, 3.5% annual escalation was added for four additional years (a medium value was chosen between the 2% current CPI index and the 5% factor typically applied by City of Winnipeg), increasing the total cost to $64.2 million.

Order-of- magnitude costing (Class 5) is based on unit construction costs for similar type LEED-silver recreation buildings recently constructed in western Canada and indexed for location and inflation. Site costs would include site servicing, parking and landscaping. The estimate does not allow for unknown geotechnical conditions, or premiums for LEED-gold.

CAPITAL COST ESTIMATE (Order-of-Magnitude)

	Components	Area SF	Unit Constr. $	Percent	
1.0	Natatorium	31,000	$650	34%	$20,150,000
2.0, 5.0	Change/Common	20,500	$400	22%	$8,200,000
3.0, 4.0	Gym/Fitness/Track	40,500	$300	44%	$12,150,000
Gross Area / Construction Cost		**92,000**			**$40,500,000**
Site and Soft Costs Allowance 33%					$14,500,000
			Total Project Cost in 2018 $		**$55,000,000**
	Escalation 3.5% x 4 Years (split btwn. 5% and 2%, rounded)				$7,500,000
	Demolish old pool and build Lifeguard building (escalated)				$1,700,000
			Total Project Value Escaled to 2022		**$64,200,000**

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Tax Incremental Funding for Capital Debt Servicing

Tax incremental funding or TIF could fund between $30 million and $43 million, or 50% to 75% of the total escalated capital cost of the project in the year 2022. This assumes an annual $500,000 of the accrued tax revenue is applied to operating subsidy so the current Kinsmen Transcona Kinsmen Centennial Indoor Pool subsidy could be transferred without additional new subsidy.

Borrowing in all scenarios is assumed to be at an average 3.5% for the life of the repayment schedule. If the City can borrow at lower rates, the cost will go down or more capital can be funded.

If the new additional operating subsidy can be funded from other sources and all of the annual tax revenue from the development can be applied to capital debt repayment, the TIF income would finance as much as $35 million to $50 million, or 56% to 81% of total project cost in 2022.

The reason the capital amount has been expressed as a range has to do with the length of the amortization period. The longer the amortization window, the more capital debt can be financed because the repayment is spread over 25-years, not 15-years. However because money is borrowed for ten additional years, substantially more interest will be paid. Arguably, since this project is to be financed by new taxation dollars, to aggregate sum paid is less important than being able to fund a higher percentage of the total project.

	Revenues Acrude Before Opening (,000's)					Revs. Acrude After Opening (,000's) 15-Year Amortization Period			
	2018 Approv.	2019 Design	2020 D/C	2021 Constr.	2022 Constr.	2023 Start	2027 5-Yr	2032 10-Yr	2037 15-Yr
Multi-Family	0	$320	$650	$900	$1,150	$1,400	$2,030	$2,140	$2,250
Commercial	$320	$540	$540	$540	$540	$550	$560	$590	$610
Mixed-Use	$270	$390	$400	$400	$400	$410	$430	$450	$480
	$590	**$1,250**	**$1,590**	**$1,840**	**$2,090**	**$2,360**	**$3,020**	**$3,180**	**$3,340**
Interest 3%	$18	$38	$48	$55	$63				
Years	5	4	3	2	1				
Interest Income	**$89**	**$150**	**$143**	**$110**	**$63**				

Total: $7,503
(estimated $3-4 million saved)

Annual Average: $2,975

The table above illustrates how much TIF-applied tax revenue would be captured during the ramping-up first five-years and for the subsequent 15-year amortization repayment window. In the table below, the first five-year window is the same, but the repayment window is extended from 15 to 25 years.

	Revenues Acrude Before Opening (,000's)					Revs. Acrude After Opening (,000's) 25-Year Amortization Period					
	2018 Approv.	2019 Design	2020 D/C	2021 Constr.	2022 Constr.	2023 Start	2027 5-Yr	2032 10-Yr	2037 15-Yr	2042 20-Yr	2047 25-Yr
Multi-Family	0	$320	$650	$900	$1,150	$1,400	$2,030	$2,140	$2,250	$2,370	$2,370
Commercial	$320	$540	$540	$540	$540	$550	$560	$590	$610	$630	$630
Mixed-Use	$270	$390	$400	$400	$400	$410	$430	$450	$480	$500	$500
	$590	**$1,250**	**$1,590**	**$1,840**	**$2,090**	**$2,360**	**$3,020**	**$3,180**	**$3,340**	**$3,500**	**$3,500**
Interest 3%	$18	$38	$48	$55	$63						
Years	5	4	3	2	1						
Interest Income	**$89**	**$150**	**$143**	**$110**	**$63**						

Total: $7,503
(estimated $3-4 million saved)

Annual Average: $3,150



The Critical First Five-Year Window

On the surface, the graduated income stream runs counter-intuitive with the uniform rate of debt amortization and in the early years of the agreement the amount collected would cover a relatively smaller portion of the total capital debt.

However, **if the tax revenue is collected and held in trust for the first five years** (while the project is approved, designed and constructed), the banked millions of dollars would carry to recreation centre project much farther.

If the TIF-applied tax revenue could be averaged to about $3 million per year, the capital amounts mentioned earlier in this section would be attainable. By collecting and holding the revenue from 2018 to 2022, the monies would be able to 'top-up' the early years of the debt repayment schedule.

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Approximately $7.5 million can be collected between now and opening of the new recreation centre in 2022. In addition to leveling the debt repayment schedule, this money is not borrowed and is available interest-free, saving the City of Winnipeg an additional $3-4 million in interest costs. In addition, this revenue can be used to finance design work and site development.

At about Year 7, the TIF income will be in excess of $3 million per year and the amount drawn early (prior to 2022) the City would be 'repay' itself for that portion of the $7.5 million used. When the capital debt is fully repaid and discharged, the TIF revenue stream will continue in perpetuity. At this time, the proceeds could be used to eliminate completely the City operating subsidy to the facility as well as to create a sinking fund for capital lifecycle replacement.

Funding Alternatives and Additional Incremental Sources

Should TIF-funding not be available as a financing option for the project, conventional tax-based financing will be necessary and could possibly augmented with Impact Fees should the City of Winnipeg consider implementing that type of vehicle. The challenge with Impact Fees will be push-back from developer and the likelihood that those levies would be directly passed on to renters and/or buyers.

Looking to the private sector such as corporate sponsorships in the form of naming rights can be impactful with major high-profile venues such as stadiums and spectator arenas, but likely will not yield a significant enough capital contribution with community recreation facilities. Most sponsorships are 10-year contracts that can buy long-term debt but when factoring in the interest cost, the contribution is only 2/3 of it's perceived value.

REVENUES	Current Attendance*	Current Revenues*	Projected Attendance	Percent Increase	Projected Revenues	Percent Increase	Users per Oper. Hour
Aquatics:							
Lessons / Programs	27,000	$205,000	40,000	148%	$320,000	156%	7.1
Public Swim / Rentals	19,000	$38,000	80,000	421%	$260,000	684%	14.3
Fitness:							
Memberships (1,000)	0	$0	95,000	-	$230,000	-	17.0
Drop-In	0	$0	30,000	-	$125,000	-	5.4
Gym / MPR Rentals	0	$0	30,000	-	$45,000	-	5.4
Dryland Programs	0	$0	20,000	-	$25,000	-	3.6
Totals Before Subsidies	**46,000**	**$243,000**	**295,000**	**-**	**$1,005,000**	**414%**	**52.7**
Subsidies and Transfers:							
Current Direct Subsidy		$875,000			$875,000	(transferred to new)	
New Additional Subsidy from TIF					$500,000		

EXPENDITURES	Current Operating Costs	Cost per Oper. Hour	Cost per Sq. Ft.	Projected Oper. Costs	Cost per Oper. Hour	Cost per Sq. Ft.	Percent Increase
Direct and Indirect Labour							
Indirect Labour Costs	$200,000	$35.71	$18.18	$200,000	$35.71	$2.04	100%
Direct Labour Costs	$500,000	$89.29	$45.45	$350,000	$62.50	$3.57	316%
Auxiliary Labour**	Incl. above			$1,070,000	$191.07	$10.92	
Benefits	Incl. above			$160,000	$28.57	$1.63	
Contracted Services		$0.00	$0.00	$0	$0.00	$0.00	
Energy Costs							
Natural Gas	$140,000	$25.00	$12.73	$125,000	$22.32	$1.28	200%
Electricity	Incl. above			$155,000	$27.68	$1.58	
Water and Sewer		$0.00	$0.00	$0	$0.00	$0.00	
Maintenance							
Scheduled and Unscheduled	$270,000	$48.21	$24.55	$175,000	$31.25	$1.79	193%
Minor Capital (Lifecycle)	Incl. above			$0	$0.00	$0.00	
Fixed and Variable Overheads							
Pool Chemicals	$11,000	$1.96	$1.00	$60,000	$10.71	$0.61	
Custodial Supplies	Incl. above			$50,000	$8.93	$0.51	
Program Supplies	Incl. above			$125,000	$22.32	$1.28	
Miscellaneous (Office, Internal)	Incl. above			$110,000	$19.64	$1.12	
Totals	**$1,121,000**	**$200.18**	**$101.91**	**$2,380,000**	**$460.71**	**$26.33**	**212%**
Net Cost Recovery	22%			42%			

Pro Forma Operating Model

APPENDIX 1

BUSINESS PLAN

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4.0 Operating Costs and Revenue Targets

The projected operating model for the new East of the Red River Aquatic Centre is based on both the linear extrapolation of the predictable, and the speculative. Operating expenditures are the predictable side of the equation as they can be based on the ample comparative information, including current City of Winnipeg facility historical operating costs and comparative data from similar-scaled facilities in other municipalities across western Canada. Labour, energy use and overhead costs in historical annual operating reports for Winnipeg facilities have been scaled to adjust for the newer and larger facility and indexed to account for future increasing operating costs. Historical operating cost data was provided by City staff.

The new recreation centre will yield tremendous economies of scale in staffing efficiency coupled with higher energy efficiency and lower maintenance costs associated with a new modern facility. The number of lifeguards on deck will be a function of Health Act requirements for bather load but is also a function of sightlines (at off-prime times there may be minimal staff - the same number of guards that exists at Kinsmen Centennial now).

Projected operating costs are also based on a composite-average comparison of similar aquatic and dryland recreation centres in Calgary, Edmonton and metro Vancouver. Unit costs for labour, energy and overheads have been averaged and indexed for location, accounting for local variables such as cost of living, labour agreements, the different province-to-province cost of energy and overheads such as insurance, administrative costs.

The experience of other facilities also factored into projecting maintenance and repair costs that will be predictably low during the first decade of operation of a new facility. This comparative data has also been indexed to 2018 dollars.

Operating Budget in 2018 Dollars

Unlike the capital cost estimate used in the TIF calculation that has been escalated for inflation to 2022, the operating model numbers herein are expressed in current 2018 dollars. This is owing to the unpredictability and volatility of costs, especially world energy pricing that is rumoured to escalate at between 5-15% annual for the next number of years. Renewed labour agreements may also impact operating costs and with labour being over 2/3 of the total cost. Expressing the operating budget in current dollars also allows for a more apples-to-apples comparison with current operations and cost recoveries.

Operating Cost Expenditures and Revenue Targets

The operating pro forma on the following page illustrates current operating costs, revenues and cost recoveries in the left-hand columns and the same data for the new facility in the right-hand columns. The new facility will see operating costs increase from $1.1 million to about $2.4 million, only just over a 120% increase – even though the facility will increase about eight-fold in size. This relatively modest increase was tested against the comparative data from other jurisdictions to ensure accuracy. The comparatively low increase speaks more to the inefficiencies of the moribund old facility - the high-ratio of labour to area and, high maintenance and repairs cost.

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The revenue side of the equation has to equal the expenditure side, either through revenue earned from user fees, admissions, programs and rentals – or through subsidy. Whatever earned shortfall there will be must be met with an operating subsidy, and currently that subsidy is about $875,000 per year.

The business model projects a likelihood that the subsidy will have to increase by $500,000 annually to $1,375,000 in the new facility even with increased user revenues. However, if a portion of the taxation revenue collected from the developer intended for TIF capital debt servicing were to be allocated for operations, the subsidy could remain the same as it is now.

In the business model fees from all sources including users, admissions, programs and rentals have been projected to increase four-fold or by over 400% in the new facility. CurrentW Transcona Kinsmen Centennial Indoor Pool (plus Bernie Wolfe Pool programs) revenues are solely from the pool and total almost $250,000 annually (average 8.2 users / hour). In the new facility the aquatic-specific revenues will increase to $580,000, a 240% increase (average 21.4 users / hour).

In addition, the City of Winnipeg should contemplate increasing user fees that when compared with Calgary, Edmonton and metro Vancouver are significantly lower. Doing so when a new facility is opening is the best opportunity to make change, as the public will be able to see and experience the value associated with the added cost.

An additional new steam of income, fitness and dryland rentals will generate a new $425,000. This assumes about 22.4 membership or drop-in users of the fitness centre and indoor track per every operating hour. The fitness centre at over 10,000 sf or about 100 to 120 activity stations (equipment or open space for free weights), would only be operating at 1/4th to 1/5th of capacity or 20-25% of capacity. Note, this is an average and at peak times such as weekdays between 5-8pm the fitness centre may be approaching capacity whereas early or late times the fitness centre could see minimal use.

Multi-purpose rooms were projected to rent at a very conservative $15 each (2 rooms), 20 hours per week, 32 weeks per year. Programs would recover room costs and instructor costs in registration fees. The gymnasiums are assumed to rent at $30 /hour per court (2 courts), also 20 hours per week, 32 weeks per year. Membership and drop-in users would also generate use but revenues are accounted for in those categories.

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