

February

**HOKSPORT**

study

EDMONTON, ALBERTA



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SPORT

HOKSPORT.COM BRISBANE DENVER KANSAS CITY LONDON NASHVILLE NEW YORK

*February 18, 2008*

Lyle Best, Committee Chair  
Jerry Bouma  
Greg Christenson  
Andrew Huntley  
Patrick LaForge  
Al Maurer  
Patricia Mackenzie  
Cal Nichols  
Bob Normand

**RE: Proposed Downtown Edmonton Arena, Edmonton, Alberta**

Members of the Committee,

We are grateful for your support and the generous sharing of your time that has helped us come to understand the community and its aspirations for a new arena. We have enjoyed getting to know you and the many discussions in Edmonton, Columbus and Kansas City have contributed significantly to this report.

A project of this size and visibility is inherently controversial and politically charged, but the arena committee's directive has been unwavering – we provide our best professional responses to the two fundamental questions of program and location.

- 1) what are the essential arena components required in Edmonton to retain a National Hockey League franchise and attract top flight entertainment and sporting events?
- 2) where should the arena be located?

This report addresses both questions with data, analysis and identification of the key challenges facing Edmonton. It is our hope that this objective and experienced analysis will help Edmonton's civic leadership arrive at an actionable course.

On behalf of my colleagues Kobi Bradley, Dave Orłowski, Jim Swords and Bob White, thanks for your cooperation. We are poised to assist Edmonton in continuing down the path to a great new community facility.

Sincerely,

A handwritten signature in black ink, appearing to read 'R. Martin', with a horizontal line extending to the right.

Richard Martin,  
Senior Principal



## Executive Summary

This report provides a detailed conceptual program for a major multipurpose arena and examines potential sites for such a facility in Edmonton including background information on similar projects around North America. Our summary approach and conclusions are:

### Arena Program Essentials:

The NHL and major concert industry in North America require a seating capacity of approximately 18,000 for hockey with multiple suite and premium seating offerings that are sized to the local market's economy. To deviate from this optimum capacity is not advised. Smaller simply is not competitive and a larger seat-count drives up construction costs while providing little or no competitive advantage. A practice facility for an NBA or NHL anchor tenant is desired by teams, creates an added attraction for game and non-game days, and provides community recreational opportunities.

Other important program elements for a multipurpose arena:

- rigging capacity in the range of 150,000 to 200,000 pounds
- direct loading to the event floor and convenient truck access to loading docks
- generous staging and marshalling area behind the stage-end
- retractable seating in the lower bowl to allow adjustments to the size of the event floor
- ability to create blackout conditions for concert lighting schemes
- floor anchors on the event floor to accommodate overhead tie-downs for circus and other events
- spotlight platform at catwalk, for end-stage and opposite end-stage configurations
- a minimum of 4 small and 1 large star dressing room with green room designed for maximum flexibility
- state-of-the-art acoustics with sound baffles and bass traps at the upper levels of the arena





#### **Arena Location:**

HOK was tasked with examining potential downtown arena sites as well as potential at the existing Northlands site. Prerequisite criteria for identifying sites included a minimum of 5 acres with an acceptable building configuration; capability to build or lease adjacent premium parking; proximity to transit and parking; compatibility with proposed downtown improvements; and the ability to accommodate service functions and television truck parking. Based on dialogue with the arena committee, evaluation categories were refined to include urban design analysis, transportation, site characteristics that could impact design and overall costs, and consideration of the potential for broader urban development.

We identified six downtown sites: North Post Office, Post Office, Casino, Greyhound Depot, The Quarters and West Jasper Avenue Warehouse. The report examines all six sites in terms of fundamental suitability for a major arena as well as each site's potential to serve as a redevelopment catalyst. In the case of the Quarters, we looked at two options – the southeast corner of 97th Street and 103rd Avenue, and a site just north of Jasper Avenue east of 97th Street.

Of the downtown sites, we would judge West Jasper Avenue as richest in variety and offering the most immediate urban design opportunity. It best leverages current development trends and is surrounded by an inventory of buildings compatible with a mixed-use district. Thus it offers immediate private development potential with no substantial economic stimulus requirement.

The Quarters' sites represent an ambitious opportunity to redefine the eastern edge of the central business district. The southern of the two options would enjoy a synergistic link to the convention center while the northern site would have to contend with existing institutional buildings that do not complement mixed-use development. Any arena in the Quarters is best viewed as one component of a broader publicly-incented redevelopment effort.



The remaining four sites north of the central business district (North Post Office, Post Office, Greyhound Depot and Casino) must address the issues of psychologically and physically bridging the wide-span 103rd / 104th Avenue corridor. A large-scale private/public redevelopment plan would seem necessary to create the density and a sense of destination to effectively extend the central business district. The Post Office site has the advantage of proximity to Sir Winston Churchill Square but surrounding civic buildings would not assist in creating a mixed-use and lively urban district. The Casino site in combination with the Greyhound Depot site could link to stronger mixed-use redevelopment and parking.

Northlands offers perhaps the most expedient solution to the community's need for a new arena -- parking and transit infrastructure are in place, arena patrons are accustomed to getting there, an exhibition/meeting complex is adjacent, and the massive site is owned and controlled by a single not-for-profit entity. It may be characterized as an island unto itself but it offers the potential to become a large-scale entertainment hub in its own right.

#### **Next Steps:**

A flow chart is included to illustrate the typical 3-4 year sequence of events required for the planning, design and construction of a major new arena. It's also understood the current Alberta market is anything but typical.

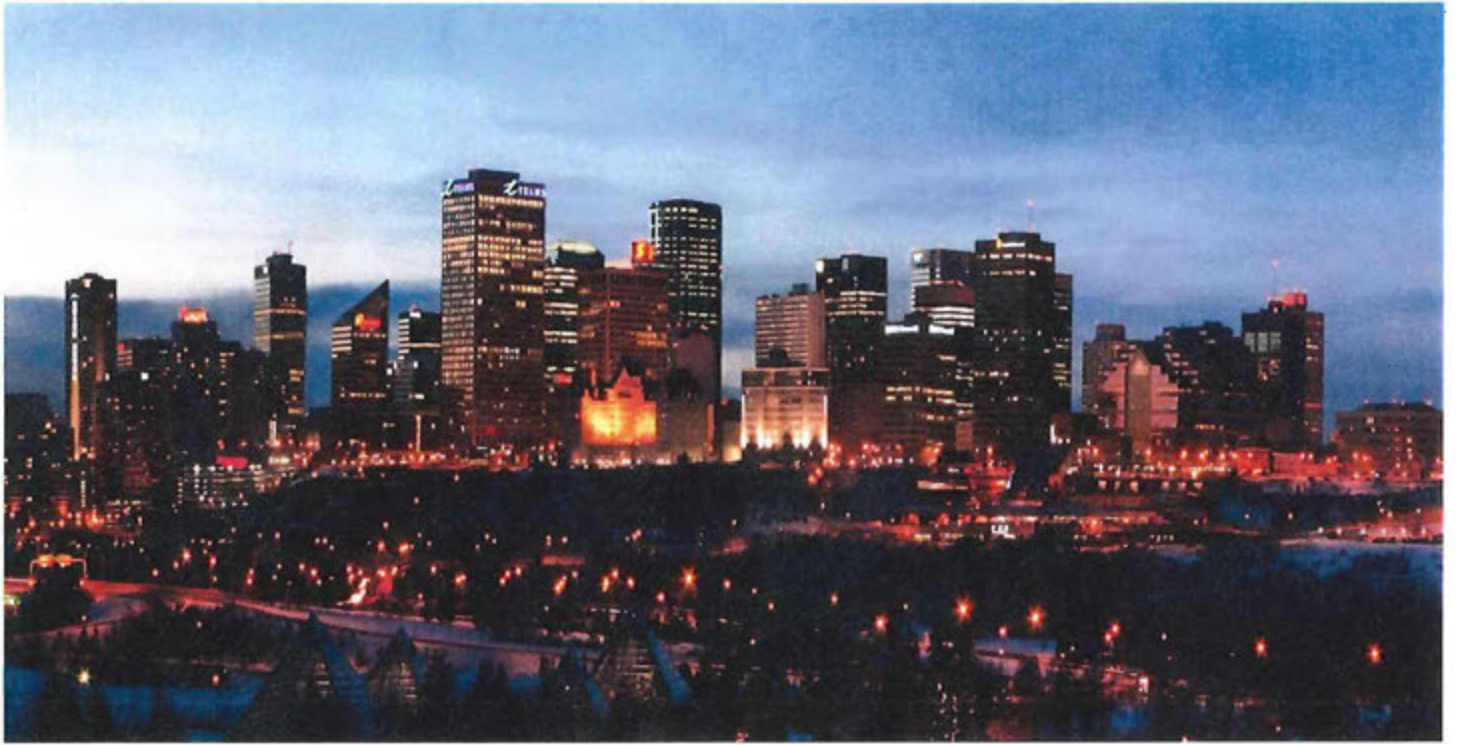
We already have a well-defined program and site options have been identified. It's now up to community leaders and key stakeholders to determine one or two sites that best align with the community's long-term interests, priorities and vision. The selected site(s) should be confidentially examined by architects, urban planners, government development specialists, engineers, traffic and parking consultants, and a contractor to confirm compatibility with the program, test site and soil conditions, examine utility placements and estimate the cost and timing of land acquisition.

Simultaneously, an economic model should be developed that addresses issues of ownership, tenant leases, revenue sharing and funding options. As architects and designers HOK Sport has participated in the planning of hundreds of major sports projects across North America and around the world. We've observed that major civic arenas do not generate sufficient returns on investment to attract 100% private development capital. Substantial participation and incentives from the public sector are a necessary and essential component. This report is intended to assist those efforts.



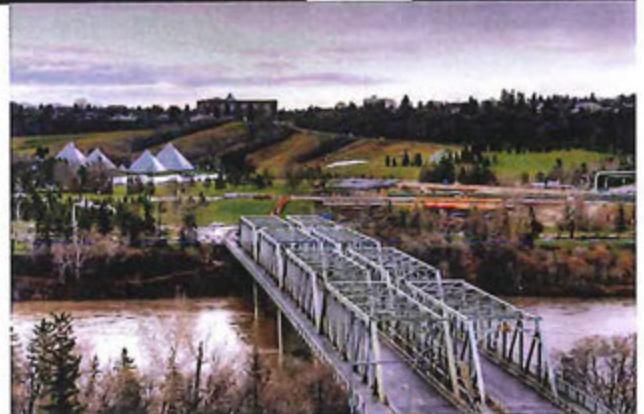
**I M A G E**





**It's about the place ...**





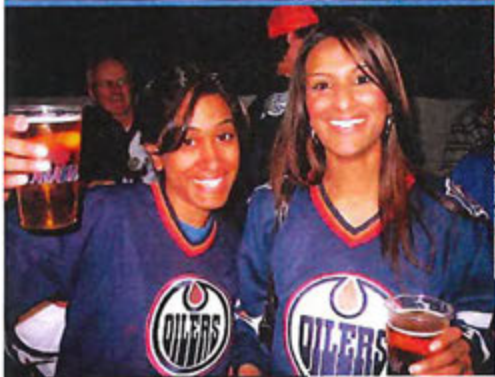
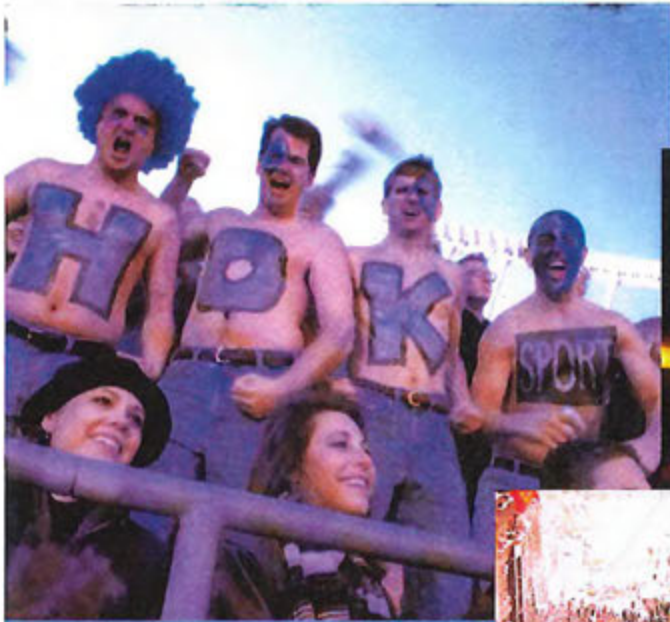
...and it's unique characteristics





**It's more than the game or event ...**





**It's about the experience ...**



**The image of sports teams defines the image of its cities.  
The image of cities defines the image of its sports teams.**





**PROCESS**

# Site Evaluation Process



1. **Determine Arena Program and Site Requirements**
  - Define the Project
2. **Develop Evaluation Criteria**
  - Phase 1 – Threshold Criteria
  - Phase 2 – Comprehensive Analysis
3. **Consider Site Alternatives**
  - Identify Sites which meet Phase 1 Criteria
4. **Evaluate Viable Sites**
5. **Score and Rank the Sites**

# Arena Program



The essential first step in a successful site selection process is to determine the program requirements of the building. The program identifies the size capacities and functions the building must fulfill. These in turn determine the square footage requirements of the building and begin to define the inter-relationships of the building's main components. Planners then can create building footprints to be tested on all sites.

In the case of Edmonton, NHL standard functional requirements were compared with the existing conditions at Rexall Place. These findings were presented to numerous representatives of Northlands and the NHL Oilers for the purpose of arriving at a program to meet the 21st century needs of Edmonton's NFL franchise and provide a highly flexible, efficient and competitive multipurpose community venue.

To confirm our findings, HOK Sport benchmarked the Edmonton results against a number of our recent NHL/NBA facilities. We found the Edmonton results to align closely with the Prudential Center -- the new home of the New Jersey Devils that opened last fall in a redevelopment area of downtown Newark. The recommended Edmonton program is summarized on the following page and is accompanied by a detailed program comparison with the New Jersey Devils arena. And a chart of comparable arenas designed by HOK Sport.

# Arena Program



- 18,000 Seats for Hockey
- 750,000 total square feet +
- 35,000 sq. ft. Practice Ice Sheet and Facilities

64 Luxury Suites

12 Bunker Suites

2 Party Suites

21,500 sq. ft. Club Lounge

7,000 sq. ft. Retail opportunities

16,000 sq. ft. Members Restaurant

7,500 sq. ft. Commercial Restaurant

10,000 sq. ft. Administrative Office

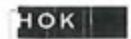


**Program Comparison:  
Rexall Place/New Jersey Devils Arena**



CLASSIFICATION 1: SPECTATOR FACILITIES								
Space Type	Room Description	Recommended			Renovation	Actual	Difference	Comments on Rexall Place
		Units	SF	Total NSF	Scheme	Rexall Place		
Spectator Seating Hockey	Approximately 17,500 seats will be provided in a hockey configuration, distributed across the following categories: a. Lower Bowl seating, @ 20" min. width: - Includes 1650 Club seats, @ 21" min. width - Includes 120 Loge Box seats @ 24" w - Includes 144 seats for bunker suite holders - Includes 400 end seats, behind stage, @ 20" w b. Club seats @ Suite Level (20" w) c. Suite seating, (21" min. width) d. Restaurant tiered seats widening rail e. Upper Bowl seating, @ 20" min. width <b>TOTAL CAPACITY</b>	7,900	6.5	51,350		33,156		Provisions for wheelchair and an auxiliary disabled patrons and their own patrons shall be provided in accordance with the Canadian Law.  3rd deck seating  10,871 seats is current capacity of Rexall Place Seats/ Existing trends are 31"
Suites	Typical suite fit-out includes small serving area with sink, undercounted refrigerator, undercounted ice maker, closet, toilet room, (2) TV monitors, internet and an audio system. a. Luxury Suites: - Suites seating 12 - Suites seating 16 - Suites seating 18 b. "Bunker" Suites c. Party Suites	36 16 12 12 2	350 475 475 600 600	12,600 7,600 5,700 7,200 1,200	16,476 10,884 3,680 9,420 1,200	11,206 3,432 5,376 0 0	-1,394 -4,168 -324 -7,200 -1,200	32 level 3 suites - 464 suite seats 12 level 5 suites - 120 seats 18 Level 6 suites - 92 seats
Club Lounge	Lounges with bar and upgraded concession stands. Lounge serves as concourse for club seats. a. Club Lounge area b. Men's toilets: 6 w.c. (1:200) + 12 urinals (1:90) + 6 lavs (1:200) c. Women's toilets: 18 w.c. (1:60) + 8 lavs (1:150) d. Pantry and Bar e. Business Center	2 18 18 2 2	6,400 60 60 1,800 120	12,800 1,080 1,080 3,600 240	41,791	22,472 1,530 1,572 included above 1,253	9,672 450 492 1,013	North, East, 7 South Clubs, Concessions and support combined  Corporate room on level 4
Hospitality	a. Owners' Dining Room (50 capacity) Dining room for Owners' use, located between Owners' bunker suite and Owners' parking. b. Sponsors' Room, w/ bar and buffet 100 capacity in combination of dining/bar/lounge seating - Pantry - Men's and Women's Restrooms c. Alumni Room, w/bar and light buffet - Pantry - Men's and Women's Restrooms d. Bunker Lounge Bar at Event floor level, for bunker suite patrons and guests e. Suite Level Bar Includes bar, lounge area and row of bar stools @ disk rail seating approximately 80, w/full oval view - Men's and Women's Restrooms f. Cigar Bar Includes bar, lounge seating, humidifier and cigar lockers. Total capacity of 25 each.	2 1 1 1 1 2 2 1 2 2	1,000 3,000 150 120 1,000 80 60 6,240 240 800	2,000 3,000 150 240 1,000 80 120 6,240 480 1,600	15,561	0 0 0 0 1,817 204 0	-4,423	Altkon on level 6
Suite Level Restrooms	Common restroom facilities will be provided on each Suite Corridor for suite holder use, w/upscale finishes, fixtures a. Men's toilets: b. Women's toilets:	4 4	240 240	960 960	0 0	0 0	0 0	none for exclusive use of suites
Public Restrooms	Public restroom facilities will be provided based on an assumed ratio of 50:50 male-female attendance. Note: the following ratios are based on IPC 2000 codes, check state and local requirements. Distribution of toilet room should include men's and women's @ floor level, to assure adequate attendance at floor events. Baseball capacity is used for calculating toilet fixtures, which is greater capacity of floor level and lower bowl seats. a. Men's toilets: 32 w.c. (1:250) + 87 urinals (1:90) + 39 lavs (1:200) b. Women's toilets: 138 w.c. (1:60) + 52 lavs (1:150) c. Family toilets	119 130 8	50 50 70	5,950 6,500 560	19,676 19,576	5,449 6,441 218	-501 -99 -342	

**Program Comparison:  
Rexall Place/New Jersey Devils Arena**

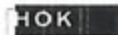


Guest Services	a. Primary First Aid Station	1	600	600	600	204	-396		
	b. Satellite First Aid Station	1	250	250	250	228	-22		
	c. Information and Lost & Found Booth	4	200	800	800	153	-647		
	d. Concierge @ Suite Levels	4	120	480	480	0			
	e. Valuables locker/storage	1	180	180	180	0			
	f. Lobby toilet rooms	2	100	200	200	0			
	g. Customer service area	1	200	200	200	0			
	to include team position info and small mtg room								
	h. Group Sales ticket booth	1	75	75	75	0			
Entertainment	a. Promotions "stage" Stage or platform viewable from seating bowl, where promo spots can be staged during breaks in game action	1	150	150					
	b. Promotions Storage	1	1,500	1,500		1,431	-69	Mech storage on level 3	
	c. Promotions Storage Closets	4	100	400		0			
	d. Kids' area w/video & other interactive games	1	1,200						
Hall of Fame			5,000						
<b>SUB-TOTAL</b>				285,561	234,585	160,388	-45,173		
Design contingency multiplier (5% - excludes seating bowl)				4,639	6,993	3,149	-1,489		
<b>TOTAL</b>				210,280	241,578	163,537	-46,862		

**CLASSIFICATION 2: FOOD and RETAIL FACILITIES**

Space Type	Room Description	Recommended		Total NSF	Renovation	Actual	Difference	Comments
		Units	SF		Schema	Rexall Place		
Concession Stands	Concession Stands will be distributed at regular intervals on each concourse. The number of points-of-sale is based on a ratio of 1:175 spectators, at both public and club concourses. Distribution of concession stands should include some @ floor level, to accommodate attendees at floor events. Baseball capacity is used for calculating P.O.S., which is greatest capacity of floor level and lower bowl seats.							All requirements to be verified by Food Service operator or consultant
	a. Public Concession Stands	89	100	8,900	16,893	12,320	3,420	ratio= no. of points-of-sale @ 6 ft per POS
	b. Club Lounge Concession Stands	11	100	1,100		3,278	2,178	ratio= no. of points-of-sale @ 6 ft per POS
	c. Vendor (hawking) Stations	8	200	1,600		1,875	275	level 2
	d. Portable Concessions			0	4,265	0		
	e. Themed Food Court	2	1,000	2,000		0		
Restaurants	a. Commercial Restaurant, 300 capacity	1	7,200	7,200	5,133	0		with regular hours of operation. Confirm capacity
	includes dining area and all front-of-house and back-of-house support space							
	b. Members Restaurant, 350 dining capacity	1	16,000	16,000	7,745	0		Open on event days only and for special events
	includes dining for 300 w/partial view of floor, 170 bar stools @ drink rail and direct view to floor, reception, bar, restrooms, coat check and kitchen/office.							
Food Service Support	a. Central Kitchen to support concession stand and catering operations	1	6,000	6,000	6,680	4,248	-1,752	kitchens on levels 4 and 0
	b. Commissary	1	6,000	6,000	18,496	9,077	3,077	Warehouse commissary complex on level 2
	c. Beer Pump Rooms	4	375	1,500		0	-1,500	
	d. Empties Storage	1	700	700		0	-700	
	e. Suite Pantries	5	350	1,750	2,242	0	-1,750	
	f. Vendor Office(s)	1	2,000	2,000		938	-1,062	level 2
	g. Staff Lockers / Toilets	2	1,000	2,000		3,239	1,239	separate men's & women's
	h. Uniform Distribution	1	150	150		above		
Retail Sales	a. Team Store	1	3,800	3,800	3,800	803	-2,997	Allow for street access for non-game day sales. SF includes stock room.
	b. Satellite Retail Store	1	1,000	1,000	1,000	568	-432	
	c. Novelty Stands	4	400	1,600	1,600	below		
	d. Retail Storage	1	1,500	1,500	1,500	1,269	-231	2 mech storage location on level 4
<b>SUB-TOTAL</b>				64,800	69,366	37,615	-27,189	
Design contingency multiplier (5%)				3,240	3,468	1,881	-1,358	
<b>TOTAL</b>				68,040	72,834	39,496	-28,544	

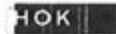
**Program Comparison:  
Rexall Place/New Jersey Devils Arena**



CLASSIFICATION 3: CIRCULATION								
Space Type	Room Description	Recommended			Renovation	Actual	Difference	Comments
		Units	SF	Total NSF	Scheme	Rexall Place		
Lobbies	a. Main Entry Lobby	1	9,300	9,300	8,641	10,283	983	2 entry lobbies
	b. Secondary Lobbies	2	6,300	12,600	5,500		-12,600	
	c. Suite/Club Elevator Lobbies	3	0	0		1,485	1,485	Club entrances
Concourses	a. Main Level Concourse	1	50,000	50,000	71,124	30,717	-19,283	
	b. Upper Level Concourse	1	45,000	45,000	35,465	28,278	-16,722	Upper level concourses
	c. Sponsor displays Designated display space off main concourse	4	200	800	28,500	0	-800	
	d. Exterior Balconies	4				0	0	
Corridors	a. Service Corridor on Event Floor Level			10,000		0	-10,000	over a club
	b. Suite Corridors			30,000		1,502	-28,498	
	c. Press Corridor			1,200		0	-1,200	
	d. Floor Access Tunnels	4	600	3,200		0	-3,200	
	e. Player Tunnels	2	450	900		0	-900	
Vertical Circulation	a. No. of 3500 lb. Passenger/Service Elevators: 7							1 Freight Elevator
	b. No. of 10000 lb. Freight Elevators: 2							3 passenger Elevator: All Stars elevator, backstage elevator, south elevator
	c. Stairs			0	39,912			10 Stairs?
	d. Escalators			0				3 Escalators
<b>SUB-TOTAL</b>				171,000	189,142	72,265	-98,735	
design contingency multiplier (5%)				8,550	9,457	3,613	-4,937	
<b>TOTAL</b>				179,550	198,599	75,878	-103,672	

CLASSIFICATION 4: EVENT FACILITIES								
Space Type	Room Description	Recommended			Renovation	Actual	Difference	Comments
		Units	SF	Total NSF	Scheme	Rexall Place		
Event Floor	a. Possible Floor Configurations: NHL Hockey - 85'x 200' rink (17,000 sf) Arena Football - 85'x 188' and 90'x 210' clear Basketball - 50'x 94' playing court, 70'x 134' clear (9,380 sf) Concert/ Stage Shows / Circus - 85'x 200' Ice Shows - 80'x 200' Indoor Soccer - 16-26' wide x 26-42' long Wrestling/ Boxing Track & Field - 200m track requires 320'x 160' area  Tennis  NOTE: minimum overhead clearance to be: 90'	1	17,000	17,000	17,000	17,000	0	Rink size is actually 10,300 sq feet
Hockey	a. Player Benches	2	180	360	360	360	0	
	b. Penalty Boxes	2	30	60	60	60	0	
	c. Penalty Timekeeper Box (4 people)	1	30	30	30	30	0	
	d. Goal Judge's Box	2	9	18	18	18	0	
Performers	a. Star Dressing Rooms - Large	2	600	1,200		2,422	1,222	6 dressing rooms; 404 ea.
	b. Star Dressing Rooms - Small	2	350	700		0	-700	
	c. Green Room/ Family Lounge	1	0	0		0	0	
Control Rooms	a. Scoreboard Operator Booth	1	120	120		50	-70	@ Press Level
	b. Sound and Light Booth	2	120	240		50	-190	one @ press level, one @ lower bowl can be combined w/outbound booth @ press level
	c. Organist booth	1		0		0	0	
	d. Video Board Control Room	1	500	500		275	-225	@ Press Level
	e. Equipment Room (audio system, television)	1	500	500			-500	
Event (Show) Facilities	a. Office(s) for use by outside show personnel			0	250	786	786	production room north/south
	b. Crew Lounge	1	500	500	500	0	-500	
	c. Crew Locker Area (unisex)	1	150	150	150	0	-150	
	d. Crew Laundry	1	120	120	120	0	-120	
	e. Crew Toilet Rooms	2	120	240	240	0	-240	
<b>SUB-TOTAL</b>				21,738	18,720	21,851	-687	
design contingency multiplier (5% - excludes event floor)				237	86	203	-34	
<b>TOTAL</b>				21,975	18,814	21,254	-721	

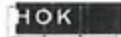
**Program Comparison:**  
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CLASSIFICATION 5: TEAM FACILITIES								
Space Type	Room Description	Recommended			Renovation	Actual	Difference	Comments
		Units	SF	Total NSF	Schomo	Rexall Place		
Home Lockers - NHL Hockey	The Home Team locker room suite includes the following spaces (assumes that team practices in separate facility): a. Changing Room with (26) 18" lockers b. Players Lounge c. Locker Room with (26) 36" lockers + (3) 48" lockers d. (10) Showers + (4) w.c. + (4) urinals e. Grooming area with (5) lavs and cont. mirror f. Sauna g. Steam Room h. Cold Pool i. Treatment Room / Hydrotherapy j. Trainers office k. Training staff change room? l. Medical room m. Training storage n. Team Equipment Work Room/Skate Sharpening - equipment managers office - equipment storage room o. Stick Work Room p. Coaches offices (1 head + 3 assistants) q. Coaching staff change room (4) 36" lockers; 1 wc; 1 urinal; 1 lav; 1 shower r. Coaching staff meeting room s. Video technicians room/ tape storage t. Video recording room u. Weight training room v. Laundry w. Circulation x. Family Lounge with play area for children and restrooms				14,100	13,356		10,900 Above total NJD arena
Visitor Lockers - NHL Hockey	The locker room suite includes the following spaces: a. Changing Room b. Locker Room with (26) lockers c. (10) Showers + (3) w.c. + (3) urinals d. Grooming area with (4) lavs and cont. mirror e. Coaches' Office f. Treatment Room g. Work Room h. Drying Room i. Storage j. Circulation k. Players' Families Lounge				5,222	991		3,800 Total NJD visitors
Auxiliary Lockers	Additional locker rooms for Tournaments or minor league hockey team. a. (20) 24" lockers b. Grooming area w/ 10 Showers + 4 w.c. + 4 urinals + 6 lavs c. Taping/treatment space d. Coaching Office e. Circulation			2,000		2,265	0	
Officials Lockers	The officials locker rooms include the following spaces: a. (4) 36" lockers plus stretching area b. 2 Showers + 1 w.c. + 2 urinals + 2 lavs c. Meeting Room				1,753	751		900 NJD total
X-Ray	Common X-ray facilities			450		0		
<b>SUB-TOTAL</b>				<b>20,220</b>	<b>21,075</b>	<b>10,197</b>	<b>-2,823</b>	
design contingency multiplier (5%)				1,011	1,054	910	-101	
<b>TOTAL</b>				<b>21,231</b>	<b>22,129</b>	<b>19,107</b>	<b>-2,124</b>	



**Program Comparison:**  
**Rexall Place/New Jersey Devils Arena**



**CLASSIFICATION 6: MEDIA FACILITIES**

Space Type	Room Description	Recommended			Renovation Scheme	Actual		Difference	Comments
		Units	SF	Total NSF		Rexall Place			
Media Support	a. Work Room - Print Reporters	1	600	600	2,487	569			
	b. Work Room - Radio Reports	1	150	150	1,331	0			
	c. Digital Editing Workroom	2	150	300		0			
	d. Dining Area	1	2,000	2,000		0			
	e. Mobile Unit Multi-Purpose Room	1	300	300		0			
	f. Press Toilets	2	250	500		0			
	g. Media Check-in	1	250	250		0			
	h. Secured Storage	1	200	200		0			
	i. TV Truck Parking (5 interior @ 20' x 60', 2 exterior)	5	1,200	6,000		1,158		Area designated in east staging	
	j. Satellite Up-link & ENG (2 exterior @ 200 s.f.)			0		0			
	k. Patch panels/ broadcast connections	1	150	150		0			
Press Box	a. Writing Press Room - seating for 150 writers	150	13	1,875	3,788	2,169		Total area of catwalk pressbox	
	b. TV Broadcast Booth(s)	4	150	600					
	c. Radio Broadcast Booth(s)	4	80	320					
	d. Off-Ice Officials Booth	1	200	200					
	e. Replay Booth	1	120	120					
	f. GM Booth(s)	2	120	240					
	g. Copy / Work Room	1	200	200					
	h. Press Toilets (men 2 wcs, 4 urinals, 3 lavs each)	2	300	600					
	(women 3 wcs, 3 lavs)	2	150	300					
	i. Secured Storage	1	120	120					
j. Press Overflow (Playoffs)			0						
Interview Facilities	a. Multi-purpose/ press conference room	1	1,500	1,500		1,097			
	b. Remote broadcast studio	1	200	200		275		Television room	
	c. Interview Rooms	4	300	1,200		0			
Camera Locations	Fixed camera boxes/platforms shall be located at the following positions (which covers both NHL & NBA requirements):							limit seatkicks as much as possible	
	a. Ice-level positions	4	35	140					
	b. Low-level Center (LLC)	1	0	0					
	c. Mid-level Center (MLC) + Mid-level Reverse (MLCR)	8	0	0					
	d. Mid-level Corner (MLCR) + High-level Corner (HLC)	4	0	0					
	e. Mid-level End (MLE)	2	0	0					
	f. Low-level Stash (LLS)	4	0	0					
	g. High-level End	2	0	0					
	h. Roof truss beauty shots	2	0	0				locate directly above goals	
	i. Unmanned Fixed Camera Positions	6	0	0				locations vary	
	j. Still Photo Positions	15	12	180				locate at ice level	
Follow Spots	Spot light platforms shall be located at the following positions:								
	a. Cross Court								
	b. Corners								
Catwalks	a. Catwalks - included in net-to-gross factor								
<b>SUB-TOTAL</b>				<b>10,245</b>	<b>7,606</b>	<b>5,268</b>	<b>-12,977</b>		
design contingency multiplier (5%)				912	380	263	649		
<b>TOTAL</b>				<b>19,157</b>	<b>7,986</b>	<b>5,531</b>	<b>-13,626</b>		

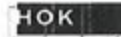
**Program Comparison:**  
**Rexall Place/New Jersey Devils Arena**



CLASSIFICATION 7: BUILDING OPERATIONS								
Space Type	Room Description	Recommended			Renovation	Actual	Difference	Comments
		Units	SF	Total NSF	Schedule	Rexall Place		
Event Personnel	a. Office(s) for use by outside show personnel			0				
	b. Lockers for use by Event Staff - 160 half-height	2	1,000	2,000	1,923			
	c. Uniform Distribution	1	150	150				
Building Staff	a. Operations Supervisor office	1	180	180		2,918		
	b. Reception Area	1	200	200				
	c. Other Offices	2	120	240				
	d. Staff Break Room	1	600	600				
	e. Lockers for use by Building Staff	2	600	1,200	5,222			
Event Storage	a. Court Equipment Storage (goals and nets)	1	5,000	5,000	4,714			East back staging
	b. Hockey Equipment Storage (fisherboards)	1	5,000	5,000				
	c. Concert and Other Event Equipment Storage (tables, chairs and platforms)	1	5,000	5,000		4,471		"big room"
	d. Technical Equipment Storage (microphones, etc.)	1	100	100				
Dock / Staging	a. Staging / Marshalling Area	1	20,000	20,000	17,372	25,768		East back staging
	b. Loading Dock (3 doors + 1 drive-through)	4	800	3,200	22,174			
	c. Trash Compactor/ Dumpster	1	800	800				
	d. Office	1	100	100				
Ice Support	a. Zamboni / Ice Equipment / Ice Dump	1	500	500		542		(2) Zambonis
	b. Ice Control Office	1	100	100				
	c. Ice Plant	1	2,400	2,400				
	d. Paint Storage Room	1	80	80				
Security	a. Security Office	1	400	400				
	b. Detention Rooms	2	85	170				
	c. Toilet	1	80	80				
	d. Lockable Storage	1	150	150				
	e. Command Post	2	200	400				located @ front of bowl at opposite ends, to allow view of entire bowl
	f. Central Command Center	1	350	350				located at Service Level
Maintenance	a. Maintenance Shops	1	3,000	3,000				
	b. Maintenance Storage	1	2,000	2,000				
	c. General/Team/Office Storage	1	5,000	5,000				lockable internal cages as desired
Janitorial	a. Central Janitorial Supply Storage	1	750	750	1,768			
	b. Distributed Janitor Closets	12	80	960				
	c. Building Laundry	1	500	500				
	d. Trash Collection Rooms	4	150	600				
	e. Recycling Rooms	1	150	150				
M/E/P	a. Mechanical Rooms	4	2,500	10,000	6,260			all MEP space to be verified w/consultant
	b. Boiler Room	1	500	500	4,065	1,852		
	c. Chiller Room	1	1,600	1,600		1,609		
	d. Main Electrical Service Entry	1	1,000	1,000				
	e. Electrical Switchgear Distribution	1	750	750				
	f. Electrical Sub-Station "A"	1	1,050	1,050				
	g. Electrical Sub-Station "B"	1	1,050	1,050				
	h. Emergency Generator Room	1	1,000	1,000				
	i. Electrical Closets	24	150	3,600				
	j. Show Power panels	2	80	160				
	k. Main Tele/data Room	1	650	650				
	l. Tele/data closets	24	150	3,600				
	m. Fire Pump Room	1	500	500				
	n. Fire Sprinkler Shut-Off Room	1	200	200				
	o. Elevator Equipment Room(s)	4	200	800				
	p. Secondary AHU Rooms (service level)	2	1,000	2,000				
<b>SUB-TOTAL</b>				<b>89,820</b>	<b>63,538</b>	<b>37,160</b>	<b>52,668</b>	
<b>design contingency multiplier (5%)</b>				<b>4,491</b>	<b>3,177</b>	<b>1,858</b>	<b>2,633</b>	
<b>TOTAL</b>				<b>94,311</b>	<b>66,715</b>	<b>39,018</b>	<b>55,293</b>	

CLASSIFICATION 8: ADMINISTRATION								
Space Type	Room Description	Recommended			Renovation	Actual	Difference	Comments
		Units	SF	Total NSF	Schedule	Rexall Place		
Arena Operations	Offices and support areas for Arena Administration			5,500		0		at another northlands location
Ticket Office	a. Box Office Ticket Windows	20	50	1,000	1,000	987		
	b. Office for Ticket Manager	1	180	180	180			
	c. Office for Assistant Manager	3	125	375	375			
	d. General office/ work room	1	500	500	500			
	e. Vault/Ticket Storage	1	125	125	125			
	f. Counting Room	1	240	240	240			
	g. Toilet room	2	80	160	160			
	h. Ticket Call Center (for 6 operators)	1	300	300	300			
	i. Computer room	1	225	225	225			
	j. Break area/ lockers	1	200	200	200			
	k. Circulation			1,000	1,000			
Advanced Ticket Windows	a. Advanced Windows within Building	4	50	200	4,305			locate 2 windows together, at Main and Upper Concourse, centrally located within concourse.
<b>SUB-TOTAL</b>				<b>10,005</b>	<b>8,610</b>	<b>987</b>	<b>9,618</b>	
<b>design contingency multiplier (5%)</b>				<b>500</b>	<b>431</b>	<b>49</b>	<b>451</b>	
<b>TOTAL</b>				<b>10,505</b>	<b>9,041</b>	<b>1,036</b>	<b>9,469</b>	

**Program Comparison:  
Rexall Place/New Jersey Devils Arena**



**CLASSIFICATION 9: PRACTICE RINK**

Space Type	Room Description	Recommended			Comments	Actual		
		Units	SF	Total NSF		Rexall Place	Difference	Comments on Rexall Place
Event Floor	a. Ice Surface (leave size, configuration and ice consistency as arena rink)	1	17,000	17,000		0		
	b. Observation Deck	1	250	250	beats above ice floor	0		
Ice Support	a. Zamboni / Ice Equipment / Ice Dump	1	500	500	(2) Zambonis	0		
	b. Ice Control Office	1	100	100				
	c. Paint Storage Room	1	80	80				
Community Use Facilities	a. Spectator Seating	1000	5	5,000	Confirm seat quantity			
	b. Check-in Area/Skate Rental Desk/ Lounge Seating	1	1,800	1,800				
	c. Public Toilet Rooms	2	150	300				
	d. Changing Rooms with (2) 12'x6'etal lockers, 4toilet fixtures, 3lavs & 2showers in each	2	500	1,000	verify if qty is sufficient			
	e. Party Rooms	3	600	1,800	adjoining, can be combined for larger groups			
	f. Games/ Arcade Area	1	1,000	1,000				
	g. Management Office	1	120	120				
	h. Storage	1	500	500				
	i. MEP			0	assume 5% of total net area in practice rink			
	<b>SUB-TOTAL</b>				29,450	0	0	-29,450
design contingency multiplier (5% - excludes event floor)				823	0	0	-823	
<b>TOTAL</b>				30,073	0	0	-30,073	

**SUMMARY**

	Recommended			Renovation Scheme			Comments
	Units	SF	Total NSF				
SUB-TOTAL PART 1: SPECTATOR FACILITIES			210,200	241,578	163,637	-46,667	
SUB-TOTAL PART 2: FOOD and RETAIL FACILITIES			68,040	72,834	39,496	-28,544	
SUB-TOTAL PART 3: CIRCULATION			179,550	198,593	75,878	-103,672	
SUB-TOTAL PART 4: EVENT FACILITIES			21,975	18,814	21,254	-721	
SUB-TOTAL PART 5: TEAM FACILITIES			21,231	22,128	19,102	-2,124	
SUB-TOTAL PART 6: MEDIA FACILITIES			19,157	7,966	5,531	-13,626	
SUB-TOTAL PART 7: OPERATIONS SUPPORT			94,311	66,715	39,018	-55,293	
SUB-TOTAL PART 8: ADMINISTRATION			10,505	9,041	1,036	-9,469	
SUB-TOTAL PART 9: PRACTICE RINK			30,073	0	0	-30,073	
<b>BUILDING TOTAL NET S.F., PARTS 1 - 8 ABOVE (NO PRACTICE RINK)</b>			656,041	637,696	364,857	-290,184	
<b>+ NET-TO-GROSS MULTIPLIER (+5%)</b>			98,254	43,395	132,841	34,586	20.4%
for secondary circulation, interstitial space, chases, and wall thicknesses							Percent NTO of existing building
<b>GROSS SQUARE FOOTAGE ESTIMATE</b>			783,298	681,091	497,700	-255,598	Existing building measured



# Comparables

## ARENA PROGRAM



PROJECT	YEAR opened	TOTAL sq. ft.	# of seats	# of suites	# of club seats	2007 cost*
Air Canada Centre	1999	665,000	19,800	153	1,020	\$298M
Jobing.com Arena	2003	600,000	17,500	89	800	\$245M
Louisville Arena	2010	700,000	16,000	72	3,200	TBD
Nationwide Arena	2000	900,000	18,500	52	1,400	\$290M
Pepsi Center	1999	675,000	18,007	95	1,900	\$260M
Philips Arena	1999	680,000	18,750	92	1,866	\$280M
Pittsburgh Arena	2010	TBD	18,500	81	1,200	TBD
Prudential Center	2007	850,000	17,625	76	3,000	\$240M
Sommet Center	1996	1,000,000	17,500	72	1,800	\$275M
Sprint Center	2007	602,000	18,500	72	1,500	\$200M
Toyota Center	2003	775,000	17,800	103	3,200	\$260M
Verizon Center	1997	1,002,000	18,672	110	3,000	\$340M
Xcel Energy Center	2000	650,000	18,064	74	3,300	\$1,255M

\*adjusted to 2007 U.S. dollars  
hard construction cost only

# URBAN SITE REQUIREMENTS



- Site Area      Desirable: 6 acres  
                      Minimum: 5.05 acres
- Site Configuration allows acceptable building configuration and exterior spaces
- Ability to build or lease parking spaces for premium customers adjacent to arena
- Proximity to adequate parking and transit within ½ mile
- Ability to accommodate service functions and television truck parking

# Evaluation Categories

The following site selection matrix and five criteria categories were initially created in 1987. Since that time, this matrix has been used to analyze and rank potential sites for sports facilities including baseball parks, football stadiums, and arenas in both urban and suburban settings. Analyses of the site issues explored by these five categories have consistently proven to be an objective means to rank potential sites. Each site was evaluated based on the following factors:

## Urban Design

- Analyze the Site in relation to the Framework of the City
- Identifies Civic Design Potential
- Consider the overall Fan Experience

## Transportation

- Determines the convenience a site offers for pedestrians, automobile access, parking and transit

## Site Factors

- Site characteristics which influence the design and overall cost



# EVALUATION CRITERIA

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## ARENA

- Adjacent Land Uses / Compatibility
- Image / Visibility
- Proximity to Downtown Edmonton
- Proximity to Existing Convention Facilities
- Proximity to Existing Hotel Facilities
- New Development Opportunities Adjacent to Arena (retail/entertainment)
- Potential to Enhance Nearby Existing Businesses
- Potential to Spur Broader Community Renewal

## TRANSPORTATION

- Vehicular Access
- Ingress/Egress
- On-site Parking
- Off-site Parking
- Proximity to Public Transit
- Access for Service
- Pedestrian Movement

## SITE FACTORS

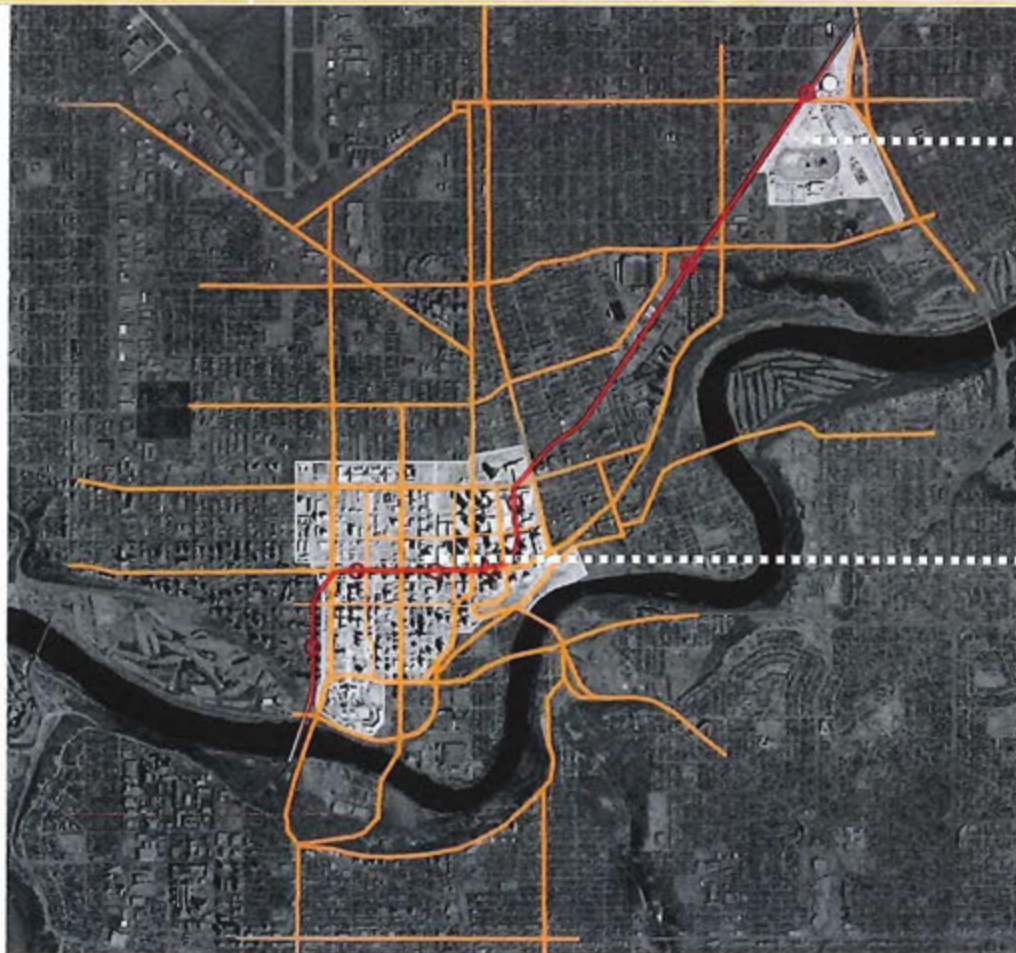
- Site Size
- Site Configuration
- Topography (potential benefits/advantages)
- Utilities (adequacy/relocation/improvement)
- Demolition Issues
- Historic Structures
- Environmental Issues
- Design Restrictions/Limitations
- Zoning and Regulatory Factors
- Displacement of Existing Users

## COSTS

- Land Acquisition & Business/Residential Relocation
- On-site / Off-site infrastructure

# EDMONTON

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.....Rexall Place

.....Downtown  
Edmonton



# DOWNTOWN EDMONTON

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..... Downtown East  
The Quarters

..... Downtown Plan  
Boundary



# DEFINE DISTRICT – urban design

## DESTINATIONS - PLACES of VALUE

- |   |                             |    |                                  |
|---|-----------------------------|----|----------------------------------|
| 1 | Alberta Legislature grounds | 10 | Edmonton City Centre             |
| 2 | Winspear Centre             | 11 | Grant MacEwan college            |
| 3 | City Hall                   | 12 | Jasper Avenue<br>Commercial core |
| 4 | Winston Churchill Square    | 13 | Telus Field                      |
| 5 | Edmonton Art Gallery        | 14 | The Quarters armature            |
| 6 | Citadel Theatre             | 15 | Beaver Hills house park          |
| 7 | Fairmont MacDonald          | 16 | Louise Mckinney Park             |
| 8 | Saskatchewan River valley   | 17 | Railtown Park                    |
| 9 | Shaw Convention Centre      | 18 | Chinatown                        |
|   |                             | 19 | Public LRT                       |





# DEFINE DISTRICT – urban design

## CITY INITIATIVES



105<sup>TH</sup> AVE  
Corridor study



THE QUARTERS –  
east DOWNTOWN



# DEFINE DISTRICT – urban design

## COMMERCIAL – FOOD - ENTERTAINMENT and HOTEL

JASPER AVENUE RETAIL  
EDMONTON CITY CENTRE



COMMERCIAL - FOOD  
- ENTERTAINMENT



EXISTING  
HOTELS





# DEFINE DISTRICT – urban design

## PUBLIC TRANSPORTATION



LRT ROUTE



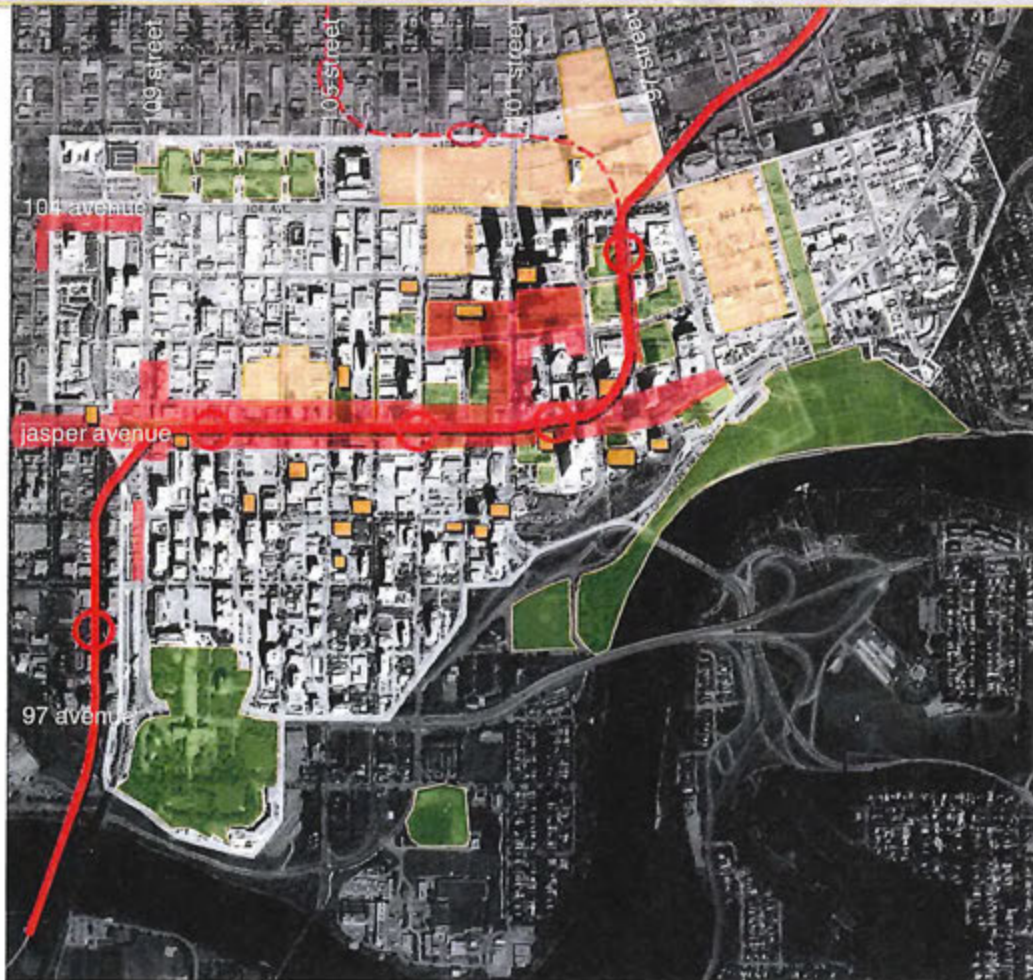
FUTURE LRT ROUTE



LRT STATION



FUTURE LRT STATION





# DEFINE DISTRICT - transportation

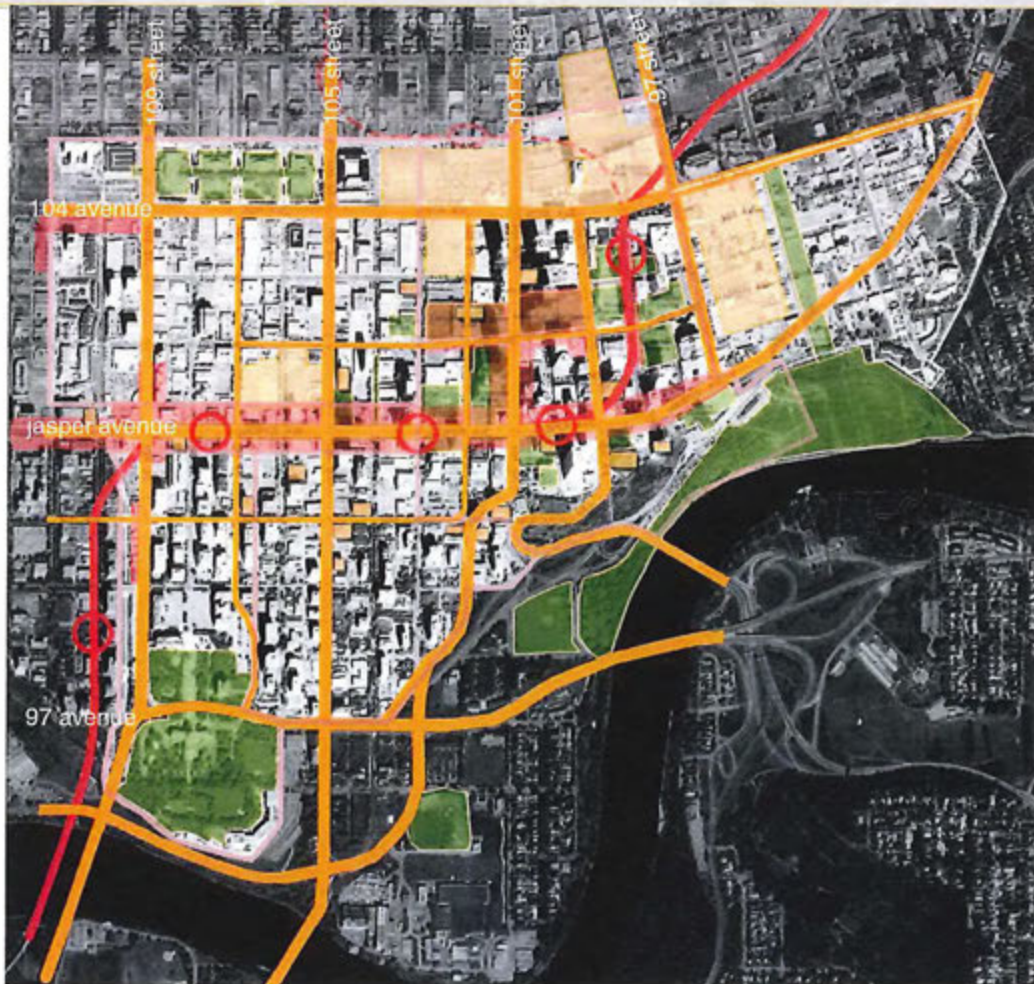
## TRANSPORTATION NETWORK

PUBLIC STREET  
NETWORK

PUBLIC BUS ROUTE

LRT – PUBLIC  
TRANSIT

PEDWAY LINKS



# DEFINE DISTRICT - transportation

## PARKING RESOURCE



PARKING  
STRUCTURES



SURFACE  
PARKING  
AREAS





# DEFINE DISTRICT - transportation

## PARKING #'s

### 106 St. & Jasper Avenue

5 min. radius  
3,850 spaces 2,200 structure  
1,650 surface

10 min. radius  
9,050 spaces 5,300 structure  
3,750 surface

### 103A Ave. & 97<sup>th</sup> St.

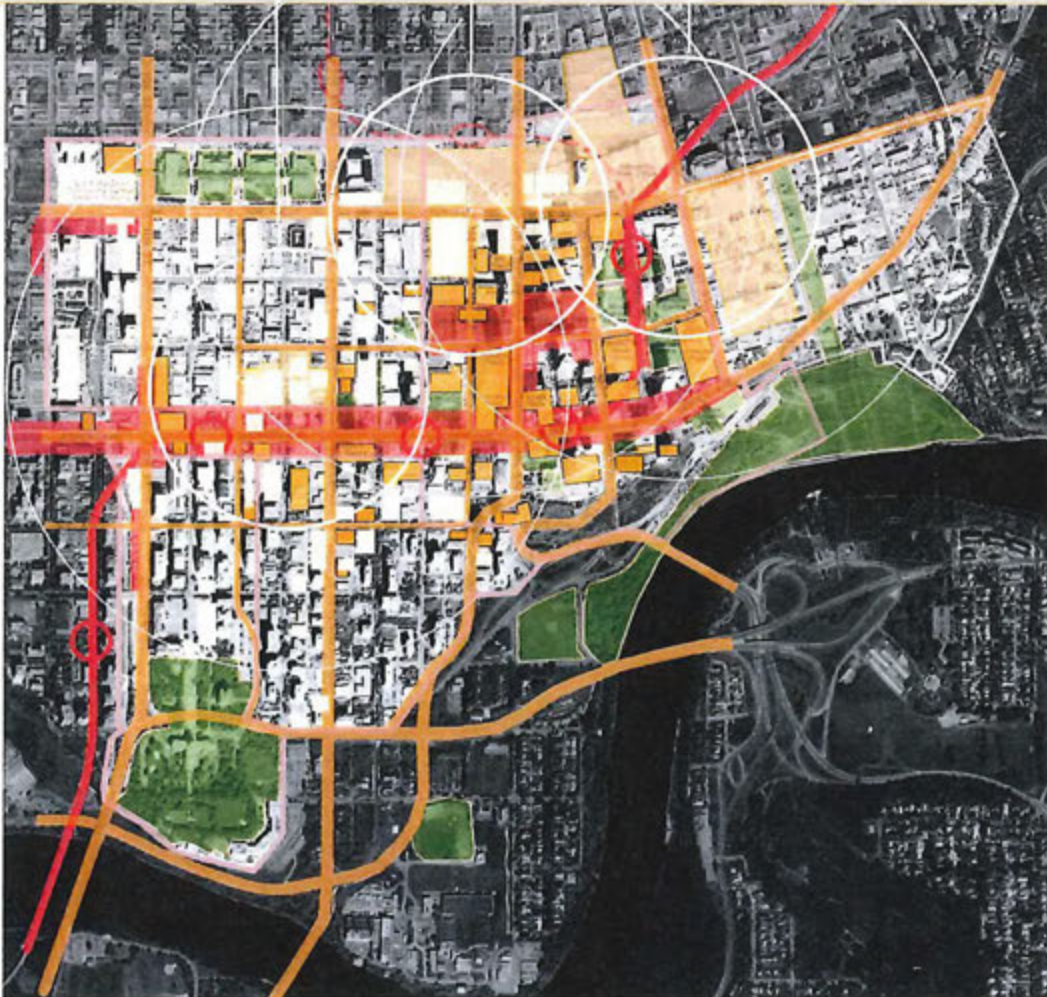
5 min. radius  
3,600 spaces 1,700 structure  
1,900 surface

10 min. radius  
11,700 spaces 7,000 structure  
4,700 surface

### 104 Ave. & 102 St.

5 min. radius  
5,500 spaces 3,900 structure  
1,600 surface

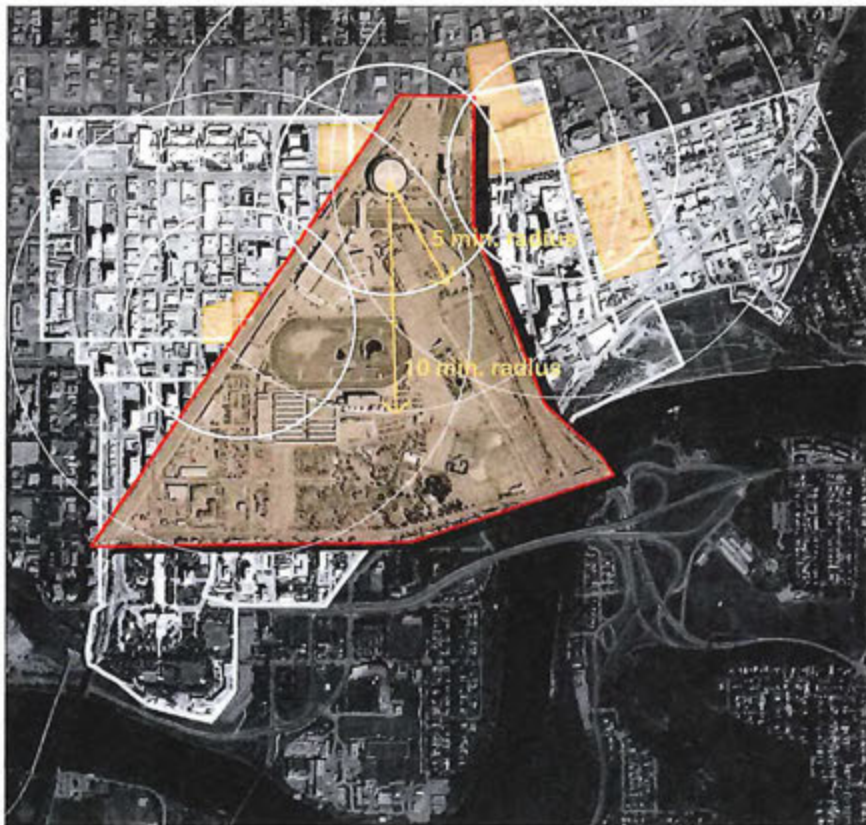
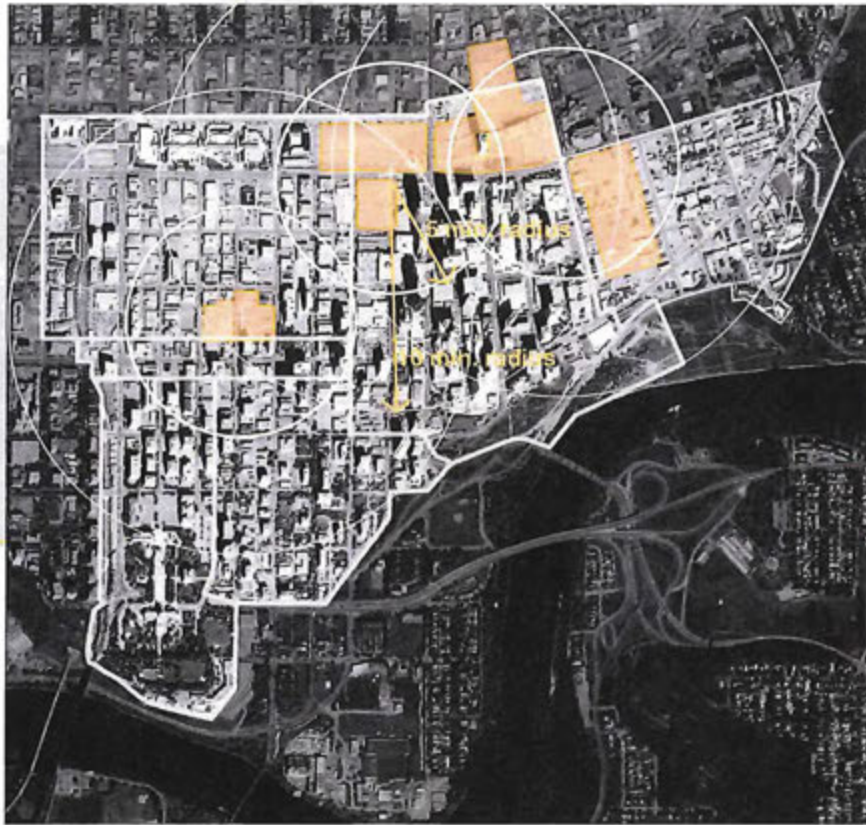
10 min. radius  
12,300 spaces 9,000 structure  
3,300 surface





# DEFINE DISTRICT – Northlands comparison

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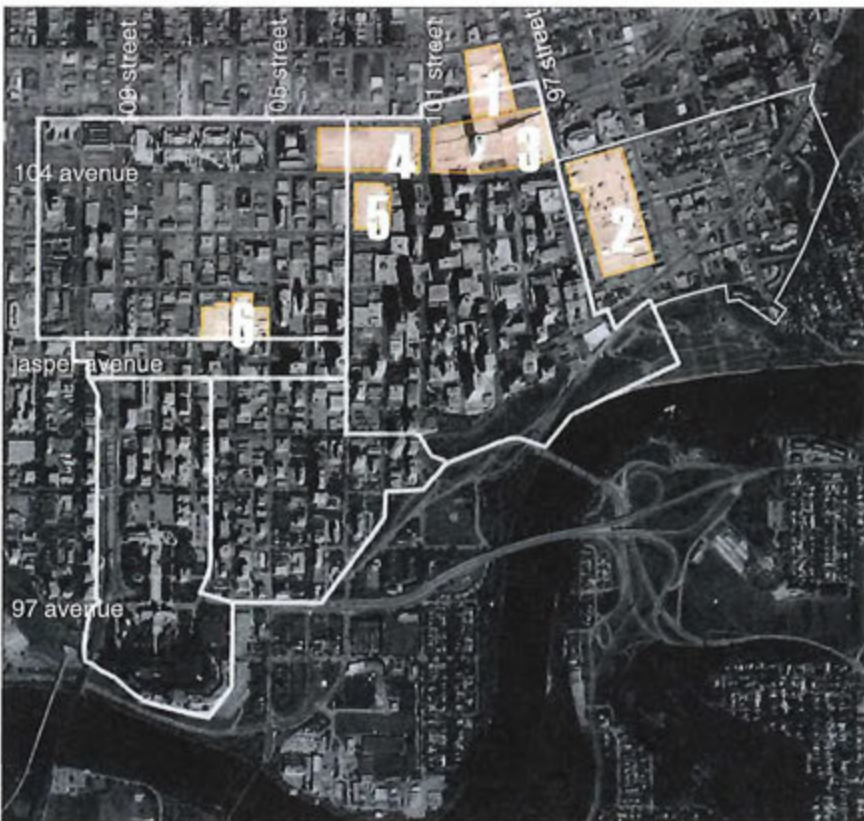


# SITE & ARCHITECTURAL RESPONSE



# URBAN DESIGN – downtown districts

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## Site and Architectural Response

Analyses of the identified sites provides an objective framework for further explorations. This information should help to narrow options to one or two sites that would be the subject of more detailed investigations with government agencies, architects and urban planners, engineers, construction estimators and economic development specialists. For obvious and pragmatic reasons, including impact on site acquisition costs, it's important to maintain a perception that multiple sites remain in consideration. None of the sites studied are problem free or without certain risks associated with a public project of this scale. The attributes and limitations of each site are delineated.



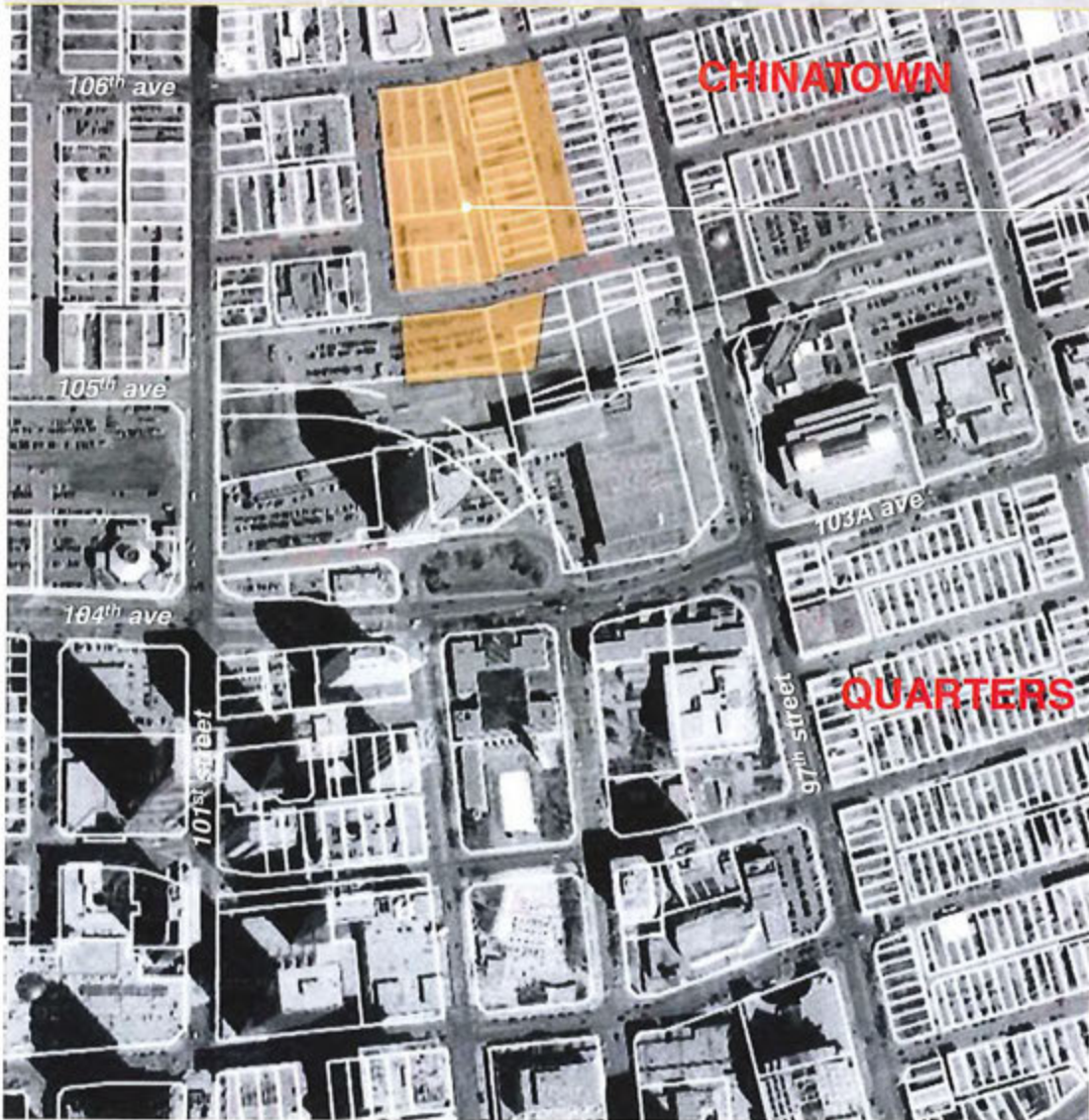
#### **North Post Office site**

At 6.54 acres it's a fairly tight site even with the required closure of 98th Street to accommodate a practice ice sheet and parking. Adjacency to the 105th Avenue corridor initiative might offer opportunities to create transitions and better connect the site to the central business district – a formidable challenge for pedestrians given the distance and barriers involved. The small site also presents service entry challenges for trucks that would likely involve costly solutions such as ramping. From an urban planning standpoint, China Town development could be strengthened but neighborhoods immediately north of the site could be overwhelmed by the arena's massive scale. Given the limitations of size and access difficulty, it doesn't compare favorably to other options. Proposed LRT expansion could boost connectivity to the LRT which now is marginal.



# SITE and ARCHITECTURAL RESPONSE

## North Post Office site

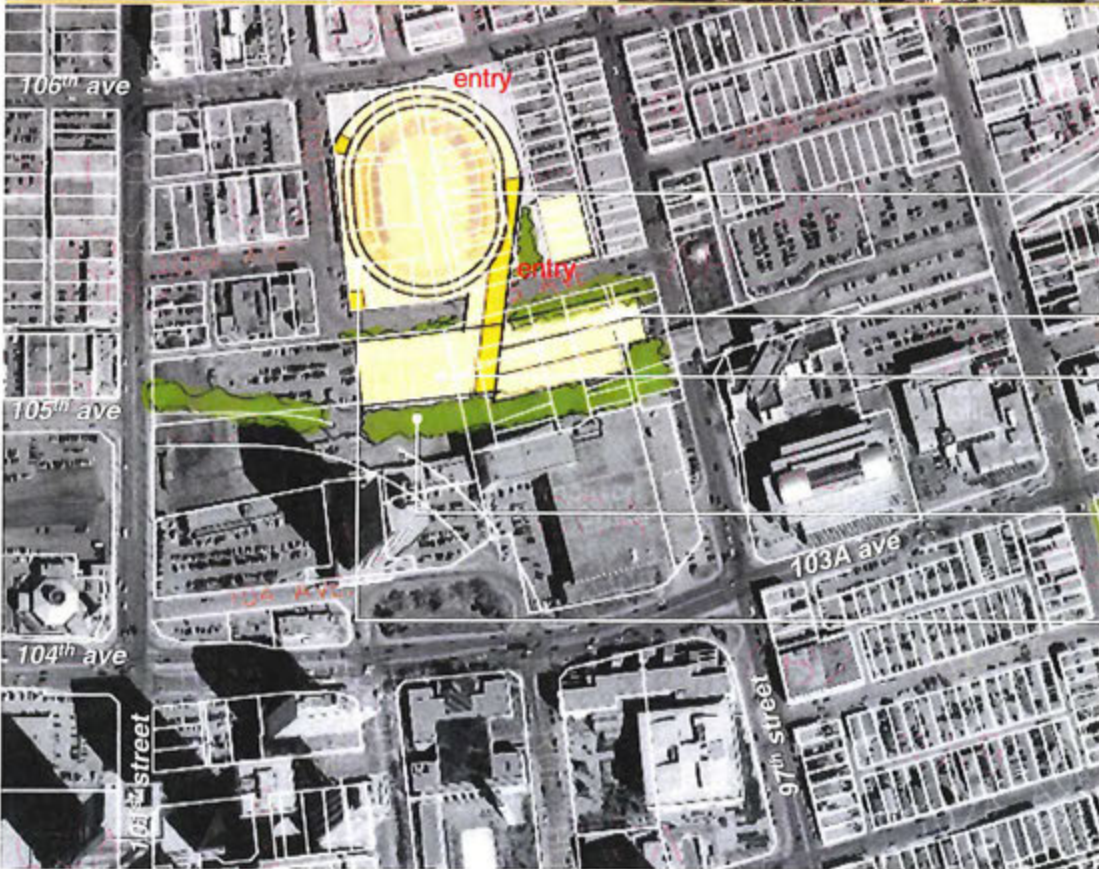
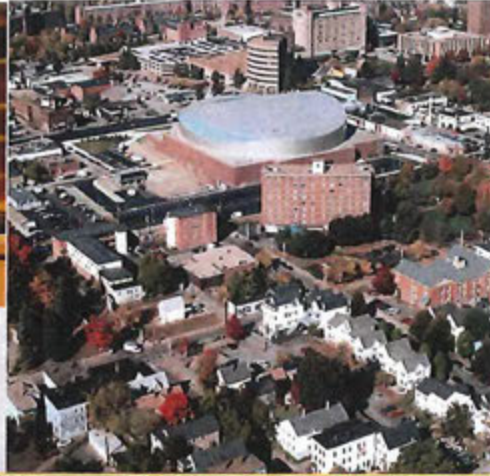


+/- 6.54 acres  
Closure of 98th st



# SITE and ARCHITECTURAL RESPONSE

## 1 North Post Office site



18,000 seat ARENA

Dev / Parking Opportunity

Practice Sheet

105th Ave corridor connection

Service Entry

Small site  
Elephant in the neighborhood  
Urban fringe  
Difficult access



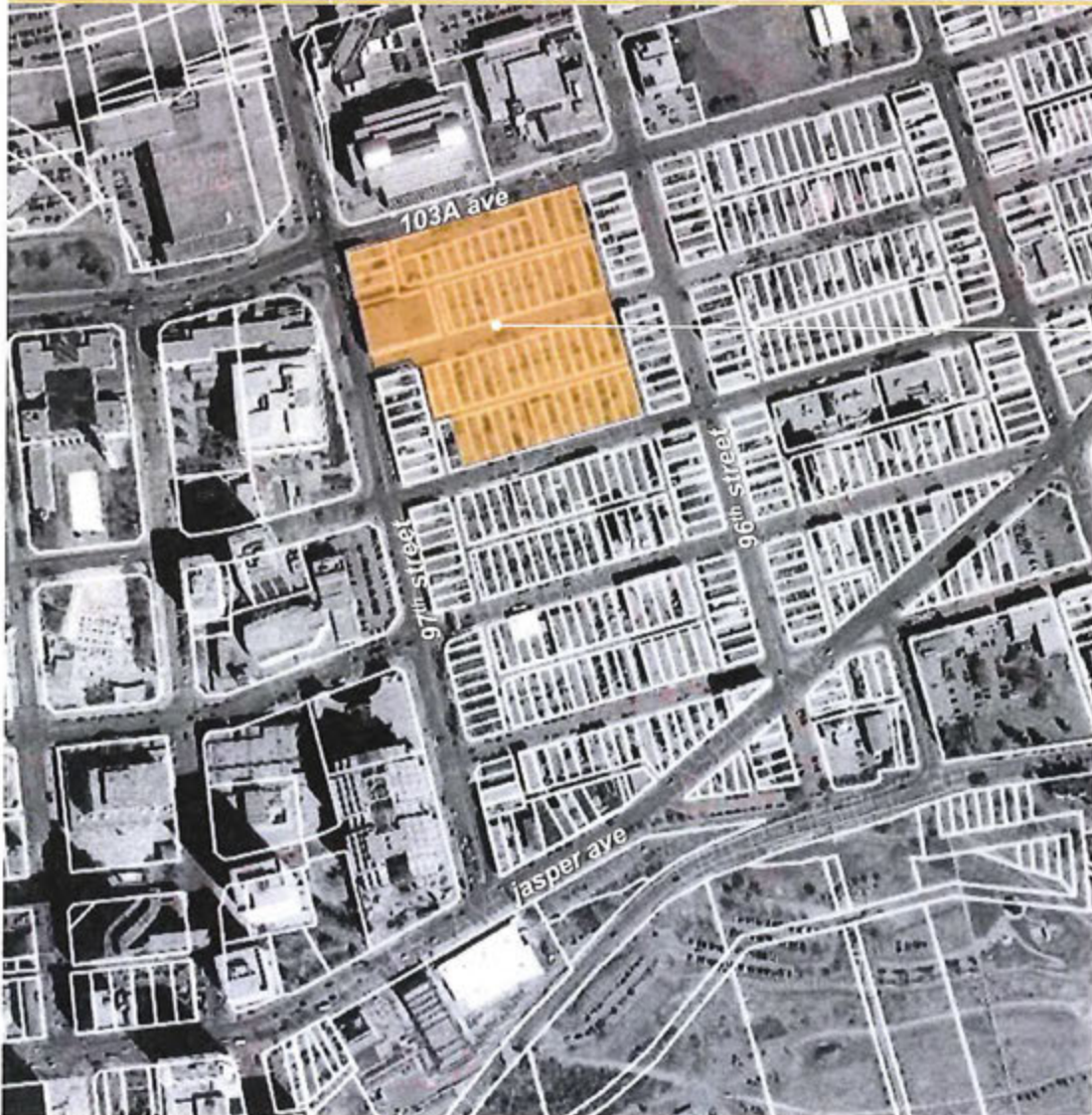
### **Quarters Option One**

Any discussion of the Quarters must begin with the 97th Street psychological wall to downtown. However, the southeast corner of 103rd Avenue and 97th Street could offer an attractive and high impact gateway to the Quarters that could provide an effective jumpstart to the eastern district and boost the east Quarters armature. And with the closure of 103rd Avenue a 7.42 acre site is created that is ample for the arena and ice sheet with adequate service entry. The ice sheet and community uses could be helpful to transition of the neighborhood. The LRT and Sir Winston Churchill Square are within reasonable reach but synergistic development is stymied on the north and west by large government buildings. The city controls much of the site. Selectively preserve existing buildings on the site's edges could add a desirable urban design element.



# SITE and ARCHITECTURAL RESPONSE

## 2 Quarters site OPTION 1



+/- 7.42 acres  
Closure of 103 ave



# SITE and ARCHITECTURAL RESPONSE

## 2 Quarters site

MAXIMUM DEVELOPMENT

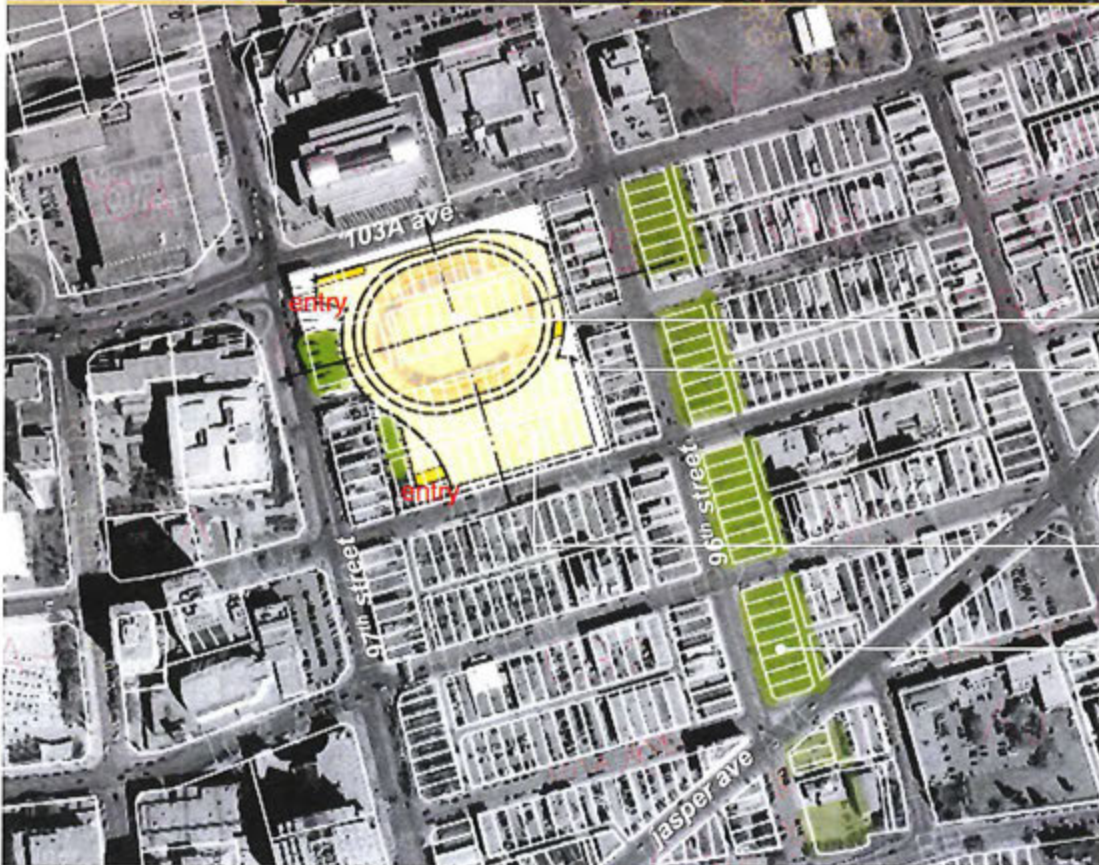


+/- 9.96 acres  
Closure of 103 ave



# SITE and ARCHITECTURAL RESPONSE

## 2 Quarters site OPTION 1



18,000 seat ARENA  
Service Entry

Practice Sheet

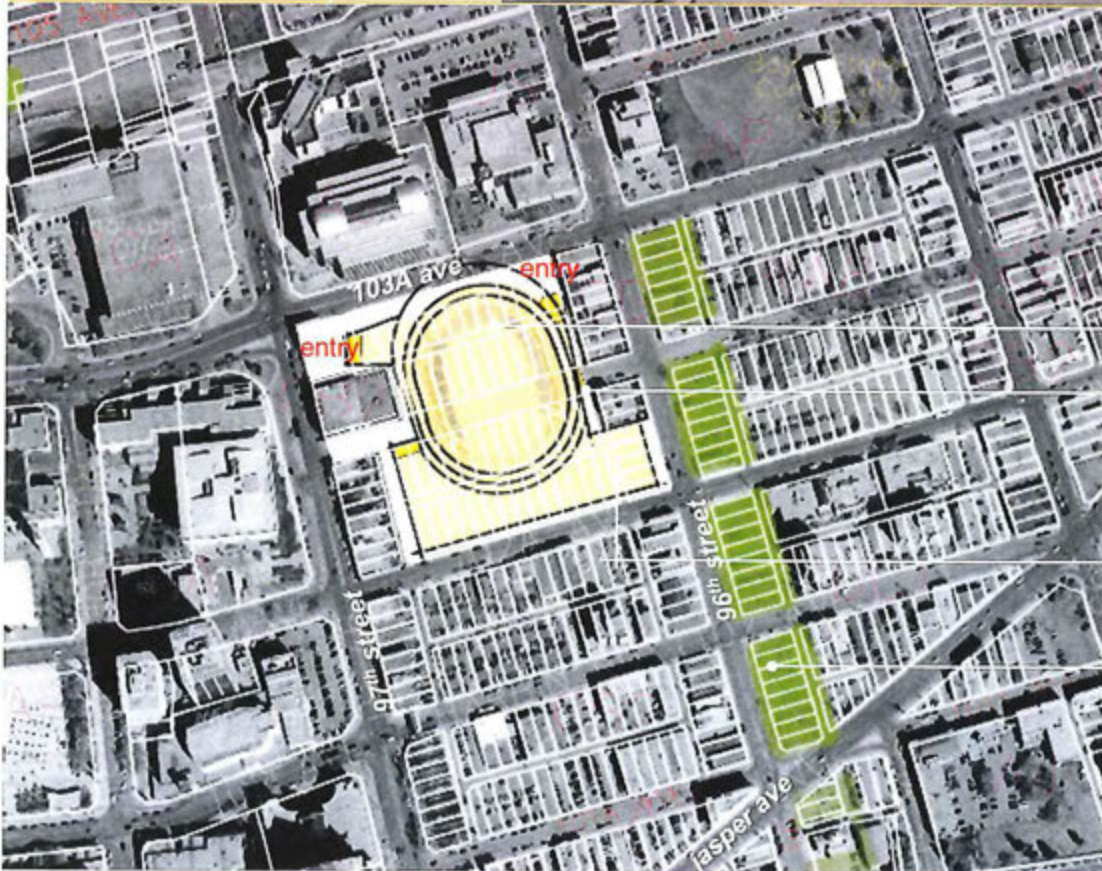
EAST quarters  
armature

Proximity to City Hall  
Plaza  
Connection to 103A  
Ave.  
Gateway site  
Civic wall at 97<sup>th</sup> street  
Property acquisition  
Practice ice as  
important nghbd. center



# SITE and ARCHITECTURAL RESPONSE

## 2 Quarters site OPTION 1a



- 18,000 seat ARENA
- Service Entry
- Practice Sheet
- EAST quarters armature

Proximity to City Hall Plaza  
Connection to 103A Ave.  
Gateway site  
Civic wall at 97<sup>th</sup> street  
Property acquisition  
Practice ice as important nghbd. center



# SITE and ARCHITECTURAL RESPONSE

## 2 Quarters site

OPTION 1b

DEVELOPMENT POTENTIAL



- Dev opportunities
- 18,000 seat ARENA
- Service Entry
- Practice Sheet
- EAST quarters armatui
- Proximity to City Hall Plaza
- Connection to 103A Ave.
- Civic wall at 97th street
- Property acquisition
- Practice ice as important nghbd. center



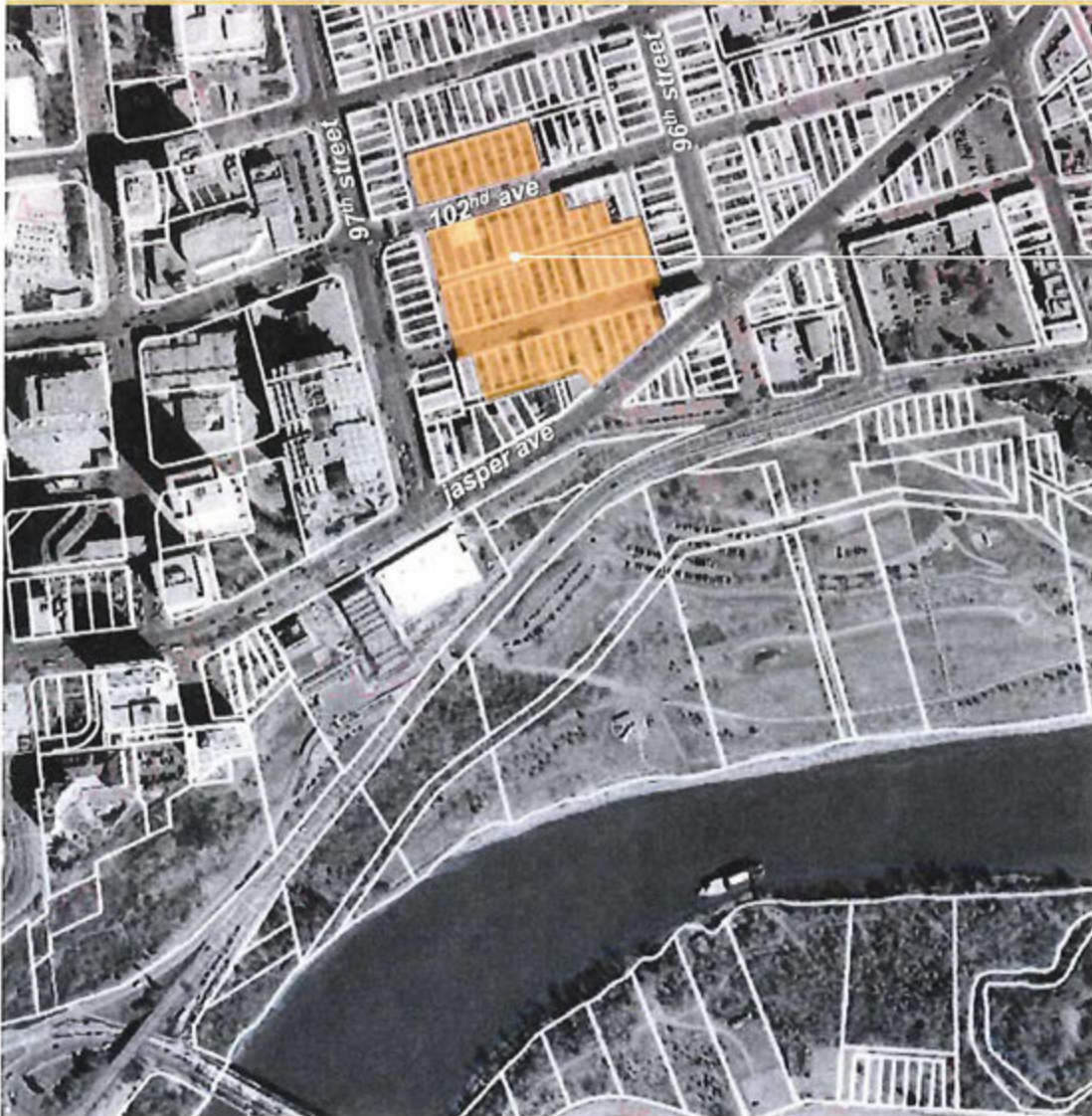
### **Quarters Option Two**

Option two does not provide the type of dramatic gateway as Option One but it offers the significant advantage of linkage to Shaw Convention Center and an environment that could prove more fertile for ancillary private development. In combination with the convention center, there exists potential for an east Quarters entertainment district that would extend downtown to the east along Jasper Avenue and reinforce connections with the river valley – one of Edmonton's defining attributes. The 5.97 acre site is tight. In addition to requiring the closure of 101st Avenue, the ice sheet would have to be on the north side of 102nd Avenue and a physical connector created. The porous street grid provides several convenient options for service entry and pedestrian circulation. Investigation of the costs and complexity of property acquisitions is a major consideration.



# SITE and ARCHITECTURAL RESPONSE

## 2 Quarters site OPTION 2

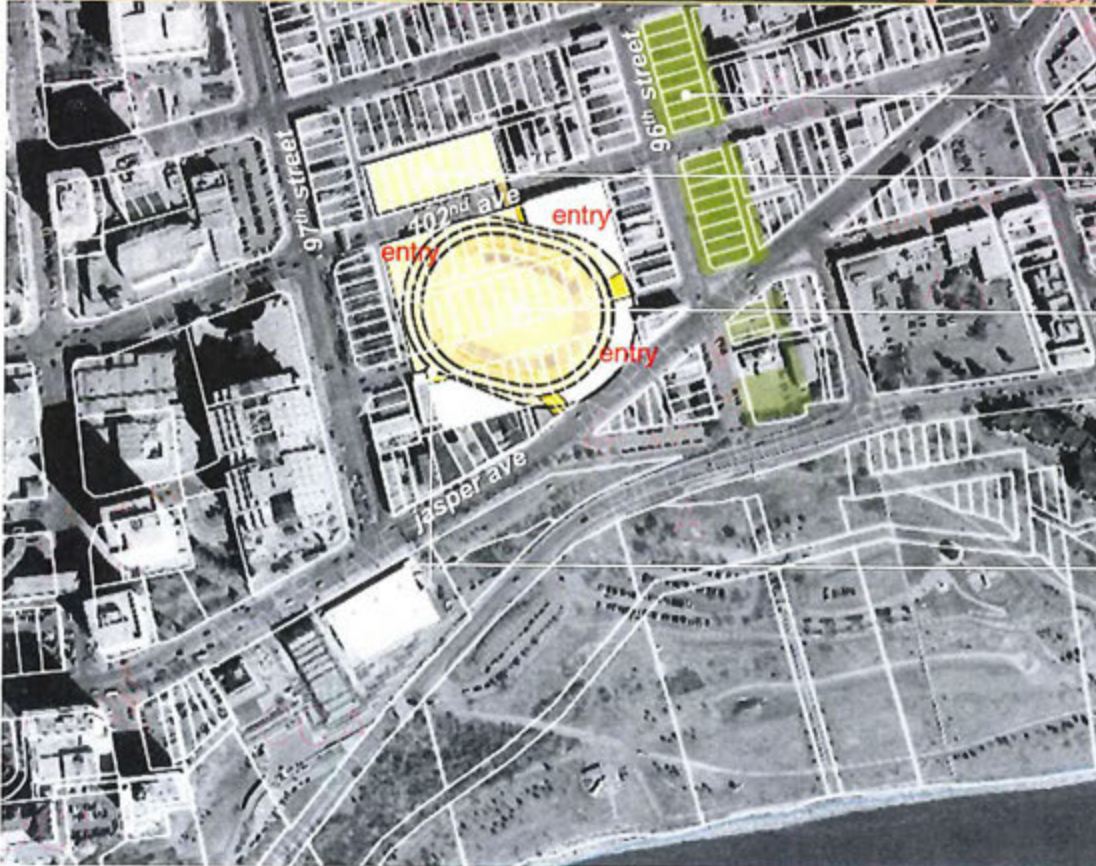


+/- 5.97 acres  
Closure of  
101A ave



# SITE and ARCHITECTURAL RESPONSE

## 2 Quarters site OPTION 2



EAST quarters  
armature

Practice Sheet

18,000 seat ARENA

Service Entry

Visibility to river valley  
Connection to Jasper  
ave.  
Property acquisition  
Shaw convention center  
proximity  
Civic piece to East  
Quarters



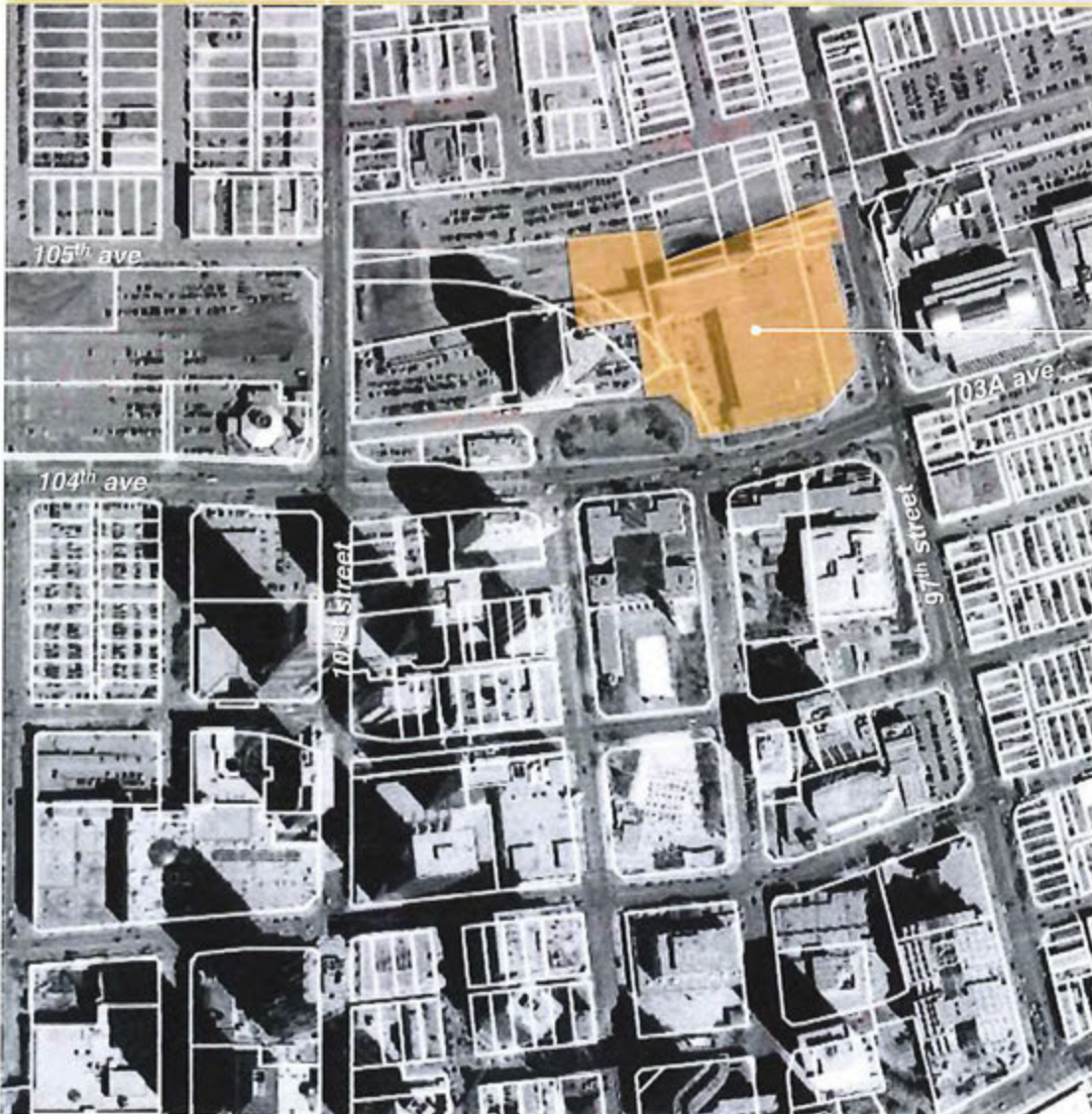
### **Post Office site**

An arena footprint of 6.15 acres is shown as a stand-alone option but the attributes of the site strongly suggest a larger mixed-use development that incorporates the entire 17.19 acres. As a stand-alone proposition, the arena would be isolated from downtown by the 104th Avenue corridor and City Hall. Proximity to Sir Winston Churchill Square is a plus but only if a strong connection is created. The notion of a broader mixed-use development could create the sense of destination and density that would help tie the project to downtown. Such a development also could provide a well-scaled transitional link to the north and west. It also could respond to development of the casino site. The courthouse, jail and city hall should be regarded as development barriers. Demolition and relocation issues could add costs and time delays. Access to the LRT is adequate.



# SITE and ARCHITECTURAL RESPONSE

Post Office site  
Site Area - footprint



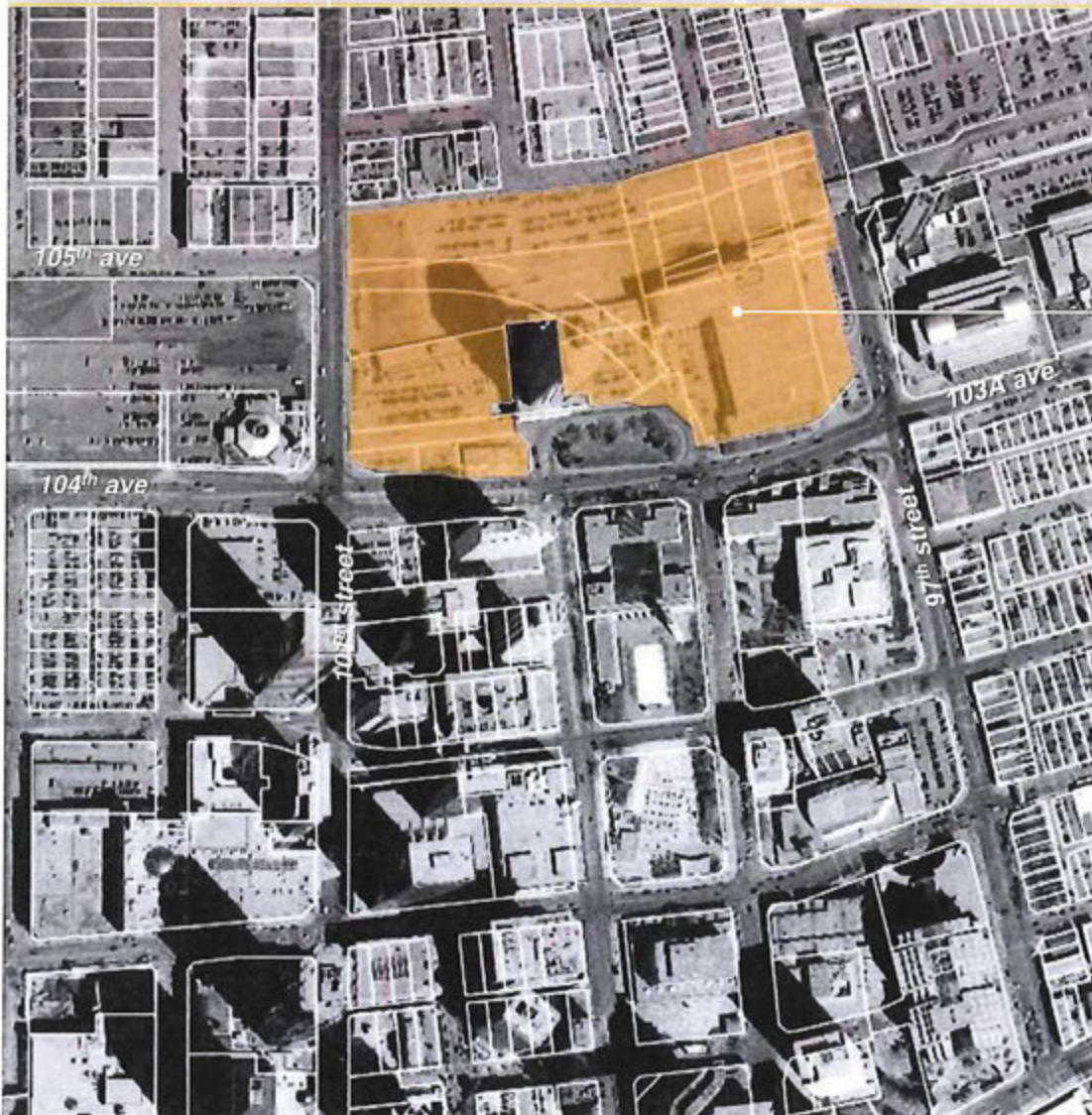
+/- 6.15 acres



# SITE and ARCHITECTURAL RESPONSE

## 3 Post Office site

MAXIMUM DEVELOPMENT



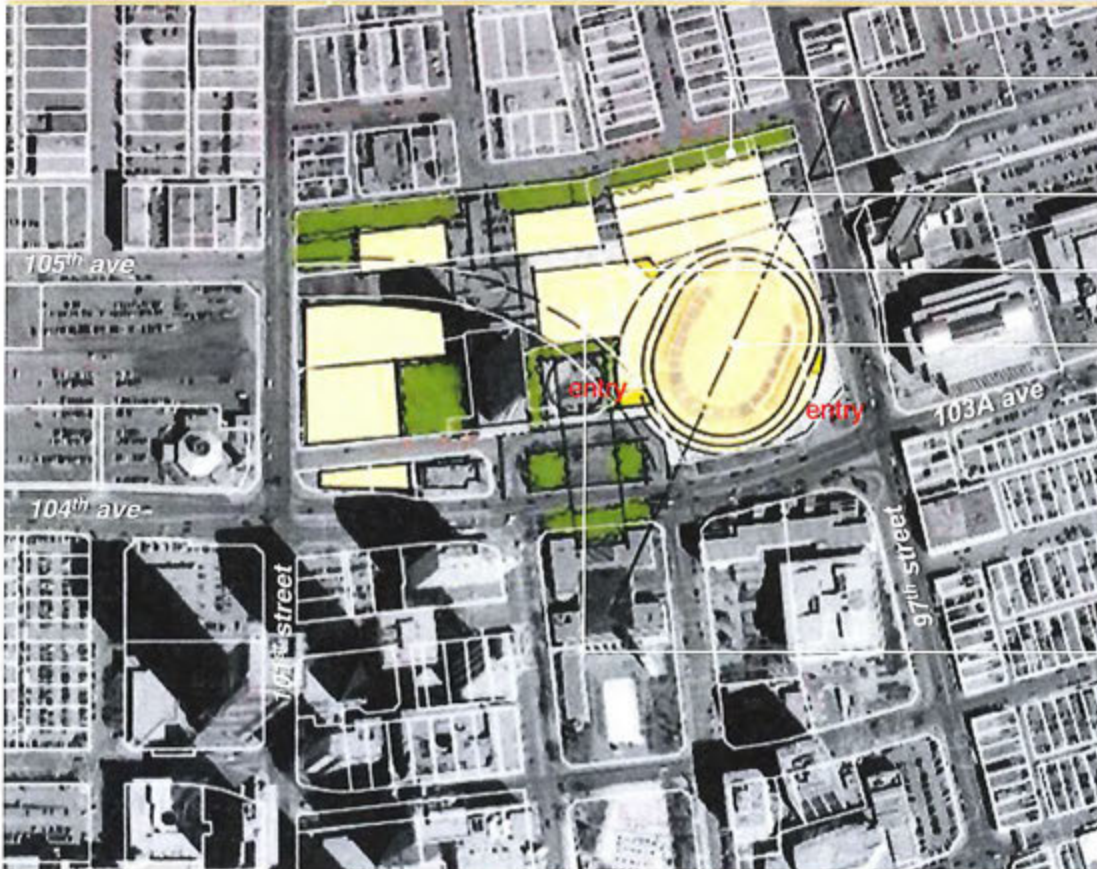
+/-17.19 acres



# SITE and ARCHITECTURAL RESPONSE

## Post Office site

DEVELOPMENT POTENTIAL



105<sup>th</sup> ave connection

Parking / Dev  
Opportunity

Service Entry

18,000 seat ARENA

Practice Sheet

City Hall plaza proximity  
Connection to 104<sup>th</sup> ave.  
Property acquisition  
Bridges north nghbds.  
w/ downtown  
Access



### **Casino site**

Like the Post Office site, the Casino site is best viewed as a larger mixed-use development opportunity in order to overcome the 104th Avenue corridor barrier and meaningfully extend downtown to the north. The site does not suffer the physical barriers of large-scale government buildings on the south and east. In fact, the character of the neighborhoods to the north and south are superior to the Post Office site in terms of their compatibility and suitability for mixed-use development. LRT connectivity is marginally inferior to the Post Office but could serve as a catalyst for proposed LRT expansion and improvements to the 105 Avenue corridor. There are a myriad of options for urban development, as illustrated in this report, including expansion opportunities to the south of 104th Avenue, including incorporation of the Greyhound Depot site.



# SITE and ARCHITECTURAL RESPONSE

## Casino site

Site area - footprint



+/- 7.77 acres



# SITE and ARCHITECTURAL RESPONSE

## 4 Casino site

MAXIMUM DEVELOPMENT

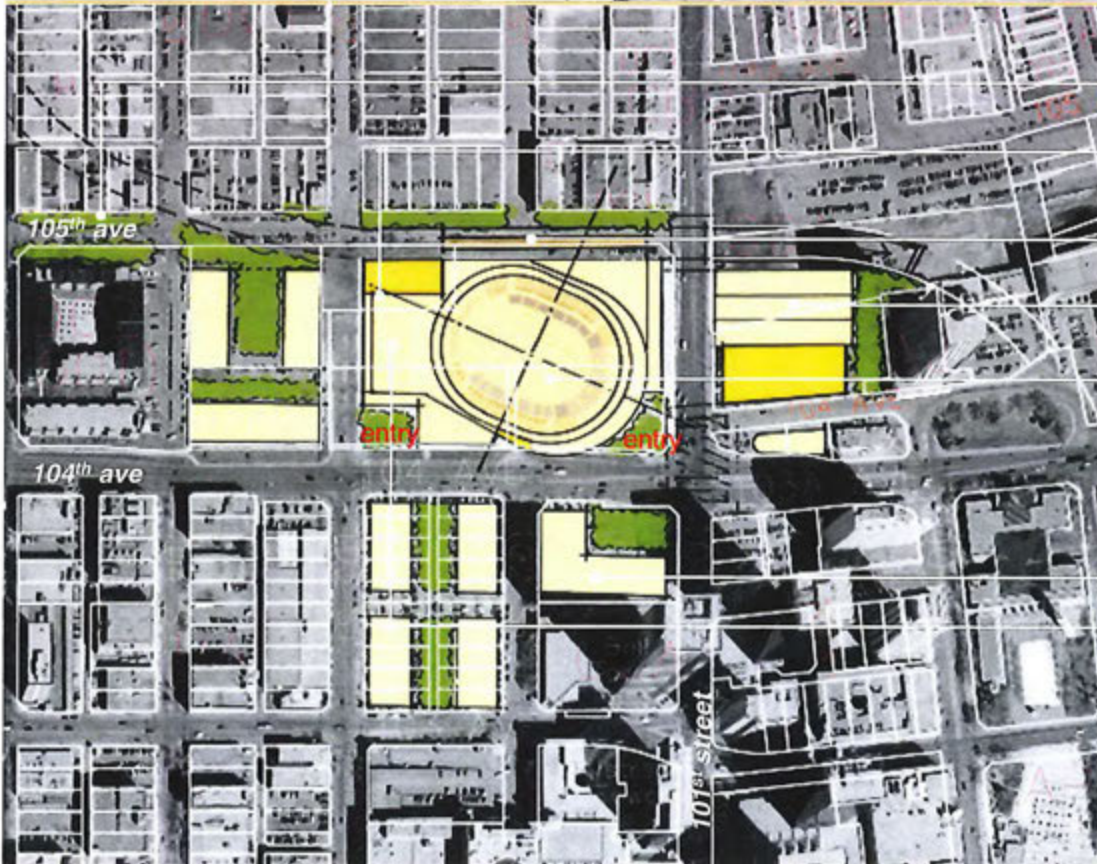


+/-12.06 acres



# SITE and ARCHITECTURAL RESPONSE

## Casino site OPTION 1



105<sup>th</sup> ave connection

Service Entry

Future LRT platform

Parking / Dev  
Opportunity

18,000 seat ARENA

Development  
Opportunities  
Practice Sheet

City Hall plaza proximity  
Connection to 104<sup>th</sup> ave.  
Property acquisition  
Bridges north nghbds.  
w/ downtown  
Access  
Future LRT platform  
Enhance 105<sup>th</sup> ave  
corridor

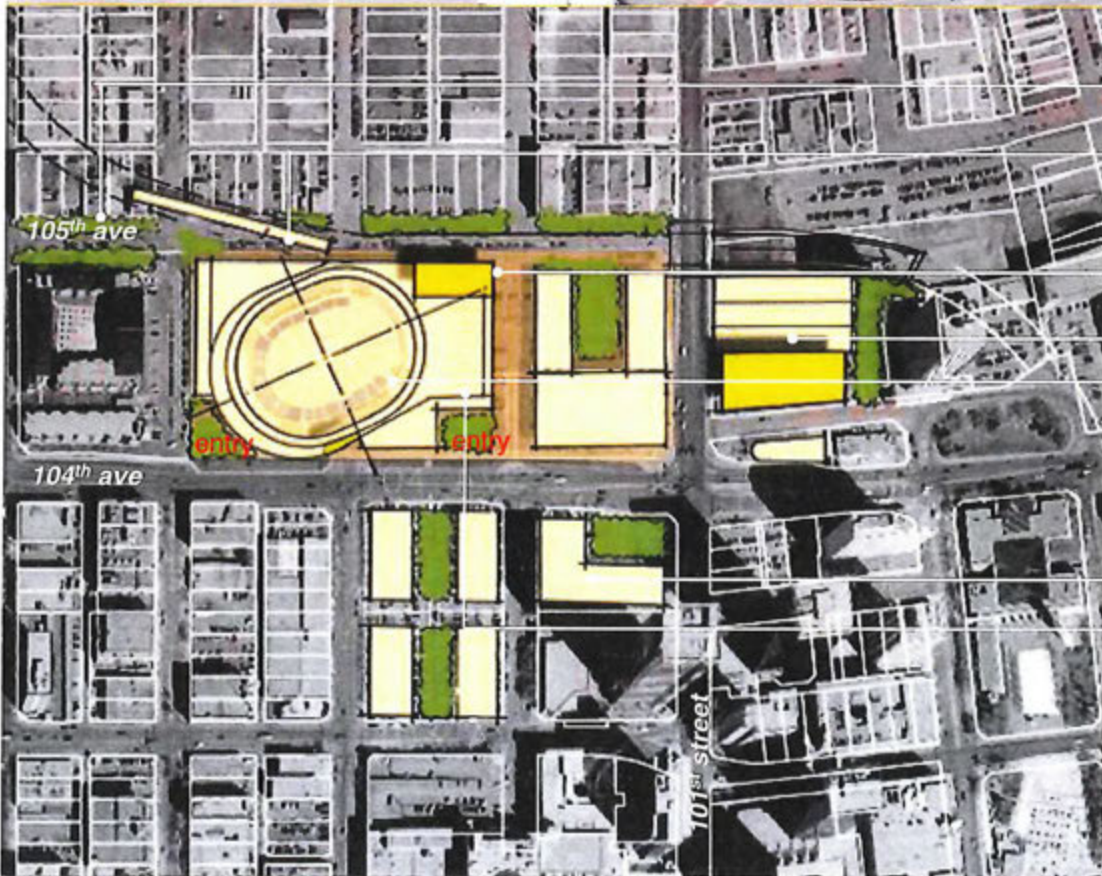


# SITE and ARCHITECTURAL RESPONSE

## Casino site

### OPTION 2

#### DEVELOPMENT POTENTIAL



105<sup>th</sup> ave connection

Future LRT platform

Service drive

Parking / Dev  
Opportunity

18,000 seat ARENA

Development  
Opportunities

Practice Sheet

City Hall plaza proximity  
Connection to 104<sup>th</sup> ave.

Property acquisition  
Bridges north nghbds.  
w/ downtown

Access

Future LRT platform

Enhance 105<sup>th</sup> ave  
corridor



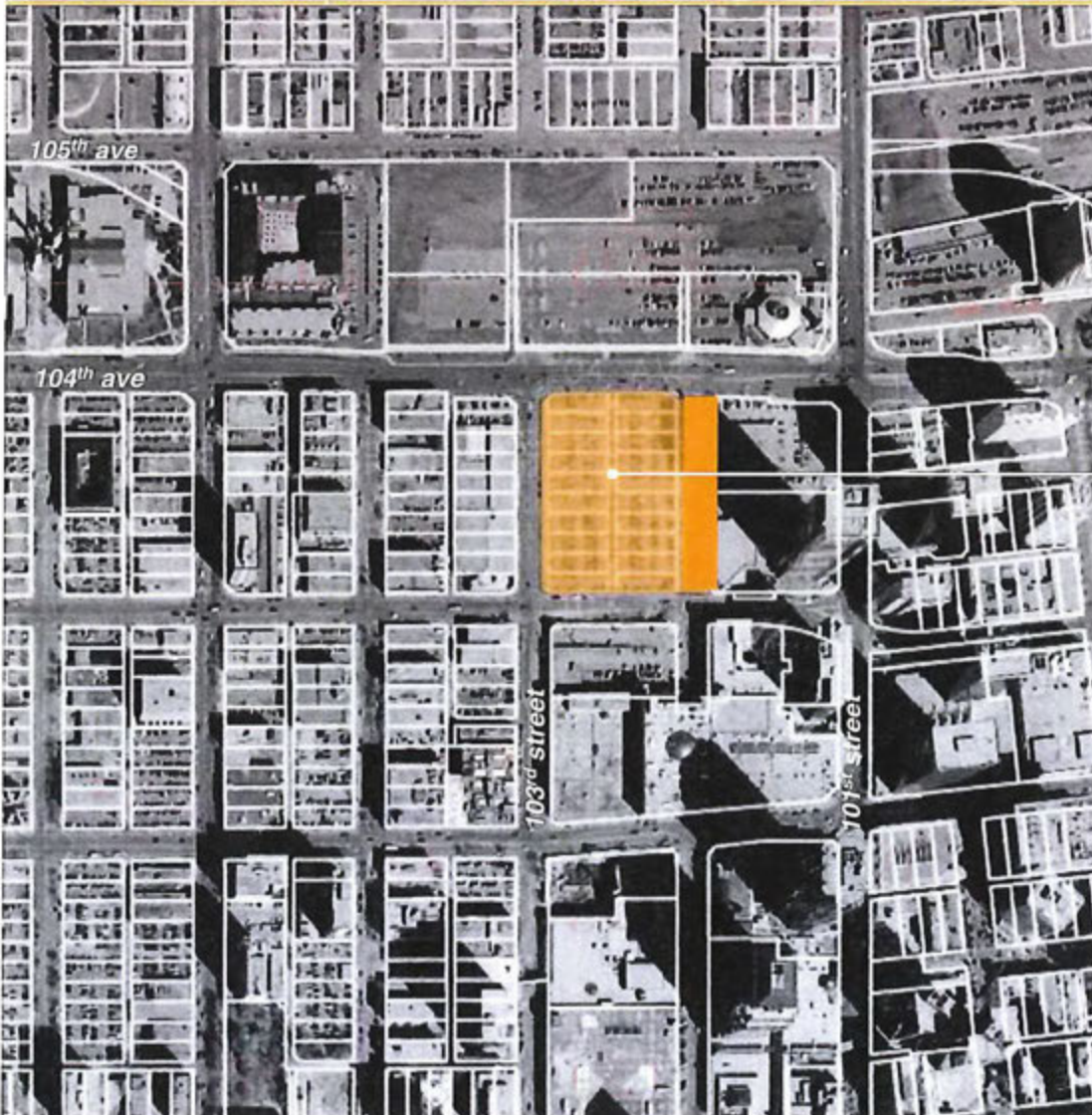


### **Greyhound Depot site**

Even with the closure of 102nd Avenue, the 4.53 acre site is too small. An 18,000-seat arena could be wedged onto the site but desirable amenities and an ice sheet would not fit. The service entry would have to go under 104th Avenue – a costly and inconvenient solution. The constraints of the site would also preclude a dramatic entry or arrival experience. The real potential of this property is as an enhancement to the Casino site that could provide highly desirable linkage to the existing downtown fabric of shops, restaurants and entertainment.

# SITE and ARCHITECTURAL RESPONSE

## 5 Greyhound depot site

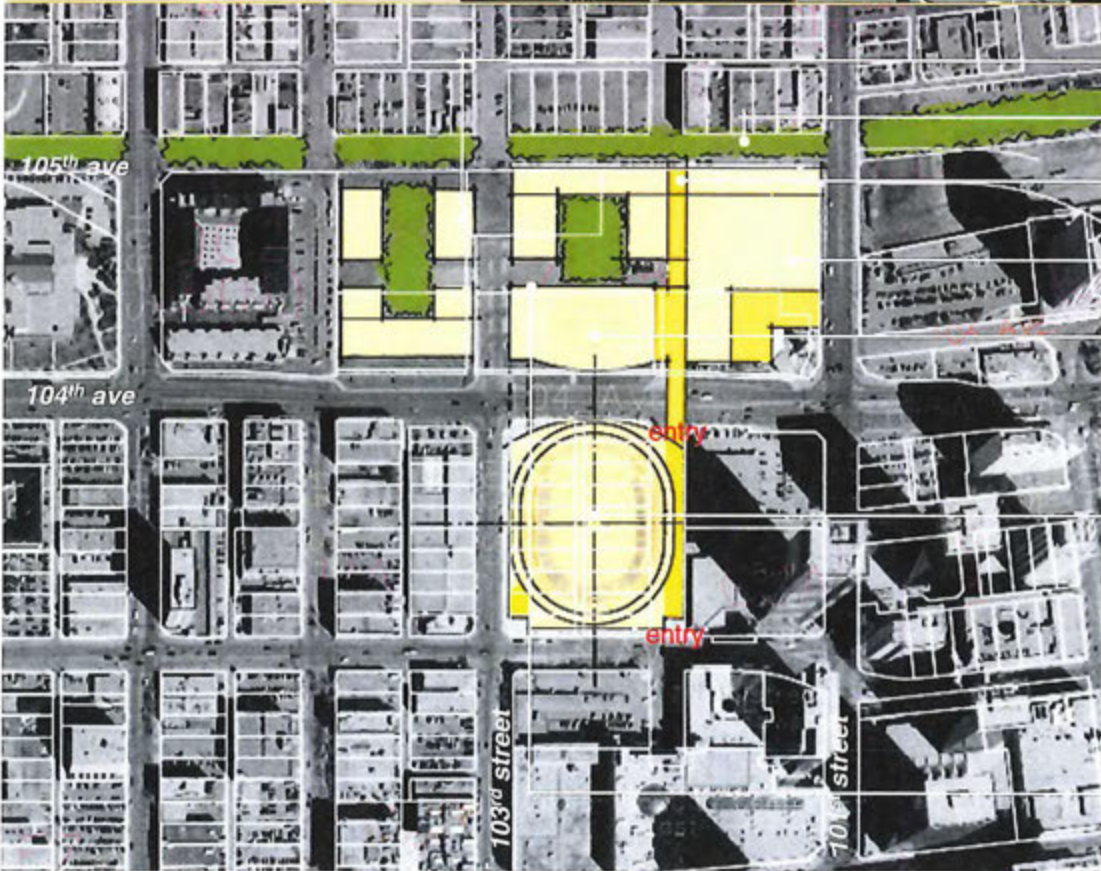


+/- 4.53 acres +  
1.30 ac practice  
Sheet  
Total 5.83 ac  
Closure of 102 st



# SITE and ARCHITECTURAL RESPONSE

## Greyhound depot site



Development Opportunities  
105<sup>th</sup> ave connection  
Future LRT platform  
Parking / Dev Opportunity  
Practice Sheet

18,000 seat ARENA

Service Entry under 104 ave

City Hall plaza proximity  
Gateway to 104<sup>th</sup> ave.  
Property acquisition  
Small site  
Access  
Adjacent to historic core



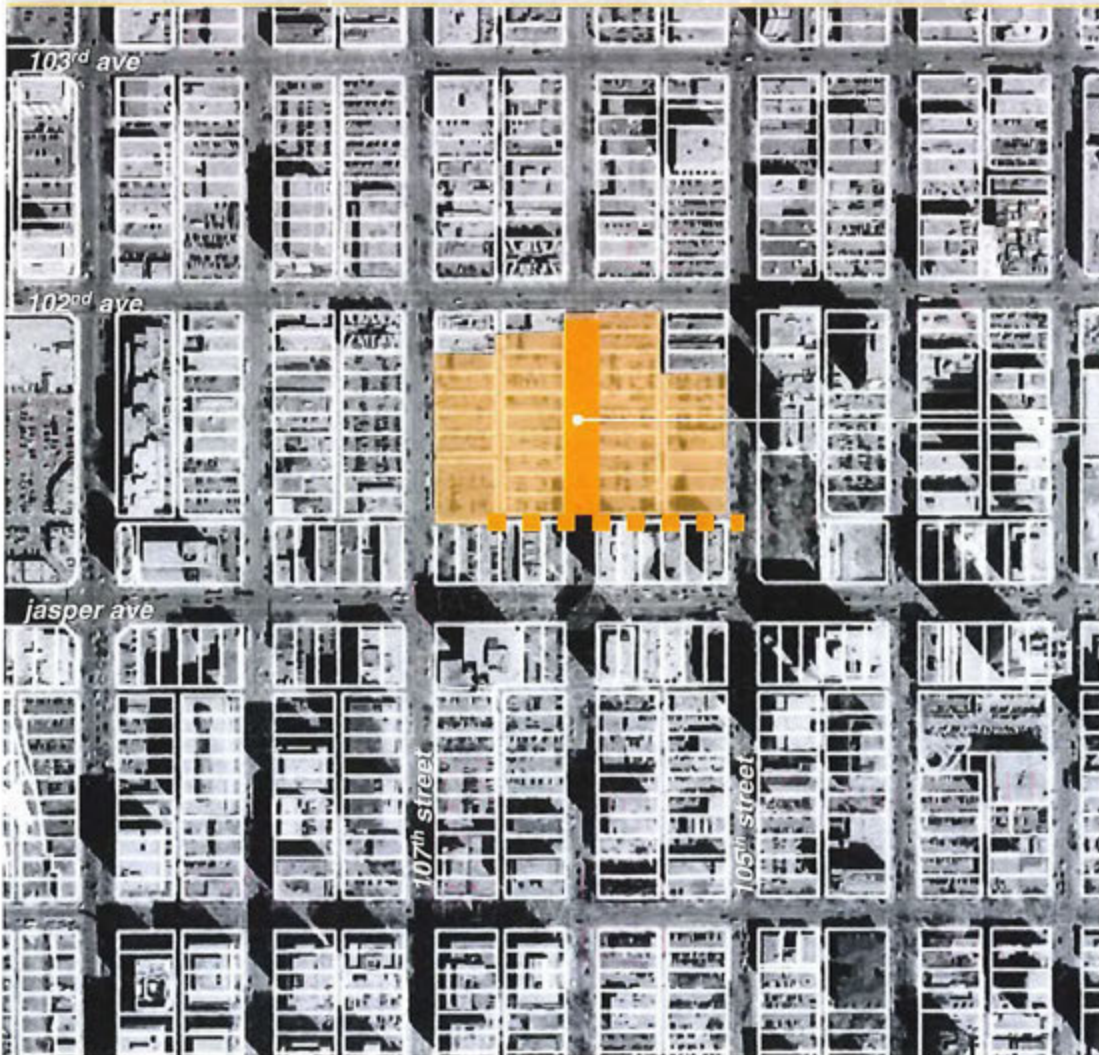
#### **West Jasper Avenue Warehouse site**

Depending on the disposition of 106th Street, this site offers between 6.5 and 11 acres that are virtually surrounded by a fabric of desirable and fertile mixed-use opportunities. It boasts a strong tie to Jasper Avenue and excellent LRT access. The scale of the neighborhood is pedestrian friendly and rich in variety. The site comfortably reaches to both the heart of downtown and burgeoning warehouse district neighborhood redevelopment. These inherent strengths could be expected to spur significant and immediate "organic" redevelopment driven by the interest of many property owners. These same strengths are also the source of possible objections. First, the multiplicity of parcels on and around the site could add time and costs to site acquisition. Secondly, while an arena would provide a compelling and immediate boost to the area it may be viewed as having less long-term benefit for a downtown that faces more serious challenges to the north and east.



# SITE and ARCHITECTURAL RESPONSE

## West Jasper Avenue Warehouse site

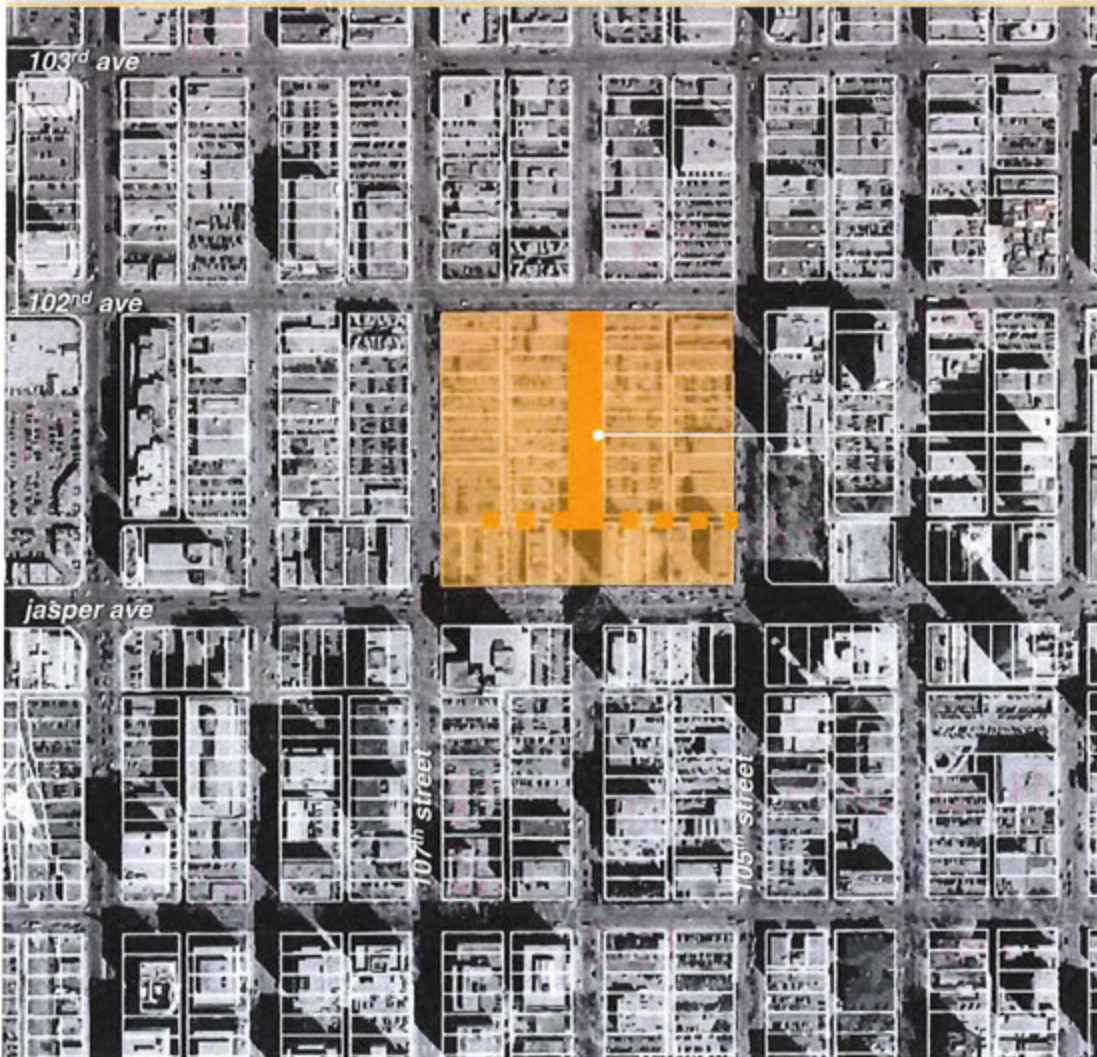


+/- 6.65 acres  
Closure of 106 st  
Maintain alley



# SITE and ARCHITECTURAL RESPONSE

**West Jasper Avenue  
Warehouse site**  
MAXIMUM DEVELOPMENT

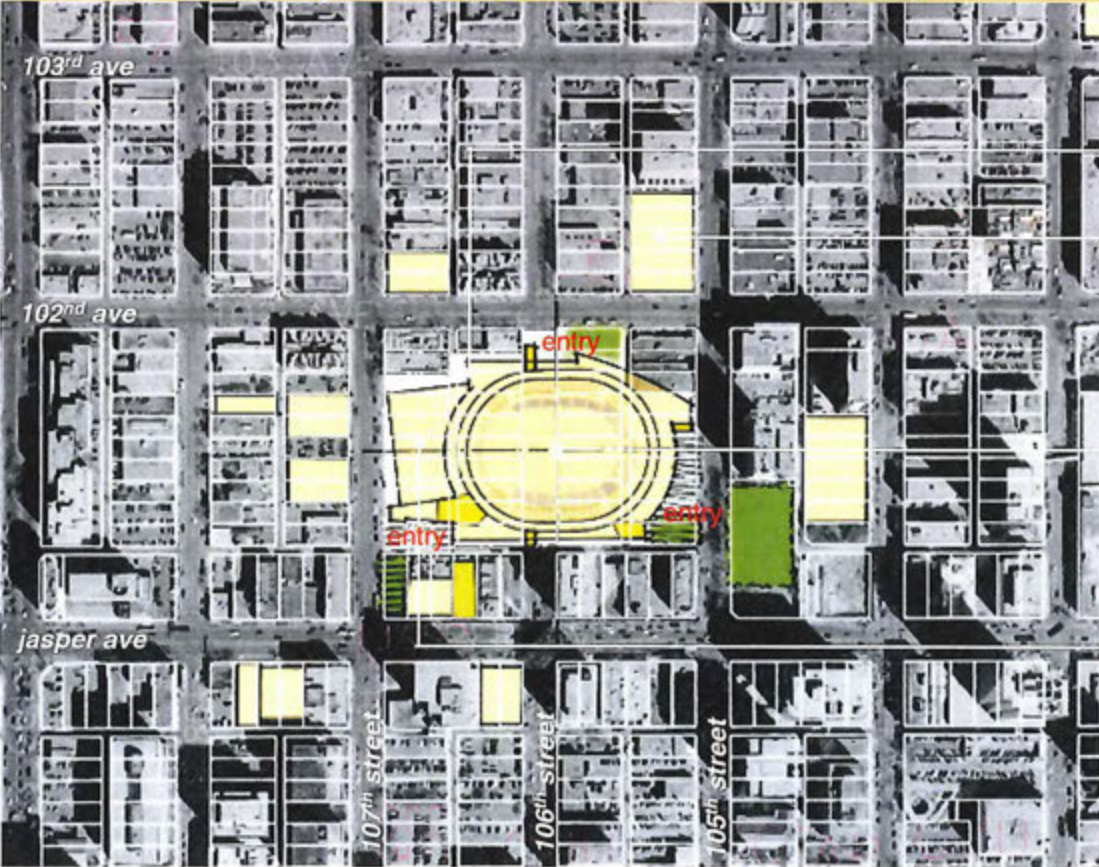


+/-11.05 acres  
Closure of 106 st  
& alley



# SITE and ARCHITECTURAL RESPONSE

## West Jasper Avenue Warehouse site



Service Entry

Development opportunities

18,000 seat ARENA

Practice Sheet

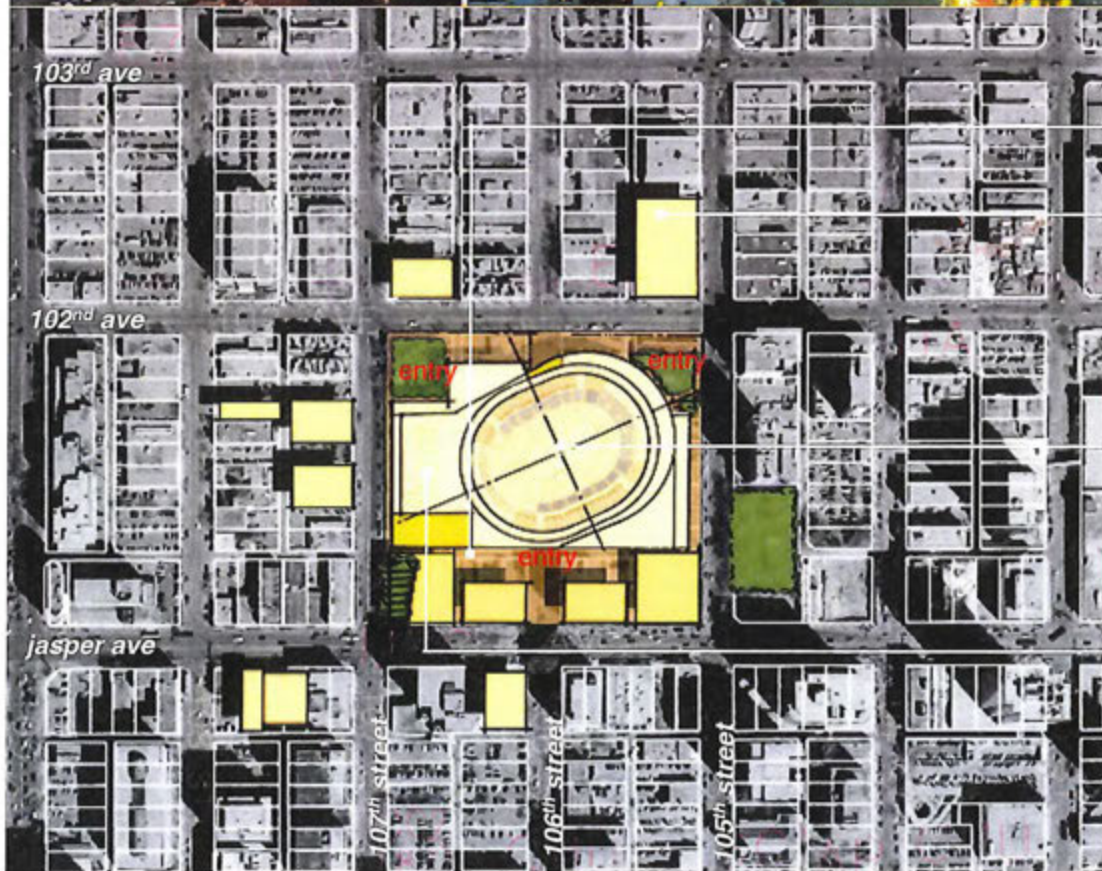
West Jasper Ave anchor  
Proximity to LRT  
Pedestrian scale  
New neighborhood connection



# SITE and ARCHITECTURAL RESPONSE

## West Jasper Avenue Warehouse site

DEVELOPMENT POTENTIAL  
OPTION A



Service Entry

Development opportunities

18,000 seat ARENA

Practice Sheet

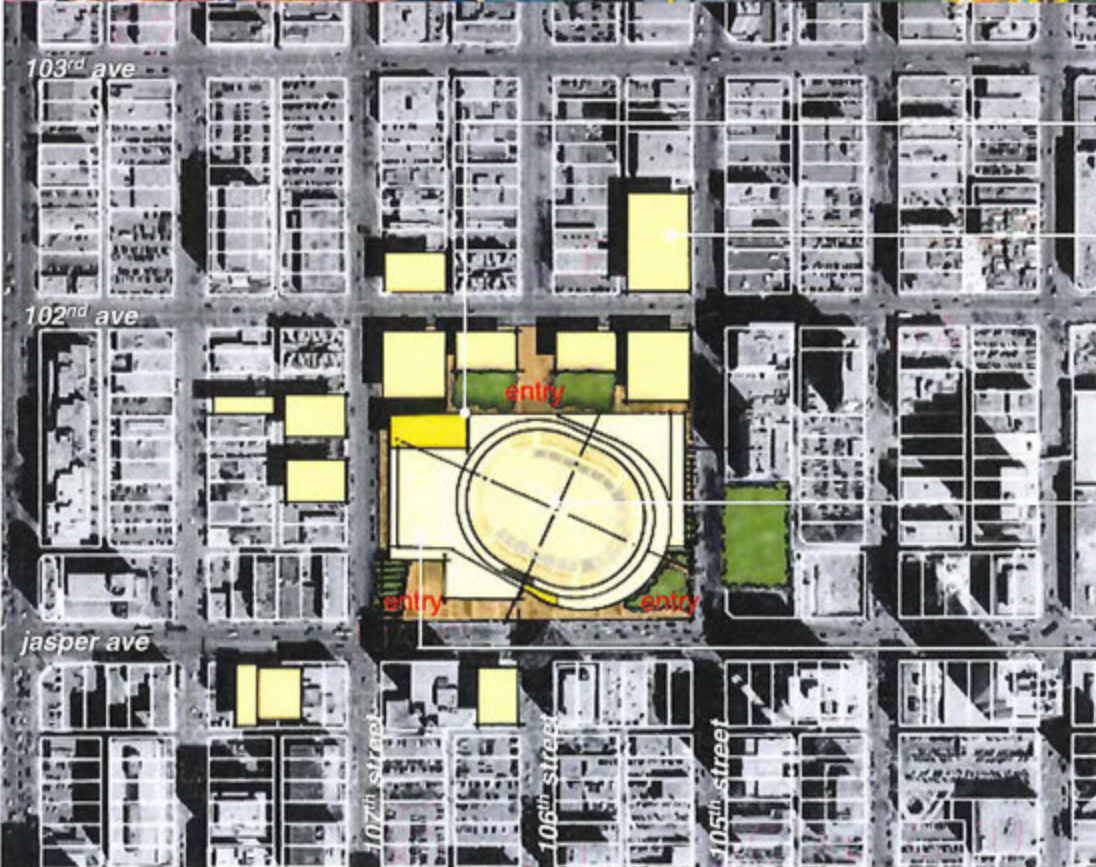
Jasper Ave development  
Proximity to LRT  
Pedestrian scale  
Neighborhood connection



# SITE and ARCHITECTURAL RESPONSE

## West Jasper Avenue Warehouse site

DEVELOPMENT POTENTIAL  
OPTION B



Service Entry

Development opportunities

18,000 seat ARENA

Practice Sheet

West Jasper Ave anchor  
Proximity to LRT  
Pedestrian scale  
Warehouse  
neighborhood dev.



#### **Northlands site**

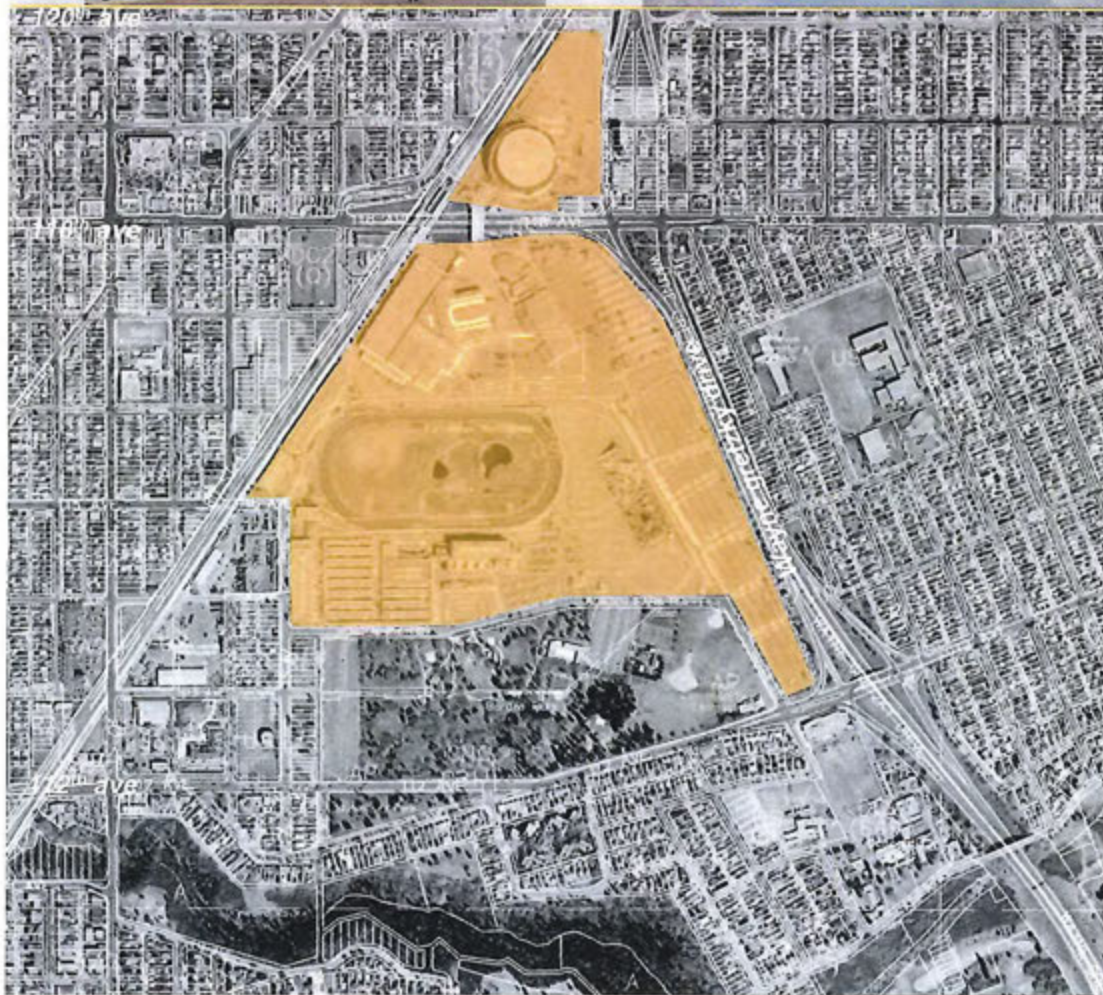
The existing home of Rexall Place does not impact the downtown area but it could support the City's 118th Avenue corridor initiative and offers an expedient solution to the need for a new arena. The list of positive attributes include: excellent LRT access, a large inventory of parking, a single property owner, linkage to an existing conference/exhibition complex and familiarity to arena patrons. The massive scale and potential of the site is illustrated by comparison to the footprint of Disneyland and the recent Kansas Speedway development that has spurred a major entertainment/retail destination in a previously unheralded and undeveloped area of metro Kansas City.



## SITE LOCATION : NORTHLANDS SITE

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### 7 Northlands site





# SITE LOCATION : NORTHLANDS SITE

## 7 Northlands site



LRT Development opportunities

Parking / retail opportunities

Pedestrian space / plaza

18,000 seat ARENA

Practice Sheet

Structured Parking

Service Entry  
Expanded horse track

Reinforce 118<sup>th</sup> ave corridor  
Proximity to LRT  
Neighborhood connection  
Entertainment destination



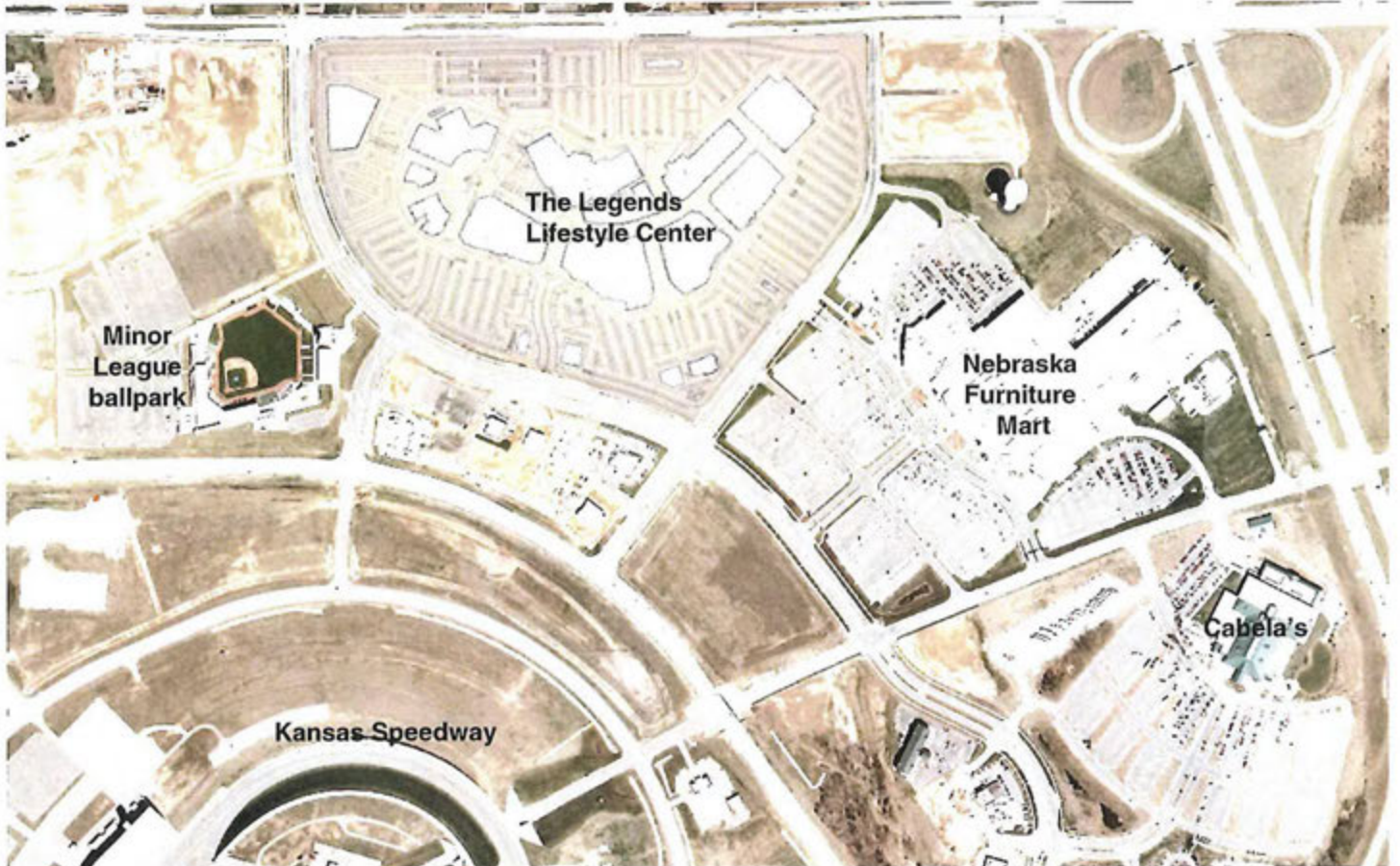


Northlands site as Entertainment hub

DisneyLand footprint



Kansas Speedway development



Minor League ballpark

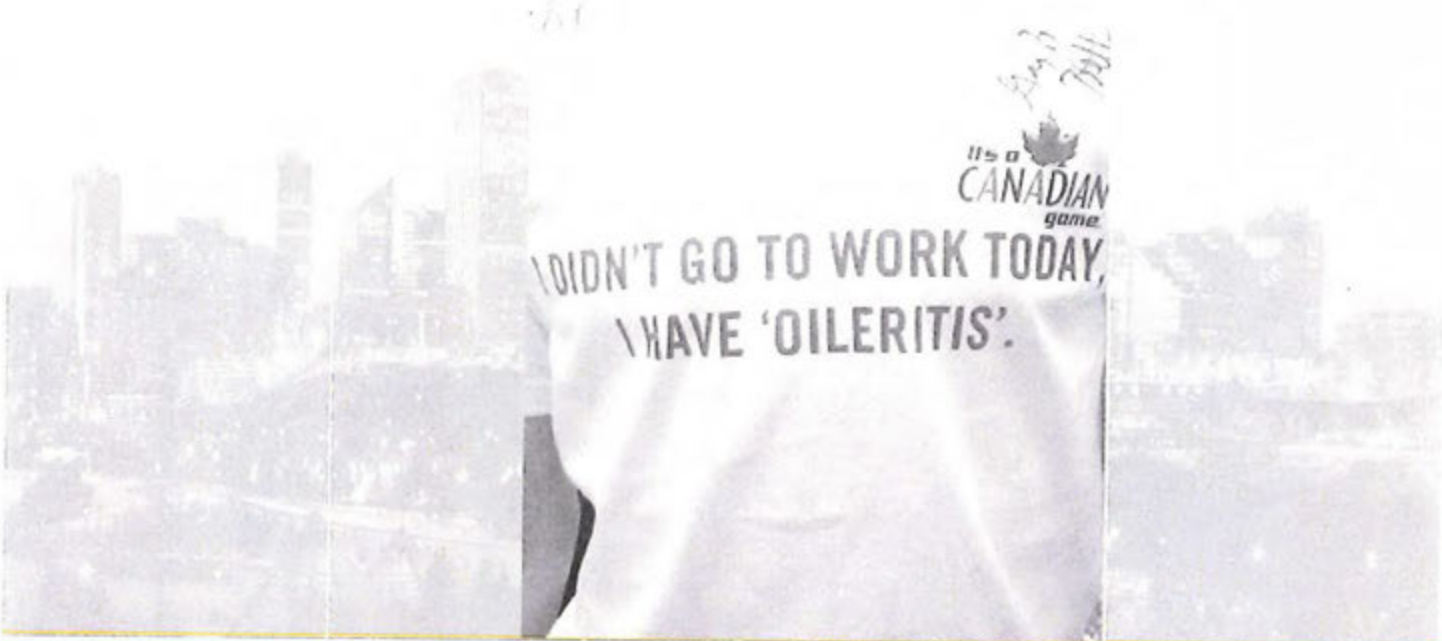
The Legends Lifestyle Center

Nebraska Furniture Mart

Cabela's

Kansas Speedway





# SCHEDULE FLOW CHART



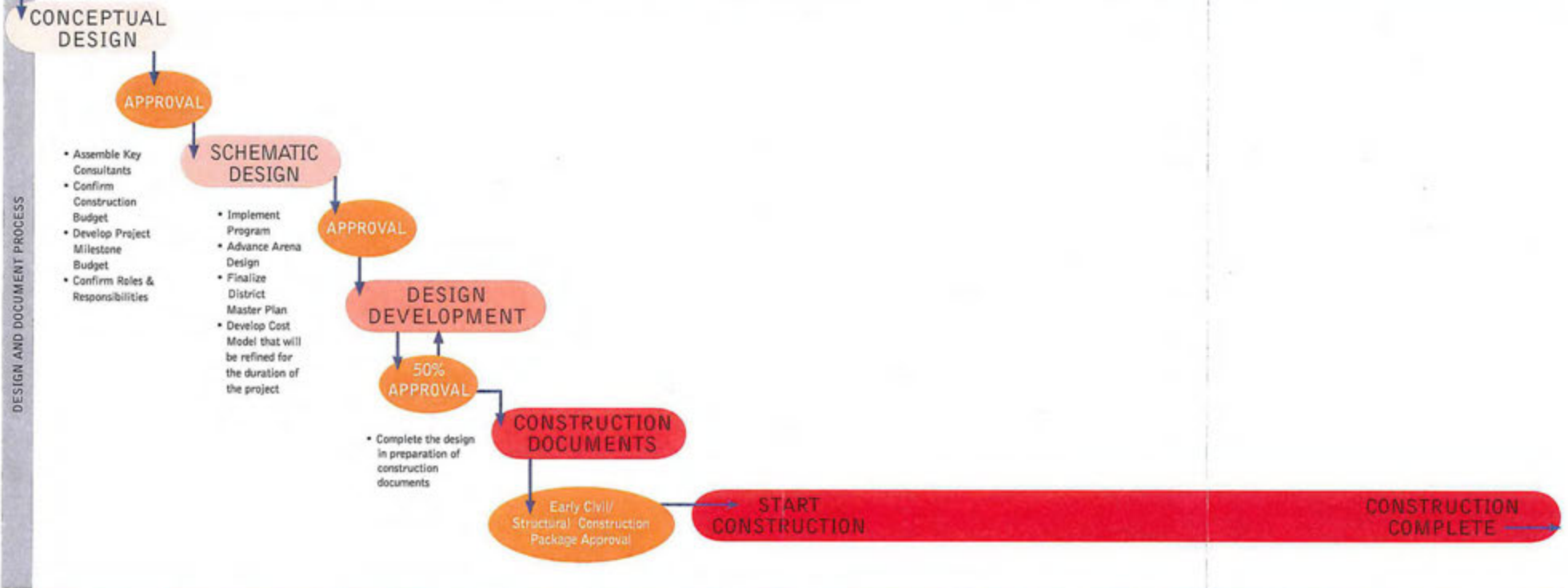


### **Schedule / Flow Chart**

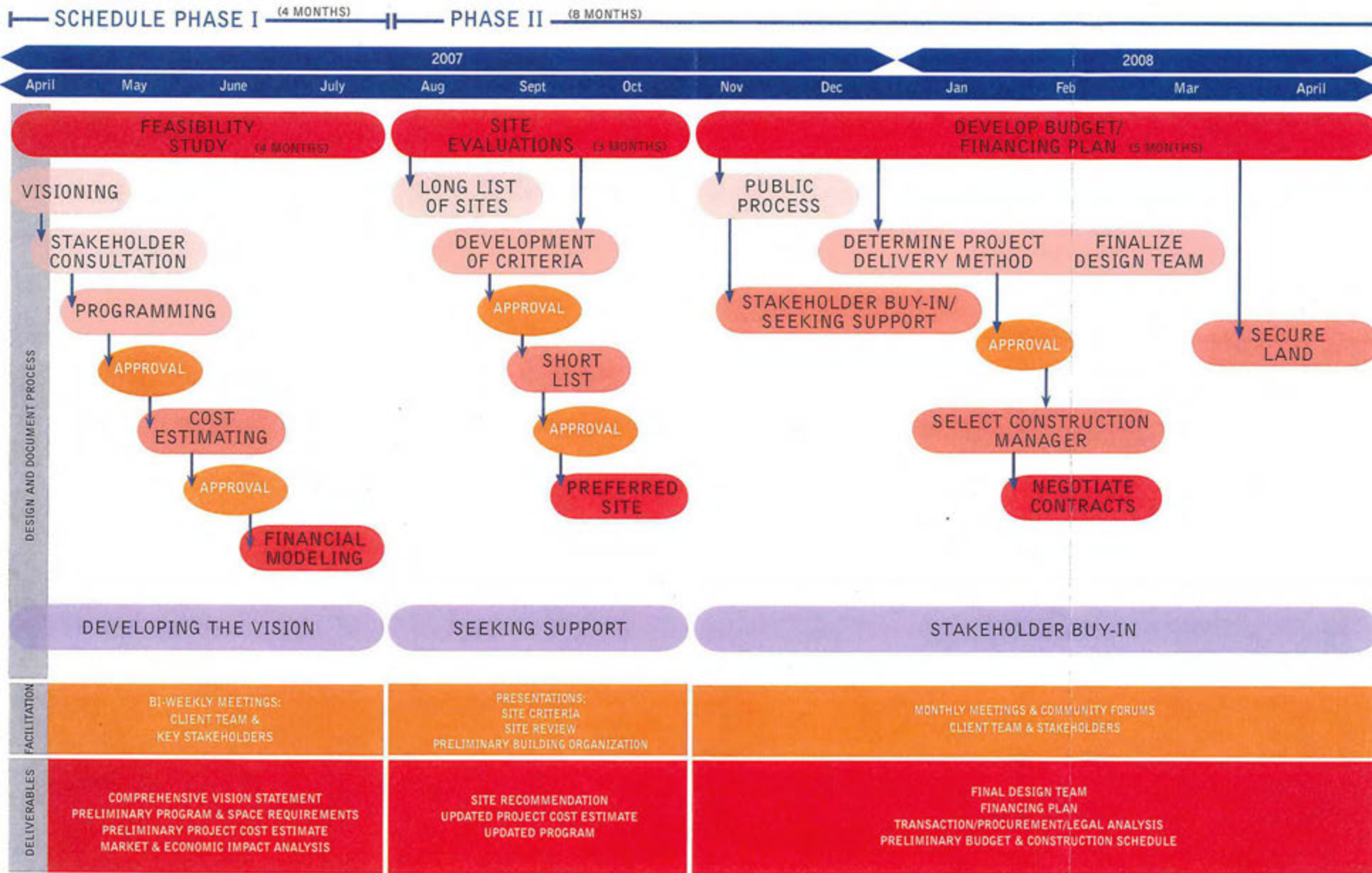
This schedule was developed early in 2007 to illustrate the sequential nature, complexity and timing of the planning, design, financing and construction of a new arena. At the direction of the arena committee we altered the initial approach to the assignment so the schedule is no longer current. However, much of the initial Feasibility Study and Site Evaluation are now complete. Remaining work for these two categories are preliminary cost estimating, financial modeling and final determination of a preferred site. We estimate a minimum of 3-4 months would be needed to complete these tasks. After that, we could pick back up on the path of the original schedule:

- Develop Budget/Financing Plan -- 5 months
- Design – 12 to 14 months
- Construction – 24 to 26 months
- Potential Project Opening – fall of 2011

# SCHEDULE PHASE III









# 5

## CASE STUDIES



## CASE STUDIES

### AIR CANADA CENTER (Toronto):

On-site parking: None

Nearby off-site parking: 13,000

Transit: Adjacent to Union Station, with access to GO Transit system of commuter train as well as Toronto's TTC subway system.

Miscellaneous: Pedestrian bridge linking arena with proposed Maple Leaf Square mixed-use development (includes fine dining and high-tech sports-themed restaurant, a boutique hotel, two condominium towers, office space, a high-definition broadcast studio and a 170,000 square foot retail space anchored by a 9,000 square foot Leafs, Raptors, Marlies and Toronto FC store.) Also linked to PATH system of underground pedestrian walkways.





## CASE STUDIES

### **GENERAL MOTORS PLACE (Vancouver, British Columbia):**

On-site parking: Limited parking below the arena (GM Place Lot 987), "subject to availability" and with a height limitation of 6'-6".

Nearby off-site parking: Within a 15-minute walk of more than 7,000 parking spots.

Transit: Covered elevated pedestrian walkways connect arena with Stadium/Chinatown Skytrain station.

Miscellaneous: Centrally located in Vancouver's downtown entertainment district bordering the dynamic neighborhoods of Yaletown, Gastown and China town.





## CASE STUDIES

### NATIONWIDE ARENA (Columbus, Ohio):

On-site parking: Attached parking garage (560 spaces).

Nearby off-site parking: 10,000 spaces, including five additional parking garages.

Transit: Event bus service.

Miscellaneous: Part of a 95-acre "Arena District" with 200,000 s.f. of retail/entertainment development and 1.3 million s.f. of office space Arena Park is a grass mallway 870 feet long and 280 feet wide at its widest part; large grass terraces lead down to the Scioto riverfront.



© 2006 Europa Technologies

Columbus Columbus

Pointer 39°53'02.83" N 83°00'18.70" W elev 728 ft Streaming 100%

Eye all 6071 ft



## CASE STUDIES

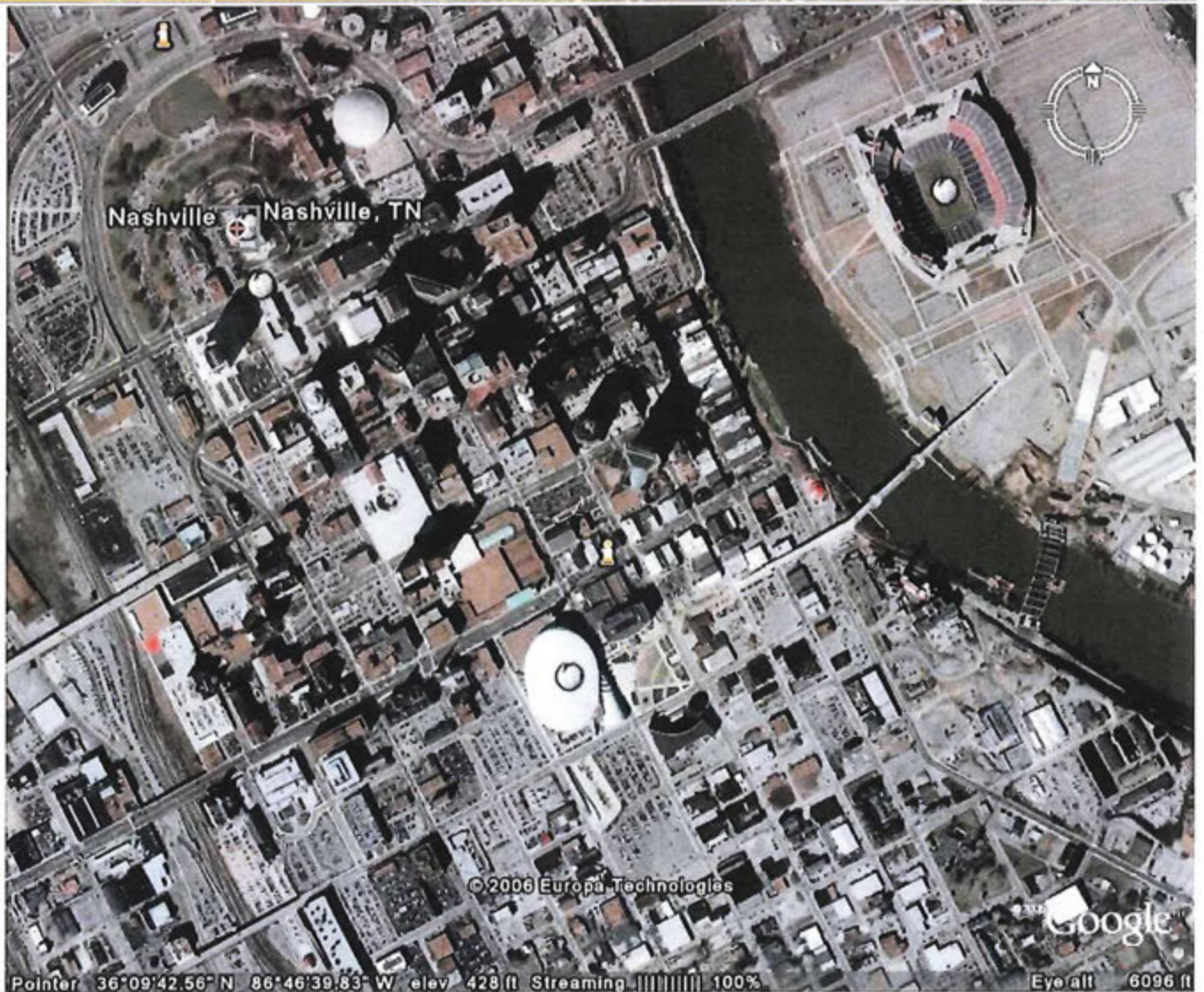
### **SOMMET CENTER (Nashville, Tennessee):**

On-site parking: Attached parking garage with 250 spaces.

Nearby off-site parking: 11,000 spaces within 1,500 feet from arena.

Transit: MTA event shuttles between arena and parking facilities.

Miscellaneous: Arena plaza and front door face Broadway, integrated with the "Lower Broad" entertainment corridor.





## CASE STUDIES

### AMERICAN AIRLINES CENTER (Miami, Florida):

On-site parking: Attached parking garage (underground facility below arena) with 1,147 spaces.

Nearby off-site parking: 26,000

Transit: Metrorail to the Government Center station. Transfer to the People Mover (free automated people-mover system), which has a 2-car express service to the Freedom Tower station.

Miscellaneous: Pedestrian bridge linking arena with Bayside Marketplace (225,000 s.f. retail-entertainment center).







## PEPSI CENTER, DENVER CO

SEATING FOR HOCKEY 18,100

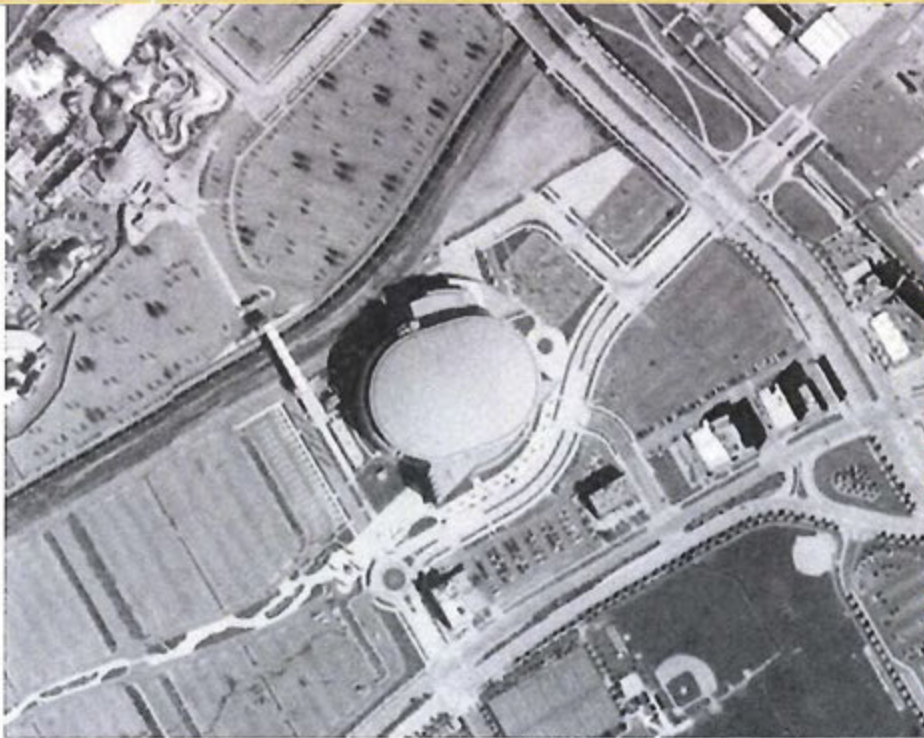
ARENA FOOTPRINT +/- 7.71 A

PARKING +/- 65 A

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TOTAL +/- 72.71 A

EXISTING ARENAS







## PHILIPS ARENA, ATLANTA GA

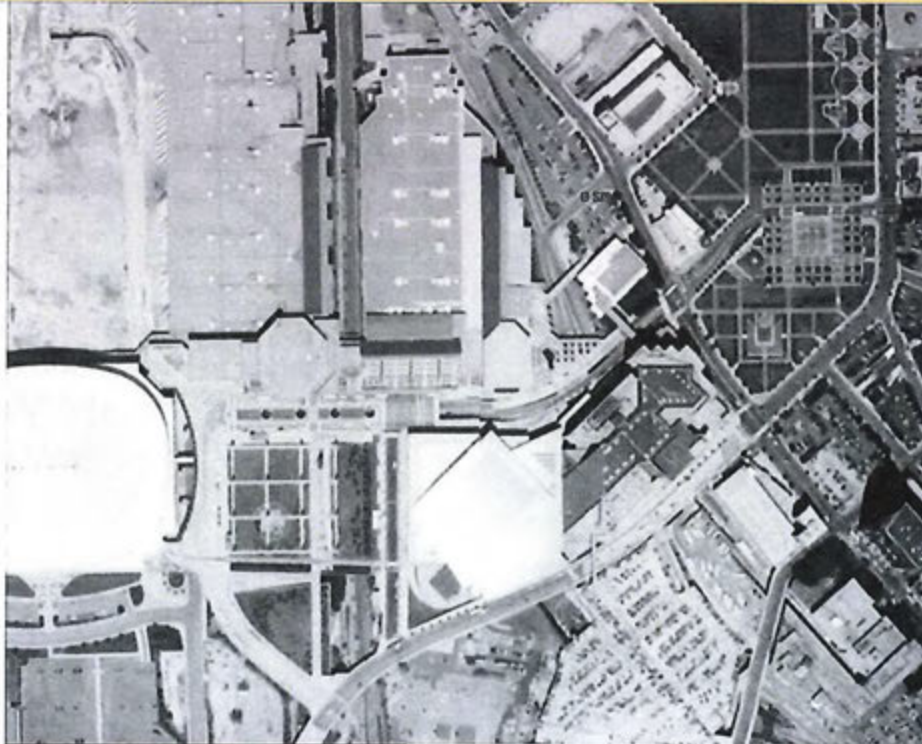
SEATING FOR HOCKEY 18,750

ARENA FOOTPRINT +/- 5.05 A

SITE STRUCTURED PARKING  
7,345 SPACES OFF-SITE

TOTAL +/- 6.00 A

EXISTING ARENAS







**HOUSTON ARENA, HOUSTON TX**

SEATING FOR HOCKEY 17,800

ARENA FOOTPRINT +/- 6.22 A

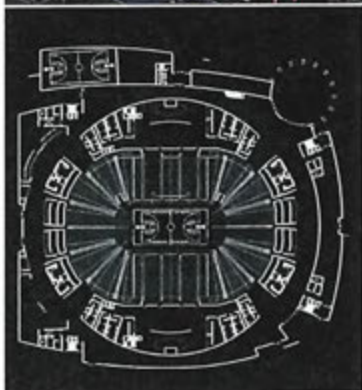
STRUCTURED PARKING +/- 3.35 A

1,500 SPACES ON-SITE  
7,000 SPACES OFF-SITE

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**TOTAL +/-12.50 A**

EXISTING ARENAS







**UNITED CENTER, CHICAGO IL**

SEATING FOR HOCKEY 20,500

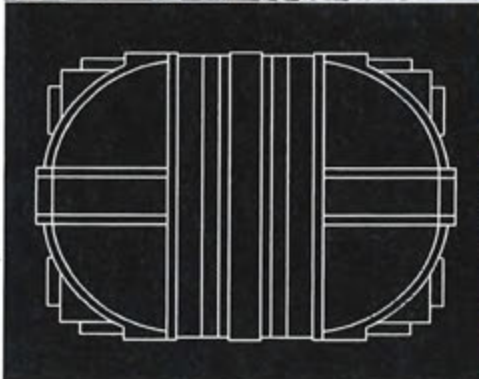
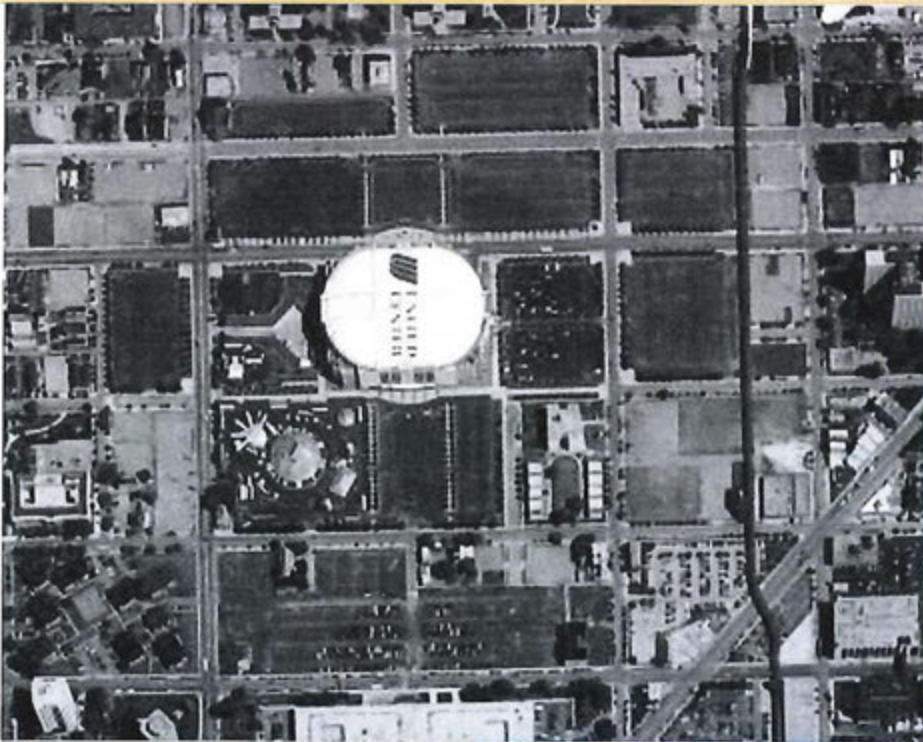
ARENA FOOTPRINT +/- 5.25 A

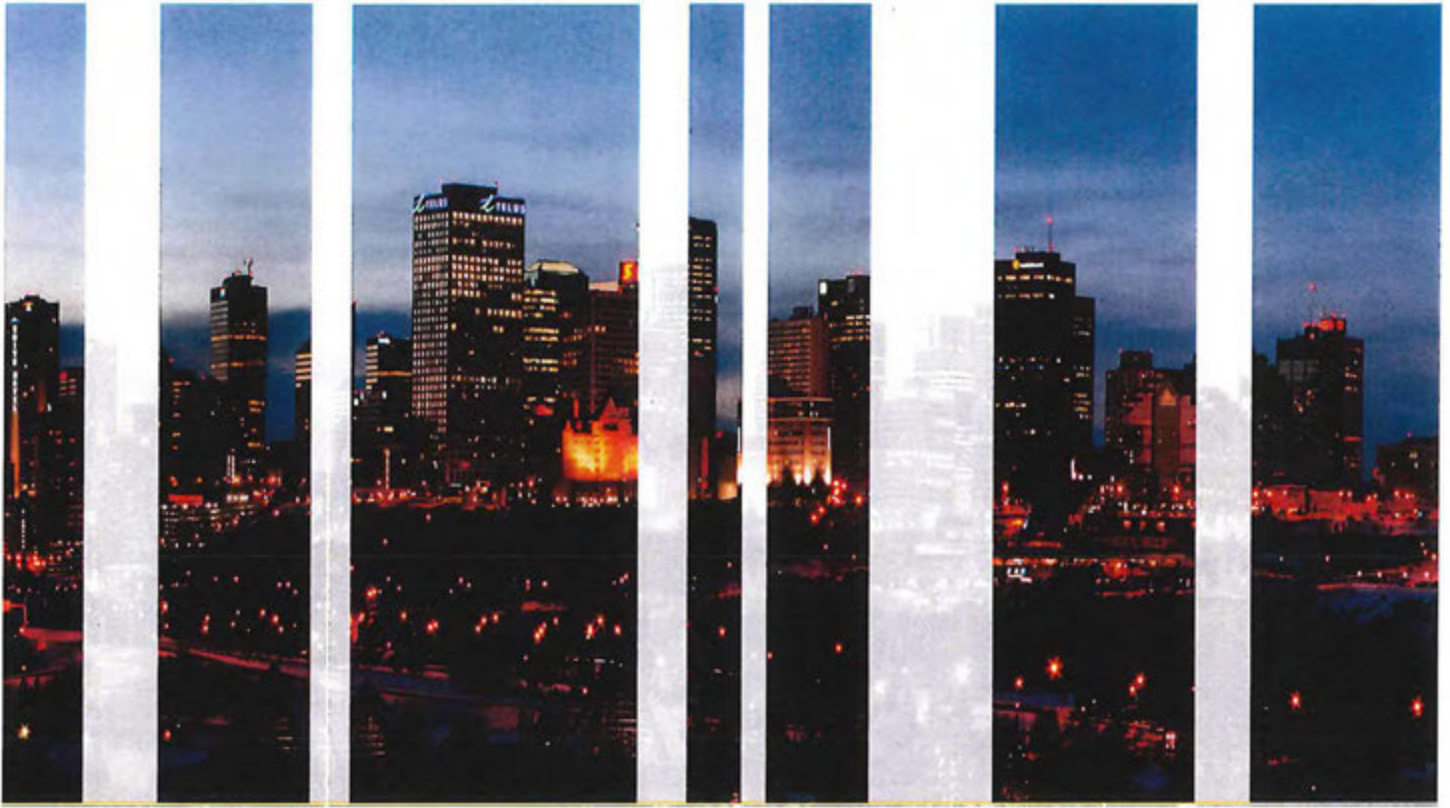
PARKING +/- 60 A

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**TOTAL +/- 65.25 A**

EXISTING ARENAS





February

HOKSPORT

study

EDMONTON, ALBERTA