

HARTFORD CONNECTICUT NEW & TRANSFORMED ARENA PROGRAM DEVELOPMENT and CONSTRUCTION FEASIBILITY SERVICES

Prepared for:

CAPITAL REGION DEVELOPMENT AUTHORITY
HARTFORD CONNECTICUT

February 19, 2015

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MARKET STUDY

The Capital Regional Development Authority ("CRDA") is a quasi-public agency of the State of Connecticut that has operational responsibility for the current outdated arena - the XL Center - and has been charged with planning for and, if appropriate, constructing a successor facility. In October 2014, the Capital Region Development Authority ("CRDA") retained SCI Architects ("SCIA") to complete Program Development and Construction Feasibility Services for a spectator arena.

CRDA's primary goals and objectives are to understand:

1. Industry trends in the design of Multi-use arenas.
2. The ideal Multi-use Arena Program for the Hartford and regional markets in order to maximize revenue and create a dynamic fan experience.
3. The current building, to determine the feasibility that it can be renovated to accommodate such a Program or whether a new arena on the current footprint or an expanded footprint can be built and is the most cost effective solution.

CRDA's Objectives or Questions are to know:

- Whether a new facility should be designed solely for the current mix of tenants (UConn and AHL and concerts), but with the potential to expand/upgrade for an NHL tenant in the future or to meet NHL requirements from the start.
- What is the ideal number of seats and the ideal mix of seating types necessary to maximize revenue?
- What is the smallest facility that can be built that will still meet such requirements?
- What other revenue-generating opportunities can/should be included?
- What types of fan amenities are required in the next generation of arenas?
- What advances in building systems can be incorporated into a new facility in order to reduce operating expenses?
- Should parking facilities be worked into the design of a new facility?

CRDA also requires:

- The basic cost of constructing a new state-of-the-art facility
- Any premiums associated with constructing on the current three-acre site.
- The advantages of razing the existing XL structure or using it as the foundation of a new facility with respect to costs and benefits.
- The financial and market implications of closing the existing facility during construction, both to the facility itself and the City as a whole.
- The preferred option for expanding the XL Center site.

The XL Center (originally the Hartford Civic Center) opened in 1975 and consists of two facilities: a Multi-use Spectator Arena and an Exhibition Hall. It is located in downtown Hartford, adjacent to Hartford 21 (a residential and commercial development), parking structures and an office/retail complex to the east.

When it opened, the facility was the home of the New England Whalers of the World Hockey Association, which later became the Hartford Whalers of the National Hockey League (NHL). After its roof collapsed in 1978, the facility was expanded and reopened with an increased capacity. Today its capacity is approximately 14,750 for hockey and 15,600 for basketball and 16,500 for center-stage concerts. There was a subsequent renovation of the Coliseum Club located above the upper seating bowl.

The NHL Whalers left in 1997. The XL Center currently hosts the Hartford Wolfpack of the American Hockey League (AHL) and approximately 20 University of Connecticut (UConn) men's and women's basketball games and 10 UConn hockey games per year and a variety of other events, including concerts, family shows, motor sports and other sporting events, trade shows and community events.

The 68,800sf Exhibition Hall is used for tradeshow, conventions, banquets, meetings and other similar events.

In 2014, approximately \$33 million in improvements to the XL Center were completed for repairs and upgrades to the buildings mechanical systems, public spaces and locker rooms to improve the fan experience, enhance revenues and reduce operating costs. The improvements were to extend the building's life for 8 – 10 years while planning proceeded for a new facility.

It is generally recognized that the XL Center's functionality and ability to generate revenue are severely limited by its age, obsolete design, mechanical systems, limited size of the current building footprint, narrow concourses, limited fan amenities, shortage of restrooms and ADA deficiencies. As well, while some important improvements have been made, most of the overall mechanical, electrical and plumbing (MEP) infrastructure is in poor condition. Problems and breakdowns frequently occur and will increase going forward. In fact, if these systems aren't replaced the XL Center will become susceptible to more serious breakdowns that could result in the loss of an event.

Global Spectrum is the manager of the XL Center and are assisting CRDA with this planning process.

Our methodology to assist in achieving CRDA's goals and objectives; and to develop the right Programs and Designs for evaluating development options on the current site was as follows:

- Secure the relevant demographic information for the Hartford Region and benchmark it against other University and/or NHL and/or NBA cities of a similar size.
- Evaluate comparable regional facilities and arenas with similar uses to identify 'best practices' in design and operation.
- Work with the regional business community to compile a list of the largest companies in the Hartford Region.
- Interview different companies with respect to their support for a new facility through the purchase of seat, suite and sponsorship products.
- Interview UConn and Wolfpack corporate and non-corporate supporters.
- Search out feedback on any key building features that will make a difference to the NHL in selecting Hartford for a Team and assessed the opportunities and challenges of Hartford receiving a franchise.
- Assess and recommend the appropriate size, type and number of seats and amenities for a UConn/AHL facility or a UConn/NHL facility.

From the above, we have developed a Building Program that is based on our experience and database, research and the input and opinions of the people and companies of central Connecticut.

We have developed the absolute best new arena design that uses existing XL Center structures and that satisfies as much of the above Building Program as possible. We have identified where the best designs fail to meet the recommended Building Program.

We have reviewed the Structural, MEP, Life Safety, Food & Beverage, ADA and A/V issues with the XL Center and developed the best possible solutions.

In the above, we have applied our experience where we have created new arenas using existing arena structures.

Our Building team has developed optimum constructability solutions to minimize construction costs and the impact on the continuing operations of the XL Center with respect to losing existing tenants and events. We have worked with Dimeo, the contractor completing the present improvements to the XL Center, to establish our development estimate.

As well, we have determined the best expanded XL Center Site to build a completely new arena.

We have also set out our opinion on creating the best conditions to improve the potential to secure an NHL franchise.

Based on Stafford Sports' Market Study (i.e. database on comparable markets and interviews and research in the greater Hartford market), which follows at the end of this report, the following components are recommended for a new facility:

Scenario A Program (UConn, AHL, Concerts and Family Shows):

To accommodate UConn Basketball and Hockey, the AHL and Major Concerts and Family Shows:

- Capacities in hockey and basketball modes:
 - 9,000 to 10,000 in lower bowl.
 - 8,000 in upper bowl.
 - Totals of 17,000 in hockey and 18,000 in basketball and up to 19,000 for center stage concerts boxing, wrestling, etc.
- Ability to curtain off the upper bowl to only have a 9,000 to 11,000 seat arena bowl for different events.
- Have Seating Programs and Club(s) for basketball courtside and lower bowl hockey between the faceoff circles.
- Premium Seating:
 - 6 bunker suites with 20 person capacity each.
 - 30 mid-level suites: 20 with 12 seats and 10 with 8 seats.
 - one large 150 person corporate party suite in upper areas of bowl that's divisible into 3 separate suites.
 - 30 four-person loge boxes at the end where the home team shoots twice.
 - 1,000 Terrace Club Seats at other end
 - 1,500 person Event Level Seating Programs and associated Club(s) for basketball courtside and lower bowl hockey between the faceoff circles.
- Premium Support Spaces:
 - separate VIP entry(s) with immediate adjacency to VIP parking and elevators.
 - a 1,500 person Club/Lounge at courtside/ice level for the above Event Level Seating program.
 - 2 Lounges and/or Restaurant and/or Sports Bars open to bowl.

- General:

- contemporary standards for the areas of public concourses, number of washroom fixtures (especially for women) and number of Food & Beverage Points of Sale (POS).
- full compliance with the American Disabilities Act.
- convenient safe vertical circulation.
- adequate areas and equipment for security checks and ticket processing.
- modern equipment for all mechanical, electrical, plumbing, fire protection and IT/data systems.

Scenario B Program (UConn, NHL, Concerts and Family Shows)

To have the maximum opportunity to also attract an NHL Team to Hartford, the same Building Program as above is required plus:

- a state of the art 12,000sf Home NHL Locker Room.
- additional Club Seats.
- additional four person Loge Boxes.

Option 1 – Totally New Arena

A totally New Arena on an expanded XL Center site (see Exhibits A & B for the existing site and our recommended expanded site) would provide all of the above components. Also Exhibits C & D shows Arena Bowl footprints and site areas of several major arenas that accommodate the NHL and/or NBA in comparison to the expanded XL Center site. They indicate that our recommended expanded site has sufficient space compared to other more modern venues.

In summary, a totally new state of the art Multi-use Spectator Arena could be built on this expanded site. The primary difference in the arena's location versus the existing XL Center is that it would be located further east to allow an industry standard trucking area off of Ann Uccello Street to facilitate a more efficient event load-in/out, garbage pickups, general deliveries, etc.

A second expanded site option was also analyzed where Church Street is closed between Ann Uccello Street and Trumbull and most, if not all, of the parking garage to the north is demolished. This option is not preferred because of additional costs, the time and difficult logistics in closing Church Street and the Arena would not have its main entrance on Trumbull, Hartford's main street in this area of downtown.

Under our recommended expanded site option, the main entry into an entry hall would be on Trumbull and probably a new connection would be built to the existing parking garage across Church Street to the north. Secondary public entries could be accommodated on the north and west.

The required time to demolish the XL Center and Northland's building to the east and construct and commission a new arena is estimated at 36 months. During this time, all events would have to be held in other locations. All tenants in the Northland building to the east of the XL Center would have to be vacated. Some could possibly be located in the new arena if additional rentable tenant space was built.

The total all-in capital cost for Option 1 is estimated between \$450m and \$500m plus land acquisition costs.

Option 2 – Transformed Arena and Expanded Site

A new arena on an expanded XL Center site (see Exhibit B) that utilizes substantial existing XL Center structures would provide all of the above new arena components in a state of the art design and with the same attributes as the above all new arena (including being capable of accommodating the NHL), except:

- the Lower Bowl would have 8,000 to 9,000 seats for hockey and basketball instead of 9,000 to 10,000.
- the truck load-in/out servicing area would be less efficient although important upgrades would be made to the existing truck marshaling area.

Accepting the above, a state of the art Multi-use Spectator Arena utilizing substantial existing XL Center structures could be built on this expanded site provided that a relatively small adjustment could be made to the existing Church Street south sidewalk and curb line and the northbound vehicular access off of Ann Uccello Street.

Concept Design drawings are attached as Exhibit E. Because of the stage of this project, all rooms are not shown but sufficient space is available to provide modern standards for concourses, washrooms, food & beverage, vertical circulation and back of house.

This design with the Main Concourse at or close to grade, will allow the south concourse to be used as an interior pedestrian connection from Ann Uccello Street to an expanded entry hall on Trumbull. This connection could be made accessible to the public at non-event times. A concept rendering of the Trumbull Street entry is included as Exhibit F.

Because there are only 19 rows in the Lower Bowl at the east end, the seating tier immediately above is unusually close to the event floor. Therefore, we have removed the vomitories and their sightline obstructions, and added an open Concourse Club Bar at the back of this seating where the Home Team will shoot twice. This will be another premium area. A photo of the existing XL Center bowl and two versions of a new seating bowl rendering are attached as Exhibit G.

This Transformed Arena will look and feel like an entirely new building.

The required time to complete this transformation is estimated to be 26 – 32 months with the arena continuing to operate for UConn basketball and hockey games and other events in late fall, winter and early spring. In other words, the arena would be closed for two or three periods through late spring, summer and early fall. During this time, all events (i.e. concerts, family shows, etc) would have to be held in other locations and the arena would have to be largely vacated at these times. Construction would continue between these closures in a manner that would allow operations to continue.

Approximately 60% of the tenant space in the Northland building to the immediate east of the XL Center would be retained. These areas should be able to be utilized for a significant amount of time during construction.

The total all-in capital cost for Option 2 is estimated at approximately \$250m plus land acquisition costs.

Option 3 – Transformed Arena and Existing Site

We also analyzed the ability to create a state-of-the-art multi-use spectator arena suitable for UCONN basketball/hockey games, major concerts and professional hockey/basketball games if a significant amount of existing structures are maintained and utilized; and the arena is only located within the arena's existing Leasehold Line and Easement restrictions with Northland.

A set of colored existing building drawings with the Leasehold Line marked in red, is attached as Exhibit H. For simplicity, all easements are not shown. The Leasehold and Easement Drawings are also available if required.

The primary issues to create a quality multi-use spectator arena suitable for UCONN basketball/hockey games, major concerts and professional hockey/basketball, if the arena is only located within the arena's existing Leasehold Line and Easements on the south and east are as follows:

- Insufficient space exists on the south to expand the Main Concourse L61 to accommodate an acceptable amount of restrooms, concessions and public circulation.
- Insufficient space exists on the south to build a new Upper Concourse.
- Insufficient space exists on the east (towards Trumbull St) to accommodate premium seating options on expanded Main Concourse and an appropriately sized entry.
- Insufficient space exists on the south and/or east to accommodate increased vertical circulation.

It is therefore our opinion that it is not possible to realize a quality state-of-the-art multi-use spectator arena if a significant amount of existing structures are maintained and utilized; and the arena is only located within the arena's existing Leasehold Line and Easement restrictions with Northland.

ADVANTAGES of OPTIONS 1 & 2

The primary advantages of the above 2 viable options are as follows:

Option 1 – Totally New Arena

The advantages of Option 1, a totally new arena on an expanded XL Center site versus Option 2 are:

- a. Better truck load-in and out.
- b. 1,000 more seats in lower bowl.

Option 2 – Transformed Arena on Expanded Site

The advantages of Option 2, a transformed arena on an expanded XL Center site that utilizes substantial existing XL Center structures are:

- a. \$200m to \$250m less capital cost.
- b. No displacement of UConn games in Hartford during construction.
- c. Less demolition of Northland's office/retail tenant space.
- d. Much of recently completed renovation is retained.
- e. Less demolition resulting in less required landfill.

Urban Impact

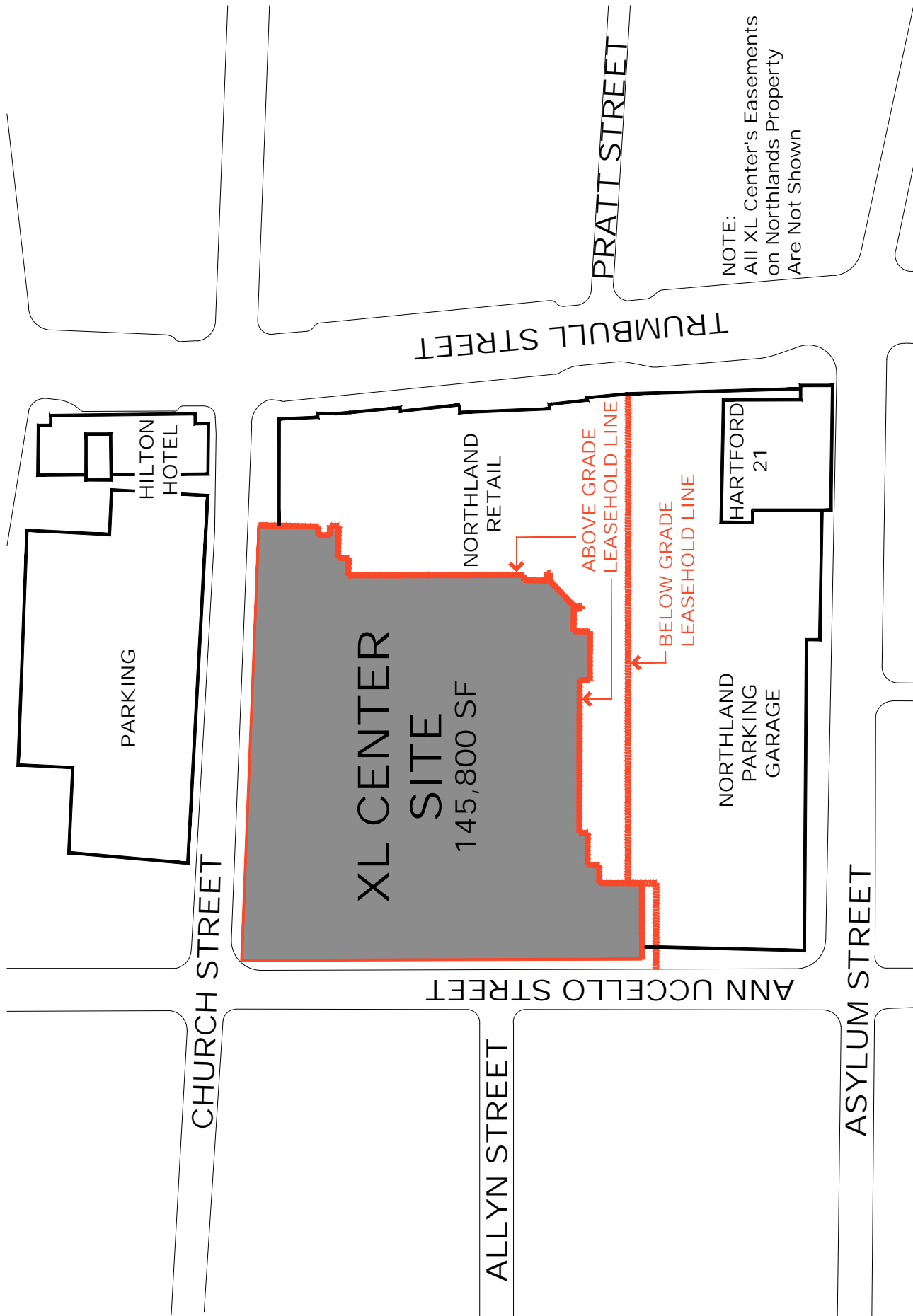
Either a totally new or transformed arena will have a significant positive impact to revitalize downtown Hartford.

Additional events will bring more people downtown and more of these fans and spectators will visit surrounding restaurants, bars and retail before and after events. This will enhance the viability of these businesses to assist them to be economically viable 365 days per year. The venue will especially draw people during the evenings when downtown Hartford is particularly quiet.

As well, a modern spectator venue can be the catalyst and anchor for community initiatives as wide ranging as cultural festivals, art shows, antique car displays, city celebrations, etc.

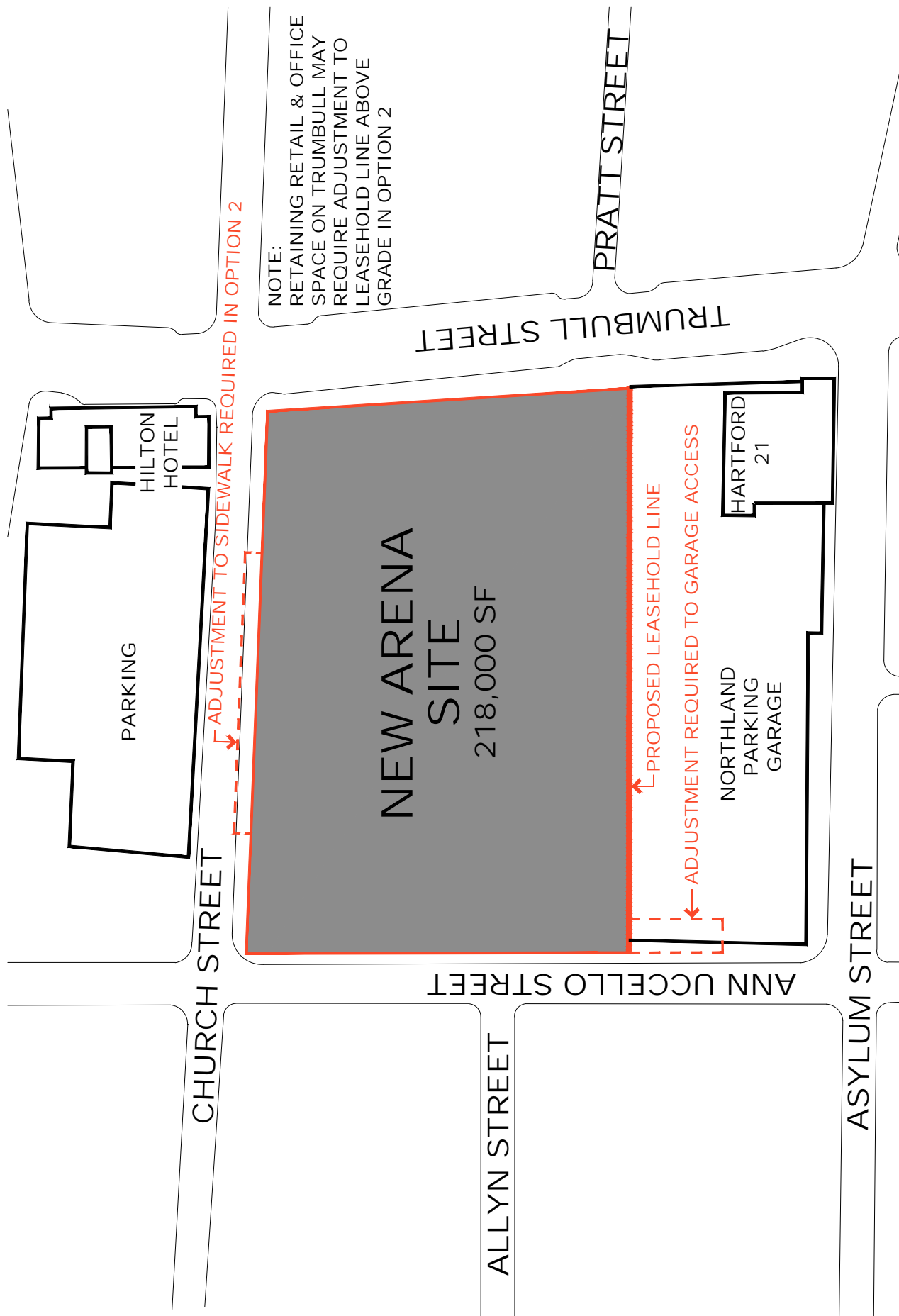
Designed and operated correctly, the main street-level public concourse of this arena can be open to the public at non-event times, either as interior pedestrian links between Trumbull and Ann Uccello and Church Streets; or as programmable interior community space for use by all residents including seniors and youth.

Positioning this quality project as the largest multi-use venue with the most diverse selection of entertainment will as well create a positive new symbol for a revitalized downtown. It will build upon the existing strong corporate base and be a catalyst to make downtown an active urban environment 7 days a week.



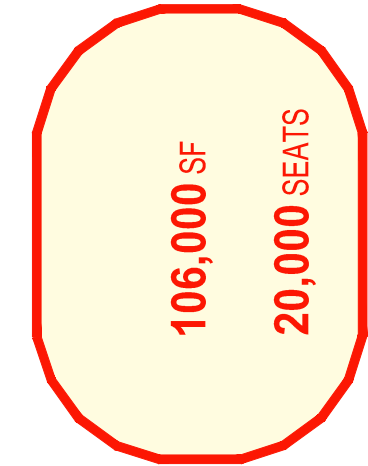
OPTION 3

EXHIBIT A

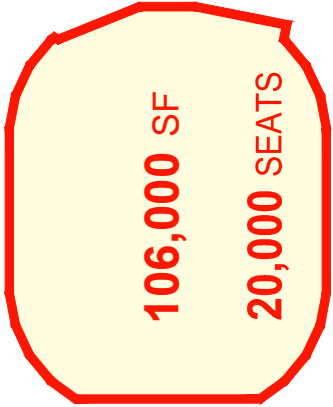


OPTIONS 1 & 2

EXHIBIT B



TD GARDEN - BOSTON



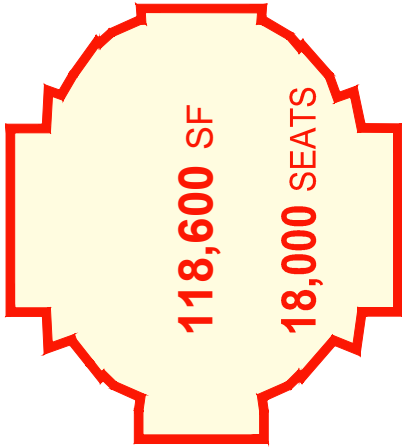
ACC - TORONTO



MADISON SQUARE GARDEN - NY



ROGERS ARENA - VANCOUVER

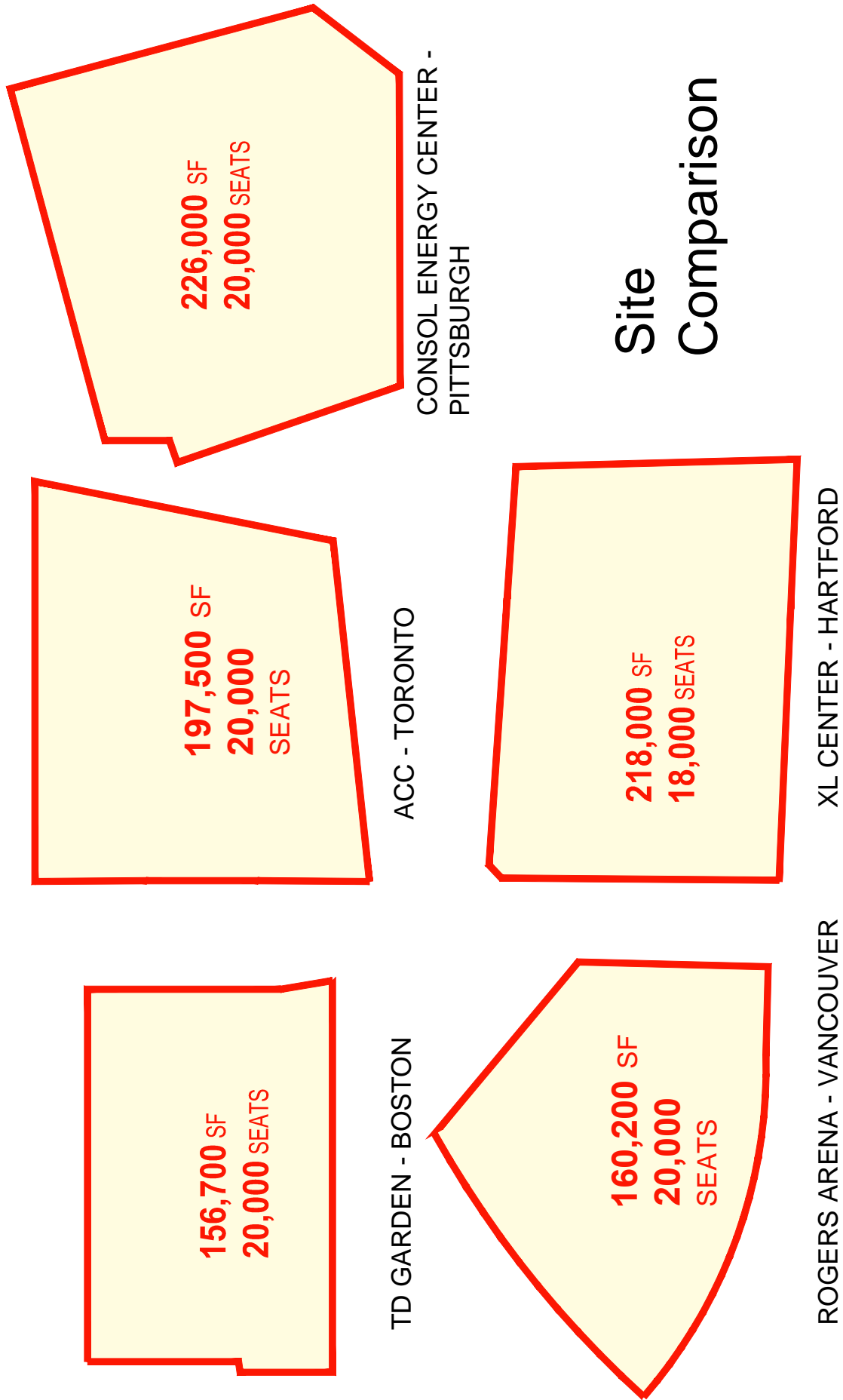


XL CENTER - HARTFORD

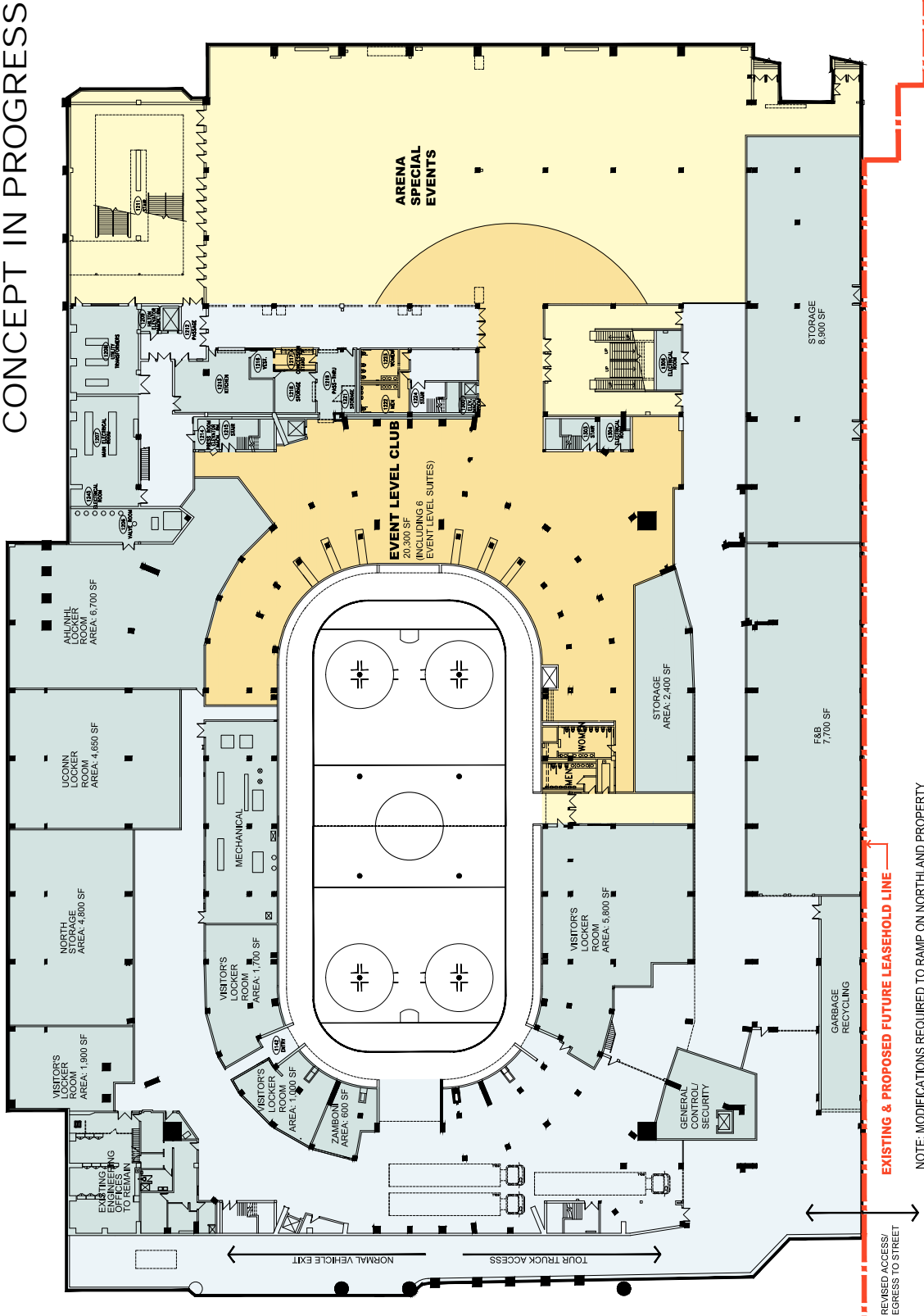
Arena Bowl
Footprint
Comparison

OPTION 2

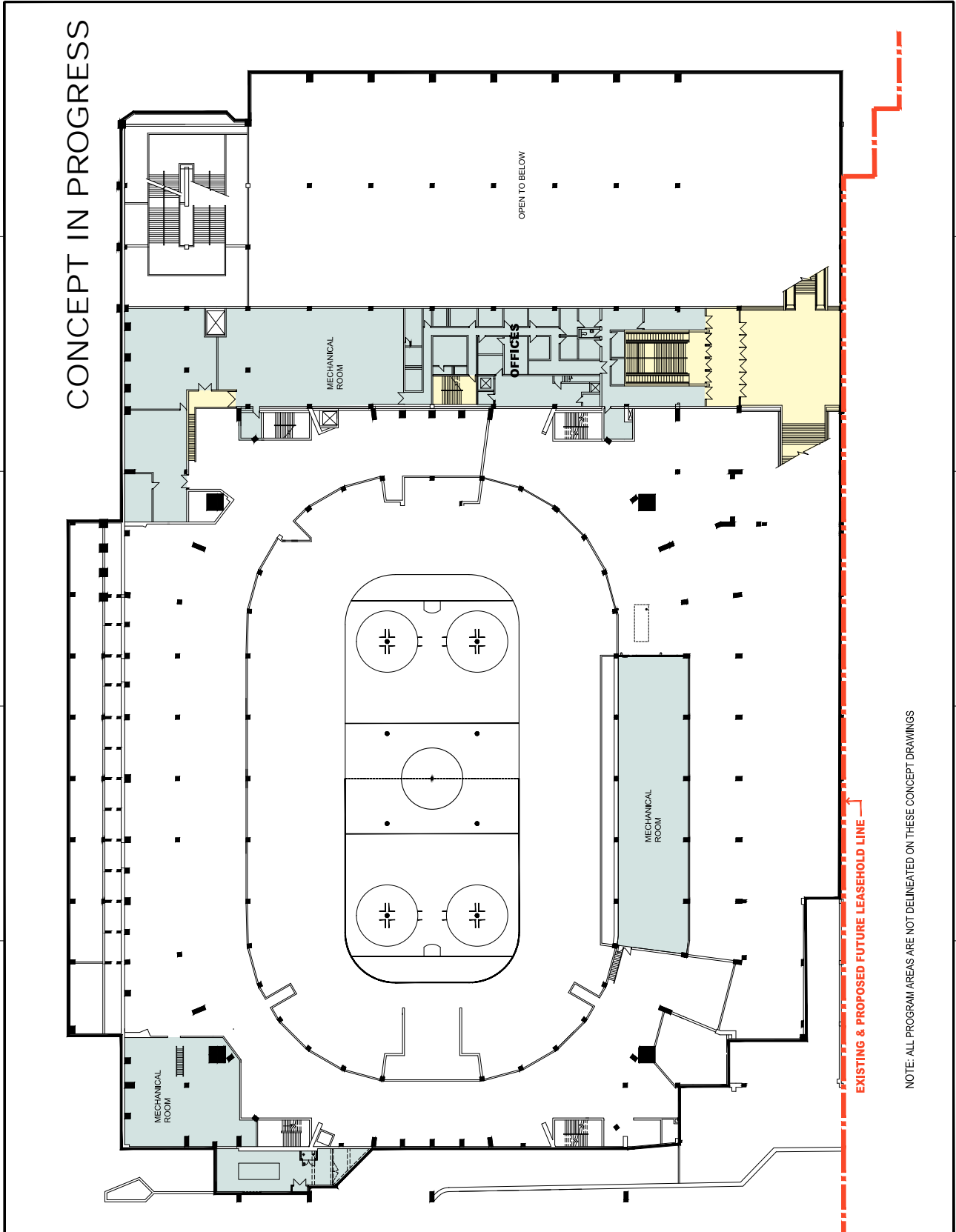
EXHIBIT C



CONCEPT IN PROGRESS



NOTE: MODIFICATIONS REQUIRED TO RAMP ON NORTHLAND PROPERTY
TO ALLOW EXITING OF LARGE TRUCKS
NOTE: ALL PROGRAM AREAS ARE NOT DELINEATED ON THESE CONCEPT DRAWINGS



XL CENTER
1600 CENTER PLAZA
HARTFORD, CT 06103

**NEW ARENA
USING
EXISTING
STRUCTURES
WITHIN
NEW
LEASEHOLD
LINE**

**EXHIBIT
E**

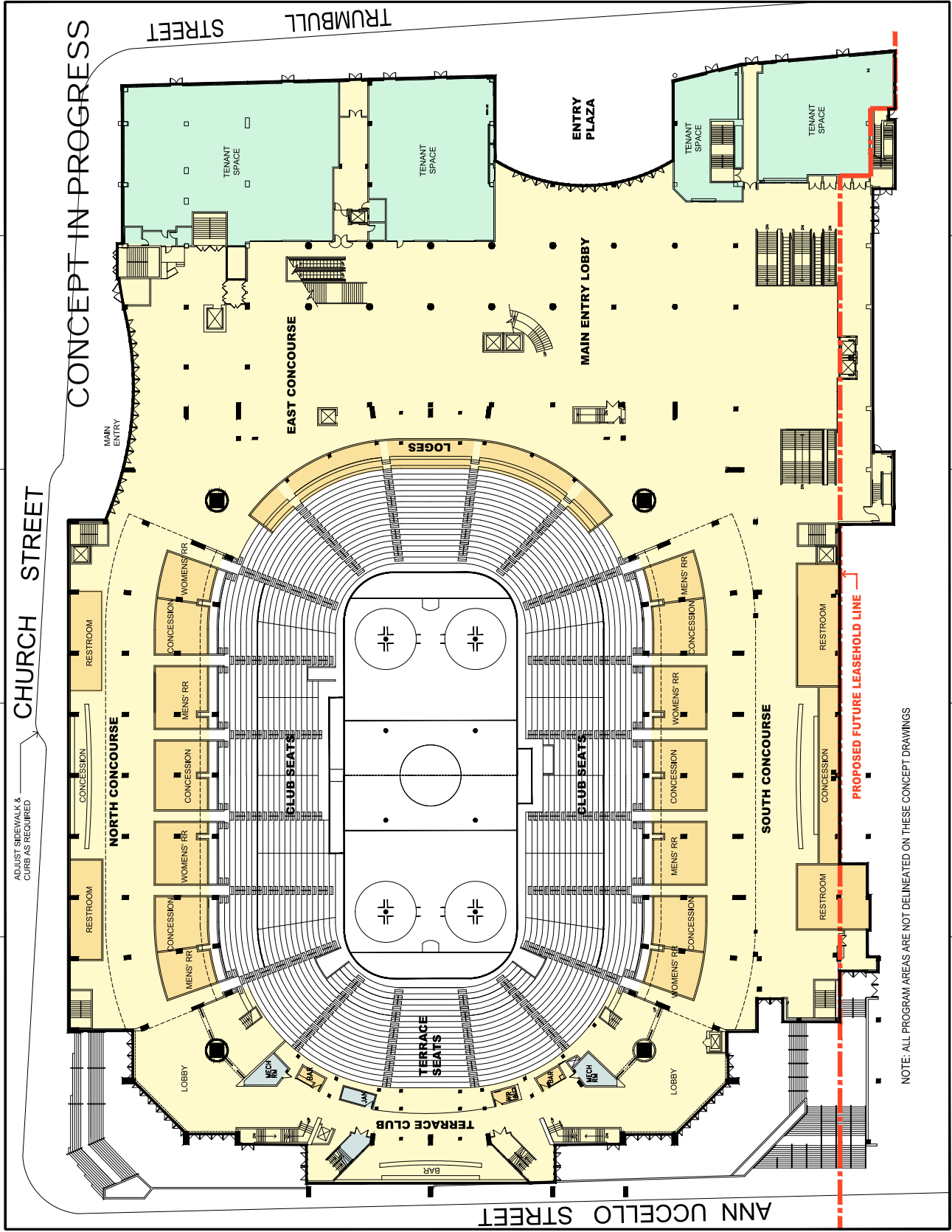
BASE BACKGROUND DOCUMENT
JCI ARCHITECTURE



DATE: FEB 2016
CONCOURSE
LEVEL 61

A-130

EXHIBIT E



XL CENTER
1 CIVIC CENTER PLAZA
HARTFORD, CT 06103

**NEW ARENA
USING
EXISTING
STRUCTURES
WITHIN
NEW
LEASEHOLD
LINE**

**EXHIBIT
E**

BASE BACKGROUND DOCUMENT
FOR THE
JCJ ARCHITECTURE

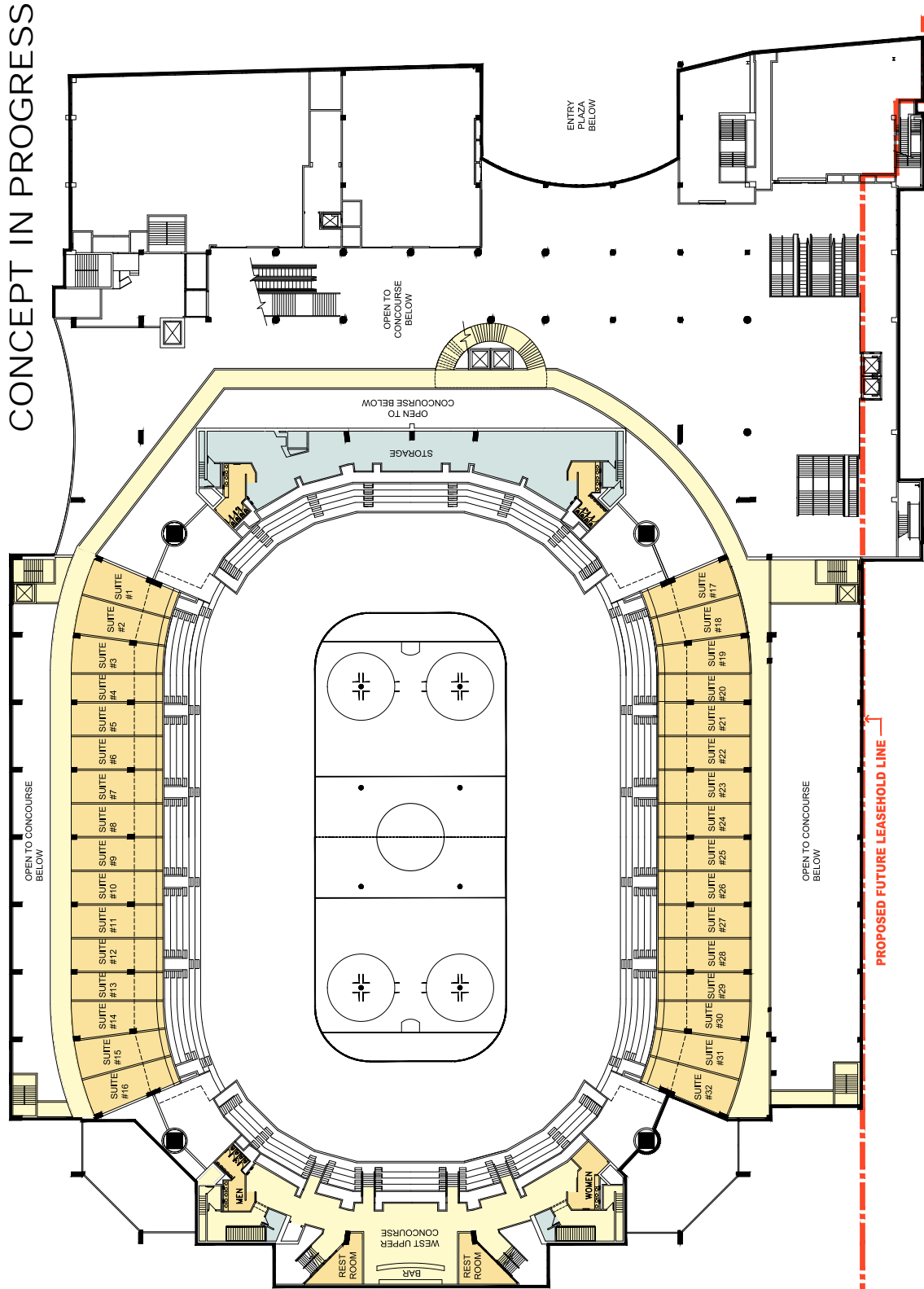


DATE: FEB 2015
**UPPER
CONCOURSE
LEVEL 71**

A-140

EXHIBIT E

CONCEPT IN PROGRESS



NOTE: ALL PROGRAM AREAS ARE NOT DELINEATED ON THESE CONCEPT DRAWINGS

XL CENTER
1 CIVIC CENTER PLAZA
HARTFORD, CT 06103

**NEW ARENA
USING
EXISTING
STRUCTURES
WITHIN
NEW
LEASEHOLD
LINE**

**EXHIBIT
E**

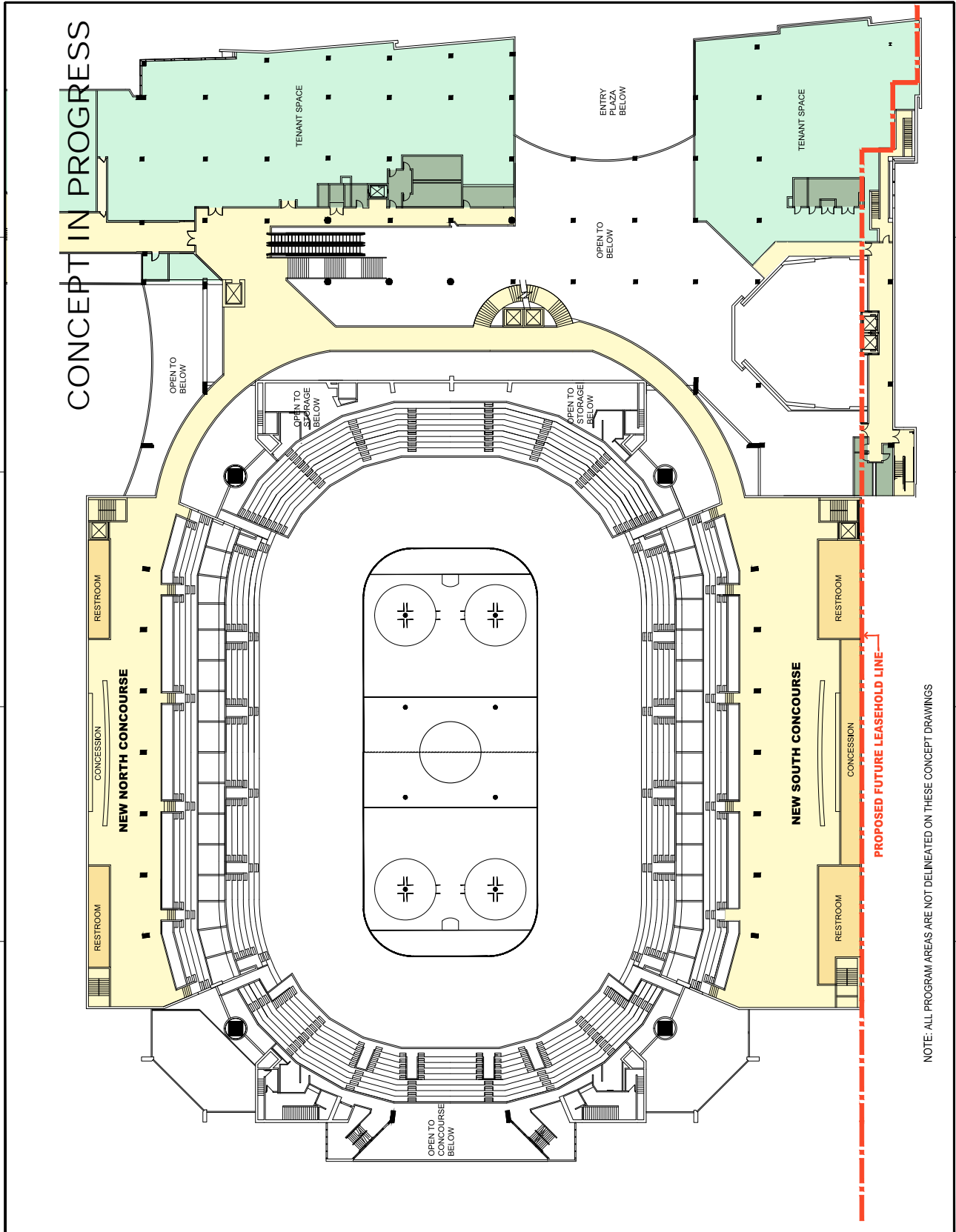
BASE BACKGROUND DOCUMENT
10/15/2013
JCJ ARCHITECTURE

SCI
© SCI Architects, P.C., 2014

DATE: FEB 02/2014
**NEW UPPER
CONCOURSE
LEVEL 80 & 82**

A-150

EXHIBIT E



XL CENTER

1 CIVIC CENTER PLAZA
HARTFORD, CT 06103

**NEW ARENA
USING
EXISTING
STRUCTURES
WITHIN
NEW
LEASEHOLD
LINE**

EXHIBIT E

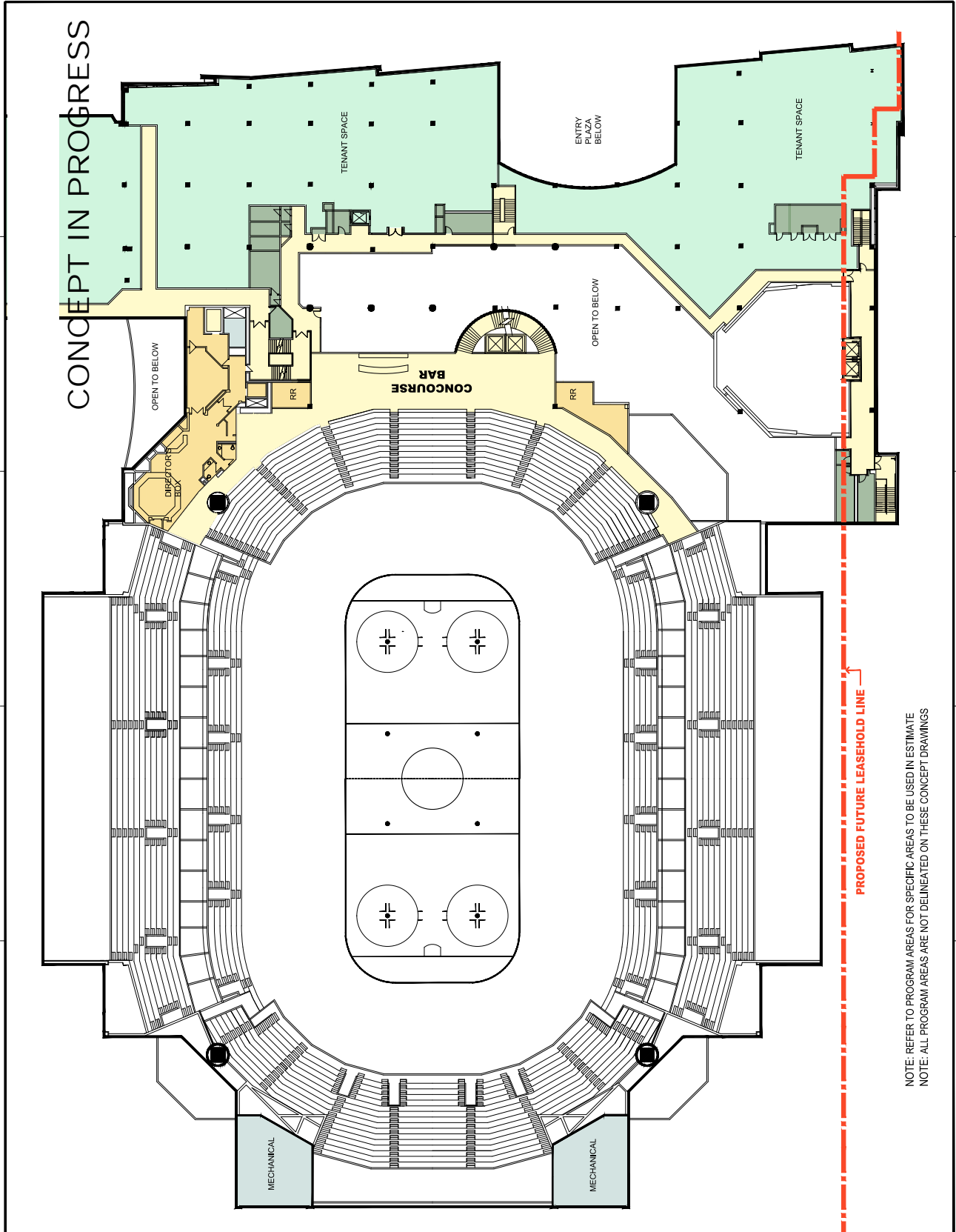
BASE BACKGROUND DOCUMENT
ARCHITECTURAL
JCJ ARCHITECTURE



DATE: FEB/2016
NEW UPPER
CONCOURSE
BAR
LEVEL 95

A-160

EXHIBIT E



XL CENTER
1 CIVIC CENTER PLAZA
HARTFORD, CT 06103

**NEW ARENA
USING
EXISTING
STRUCTURES
WITHIN
NEW
LEASEHOLD
LINE**

**EXHIBIT
E**

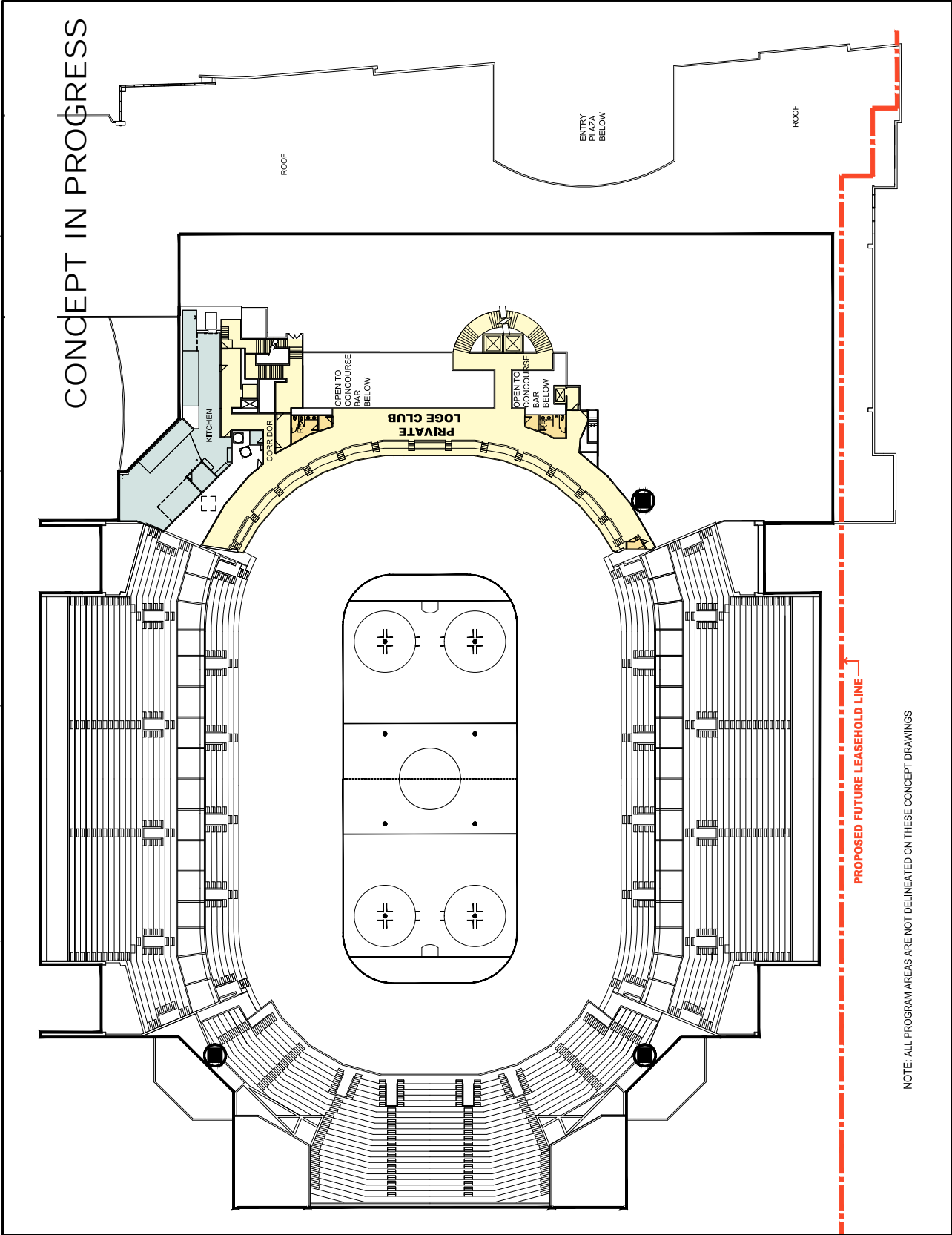
BASE BACKGROUND DOCUMENT
DATE: FEBRUARY 2014
JCJ ARCHITECTURE



DATE: FEB 02/2015
**LOGE CLUB
LEVEL 107**

A-170

EXHIBIT E



NOTE: ALL PROGRAM AREAS ARE NOT DELINEATED ON THESE CONCEPT DRAWINGS

XL CENTER

1 CIVIC CENTER PLAZA
HARTFORD, CT 06103

**NEW ARENA
USING
EXISTING
STRUCTURES
WITHIN
NEW
LEASEHOLD
LINE**

EXHIBIT E

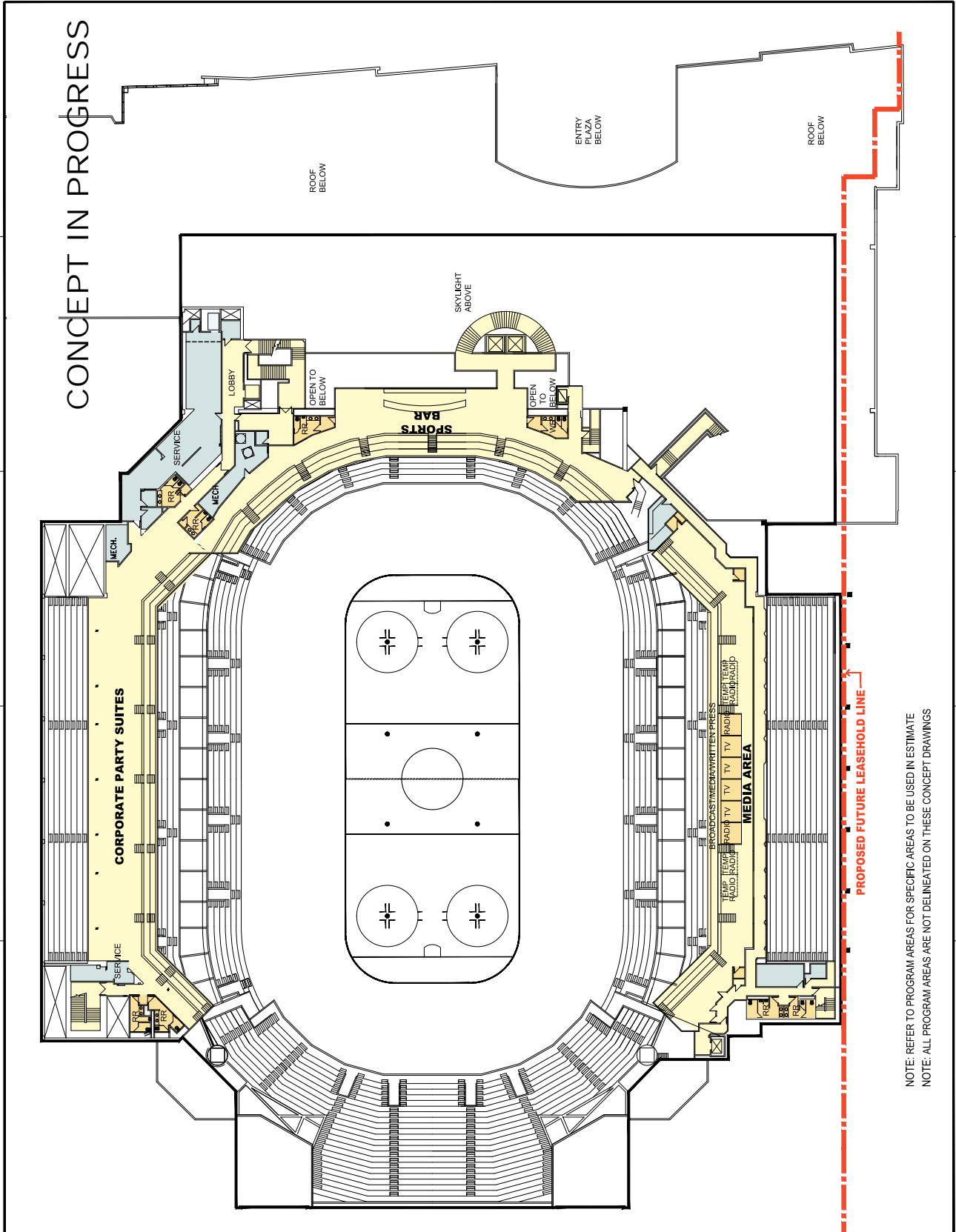
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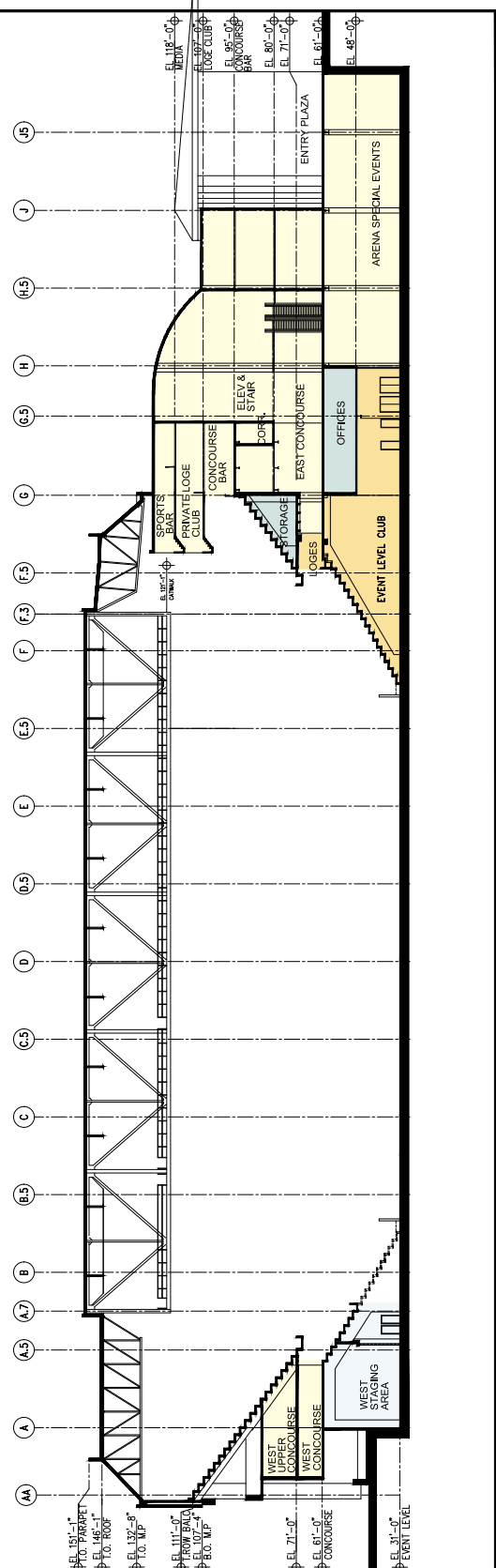
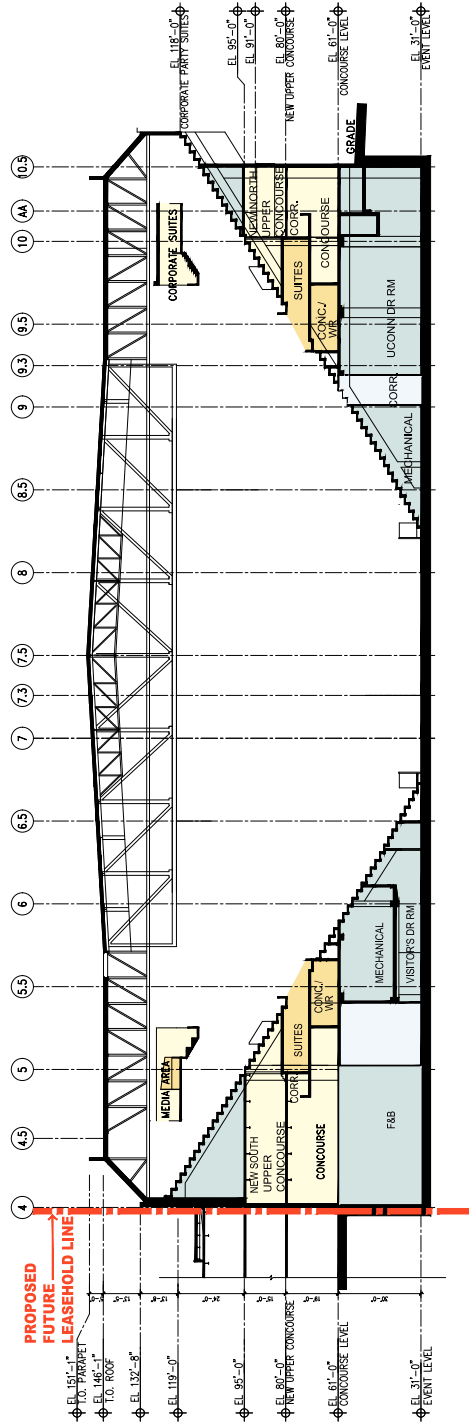
DATE: FEB 02/2015
MEDIA AREA
LEVEL 118

A-180

EXHIBIT E



CONCEPT IN PROGRESS





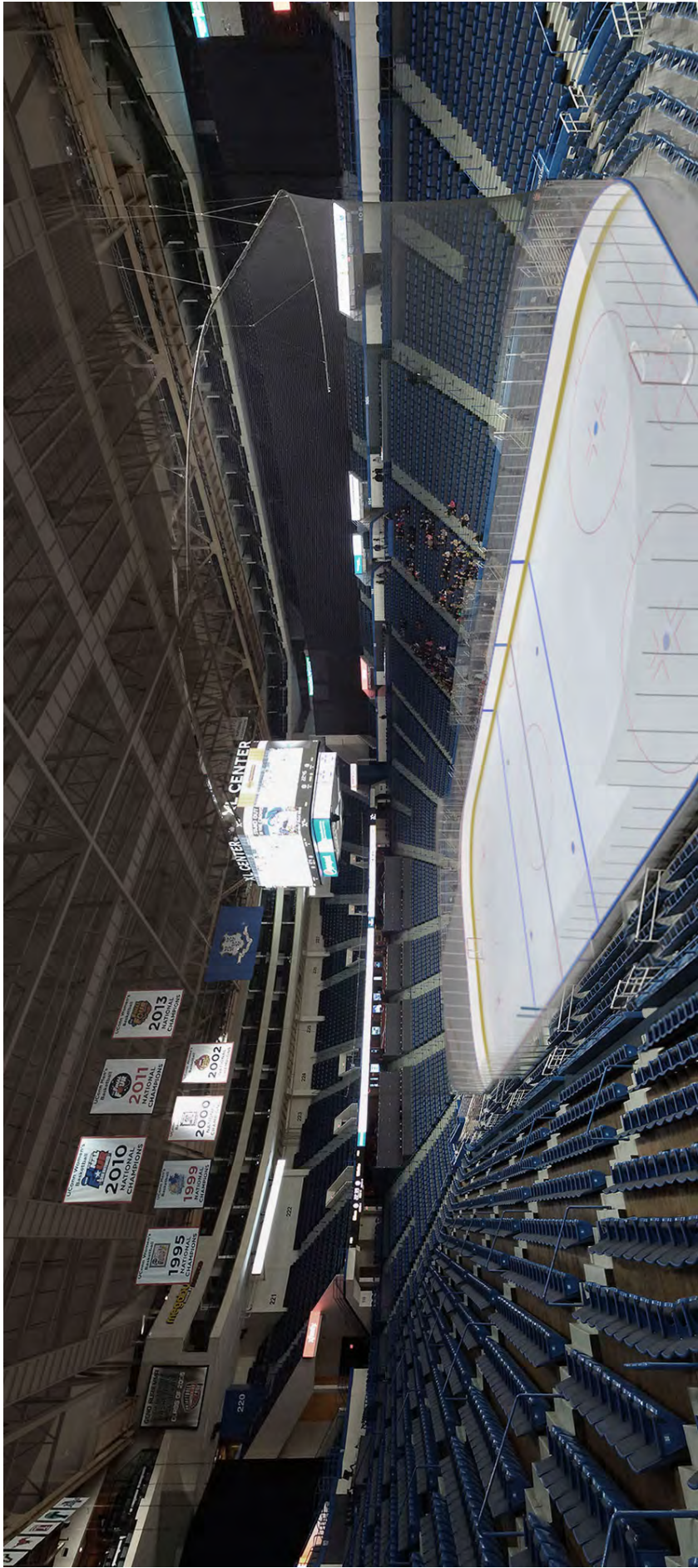


EXHIBIT G





EXHIBIT G

XL CENTER
1 CMG CENTER PLAZA
HARTFORD, CT 06103

**EXISTING
ARENA
WITHIN
EXISTING
LEASEHOLD
LINE**

**EXHIBIT
H**

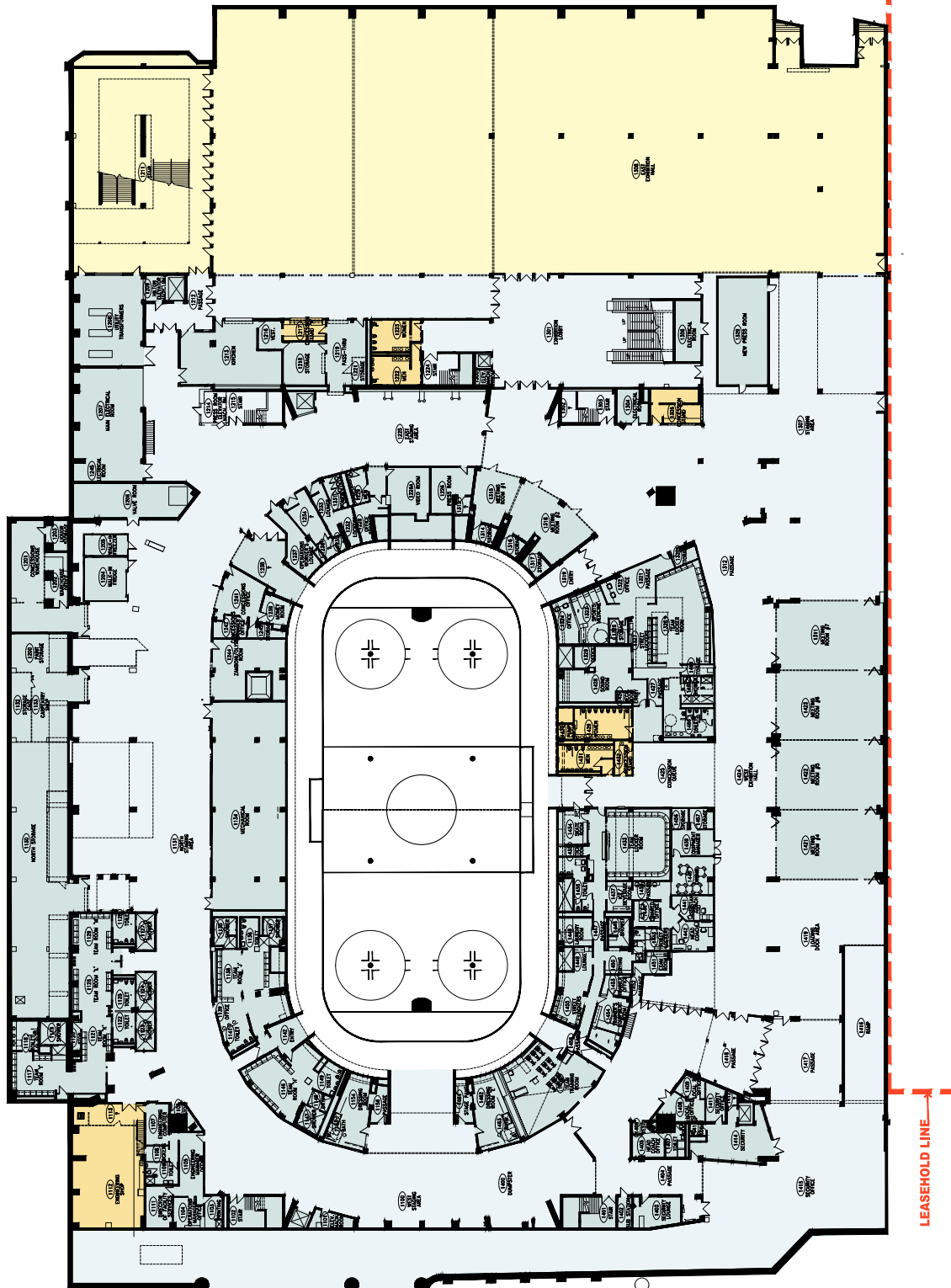
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EXISTING ARENA
JGJ ARCHITECTURE

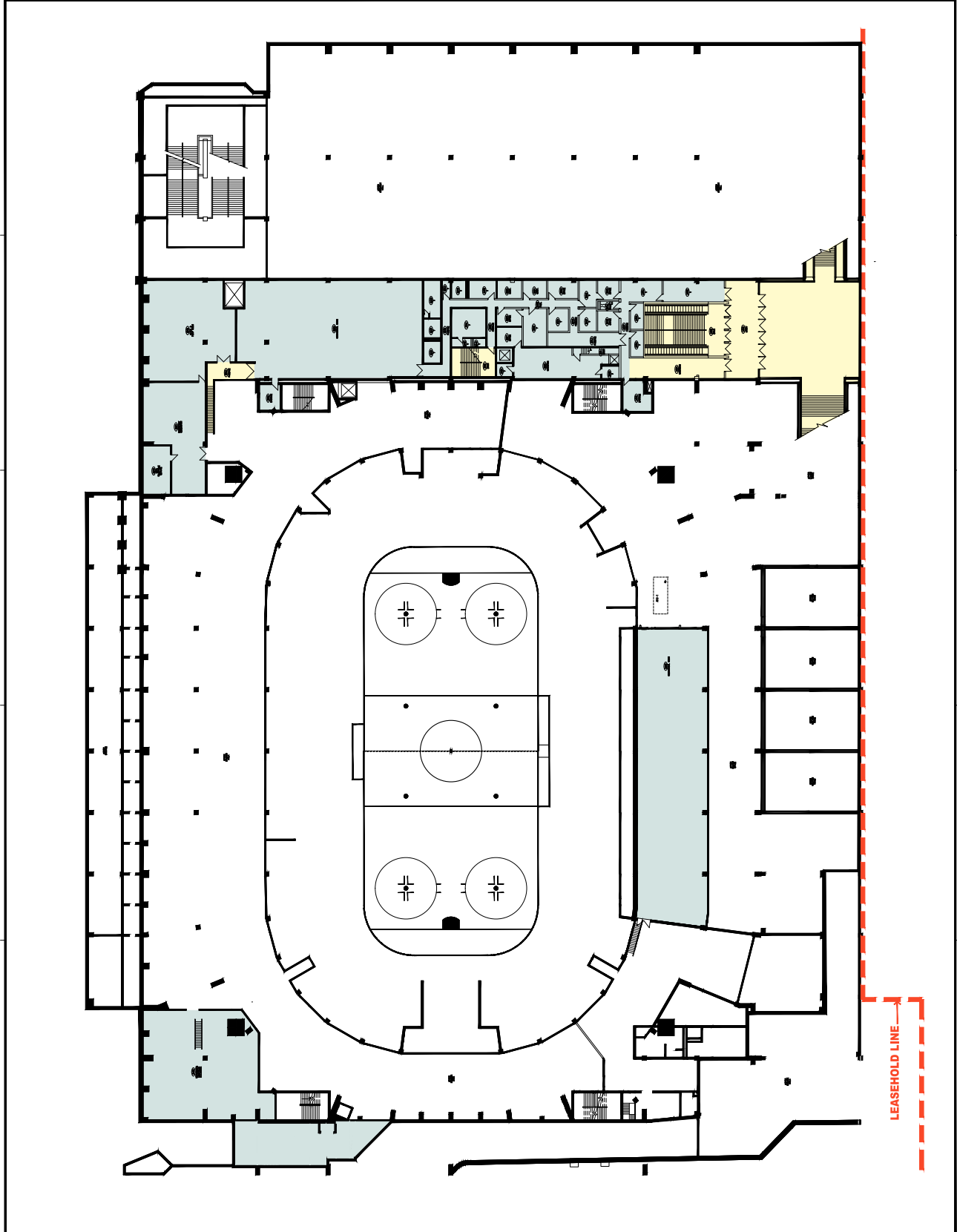
SCI
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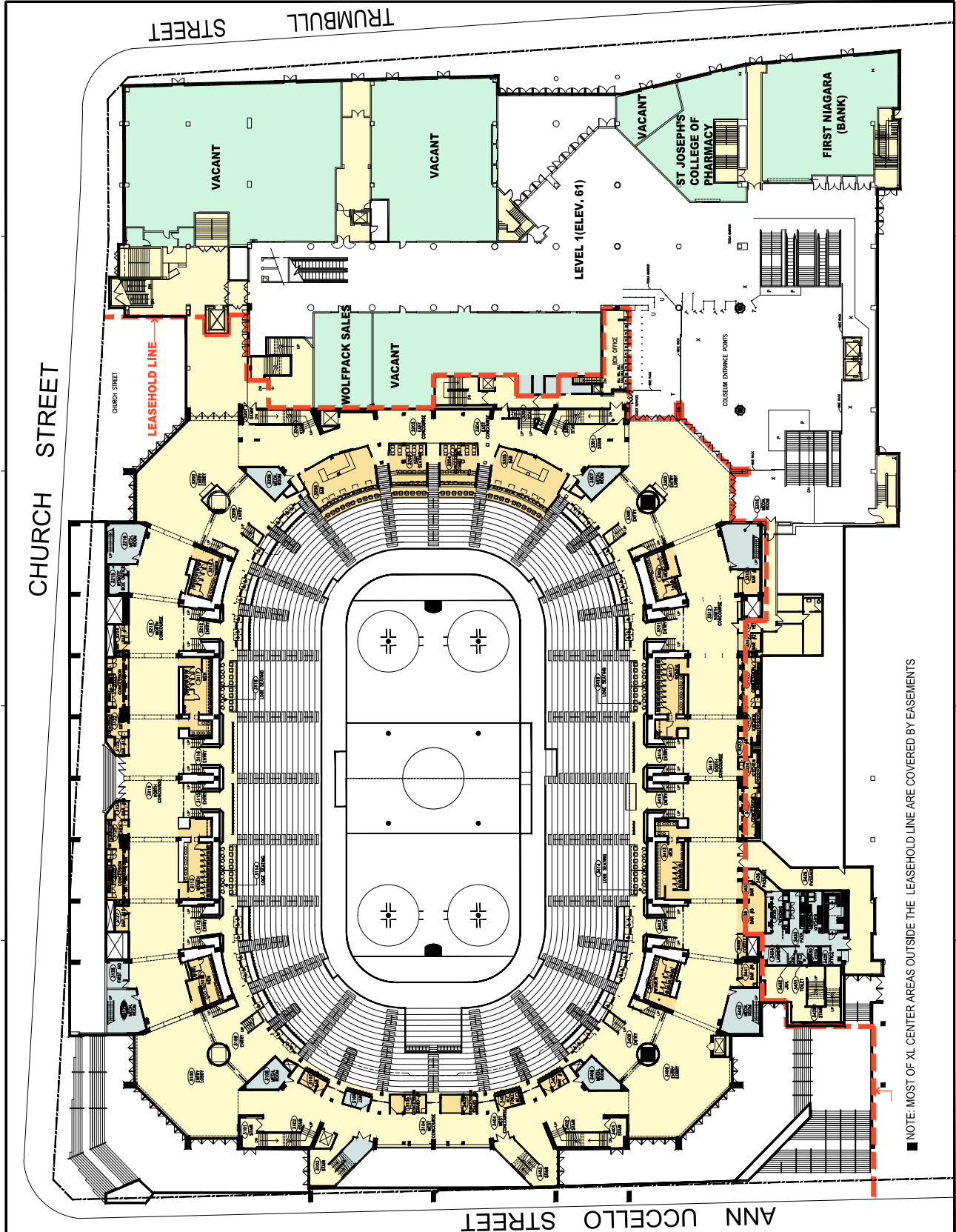
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**LOWER PLAN
LEVEL 31**

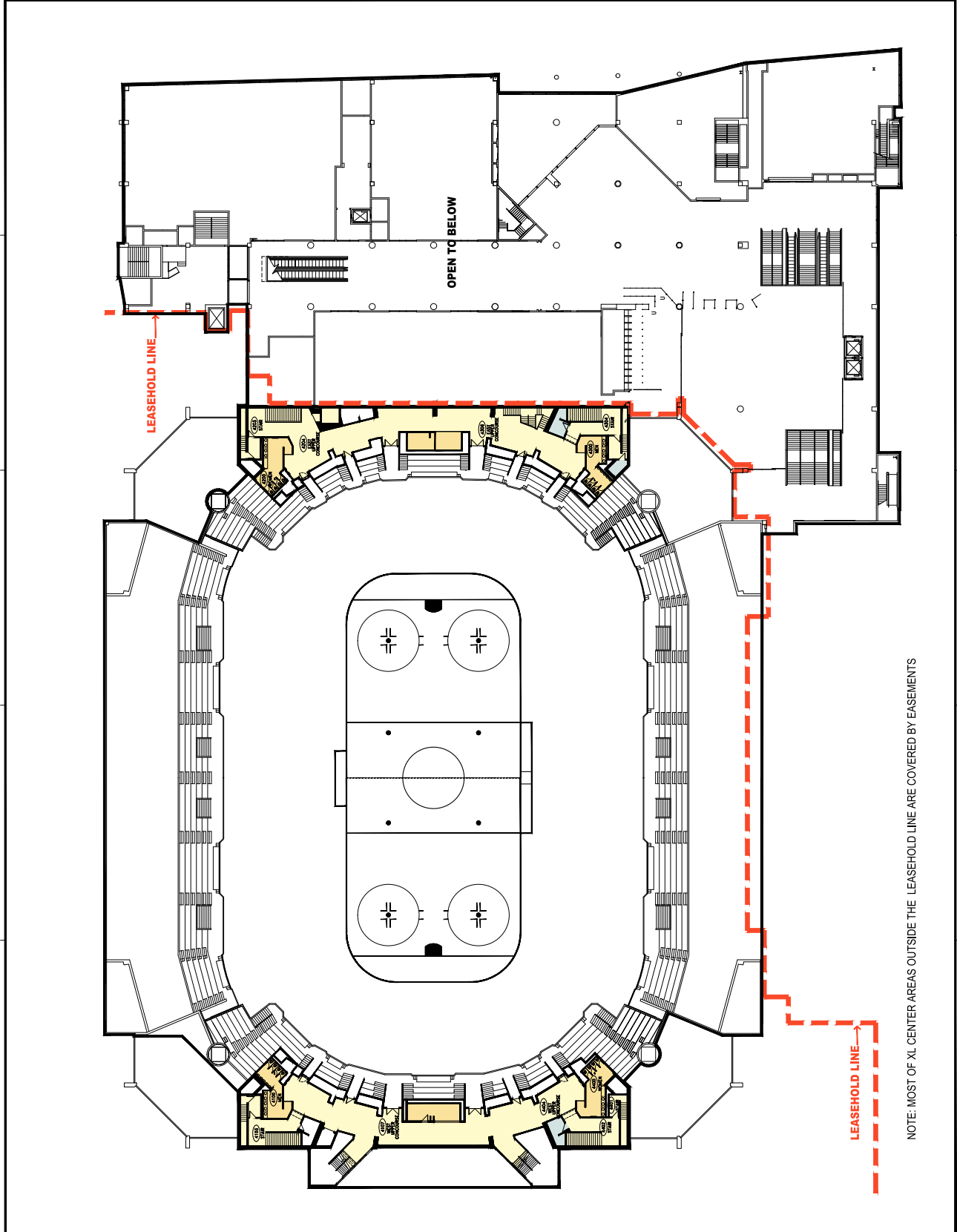
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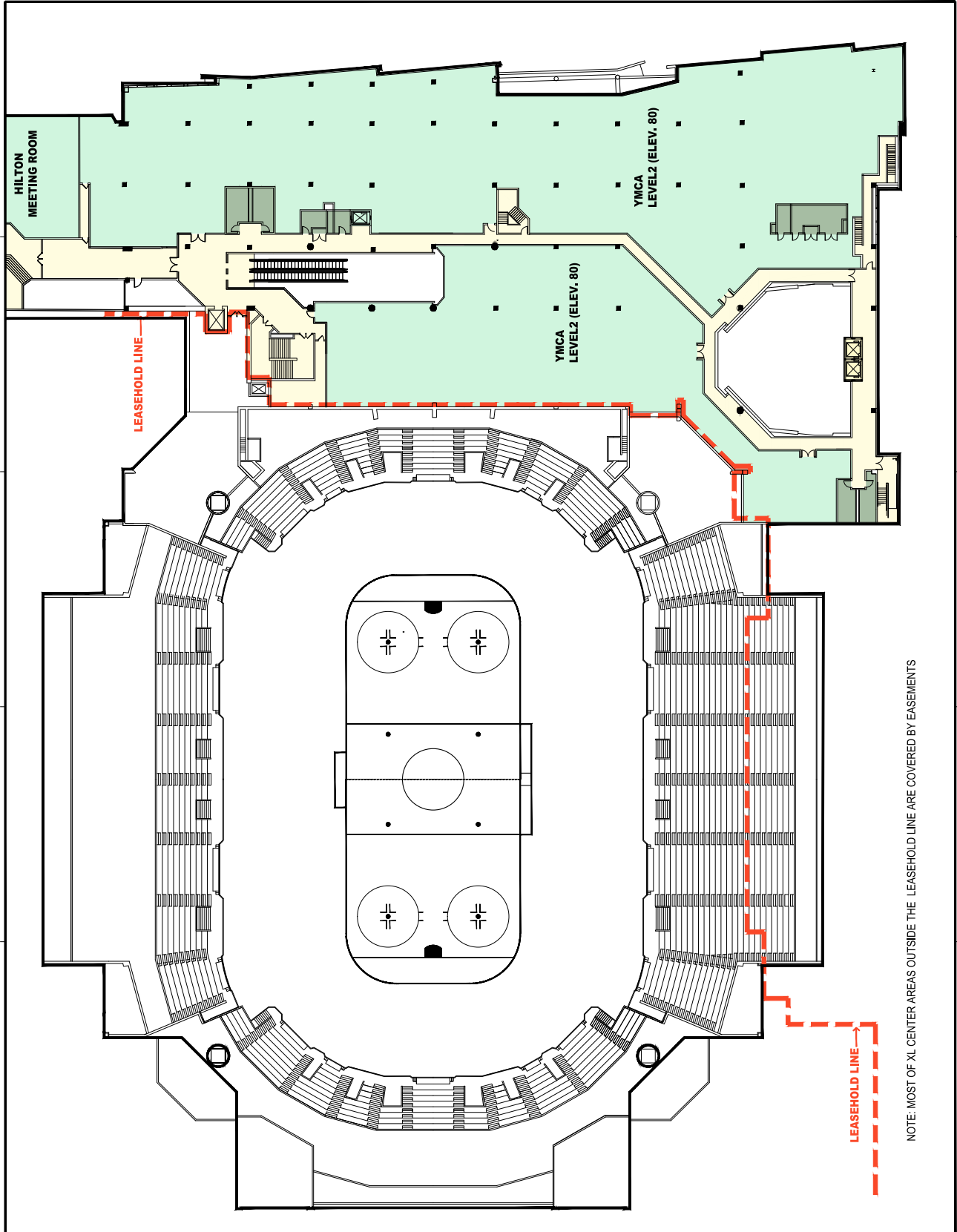
EXHIBIT H











XL CENTER

1 CIVIC CENTER PLAZA
HARTFORD, CT 06103

**EXISTING
ARENA
WITHIN
EXISTING
LEASEHOLD
LINE**

**EXHIBIT
H**

BASE BACKGROUND DOCUMENT
10/11/2014
JCJ ARCHITECTURE



DATE: FEBRUARY 2015
DIRECTOR BOX
PLAN
LEVEL 103/95

A-160

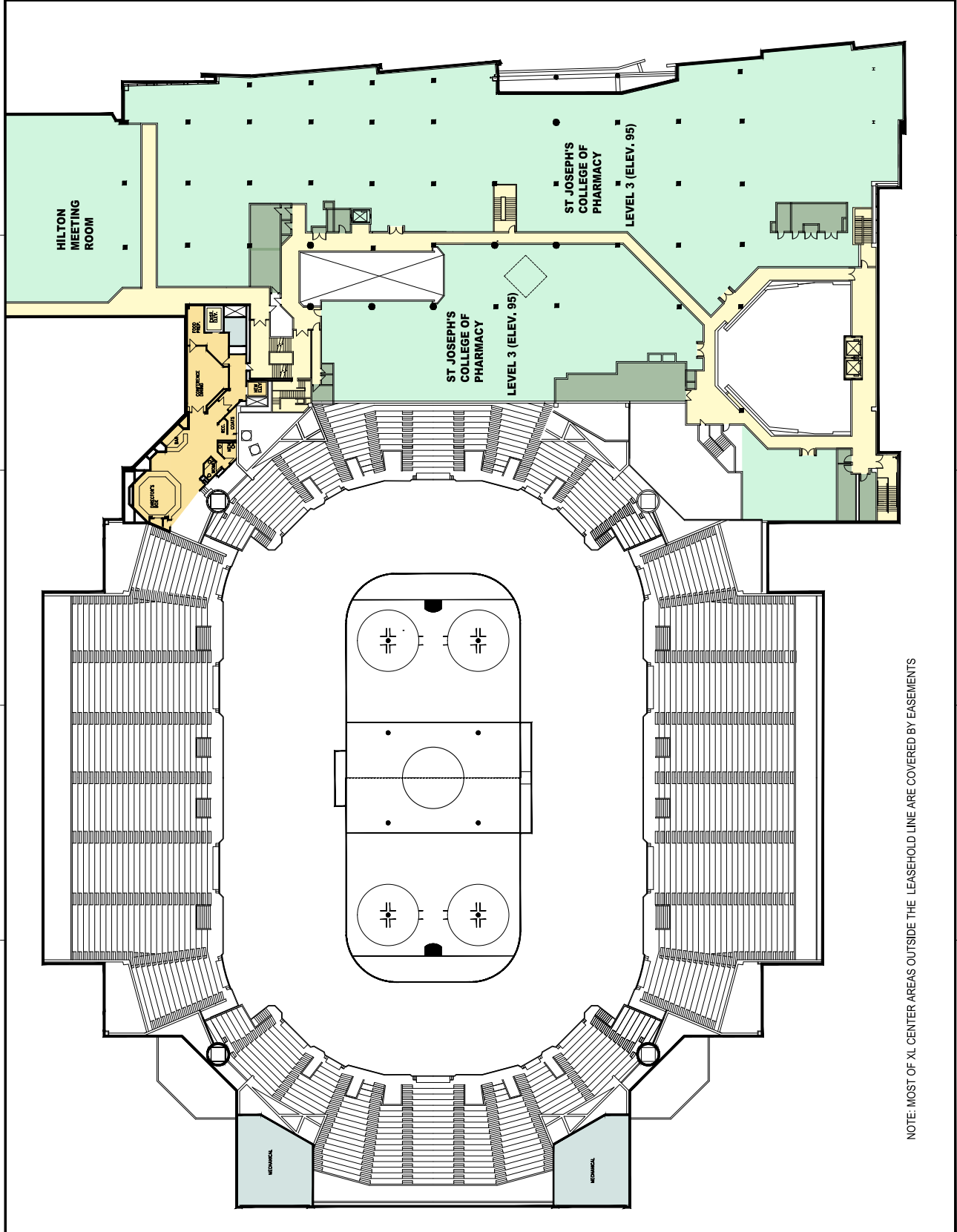


EXHIBIT H

XL CENTER

1 CIVIC CENTER PLAZA
HARTFORD, CT 06103

**EXISTING
ARENA
WITHIN
EXISTING
LEASEHOLD
LINE**

**EXHIBIT
H**

BASE BACKGROUND DOCUMENT
PROJECT NUMBER
JCJ ARCHITECTURE



DATE: FEBRUARY 2014
LOWER BOX
SUITES PLAN
LEVEL 107

A-170

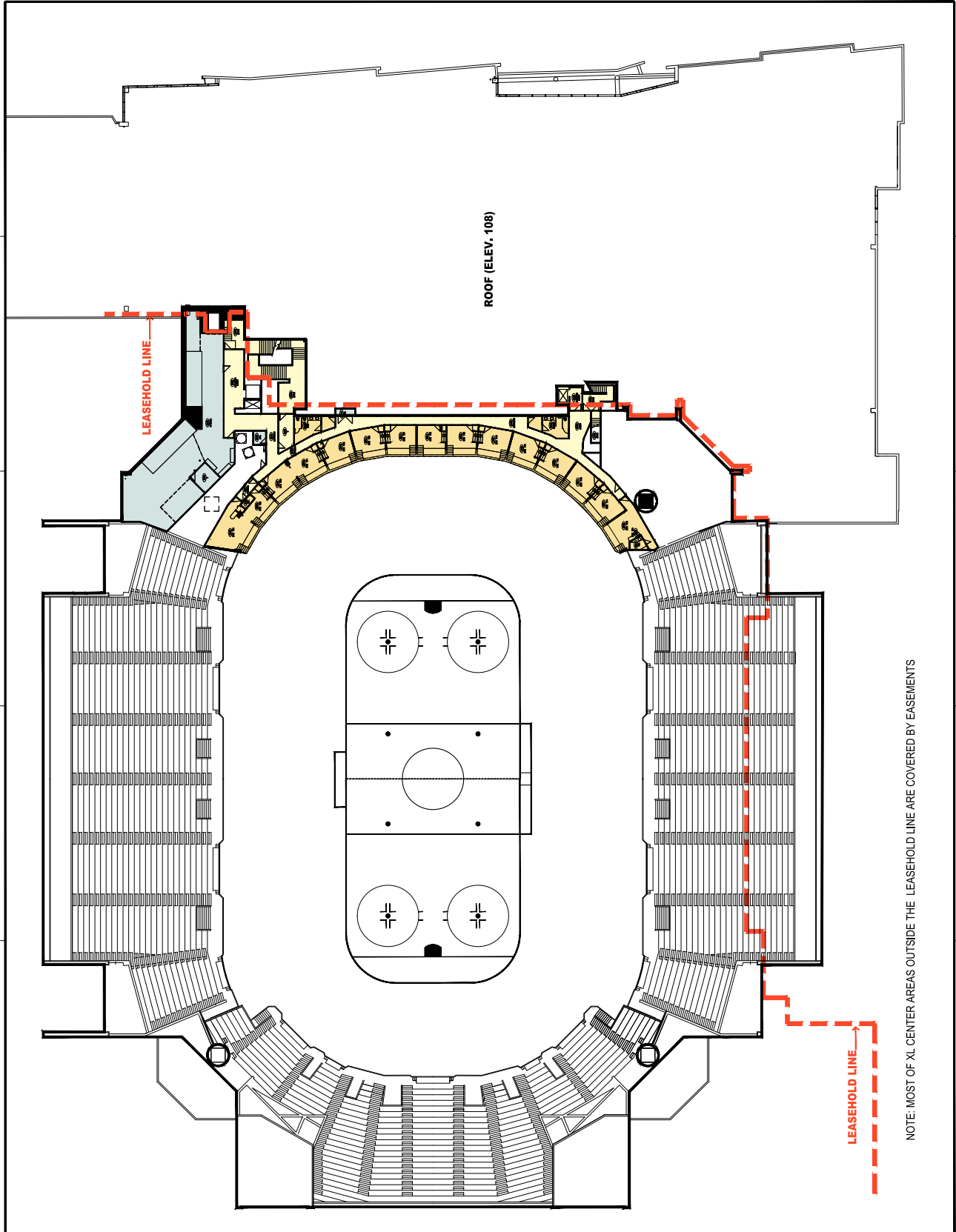


EXHIBIT H

XL CENTER

1 CIVIC CENTER PLAZA
HARTFORD, CT 06103

**EXISTING
ARENA
WITHIN
EXISTING
LEASEHOLD
LINE**

**EXHIBIT
H**

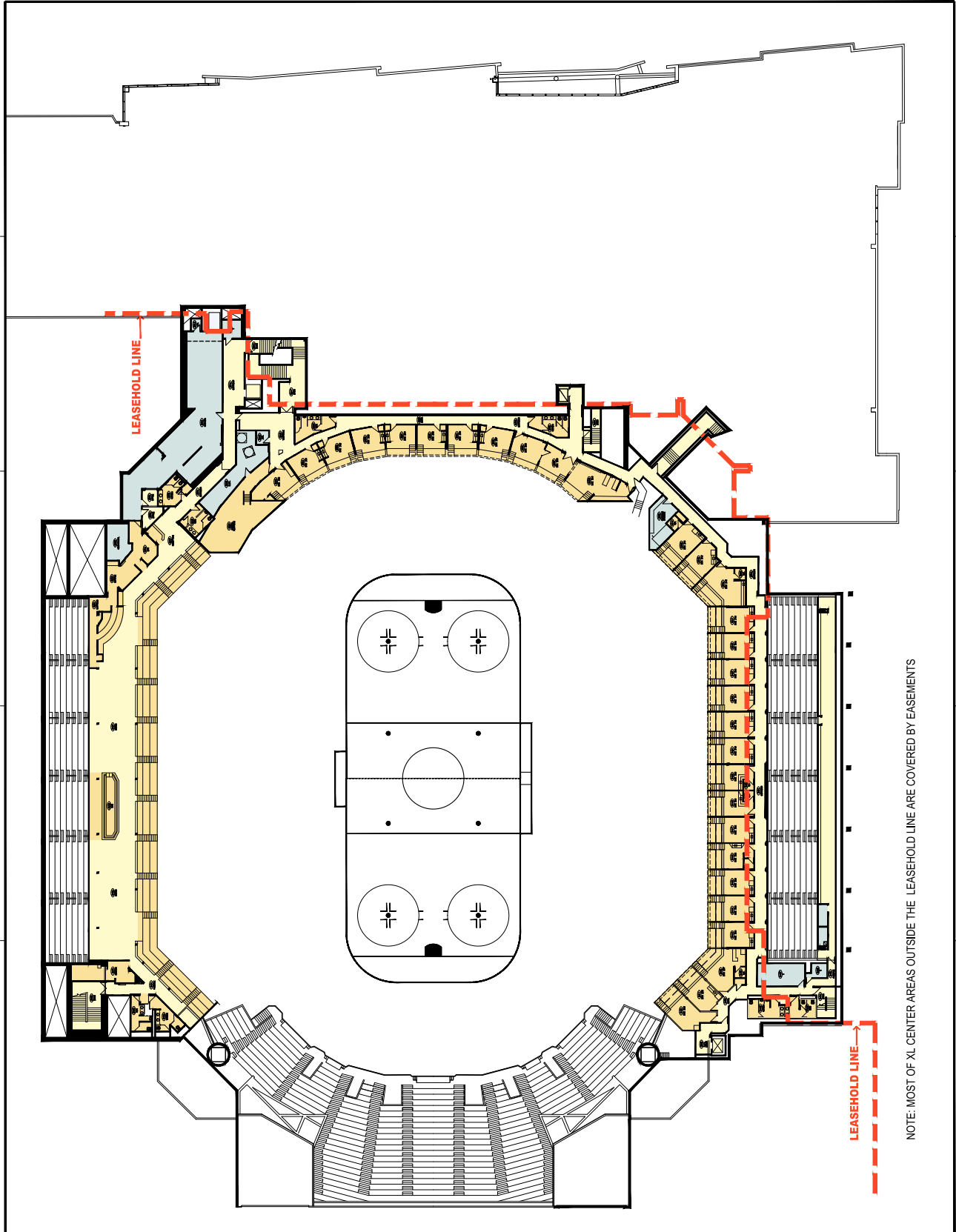
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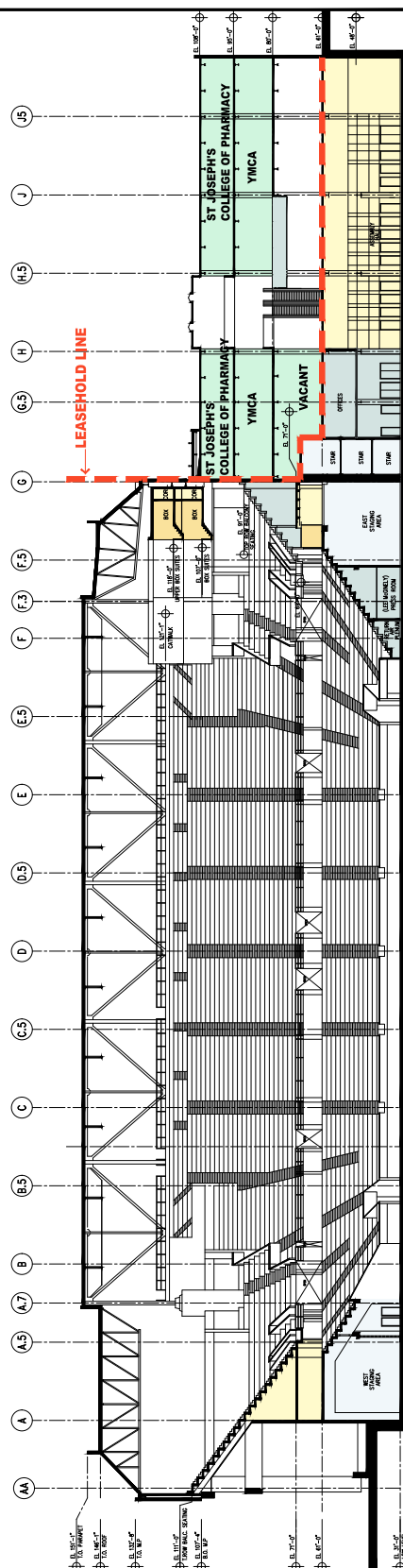
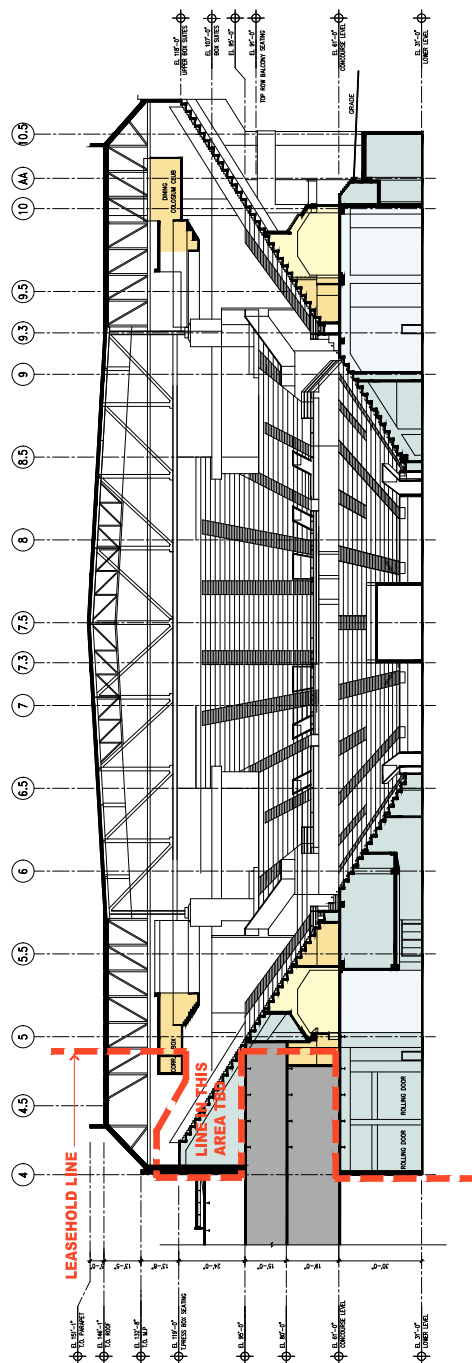


DATE: FEBRUARY 2015
UPPER BOX
SUITES PLAN
LEVEL 118

A-180

EXHIBIT H





NOTE: MOST OF XL CENTER AREAS OUTSIDE THE LEASEHOLD LINE ARE COVERED BY EASEMENTS

The primary trends in the design and operation of Multi-use Spectator Arenas are as follows:

- Locating multi-use spectator arenas in downtown urban environments instead of the suburbs. This is combined with fostering the growth of active entertainment districts around these spectator venues.
- Premium services that begin before entering the arena , from direct phone and texting to the concierge to easy in/and out parking.
- Smaller seating capacities of approximately 17,000 to 18,000 in lieu of the previous 19,000 to 21,000 for hockey and basketball.
- WiFi and connectivity to and from all guests to ensure better interaction between the teams/artists/facilities and their fans.
- Reduced number of private suites.
- More premium seating close to the event.
- More private or semi-private VIP hospitality for smaller groups.
- More clubs of varying exclusivity and size with more looking into bowl.
- Super VIP hospitality products with exclusive access to stars and unique amenities.
- Party areas in the bowl especially for corporate group sales.
- Adventure and unusual seating products such as on bridges and cabaret style seats and banquettes.
- Bigger concourses with informal seating areas and views to the exterior.
- Branded gourmet and specialty food & beverage offerings including craft beer.
- Cleaner brighter restrooms with more fixtures.
- Larger interactive team stores.
- Better and more audio and video.
- Faster exiting at the end of events.

Answers to other Miscellaneous CRDA Questions:

- The smallest facility that can be built that will still meet CRDA's objectives would be approximately 16,000 for hockey and 17,000 for basketball.
- Building systems that we would recommend to be incorporated into a new 17,000 seat multi-use spectator arena to reduce energy consumption and operating expenses:
 - Airside economizers on all Air Handling Units to take advantage of lower outside air temperatures for cooling in lieu of mechanical cooling.
 - Energy recovery units for the bowl and locker rooms where significant excess heat is generated.
 - Desiccant dehumidifiers on the bowl air handling units which are more efficient than mechanical dehumidification.
 - High efficiency boilers to achieve up to 93% efficiency versus a more normal 80%.
 - Kitchen hood wash and recirc systems to reduce make-up air requirements.
 - LED lighting including for the sport floor with higher efficiencies.
 - Full lighting control system with occupancy sensors to reduce lighting usage.
 - High efficiency fenestration to reduce cooling loads.
 - Proper insulation in exterior walls to reduce heating and cooling loads.
 - Demand control ventilation with CO2 sensors to reduce outside air requirements.
 - Bioclimatic bi-polar ionization on AHU'S to reduce outside air use.
 - Kitchen hood VFD control to reduce fan CFM's.
 - Dock door seals to prevent leakage around trucks while loading/unloading.
 - A complete energy model of the arena to understand where energy is being wasted along with an assessment of water use and labor requirements to operate.
 - Proper MEP systems commissioning to yield 13% to 16% in energy savings.
- Readily accessible parking facilities should be worked into the design of a new facility. Obviously in this regard, retaining the Church Street garage is important.
- The market implications of closing the existing facility during construction, both to the facility itself and the City as a whole are:
 - The continuity of booking annual shows would be lost. Management would be forced to rebuild the business, while touring shows will probably have found other markets to play during the period when the venue is inactive.
 - The local business community would suffer financially as there will be no impact venue in the market that can bring thousands of people downtown for events.
 - In Hartford, this is of particular concern given the proximity of two major casinos in southeastern Connecticut and the announcement of a new casino complex planned for nearby Springfield, Massachusetts. In this regard, speed is particularly important.

History has proven that it is very difficult to predict what cities can and what cities will secure a professional sport franchise. Who would have bet 20 years ago that in 2015, Los Angeles would still not have a NFL Team?

However, based on our experience, we believe that the following is true:

1. Hartford will not secure an NHL franchise with the present day XL Center.
2. Hartford will not have a chance of securing an NHL franchise until:
 - a first class arena is in place.
 - a detailed business plan, backed up by thorough market studies and long term commitments from Connecticut companies and individuals, is produced.
 - a high quality company or wealthy individual who the League trusts has a conditional agreement with the arena owners to operate a team in the facility.
 - it is demonstrated that the team will not be a negative contributor to the League's overall financial health.
 - an opportunity arises where an existing team has to move or the League expands the number of franchises.

IT IS EMPHASIZED THAT EVEN IF ALL OF THE ABOVE IS IN PLACE OR CONFIRMED, THERE IS NO GUARANTEE THAT HARTFORD WILL SECURE AN NHL TEAM.

With the assumption that CRDA will continue to advance this initiative to realize a new or transformed arena on the existing XL Center site, we propose that the following next steps be considered:

- With the objectives stated in this report, complete agreements or MOU's with:
 - UConn
 - City of Hartford
 - Northland
 - Global Spectrum
- With the above confirmed or in a positive position, complete more detailed due diligence of the site and building and of the design if the Transformed Arena is preferred especially in order to verify the capital cost estimate.

SCI ARCHITECTS, P.C.

SCIA's group of companies have focused on the development of spectator sports and entertainment projects for over 30 years. We are recognized as industry leaders in determining what older facilities can be transformed into modern facilities and which are better to be demolished. By example, when many experts proclaimed that New York's MSG and Los Angeles' Forum had outlived their useful lives, SCIA found the secrets to their transformation and their hidden economic potential to deliver major newly transformed successful projects.

STAFFORD SPORTS

Stafford Sports is an independent, nationally recognized company that provides expert consulting and advisory services for sports, entertainment and public assembly venues. Stafford's Principals have conducted market studies that have led to the successful development of high-profile arenas including the AT&T Center, BB&T Center, Cedar Park Center, Intrust Bank Arena, Moda Center, Oracle Arena, Quicken Loans Arena and the Wells Fargo Center.

POSITIVE IMPACT

Positive Impact, Inc., is a sports and entertainment management and advisory firm specializing in tenant negotiations, facility planning and design, strategic business plan development, sponsorship and premium seat sales. Positive Impact's clients include the Meadowlands Sports Complex, the NBA Nets, the City of Newark, and the Atlantic City Casino Redevelopment Authority.

SEVERUD

Severud Structural Engineers are pre-eminent specialists in the design of sport and entertainment facilities. Their impressive portfolio includes many upgrades of older arenas to 21st century standards. Following renovation, one high profile project now accommodates 'award show event loadings' in excess of 275,000lbs.

M-E ENGINEERS.

In the last 10 years, no MEP engineering company in the country has worked on more major spectator arenas than M-E. They have especially focused on environmentally responsible solutions that reduce annual operating costs in new and renovated facilities. They have been actively involved in the present renovation.

DIMEO CONSTRUCTION COMPANY

Dimeo is a ENR Top 100 Contractor and regional construction leader providing a complete range of preconstruction planning, general contracting and at risk construction management services to clients throughout many building types. Dimeo's recent sports and arena projects include renovation of the XL Center, Quinnipiac University's TD Bank Sports Center, and University of Connecticut's Mark R. Shenkman Training Center.

JCJ ARCHITECTURE

JCJ are a well known architectural company based in Hartford who have recently completed renovations to the XL Center. During the course of this study, JCJ have been very helpful in providing existing XL Center documents and advice about the building's existing condition.

MARKET STUDY

HARTFORD CONNECTICUT

NEW & TRANSFORMED ARENA

PROGRAM DEVELOPMENT and

CONSTRUCTION FEASIBILITY SERVICES

Prepared for:

CAPITAL REGION DEVELOPMENT AUTHORITY
HARTFORD CONNECTICUT

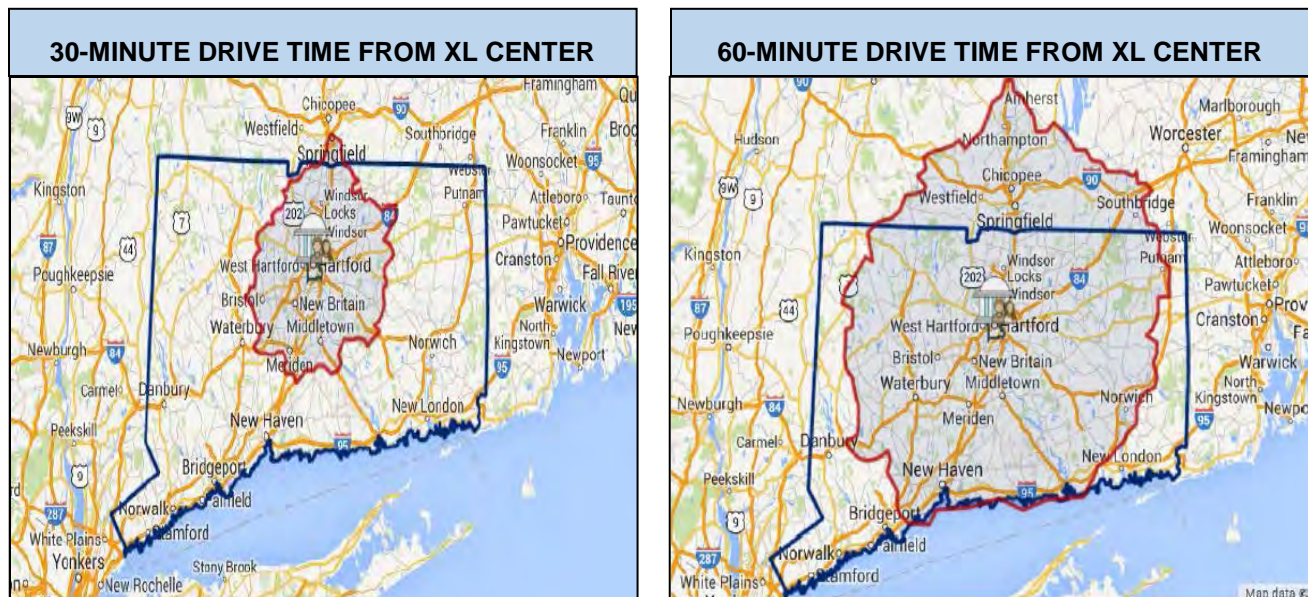
February 19, 2015

Stafford Sports, LLC
SCI Architects P.C.

A. Industry Demographic and Economic Indicators – Support for a New or Transformed Arena

The Consulting Team reviewed selected economic and demographic information for the Greater Hartford region in order to determine the levels of future support for events and commercial opportunities at a New or Transformed Arena (the “Arena”).

The Consulting Team recognizes that the success of the Arena will be dependent upon its ability to attract residents from the Hartford region, as well as the adjacent counties of New Haven, Middlesex and Litchfield. The Team reviewed demographic and economic information provided by the Metro Hartford Alliance and the Connecticut Economic Resource Center (CERC). Demographic and economic information was reviewed for two catchment areas - within a thirty-minute drive time and sixty-minute drive time of the Arena, to be located at the existing XL Center site.



The Consulting Team's review focused on those demographic indicators that are analyzed by event presenters in determining whether a market has sufficient population and income to support their events. These demographic indicators include attributes such as:



- Population
- Population by Race
- Population by Gender
- Population by Age Grouping
- Median Age
- Household Income
- Levels of Education

Event producers and tenants analyze information on the overall size and age of the population. In particular, presenters and tenants look to determine whether there are sufficient numbers in the age groupings between 20 and 39 years of age and between 40 and 59 years of age. These two age groupings typically account for the majority of ticket sales. Finally, event presenters and tenants evaluate levels of household income in the market, which is a significant indicator as to whether residents will purchase tickets for events that command higher prices.

The following information is a demographic and economic summary of the market catchment areas for the Arena.

Event presenters of sporting events, concerts, family shows, special entertainment events and national tournaments evaluate the base of population that will be serviced by the Arena in order to determine whether the number of residents within a reasonable driving distance of the venue is sufficient to support their events. These event presenters recognize that the majority of ticket buyers will come from an area within a thirty-minute drive of the Arena, with additional ticket sales coming from residents of communities that are between thirty and sixty minutes drive time of the venue.

The Hartford Metropolitan Statistical Area (MSA), which consists of Hartford, West Hartford and East Hartford, CT, is included in the thirty minute driving radius and is ranked by population as the 46th largest market in the country.



As seen in the table below, there are projected to be 1,230,896 residents who will live within a thirty-minute drive of the Arena by the year 2019. Within sixty minutes of the site of the Arena, the projected population by 2019 is expected to be 3,114,320 residents. The population in the market within both thirty and sixty minute drive time of the site is expected to remain stable with marginal growth of less than 1% between 2014 and 2019.

POPULATION		
30-MINUTE DRIVING RADIUS OF XL CENTER		
Population		Growth
2014 Estimate	1,219,986	2014 – 2019 .9%
2019 Projection	1,230,896	
POPULATION		
60-MINUTE DRIVING RADIUS OF XL CENTER		
Population		Growth
2014 Estimate	3,084,858	2014 – 2019 .9%
2019 Projection	3,114,320	

The Hartford MSA is slightly larger than metropolitan markets such as Birmingham, Buffalo, Raleigh and Salt Lake. The sixty-minute driving radius incorporates both the Hartford MSA and the New Haven-Milford MSA (63rd largest U.S. market).

The size of the Hartford market is similar to the size of other metropolitan markets that support major arenas. These arenas present a wide range of activities, including professional, minor league and collegiate sports tenants, concerts, family shows and touring entertainment events. These venues also serve the greater metropolitan area in which they are located and host amateur athletics, regional athletic competitions and community events. Based on the population within a thirty-minute drive time and supported by additional population within a sixty-minute drive time, the Arena will need to be of a comparable seating capacity with these major arenas.



Similar to a number of arenas across the country, the Arena will serve as a destination that serves both an urban and suburban population. Additional support for the arena will come from nearby suburban residents. In addition, the State of Connecticut through the Capital Region Development Authority ("CRDA") is in the process of funding \$60 million towards new housing development in the CRDA District located in the City. CRDA has a total of 800 units under construction in the market, with another 2,000 units being planned. As seen in the table, this funding supports the development of a number of recent housing units.

LOCATION	NUMBER OF UNITS
201 Ann Uccelo Street	26 units
179 Allyn Street	63 units
On the Plaza	193 units
777 Main Street	285 units
Front Street Lofts	121 units

The location of the Arena on the site of the existing XL Center will allow both City residents to have ease of access by walking or utilizing the DASH free transit system. Suburban residents will benefit from the availability of numerous parking spaces located adjacent to, or within proximity of, the Arena.

A strong indicator of the ability of a market to support a wide variety of events is the number of residents by age group. In particular, event presenters focus on the key age groups of 20-39 years of age and 40-59 years of age, since these two age groups are the most active ticket buyers and typically buy the majority of tickets to events. Presenters also evaluate the number of youth and young adults in the market that are under twenty years of age, particularly for events such as family shows and selected concerts. The table below provides a breakdown of the population within thirty-minute drive time by age grouping. By 2019, there will be more than 635,000 residents who live within 30 minutes of the Arena in the essential ticket buying age group of 20 - 59 years of age. By 2019, the combined age group of 20-59 will account for almost 52% of the total population. And



within a sixty-mile radius, this key age group with discretionary income grows to more than 1,600,000 residents.

This number of residents within a thirty mile and sixty mile radius who fall into these key age groups is a significant positive indicator of the ability of the Greater Hartford market to support events in the Arena.

POPULATION BY AGE				
30-MINUTE DRIVING RADIUS OF XL CENTER				
Population 2014			Projection 2019	
Age	Total	%	Total	%
Ages 19 and under	299,587	24.55	285,688	23.21
Ages 20-39	305,820	25.06	309,987	25.18
Ages 40-59	350,703	28.74	326,562	26.53
Ages 60+	263,876	21.63	308,659	25.08
POPULATION BY AGE				
60-MINUTE DRIVING RADIUS OF XL CENTER				
Ages 19 and under	751,588	24.37	715,254	22.96
Ages 20-39	763,513	24.75	780,525	25.06
Ages 40-59	887,403	28.76	820,191	26.34
Ages 60+	682,354	22.12	798,350	25.64

As seen in the table above, the market will continue to age with a continued expansion of the age group of 60 and older. In the next five years, this group will expand by nearly 50,000 residents (30-mile drive radius) and almost 116,000 residents (60-mile drive radius).



Based on CERC information supplied by Metro Hartford Alliance, the Consulting Team reviewed the median age levels for communities for communities in Hartford, New Haven, Litchfield and Middlesex Counties. The table below provides another indication of an aging population in the region. As with other nationwide markets that have a significant older population, both presenters and management of the Arena will need to continue to develop events that appeal to an aging demographic. In addition, the Arena will need to have guest amenities that appeal to an older population such as parking within close proximity, comfortable seating and sufficient accommodations for the elderly such as comfortable washrooms and varied food and beverage choices.

MEDIAN AGE POPULATION BY COUNTY	
Hartford County	44
New Haven County	45
Litchfield County	45
Middlesex County	43

Event presenters also evaluate a market based on diversity, which is an indicator of the ability of the market to support music, sports, family, ethnic and cultural events. The table below indicates that the catchment area offers diversity in race, which reflects the capability of the Arena to present events that appeal to a wide range of interests. The level of diversity in the market will provide management of the Arena with unique opportunities to attract multiple audiences to events and to book or create ethnic and cultural events that appeal to diverse audiences.



POPULATION BY RACE				
30-MINUTE DRIVING RADIUS OF XL CENTER				
2014 Race			2019 Projection	
Race	Total	%	Total	%
White	908,273	74.45	918,051	74.58
Hispanic	198,178	16.24	211,602	17.19
Black	145,086	11.89	145,614	11.83
Other	85,633	7.01	85,785	6.96
Asian	48,304	3.96	48,502	3.94
Multi race	32,690	2.68	32,944	2.68
POPULATION BY RACE				
60-MINUTE DRIVING RADIUS OF XL CENTER				
White	2,417,329	78.36	2,444,375	78.49
Hispanic	450,850	14.61	481,026	15.45
Black	299,222	9.7	300,167	9.64
Other	188,371	6.11	188,662	6.06
Asian	101,663	3.3	102,210	3.28
Multi race	78,273	2.54	78,906	2.53

As with diversity in race, event presenters also evaluate the distribution of population by gender in order to help determine support for multiple types of events. The table below indicates that there is equitable gender distribution within the market catchment area, which is another favorable indicator for supporting a myriad of events that would be hosted in the Arena.



POPULATION BY GENDER				
30-MINUTE DRIVING RADIUS OF XL CENTER				
2014 Gender			2019 Projection	
Gender	Total	%	Total	%
Female	628,259	51.5	633,861	51.5
Male	591,727	48.5	597,035	48.5
POPULATION BY GENDER				
60-MINUTE DRIVING RADIUS OF XL CENTER				
Female	1,592,017	51.61	1,607,041	51.6
Male	1,492,841	48.39	1,507,279	48.4

In addition to information on the makeup of a market's population, presenters and tenants focus on information that indicates levels of income. The table below provides information on household income levels within the market catchment areas for the Arena. Presenters are particularly attracted to markets like Hartford that have a large number of households with higher levels of income, since these households have more discretionary income to spend and the capability to be active purchasers of tickets, food and beverage and merchandise.

Approximately 240,000 or 48% of the households within the 30 minutes catchment area have annual income higher than \$75,000 per annum, which is a noteworthy and positive indicator that there is a sufficient number of households with the ability to support the Arena. As importantly, more than 172,000 or nearly 35% of households within a 30-minute drive of the Arena have household income of more than \$100,000. This is another very positive indicator of the ability of the Hartford regional market to support high-ticket prices for events.



HOUSEHOLD INCOME 30-MINUTE DRIVING RADIUS OF XL CENTER				
2014 Income			2019 Projection	
Income	Total	%	Total	%
< \$10K to \$50K	188,708	39.01	177,945	35.78
\$50-\$60K	33,364	6.9	36,432	7.32
\$60K-\$75K	47,305	9.78	42,821	8.61
\$75K-\$100K	64,578	13.35	68,222	13.71
>\$100K	149,712	30.95	172,125	34.59
HOUSEHOLD INCOME 60-MINUTE DRIVING RADIUS OF XL CENTER				
< \$10K to \$50K	484,850	39.92	458,106	36.69
\$50-\$60K	85,332	7.03	92,585	7.41
\$60K-\$75K	120,499	9.92	108,533	8.69
\$75K-\$100K	162,372	13.37	172,728	13.83
>\$100K	361,524	29.77	416,952	33.39

A final indicator of the ability of the market to support events is the level of educational attainment in the market. The table below indicates that by 2019, 59% (495,044 residents) of the over 25 population in the Hartford region will have attained at least a high school degree or some level of higher education. Event presenters view this level of educational attainment as a positive indicator that the market would support events in the Arena that appeal to a discerning and educated audience



EDUCATION					
30 MINUTE DRIVING RADIUS OF XL CENTER					
Education 2014			Projection 2019		
Attainment	Total	%	Total	Total	%
Population 25+	817,677		Population 25+	836,989	
< Grade 9	41,565	5.08		42,472	5.07
Grades 9-12	60,193	7.36		61,537	7.36
High School	233,745	28.59		239,385	28.6
Some College	148,054	18.11		151,650	18.12
Associate Degree	62,357	7.63		63,902	7.63
Bachelor Degree	157,600	19.27		161,368	19.28
Graduate Degree	114,163	13.96		116,675	13.94

Among other assets that will support the Arena is an infrastructure system includes a mass transit system serving the Hartford region and Central Connecticut. The new Fasttrack system will serve the City and the region with a bus rapid transit system with 10 stations. The main line of Fasttrack will be the New Britain to Hartford line with additional local routes, feeder routes and four express routes. Complimenting Fasttrack is the Dash Shuttle system, a free bus line servicing the City of Hartford. The system makes stops at major attractions in Hartford including XL Center. Operating hours end at 7 pm daily, which would need to be extended on event days at the Arena.

In addition, the Hartford Transit Station is within walking distance of the arena site. A planned Hartford line will provide further connection with New Haven, Stamford and New York City. Once this line becomes operational, it will provide additional access to the Arena for residents in the region and the State.

The availability of parking in downtown Hartford is an important asset for presenters who will bring events to the Arena. There currently is sufficient parking within proximity of the arena site. There are two garages that are within close proximity of the site, the Church Street Garage and the Main and Trumbull Garage. These two garages account for twenty percent of downtown indoor parking spaces. Although there is adequate garage and surface parking, there should be more control of operating hours and rates in order to optimize the potential of the Arena and the downtown corridor.



The Consulting Team's review of economic and demographic information indicates the following:

- The Hartford MSA is slightly larger than metropolitan markets such as Birmingham, Buffalo, Raleigh and Salt Lake. The combined population within sixty minutes of the Arena would be similar in size to other metropolitan markets that have major arenas. These arenas present a wide range of activities, including professional, minor league and collegiate sports tenants, concerts, family shows and touring entertainment events. These venues also serve the greater metropolitan area in which they are located and host amateur athletics, regional athletic competitions and community events.
- Based on the population within a thirty-minute drive time and supported by additional population within a sixty-minute drive time, the Arena will need to be of a comparable seating capacity with these major arenas.
- Like the arenas in comparably sized metropolitan markets, the Hartford market with more than 1,200,000 residents is sufficient to support a sports tenant as well a calendar of concerts, family shows, entertainment events and amateur athletics. The size and future stability of the population base in the market catchment area within a thirty-minute drive is significant enough to provide a suitable level of ticket sales in support of events at the Arena.
- The success of the Arena will be dependent in part upon its ability to attract residents from more outlying areas of the region, including the adjacent counties of New Haven, Middlesex and Litchfield. Since there are no comparable arenas that are easily accessible to residents from these counties, management of the Arena has the ability to aggressively target these residents to support events.
- Other infrastructure assets that support the Arena include a sufficient amount of parking to service the venue and an integrated mass transit system featuring buses and a free shuttle.



- The market's level of household income is a noteworthy, positive indicator that residents can support events that command higher ticket prices. These high levels of income also indicate that residents have the discretionary income to spend on amenities such as high quality food and beverage items and merchandise.
- A diverse population base will provide the Arena with opportunities to develop new events that serve ethnic and cultural communities.
- The education level attained by a majority of the population is a positive indicator that events that have appeal to an educated and discriminating population will be successful.
- The aging of the population in the market is indicative of an overall aging trend and, as such, amenities and spaces in the Arena should be designed to incorporate the needs and preferences of older consumers.



B. Economic Indicators – Support for Premium Seating/Commercial Opportunities

FORTUNE 500 COMPANIES COMPARABLE NHL AND NBA MARKETS			
MARKET	VENUE	LEAGUE	# OF FORTUNE 500 COMPANIES
Hartford	XL Center	-	6*
Columbus	Nationwide Arena	NHL	5
Raleigh	PNC Arena	NHL	1
Buffalo	First Niagara Center	NHL	0
Nashville	Bridgestone Arena	NHL	2
Salt Lake	EnergySolutions Arena	NBA	1
Milwaukee	BMO Harris Bradley Center	NBA	6
San Antonio	AT&T Center	NBA	5
Oklahoma City	Chesapeake Energy Arena	NBA	4
Memphis	FedEx Forum	NBA	3
New Orleans	Smoothie King Center	NBA	1
<i>*16 Fortune 500 companies are based in Connecticut</i>			

In order to determine the demand for premium seating and commercial partnerships in the Arena, the Consulting Team reviewed available information on the region's corporate and business community.



The Consulting Team reviewed information supplied by Metro Hartford Alliance and CERC on top corporate employers in Hartford, New Haven, Litchfield and Middlesex Counties. As part of this review, the Consulting Team identified Fortune 500 companies in the Hartford regional market who would serve as partners with the Arena in the areas of naming rights, founding partnerships, sponsorships, advertising, suite leases and other commercial relationships partnerships.

Fortune 500 Companies in the Hartford region include Aetna, The Hartford Financial Services Group, United Technologies Corporation, Cigna and Stanley, Black & Decker. The State Connecticut is home to a total of sixteen (16) Fortune 500 Companies. As evidence of the strength of the Hartford market, the table below compares the number of Fortune 500 companies that are headquartered in NHL and NBA markets that are comparable in size to Hartford.

The number of Fortune 500 companies in the Hartford region and the State of Connecticut compare favorably with other comparably sized markets that host NBA and NHL franchises. The largest companies in these and other major markets nationwide typically commit to some partnership with the venue, either through the purchase of premium seating, a sponsorship or an advertising relationship. In each of these comparable markets, the sports franchise or venue operator has been able to secure a long-term naming rights partner with either a locally headquartered company or another corporate entity. The presence of a significant number of Fortune 500 companies in the Hartford region and in the State of Connecticut is a very positive indicator that the Arena will be able to secure a future naming rights partner and engage locally headquartered companies in the purchase of suites and/or sponsorships.

The Consulting Team also identified companies that are headquartered or have significant operations in the Hartford region. The table below identifies these companies, which have a presence in Hartford County. There are twenty-nine companies in the County that are listed as major employers.



HARTFORD COUNTY TOP EMPLOYERS		
COMPANY	INDUSTRY	EMPLOYEES
Pratt & Whitney	Aerospace	8,100
The Hartford Financial Services Group	Insurance	7,700
UTC Aerospace Systems	Aerospace	5,000
Aetna	Insurance	4,000
CIGNA	Insurance	4,000
Travelers Co. Inc.	Insurance	4,000
UnitedHealth Group	Insurance	1,800
Kaman Corporation	Manufacturing	1,300
ALSTOM Power (North American Gas business)	R&D	1,100
Otis Elevator Co.	Manufacturing	1,100
Stanley Black & Decker	Manufacturing	700
Clear Edge Power	Manufacturing	700
Westinghouse Electric Co.	Manufacturing	650
Walgreens Distribution Center	Distribution	550
Ahlstrom Fiber Composites	Manufacturing	525
Carrier Corporation (United Technologies)	Manufacturing	500
DST Output	General Information	500
Ensign-Bickford Co.	Manufacturing	500
TRUMPF Inc.	Manufacturing	500
Wiremold/Legrand	Manufacturing	500
EDAC Technologies	Manufacturing	490
Danaher Corp. (Jacob's Vehicle Systems)	Manufacturing	450
Henkel Corporation	Manufacturing	425
Barnes Group Inc.	Manufacturing	400
Colt Defense Inc./Colt's Manufacturing	Manufacturing	400
Insurity Inc.	Insurance	270
CareCentrix	Insurance	240
Dollar Tree Distribution Center	Distribution	240
OptumInsight - Part of United Health Group	Insurance	200



In addition to engaging locally based Fortune 500 Companies, management of the Arena will look to engage major employers in Hartford with opportunities to purchase suites, other premium seating or sponsorships and advertising. The number and size of these companies is a strong indicator that the Arena will be able to successfully engage companies in the Hartford region in the purchase of premium seating, sponsorship opportunities or group sales tickets.

The Consulting Team also identified a list of top employers in New Haven, Middlesex and Litchfield Counties, which is listed in the table below. Although employers in Hartford County will serve as a base for significant commercial opportunities for the Arena, management of the Arena will need to engage other companies within the region. Arena venues in the industry typically broaden their sales and marketing efforts to engage as many companies as possible in their regional market. The number of top employers in these three counties presents an additional opportunity for management at the Arena to sell additional premium seating or to engage these companies in commercial opportunities such as sponsorship or advertising.

TOP EMPLOYERS SURROUNDING COUNTIES		
COMPANY	INDUSTRY	EMPLOYEE #
NEW HAVEN COUNTY		
Farrel Corp.	Manufacturing	160
LATICRETE International	Manufacturing	1001
Lane Construction Corp.	Construction	300
H D Segur Inc.	Insurance	80
Industrial Heater Corp.	Wholesale	55
Alexion Pharmaceuticals Inc.	Manufacturing	200
Simkins Industries Inc.	Manufacturing	250
Mcdermott Auto Group	Manufacturing	70
Guilford Savings Bank	Administrative	60
Timex Group USA Inc.	Manufacturing	250
Doctor's Associates Inc.	Retail	700
Territory Ahead	Retail	80
Carter Mario Injury Lawyers	Legal	50



Naugatuck Valley Mutual Hlding	Financial	128
UIL Holdings Corp	Utilities	600
Neubert Pepe & Monteith PC	Legal	50
Wiggin & Dana LLP	Legal	323
Knights of Columbus	Civil	700
Cornell Scott Hill Health Corp.	Health	425
Achillion Pharmaceuticals Inc.	Manufacturing	65
Yale New Haven Health System	Health	5001
Sportech Venues Inc.	Retail	160
HB Communications	Communications	120
Tangoe Inc.	Consulting	50
Air-Vac Engineering	Manufacturing	50
Amphenol Corp.	Manufacturing	75
APS Technology	Wholesale	65
Webster Financial Corp.	Financial	150
All Star Transportation LLC	Transportation	85
Carmody Torrance Sandak	Legal	130
MIDDLESEX COUNTY		
Connecticut Water Svc Inc	Utility	70
State Police	State Government	1000
Omega Flex Inc.	Manufacturing	100
Automotive Technologies	Telecom	70
Bidwell Industrial Group Inc.	Manufacturing	50
Liberty Bank	Financial	200
LITCHFIELD COUNTY		
Salisbury Bancorp Inc.	Financial	58
Kuhns Brothers Inc.	Financial	5
Thomaston Savings Bank	Financial	70
Stewart EFI LLC	Manufacturing	110
EB Lens Inc.	Retail	40
Dymax	Manufacturing	75



Torrington Savings Bank	Financial	70
Crystal Rock Holdings Inc.	Utility	30
Braxton Manufacturing Co. Inc.	Manufacturing	165

With the assistance of Metro Hartford Alliance, The Consulting Team was also able to obtain a comprehensive list of mid-level growth companies. Mid-level companies are fast growing business entities whose growth no longer classifies them as startups. The table below summarizes the number of mid-level growth companies in Hartford County.

MID-LEVEL GROWTH COMPANIES HARTFORD COUNTY		
Employee Size	\$10-\$20M Sales Volume	\$20-\$50M Sales Volume
1-99	702	458
100-249	80	153
250-499	10	23
500-999	-	3
	792	637

Management in major arenas typically expand the scope of their outreach to include smaller companies whose business model is enhanced by participating in premium seating. Arena managers have found that smaller companies purchase premium seating outright or in some cases may share the cost of premium seating with another company. They are engaged in using the amenities associated with premium seating and actively distribute tickets to clients or vendors.

Management of the Arena will look to expand its outreach for premium seating and commercial opportunities by engaging smaller companies in the region beyond Hartford. The table below provides a summary of these businesses in the four-county region.



MID-LEVEL GROWTH COMPANIES		
HARTFORD, NEW HAVEN, MIDDLESEX, AND LITCHFIELD COUNTIES		
Employee Size	\$10-\$20M Sales Volume	\$20-\$50M Sales Volume
1-99	1,617	1,020
100-249	178	323
250-499	17	33
500-999	-	6
	1,812	1,382

Major arenas across the country have been successful in attracting high net worth individuals to participate in premium seating opportunities. Typically, these individuals have little need for a full suite, but instead gravitate towards more intimate premium seating options like private four person or six person boxes or private club seating. Club seating and smaller loge boxes have been incorporated into major arenas as part of an original design or through a major renovation.

The table below identifies those communities in the Hartford regional market that have the highest levels of household income, which is an indicator of the presence of high net worth individuals. These levels of household income is another significant and positive indicator of the ability of the Hartford regional market to support high-ticket prices and premium seating opportunities such as club seating and private boxes in the Arena.



MEDIAN INCOME							
HARTFORD COUNTY		NEW HAVEN COUNTY		MIDDLESEX COUNTY		LITCHFIELD COUNTY	
Simsbury	\$117,577	Woodbridge	\$137,216	Durham	\$109,969	Morris	\$89,688
Avon	\$111,798	Cheshire	\$110,587	Killingworth	\$106,964	Harwinton	\$89,429
Marlborough	\$110,718	Bethany	\$109,564	East Hampton	\$93,083	Barkhamsted	\$84,861
Glastonbury	\$106,872	Middlebury	\$97,996	Portland	\$92,344	New Hartford	\$85,598
Burlington	\$106,756	Guilford	\$95,745	East Haddam	\$91,146	Litchfield	\$84,063
Granby	\$97,851	Prospect	\$95,325	Haddam	\$89,184	Watertown	\$80,889

The Consulting Team's review of the region's corporate community indicates the following:

- The presence of a number of Fortune 500 companies in the Hartford region and in the State of Connecticut presents a significant opportunity for the Arena to engage these companies in unique commercial partnerships. Whenever possible, these major companies should be engaged on multiple commercial levels to maximize their exposure in the Arena.
- The number of Fortune 500 companies in the local region compares very favorably with the number of similar sized companies in markets that are comparable in size to Hartford. In these and other major markets, locally headquartered companies are major supporters of the arena venue and its tenants, either through the purchase of premium seating or by participating in sponsorship or advertising opportunities. It is expected that the Arena will have similar success in engaging a number of the 500 companies in the Hartford region and in the State to be partners in similar commercial opportunities.
- The ability of the Arena to offer a broad range of premium seating products will have broad, wide-ranging appeal to the local and regional business community. The Arena will be unique in its design and its premium offerings. There are no other venues in the State or in



the region that can offer comparable levels of choice and amenities to the business community.

- In addition to Fortune 500 companies, the four county region has a large number of top employers who can be targeted by management of the Arena for premium seating and other commercial opportunities. The variety of employers, the type of industry segmentation and the number of employees make them compelling candidates to participate in one or more commercial partnerships in the Arena. These opportunities could include suites, group outings for employees and sponsorship or advertising in the venue.
- Major arenas across the country have modified their premium seating from a sole offering of large suites to a mix of premium seating that includes smaller loge boxes that seat four, six or eight people. The Arena will be programmed with unique premium seating options that include these intimate private boxes as well as club seating. Multiple premium options have had strong appeal in major arena venues across the country.
- The presence of a substantial number of mid-level companies in Hartford County will serve as candidates for intimate, private premium options in the Arena. These include club seats in the lower bowl as well as loge boxes and terrace club seats on the mezzanine level. Club seats and small, private boxes continue to be the premium seating of choice in arena venues for smaller companies who do not have the wherewithal or capacity to purchase full suites.
- Management of the Arena will be able to broaden the sales effort for premium seating within the business community by targeting additional mid-level companies in New Haven, Middlesex and Litchfield Counties. The number of mid-level companies in the four-county region, along with the presence of high net worth individuals, presents a very positive landscape for the sale of more intimate premium options such as club seats or loge boxes in the Arena.



- As noted earlier, the number of communities in Hartford and surrounding counties of New Haven, Middlesex and Litchfield with high levels of household income is evidence of further support for premium seating. These high net worth individuals will broaden the base for the sale of premium seating choices such as club seats or loge boxes.
- In other major arenas, corporations and high wealth individuals who lease premium seating spend significantly on food and beverage. As with these venues, the Arena will need to be programmed with the highest standard of food and beverage options, delivered directly to premium seat holders in their seats and available in multiple lounges and restaurants.
- The high levels of household income in a large number of communities in the greater Hartford region are evidence of the presence of high net worth individuals with available discretionary income. These high net worth households are a positive indicator of a market that can support the purchase of premium seating options such as club seats, intimate loge boxes and terrace club seating.
- The availability of intimate, private premium options that seat four to six individuals should offer great appeal to high net worth individuals in the four county region. These premium options have had strong appeal in major arena venues across the country for high net worth individuals who prefer the purchase of two, four or six seat boxes to more expensive options like a full suite.

C. Comparable Venues – Facility Program

The Consulting Team examined a variety of comparable arenas in order to quantify the Facility Program that should be considered for the Arena including the quantity and type of premium seating options. The Consulting Team used information from competitive regional venues, collegiate venues and selected NHL venues to assist in the identification of premium seating options for the Arena.

The Consulting Team identified arenas in the region that currently compete with XL Center for events, arenas that host collegiate basketball as a tenant and markets with an NHL franchise that are comparable in size to Hartford. The Consulting Team examined premium seating options at comparable venues in order to understand levels of premium seating found in each venue including the number of suites, club seats, loge boxes, terrace seats and premium lounges.

In addition to the Consulting Team's research of demographic and economic indicators and the potential corporate demand for premium seating, these venues provide additional insight and context for development of the Arena's Facility Program including the type and quantity of premium seating in the Arena.

Competitive Regional Arenas

The Consulting Team, through our long-standing industry relationships, conducted interviews with managers and users of arenas in the region. These arenas compete with XL Center for concerts, family shows and touring entertainment events. Interviews were conducted to determine facility-seating capacities, existing premium seating programs and future plans for premium seat offerings.

The table below provides a summary of seating capacity and premium seating options in these venues. Arenas such as Webster Bank Arena in Bridgeport and Dunkin' Donuts Center in Providence have improved their premium seat offerings either through a major renovation or



periodic upgrades. Other venues such as Mohegan Sun and DCU Center are contemplating future improvements to premium seating offerings. The MassMutual Center may also see future improvements in their premium seating offerings as MGM Resorts International opens a new casino directly adjacent to the arena. The Times Union Center will add hospitality spaces as part of a recently approved improvement plan for that facility.

Our interviews with managers of these facilities indicated that the addition of substantial premium seating inventory was unlikely given the design limitations in each of these venues. Our interviews also indicated that the premium seat options at these regional competitive venues are not comparable to the quantity and quality of what is being proposed for the Arena.

REGIONAL ARENAS				
Venue	Location	Seating Capacity	Suites	Other Premium Seating
The Arena at Mohegan Sun	Uncasville, CT	9,500	2 large suites	Future plans include addition of 12 new super suites
Webster Bank Arena	Bridgeport, CT	8,500	33	1,300 club suites, 13 loge boxes
Dunkin' Donuts Center	Providence, RI	12,000	18	-
DCU Center	Worcester, MA	14,800	2 Large Suites	Future plans include addition of club seats
MassMutual Center	Springfield, MA	6,455	2 Large Suites	222 Club Seats
Times Union Center	Albany, NY	15,500	26	14 loge boxes



Venues with Collegiate Tenants

There are a number of trends in arenas that feature collegiate basketball and hockey programs as tenants. Some of these venues host professional sports franchises with the collegiate program as a second tenant in the venue. Others have been designed to host the collegiate program as the venue's prime tenant. These schools recognize the advantage of playing in a highly visible arena located in a downtown area that is a draw for alumni and sports fans from an entire metropolitan area. As a major tenant or co-tenant in the venue, these collegiate programs benefit from the highest quality amenities, premium seating choices and dining options.

Premium seat choices and fan amenities are designed to appeal to a number of constituents including the highest level of donors, alumni who are major supporters of the university, the student population and fans of college sports. Premium-seating options include mid-level suites, club seats located in the center sections of the lower arena bowl, small, semi-private boxes as well as upscale lounges and restaurants. Student seating is typically designated for selected sections of the lower bowl in close proximity to the playing court or ice in order to create a unique experience for the student body.

The Consulting Team conducted a review of venues that feature men's collegiate basketball and/or men's hockey program as a primary tenant. The schools play all of their home games at a publically or privately owned arena, while Villanova plays at least five games annually against high profile opponents at Wells Fargo Center.



VENUES WITH COLLEGIATE TENANTS

	Venue	Seating Capacity	Suites	Club Seats	Loge Boxes	Terrace Seats	Premium Lounges
Creighton	CenturyLink Center	18,300	32	1,200	56 seats (8 boxes)	-	2
DePaul ^(a)	Allstate Arena	17,500	40	-	-	-	-
Georgetown	Verizon Center	20,300	108	2,000	56 seats (8 boxes)	120	1
Louisville	KFC Yum! Center	22,100	76	2,519	300 seats (70 boxes)	771	9
Marquette	BMO Harris Bradley Center	18,600	44	-	40 seats (10 boxes)	-	5
Memphis	FedEx Forum	18,300	63	-	326 seats (54 boxes)	-	2
North Carolina State	PNC Arena	19,700	66	2,000	30 seats (5 boxes)	300	4
Providence	Dunkin' Donuts Center	12,000	18	N/A ⁽¹⁾	-	-	2
Seton Hall	Prudential Center	18,700	72	2,200	120 seats	124	4
St. John's	Madison Square Garden	19,800	96 ⁽²⁾	2,960 ⁽³⁾	4 boxes	-	6
Siena	Times Union Center	15,500	25	-	84 seats (14 boxes)	-	1
Villanova ⁽⁴⁾	Wells Fargo Center	20,600	126	1,810	-	-	5
University of Connecticut	Arena	17,000	30 mid level 6 bunker	800 center 200 courtside	120 seats (30 boxes)	500	2

(a) DePaul will be relocating to a new 10,000-seat arena in downtown Chicago

(1) 2,500 season ticket holders - each account pays a donation to the school for the right to buy

(2) 20 event level suites, 58 lower bowl (row 23) suites & 18 mid-level suites

(3) Includes 800 event level club seats and 180 lower bowl clubs

(4) Plays major opponents at Wells Fargo Center



Our interviews with venue managers indicated that the collegiate programs have access to all premium seating and premium lounges in their venues. The programs either receive the value of their tickets in the suites as part of their rental arrangement or share in the revenue from premium seating. In some instances, the collegiate program received a small share of net food and beverage revenue for its games.

Of particular note is the University of Louisville program at the KFC Yum! Center. The venue was built to house the University's athletic programs (and potentially a future NBA franchise). Louisville's men's and women's basketball and women's volleyball programs play their home games at the Center. The agreement reached between the public sector and the University created a comprehensive revenue sharing agreement. There is a long-term agreement in place (35 years) between the University and the Louisville Arena Authority. The agreement between the public sector and the University created a comprehensive revenue sharing arrangement. As with other tenancy agreements, the University's agreement was unique and was tailored to the market.

It should be noted that the University undertook a major effort to expand its sales and marketing team in order to take full advantage of all of the revenue streams in the venue. The University recognized that additional resources were necessary to monetize the revenue sources in this new, state of the art venue. To date, the University has realized significant financial benefits from this partnership with the public sector. The men's basketball program is sold out with a waiting list for season tickets and premium seating. Women's basketball has also been able to draw significant crowds.

Another program that can serve as a tenancy model for the Arena is the University of Creighton, which plays its men's home basketball games at CenturyLink Center in Omaha, NE. The University shares in a number of revenue streams and the men's home basketball games play to sellout crowds. The venue, which is operated by the Metropolitan Entertainment & Convention Authority, also hosts University of Nebraska Omaha men's hockey games.



A number of other schools have benefited from their tenancy in a downtown arena. Georgetown, Marquette, Providence, Saint John's and Villanova are co-tenants in their venues and have access to premium seating options and venue amenities for their alumni, students and fan base. North Carolina State and Seton Hall are co-tenants in their venues with an NHL hockey team while Memphis is a co-tenant with an NBA team. Siena College is a co-tenant that significantly outdraws the AHL team in the venue they share.

The University of Connecticut has a long history of playing Men's and Women's basketball games at XL Center. The Men's Hockey Program joined them this season in its inaugural season in the Hockey East Conference. For a number of years, both the Men's and Women's programs were highly successful in drawing sellout crowds to XL Center. In recent years, the trend has been towards smaller crowds, in part due to the switch in conference affiliation and to hosting some marquee opponents on campus.

With the transformation of the XL Center, the University has a unique opportunity to change the role it plays as a tenant - establishing a long-term expanded presence in Downtown Hartford and working cooperatively with the Arena to maximize attendance and thereby revenue for both parties. Under our recommendations, the University would commit to being a Partner and Prime Tenant in the Arena. This partnership with the public sector would require the University to make a significant change in scheduling games to be played in the Arena, how games are sold (for example, working with a third-party sales team), how the programs are marketed and how it would monetize available sources of revenue. The University would need to play a significant majority of its marquee opponents at the Arena and dedicate increased Athletic Department resources to ensure that the basketball and hockey programs are marketed to the fullest extent and all revenue streams are maximized. As with other programs that are tenants or co-tenants in a publically owned building, the University stands to gain financially with a change in commitment.



As evidence of the opportunity to aggressively market its athletic programs, the following table identifies University of Connecticut alumni throughout the State.

UNIVERSITY OF CONNECTICUT ALUMNI BY REGION	
CBSA	Total
Hartford-West Hartford-East Hartford CT	59,867
New Haven-Milford CT	21,850
Bridgeport-Stamford-Norwalk CT	22,507
Norwich-New London CT	11,132
Torrington CT	6,782
Willimantic CT	4,088
Grand Total	126,226
<i>Data supplied by Metro Hartford Alliance</i>	

Venues in Comparable Markets with NHL Tenant

The Consulting Team also identified markets that have an arena that is home to an NHL tenant and that are comparable in size to the Hartford market. As seen in the table below, these markets include Columbus, San Jose, Nashville, Buffalo and Raleigh.

COMPARABLE NHL CITIES MARKET OVERVIEW			
City	MSA Population	MSA Ranking	Nielsen TV Ranking
Columbus	1,967,066	32	32
San Jose	1,919,641	34	6*
Nashville	1,757,912	36	29
Buffalo	1,314,155	50	52
Raleigh	1,214,516	47	24
Hartford	1,215,211	46	30
*San Jose television market is combined with Oakland and San Francisco markets			

Premium seating options in NHL venues in these markets were identified in order to ensure that the



Arena could accommodate the needs of any future NHL ownership group that might consider Hartford as a candidate for relocation.

For these comparable markets, the Consulting Team examined the type and quantity of premium seating options. In addition, the Consulting Team identified three additional NHL venues in Winnipeg, Tampa Bay and Pittsburgh since these arenas were either recently constructed (Pittsburgh) or went through major renovation (Tampa Bay and Winnipeg). Surveys were conducted with venue management or franchise personnel in order to understand the levels of premium seating in each facility. The table below identifies the number of suites, club seats, loge boxes and terrace seats in each venue.

COMPARABLE NHL CITIES - PREMIUM SEATING OVERVIEW					
City/Arena	Seating Capacity Hockey	Suites	Loge Seats	Terrace Seats	Club Seats
Columbus (Nationwide Arena)	18,144	52 Suites \$120,000 - \$200,000	175 Seats \$6,600 - \$16,600	156 Seats	1,495 Seats \$9,020
San Jose (SAP Center)	17,562	66 Suites \$160,000 - \$300,000	48 seats Four boxes \$5,500	-	3,470 Seats \$5,248 - \$8,446
Nashville (Bridgestone Arena)	17,113	72 Suites \$95,000 - \$200,000	-	-	1,100 Seats \$2,600 - \$3,500
Raleigh (PNC Arena)	18,680	66 suites \$31,000 - \$200,000	30 Seats \$14,360 per seat	300 Seats	2,000 Seats \$10,000



Buffalo (First Niagara Center)	19,200	80 Suites \$70,500 - \$122,500	300	-	5,000 Seats & 310 seats \$820 - \$7,790
Winnipeg (MTS Centre)	15,016	55 suites \$104,000 - \$197,000	278 seats 75 Loge Boxes \$6,000 per seat	-	3,000 seats \$4,620
Tampa Bay (Amalie Arena)	19,204	70 suites \$159,000 - 289,000	-	48 seats \$5,790	1,400 seats \$5,400-6,800
Pittsburgh (Consol Energy Center)	18,087	66 suites \$115,000 - \$250,000	236 seats \$60,000 - \$90,000	-	2,000 seats \$7,070
Arena (UCONN and NHL)	17,000	30 mid level 6 bunker	120 seats (30 boxes)	1,000	1,500 seats

Seating capacity ranges for these surveyed facilities from Winnipeg's MTS Centre, which has 15,000 seats and is the smallest venue in the NHL to Buffalo's First Niagara Center and Tampa Bay's Amalie Arena, which each seat 19,200.

The original intent of premium seating offerings was to maximize suite revenue and all of the venues surveyed have a significant number of suites, ranging from 55 suites in Winnipeg to 80 suites in Buffalo. Our interviews, however, indicated that the sale of suites has been a challenge for a number of teams. Some suites are either unsold or leased on a shorter-term agreement. The surveyed teams, as well as a number of other teams in the NHL, have converted some suite inventory into flexible suites for rent on a "per game" or "per event" basis. These 'party suites' are designed to either serve a large number of patrons in one large gathering or to host multiple groups.



The more recent trend in professional sports has been to offer more and different premium seating options at various price points. Many teams have constructed intimate VIP boxes, which typically seat four, six or eight people. These ‘loge’ or ‘theater’ boxes have become a successful premium product in professional and collegiate sports. They appeal to smaller businesses and high net worth individuals who do not have the appetite for a large suite, but prefer conducting business with a small number of clients or vendors. Like the larger suites, box seat holders are provided with food and beverage wait service as well as access to a premium lounge. Buffalo’s Niagara Center has the largest number of loge boxes and Winnipeg’s MTS Centre will debut their loge boxes for the 2015-16 season. Some of the venues surveyed were limited in the number of boxes that could be constructed due to original facility design.

An additional trend in creating an intimate premium experience is the addition of terrace club seats. Terrace seating provides another premium product for the small business community and high net worth individuals. Terrace seats are typically located at one end of the seating bowl opposite loge box seating. Purchasers of terrace seats have access to a private club or restaurant located immediately behind their seats. Of the venues surveyed, PNC Arena in Raleigh has added the most terrace seats to date.

All of the venues surveyed have club seats, which have particular appeal to smaller businesses, season ticket holders and other individuals who prefer to sit close to the action. The club seat program provides access to multiple private lounges, which are accessed by club seat holders from center sections of the arena. The quantity of club seats varies by team and typically incorporates the center sections on each side from the rows one through fourteen. As seen in the above chart, the NHL teams that were surveyed all have programmed multiple rows of club seats.



NCAA Tournament Venues

The Consulting Team identified arenas that have hosted NCAA Men's Basketball Eastern Regionals as well as other major NCAA events in order to determine seat capacity requirements for major events. The tables located in Exhibit A identify those venues that have hosted, or will host, the Men's Regionals, the Women's Final Four, Wrestling, Hockey and Gymnastics. During the recent five-year period from 2010 through 2014, the majority of venues that hosted these events had a capacity of at least 17,000 seats, which met the NCAA requirements for these events.

The Consulting Team's review of facility programs in comparable arenas indicated the following:

- Regional venues that compete with the XL Center have added or are contemplating the installation of additional premium seating. However, the amount of premium seating is limited by the design of each arena. The premium seat options at these competitive arenas are not comparable to the quantity and quality of what is being proposed for the Arena.
- A survey of arenas that host collegiate programs as a prime tenant or co-tenant have premium seat offerings and other fan amenities that are of the highest quality and similar to those found in professional sports
- Arenas that host collegiate basketball and hockey have a variety of premium seat choices including suites, club seats and private boxes and private lounges. These premium options and amenities appeal to the broad range of a university's constituents including the major donors, alumni who are major supporters of the university, the student population and fans of college sports.
- In these arenas, student seating is typically designated in selected sections of the lower bowl in close proximity to the playing court or surface in order to create a unique experience for the student body.



- Collegiate programs that are tenants typically either receive the face value of their tickets or share in the total revenue from premium seating. In some instances, a school receives some share of net food and beverage revenue for its games.
- The KFC Yum! Center was built in downtown Louisville to host the University's men's and women's basketball and women's volleyball programs. There is a long-term partnership agreement between the public sector and the University.
- The University of Louisville undertook a major effort to expand its sales and marketing resources in order to take full advantage of all of the revenue streams in the venue. The University recognized that a substantial increase in resources was necessary to monetize all of the revenue streams in this new, state of the art venue. To date, the University has realized significant financial benefits from this partnership with the public sector.
- The history of the University of Connecticut at XL Center makes the school an attractive prime tenant for the Arena. By becoming the prime tenant, the University has a unique opportunity to become a partner with ownership. This partnership would require the University to undertake a significant change in which games are played in the Arena, how games are sold (for example, working with a third-party sales team), how the programs are marketed and how sources of revenue are monetized. As with other programs that are tenants or co-tenants in a publically owned building, the University stands to gain financially with a major change in commitment.
- As a prime tenant, the University's Athletic Department would need to commit to playing a minimum of ten games each for Men's and Women's Basketball and Men's Hockey at the Arena. Games at the Arena would need to include a significant majority of marquee opponents.
- The University has a built-in audience for its games with more than 80,000 alumni in the Hartford and New Haven regions.



- Premium seating options in arenas located in NHL markets comparable in size to Hartford were identified in order to ensure that the Arena could accommodate the needs of any future NHL ownership group that might consider Hartford as a candidate for relocation.
- Although surveyed NHL arenas typically have a large number of suites, the trend has been to convert unsold suites to party suites and smaller VIP boxes. Like their collegiate counterparts, NHL teams have found that more intimate premium seating has gained traction with the business community and high net worth individuals.
- Surveyed NHL arenas have a full complement of center club seating, loge and theater boxes at one end of the lower bowl and, in some cases terrace level seating at the opposite end. All premium seat holders have access to dedicated upscale lounges that offer a variety of food and beverage choices.
- A survey of arenas that have hosted, or will host, major NCAA events such as the Men's Eastern Regionals, Women's Basketball Final Four and National Championships in Hockey, Wrestling and Gymnastics require seating capacity of at least 17,000 seats.

D. Stakeholder Interviews – Facility Program

The Consulting Team conducted in-person meetings and comprehensive phone interviews with various stakeholders of the existing XL Center and potential future users of the Arena. A list of these interviews can be found in Exhibit B.

The Consulting Team conducted on-site interviews with numerous local stakeholders including representatives from the Capital Region Development Authority, State economic development agencies, City of Hartford leadership, management executives at the XL Center, leadership of Hartford-based corporations and other members of the business community. These interviews were conducted in order to understand the perspective of stakeholders and user groups on the Hartford market, their view of the XL Center regarding its capabilities and limitations, and their view of the



need for a new venue in the market.

Stakeholder Interviews

The Consulting Team reviewed stakeholder's observations of the Hartford market and the XL Center. Responses were consistent among those interviewed. The consensus was that the Hartford market has gone through economic ups and downs, but that the City is going through a positive revitalization phase through the efforts of the Governor, State agencies, and leadership within the City. A number of positives regarding downtown Hartford including the presence of well-regarded restaurants, multiple arts and entertainment attractions, an ongoing commitment to the City by headquartered companies and businesses including renovation/expansion of office buildings and facilities, an integrated mass transit system and the availability of parking City-wide.

Those interviewed indicated that the City lacked some of the vibrancy of earlier years when the XL Center was an extremely active venue that hosted numerous concerts, touring entertainment events, family shows and an NHL team for a period of time. They also pointed out that during its most active period, the Center and the mall served as a high-profile destination that brought residents from the suburbs.

Stakeholders were consistent in their message that the downtown corridor would realize significant benefits if a new state of the art venue replaced the XL Center. Respondents mentioned that the State's improvements to XL Center have improved its amenities and appearance, but they recognize that the facility is dated and needs to be replaced at a future date. They expressed concern that if the venue were torn down and not replaced that the City of Hartford would be without a major destination venue. They pointed towards New Haven as a city that has been unable to develop a new arena to replace its original civic center and is lacking a high profile venue.

Stakeholders who were interviewed pointed out that the exterior of the XL Center and the adjacent mall is controlled by Northland Investment Corp and not by CRDA. They consider these adjacent

areas, which are controlled by this private third party to be unattractive with empty mall storefronts and an exterior façade that lacks a welcoming feeling they have seen in other arenas. A number of those interviewed mentioned that a new, high profile arena with a welcoming front door and active adjacent spaces is needed to attract suburban residents to the downtown corridor and give them another reason to patronize local business establishments.

Interviewed stakeholders were consistent in talking about the need for the University of Connecticut Athletics to have a greater presence at the Arena. All of those interviewed consider the University of Connecticut to be the dominant sports brand in the City and in the State. They pointed out that Men's and Women's Basketball was been a major attraction in the past but that attendance is on the decline. Some interviewees mentioned that if the University brought more games against major opponents to Hartford and made a renewed marketing effort to alumni and fans, that both the men's and women's basketball programs would see an increase in ticket sales. A number of those interviewed were enthusiastic about the excitement in the market over the University's men's hockey program and the fan base it is bringing downtown.

Industry User Groups

The Consulting Team spoke with industry user groups who present their events at the XL Center as well as future potential users of the Arena. The Consulting Team conducted extensive phone interviews with concert presenters, executives of touring family show, promoters of entertainment and sports events, executives of sports leagues, producers of consumer shows and other user groups. These interviews focused on impressions of the Hartford region as a ticket buying market, the capabilities, challenges and obstacles associated with the XL Center and the type and nature of requirements they would have in the Arena.

Presenters consider XL Center to be less functional than other arenas in the region, which have undergone major renovations. They mentioned that load-in and load-out for events is problematic with only one loading dock. Those interviewed indicated that staging and marshalling areas are



limited. All of those interviewed consider the empty storefronts and spaces in the adjacent mall to be a major deterrent to ticket buyers. They referenced the appearance of the mall, broken escalators and poor connection to the parking garage is indicative of an unattractive complex. They mentioned that the initial impression of the XL Center is one of empty spaces that convey a lack of activity.

Respondents indicated that residents in the Hartford market are less supportive of events at XL Center than in the past. They attributed this to the age of the XL Center, the lack of activity in the mall and fewer suburban ticket buyers. When queried about where tickets were sold for events, presenters indicated that fewer ticket buyers came from more affluent zip codes.

Presenters indicated that Hartford fits in well from a tour routing standpoint and is centrally located to and from other cities in the region. They consider the market to be a necessary play even with moderate ticket sales in recent years, since bypassing the market would require a longer stay in another Mid-Atlantic or New England market. Interviewees did reference that Mohegan Sun Casino is very aggressive in bringing events to its arena venue.

A number of presenters commented that the XL Center is considered to be the most expensive building in the region because of labor costs and union work rules. Presenters view the XL Center to be an average date for profitability given the venue's cost structure and mostly average ticket sales.

Those interviewed mentioned that the renovation of XL Center has significantly improved the amenities, concourse and signage in the venue. They indicated that the greater Hartford region would benefit over the long-term from a new facility with state of the art design and amenities. They referenced the success of other new, state of the art facilities which have a welcoming lobby area, wide concourses, modern restrooms, unique food and beverage options, comfortable sightlines and seating as well as a functional back of the house that can accommodate an event's staging and marshalling requirements.

A number of industry users consider the Hartford market to be a collegiate oriented market and



referenced that the size of a market like Hartford is more tailored to having a minor league sports franchise. Until definitive action is taken on the new Arena, interviewees felt there is no reason to discuss future opportunities with the NHL.

Those interviewed consider the design of the XL Center to be outdated and not conducive to sports. They referenced that new venues in the industry have created an ideal environment for presenting sports events by creating a flexible venue with an intimate lower seating bowl, great sightlines, comfortable seating in all areas, compelling fan amenities and back of the house facilities that meet the needs of both the tenant and the visiting teams. They also mentioned that new arenas have multiple premium seating choices that are located at mid-level and are considerably more attractive than the premium seating locations at XL Center.

The Consulting Team interviewed University of Connecticut Athletic administrators and Board members. Athletic administrators indicated that there was a desire to have upgraded on-campus venues, but expressed a willingness to play in the Arena if an agreement was reached that provided the University with more revenue. University Board members indicated that the University needed to undertake a more aggressive approach to the sale of tickets and the monetization of revenue streams at the Arena.

Executives were interviewed who were associated with other regional universities and collegiate conferences as well as amateur athletics in the State of Connecticut. Collegiate administrators indicated that they would consider a new, state of the art Arena to be ideal for hosting a basketball and/or hockey invitational event. There is also interest in exploring future opportunities for high school basketball and hockey state championships in the Arena. Those interviewed referenced that they would expect a new venue to have all of the elements of other new arenas, including hospitality areas, sufficient locker rooms to simultaneously house multiple teams and an expansive back of the house area that can accommodate teams, cheerleaders and officials.

Presenters in the concert industry were less enthusiastic about the potential of concerts at the Arena,



particularly with the future casino opening in Springfield. In recent years, the presentation of major concerts has experienced a major consolidation with two major content providers, Live Nation Entertainment and AEG Live presenting virtually all major concerts worldwide. The Consulting Team met with a senior executive for Live Nation Entertainment who handles the entire Mid-Atlantic region including Hartford. The executive books facilities in the region including the Arena at Mohegan Sun, Toyota Oakdale Theatre and the XL Center among others. In addition, a senior executive from AEG Live was interviewed regarding the company's history in the market.

Both of these major concert presenters concurred that the decline in concert activity at XL Center is due primarily to the aggressive approach by the casino industry in attracting concerts. Casinos such as Mohegan Sun, which historically had booked concerts only on weekdays, now look to bring in concerts on weekends as well. Concerts are a major incentive to attract clients and the casino pays significant guarantees to ensure that they attract all of the major concerts. It is also expected that the guarantees for concert artists will continue to accelerate with the new casino in Springfield, MA operated by MGM Resorts International coming on board in the next few years.

Executives in the music industry indicated that the Arena would be limited to a handful of annual concerts. These limited concerts would take place only if an artist had a date conflict with one of the casinos or if an artist had the potential to make additional money beyond their guarantee due to a larger venue capacity in the Arena.

The Consulting Team's interviews with stakeholders and user groups indicated the following:

- The XL Center is unattractive due to the operation of the adjacent mall by Northland Investment Corp which has empty mall storefronts, a periodically broken escalator and a poor connection to the adjacent parking garage. The exterior façade lacks a welcoming feeling that those who were interviewed have seen in other arenas. The level of event activity at the venue has decreased from its prime years and the Arena is needed to attract suburban residents to the downtown corridor and support local business establishments.

- Stakeholders were in agreement about the need for the University of Connecticut Athletics to have a greater presence at the Arena. University of Connecticut Athletics is the dominant sports brand in the City and in the State. The University needs to bring more Men's and Women's games against major opponents to Hartford and make a renewed marketing effort to alumni and fans. There is a new level of excitement in the market over the University's men's hockey program and the fan base that sport is bringing to downtown Hartford.
- University of Connecticut athletic administrators indicated a desire to have upgraded on-campus venues for basketball and hockey, but expressed a willingness to play in the Arena if an agreement was reached that provided the University with more revenue. Board members indicated that the University needed to undertake a more aggressive approach to the sale of tickets and the monetization of revenue sources at the Arena.
- Event presenters consider XL Center to be less functional than other arenas in the region, which have undergone major renovations. They mentioned that load-in and load-out for events is problematic with only one loading dock and that staging and marshalling areas are limited.
- The empty storefronts and spaces controlled by Northland Investment Corporation in the adjacent mall are felt to be a major deterrent to ticket buyers. Presenters believe that the initial impression of the XL Center is one of empty spaces that convey a lack of activity. Presenters indicated that XL Center is unable to attract enough ticket buyers from the more affluent communities in the Hartford region.
- Presenters indicated that XL Center is the most expensive building in the region because of labor costs and union work rules. They view the XL Center to be an average date for profitability given the venue's cost structure and mostly average ticket sales.



- User groups recognize that the XL Center renovation has significantly improved the amenities, concourse and signage in the venue. However, they believe that for the long-term the Hartford region would benefit from a new venue with state of the art design and amenities. They referenced the success of other new, state of the art facilities which have a welcoming lobby area, wide concourses, modern restrooms, unique food and beverage options, comfortable sightlines and seating as well as a functional back of the house that can accommodate an event's staging and marshalling requirements.
- A number of user groups consider the Hartford market that is more suited for collegiate athletics and minor league sports. Until definitive action is taken on the new Arena, there is no reason to discuss future opportunities with the NHL.
- Those interviewed recommend that the Arena be similar in design to other new venues by having an intimate lower seating bowl, great sightlines, premium seating options, comfortable seating, compelling fan amenities and back of the house facilities that meet the needs of both the tenant and the visiting teams.
- Collegiate and amateur athletic administrators indicated that they would consider a new, state of the art Arena to be ideal for hosting invitational events in basketball and hockey as well as high school basketball and hockey championships.
- Concert executives indicated that Mohegan Sun pays significant guarantees to artists. It is expected that the guarantees for concert artists will continue to accelerate with the new casino in Springfield coming on board. Given the aggressive approach by the casino industry, the Arena would be limited to a handful of annual concerts.



EXHIBIT A



MAJOR EVENTS / TOURNAMENTS - HISTORICAL

	NCAA MEN'S BBALL TOURNAMENT ROUND 1		NCAA MEN'S BBALL TOURNAMENT ROUND 2		NCAA MEN'S BBALL TOURNAMENT EAST REGIONALS		NCAA WOMEN'S BBALL FINAL FOUR	
	Venue	Capacity	Venue	Capacity	Venue	Capacity	Venue	Capacity
2014	First Niagara Center, Buffalo, NY	19,200 (bball)	PNC Arena, Raleigh, NC	19,722 (bball)	MSG, New York, NY	19,812 (bball)	Bridgestone Arena, Nashville, TN	19,395
2013	Palace of Auburn Hills, Detroit, MI	21,321	University of Dayton Arena, Dayton, OH	13,435 (bball)	Verizon Center, Washington, DC	20,308 (bball)	Smoothie King Arena, New Orleans, LA	18,500 (bball)
2012	Consol Energy Center, Pittsburgh, PA	19,100 (bball)	Nationwide Arena, Columbus, OH	19,500 (bball)	TD Garden, Boston, MA	18,624 (bball)	Pepsi Center, Denver, CO	19,155
2011	Verizon Center, Washington, DC	20,308 (bball)	Quicken Loans Arena, Cleveland, OH	20,562 (bball)	Prudential Center, Newark, NJ	18,711 (bball)	Conseco Fieldhouse, Indianapolis, IN	18,165
2010	Dunkin Donuts Center, Providence, RI	12,400 (bball)	First Niagara Center, Buffalo, NY	19,200 (bball)	Carrier Dome, Syracuse, NY	35,446 (bball)	Alamodome, San Antonio, TX	20,662 (expandable to 39,500)



MAJOR EVENTS / TOURNAMENTS - HISTORICAL

	NCAA WRESTLING CHAMPIONSHIPS		NCAA HOCKEY CHAMPIONSHIPS		USA GYMNASTICS NATIONAL CHAMPIONSHIPS	
	Venue	Capacity	Venue	Capacity	Venue	Capacity
2014	Chesapeake Energy Arena, Oklahoma City, OK	18,203	Wells Fargo Center, Philadelphia, PA	19,537	Consol Energy Center, Pittsburgh, PA	19,100
2013	Wells Fargo Arena, Des Moines, IA	20,328 (bball)	Consol Energy Arena, Pittsburgh, PA	18,387 (hockey)	XL Center, Hartford, CT	16,294
2012	Scottrade Center, St. Louis, MO	22,000	Amalie Arena, Tampa Bay, FL	19,204 (hockey)	Chaifetz Arena, St. Louis, MO	10,600
2011	Wells Fargo Center, Philadelphia, PA	20,328 at least (21, 315 with standing room)	Xcel Energy Center, St. Paul, MN	17,954 (hockey)	Xcel Energy Center, St. Paul, MN	18,064
2010	Quest Center Omaha, Omaha, NE	18,320	Ford Field, Detroit, MI	78,000 (bball)	XL Center, Hartford, CT	16,294



MAJOR EVENTS / TOURNAMENTS - FUTURE

	NCAA MEN'S BBALL TOURNAMENT ROUND 1		NCAA MEN'S BBALL TOURNAMENT ROUND 2		NCAA MEN'S BBALL TOURNAMENT EAST REGIONALS	
	Venue	Capacity	Venue	Capacity	Venue	Capacity
2015	Consol Energy Center, Pittsburgh, PA	19,100	Nationwide Arena, Columbus, OH	19,500	Carrier Dome, Syracuse, NY	35,446
2016	Dunkin Donuts Center, Providence, RI	12,400	Barclay's Center, Brooklyn, NY	17,732	Wells Fargo Center, Philadelphia, PA	20,238 (21, 315 with standing room)
2017	First Niagara Center, Buffalo, NY	19,200	Bankers Life Fieldhouse, Indianapolis, IN	18,165	MSG, New York, NY	19,812
2018	Consol Energy Center, Pittsburgh, PA	19,100	Time Warner Cable Arena, Charlotte, NC	Expandable up to 20,200	TD Garden, Boston, MA	19,600



MAJOR EVENTS / TOURNAMENTS - FUTURE				
	NCAA WOMEN'S BBALL TOURNAMENT EAST REGIONALS		NCAA WOMEN'S BBALL FINAL FOUR	
	Venue	Capacity	Venue	Capacity
2015	Times Union Center, Albany, NY	17,500	Amalie Arena, Tampa Bay, FL	20,500
2016	Webster Bank Arena, Bridgeport, CT	10,000	Lucas Oil Stadium, Indianapolis, IN	67,000
2017	Webster Bank Arena, Bridgeport, CT	10, 000	American Airlines Center, Dallas, TX	19,200
2018	Times Union Center, Albany, NY	17, 500	Nationwide Arena, Columbus, OH	19,500

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EXHIBIT B



The following is a list of stakeholder and user group interviews regarding the future potential of the Arena:

- Live Nation
- AEG
- Vee Corporation
- Feld Entertainment
- Cirque du Soleil
- World Wrestling Entertainment
- American Athletic Conference
- American Hockey League
- National Hockey League
- Indoor Lacrosse League
- CRDA Board and Staff Members
- Department of Economic and Community Development, State of Connecticut
- Connecticut Innovations, State of Connecticut
- Office of the Governor, State of Connecticut
- State Representatives, Connecticut General Assembly
- City of Hartford
- Metro Hartford Alliance
- Hartford Business Improvement District
- Business for Downtown Hartford
- University of Connecticut Athletic Department
- University of Connecticut, Members of the Board of Trustees
- Sports Media, Greater Hartford Region
- Global Spectrum

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