

THE **GALANTE** ARCHITECTURE STUDIO

SCHEMATIC DESIGN



TOWN OF BELMONT

BELMONT RINK & SPORTS FACILITY

The Galante Architecture Studio
146 Mount Auburn Street
Cambridge, MA 02138

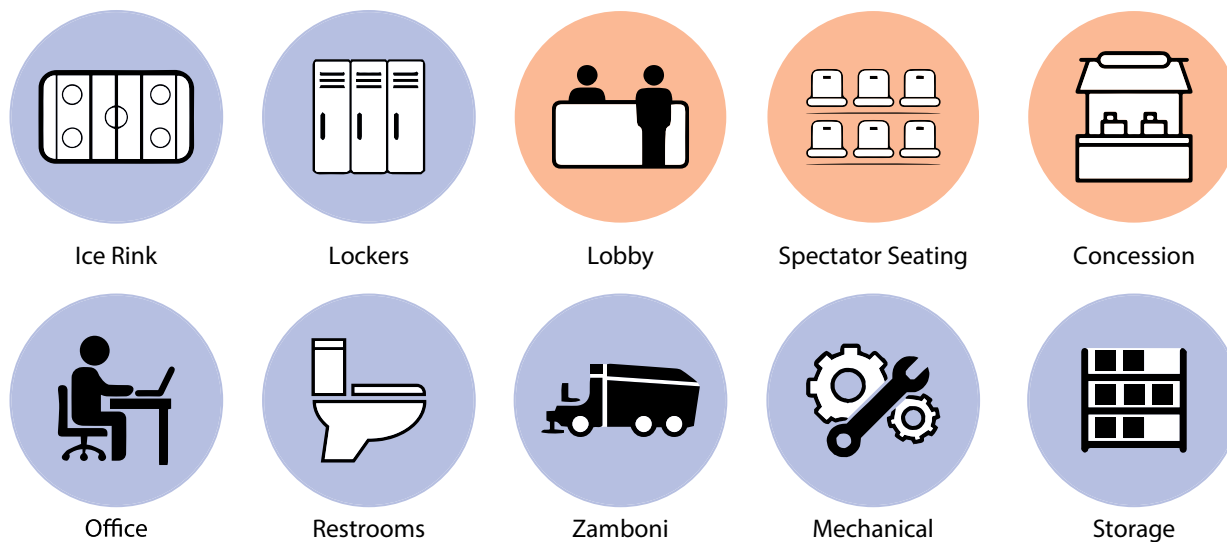
P: (617) 576-2500

galantearchitecture.com

Skip Viglirolo Skating Rink

Built in 1969
Completed in 1971

Thousands of young people participate in Youth
Hockey programs
High School Varsity and JV Hockey programs
Middlesex League titles
Appearances at MIAA Division I state tournaments
Champions 2020





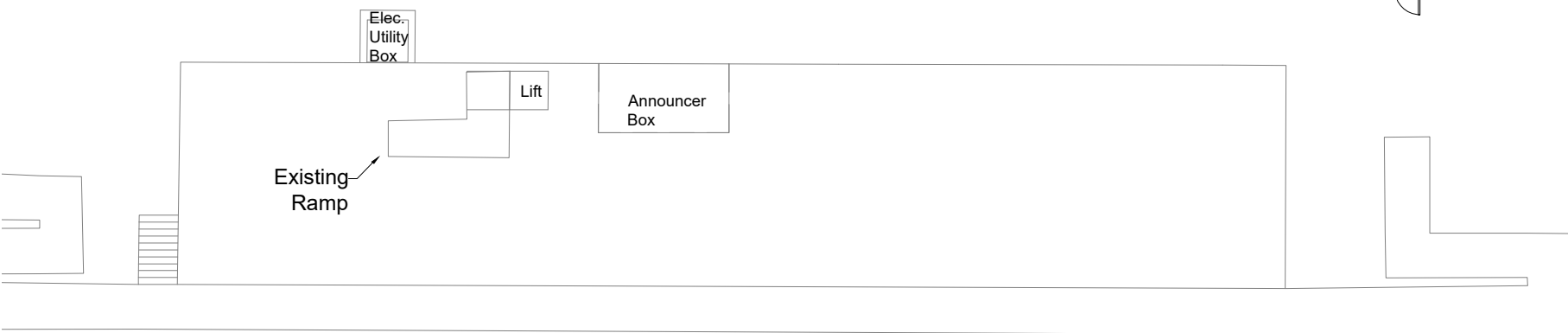
Deficiencies

- Building not insulated
- Roof leaks
- Rusted structure

1. What has changed since the
vote in November?

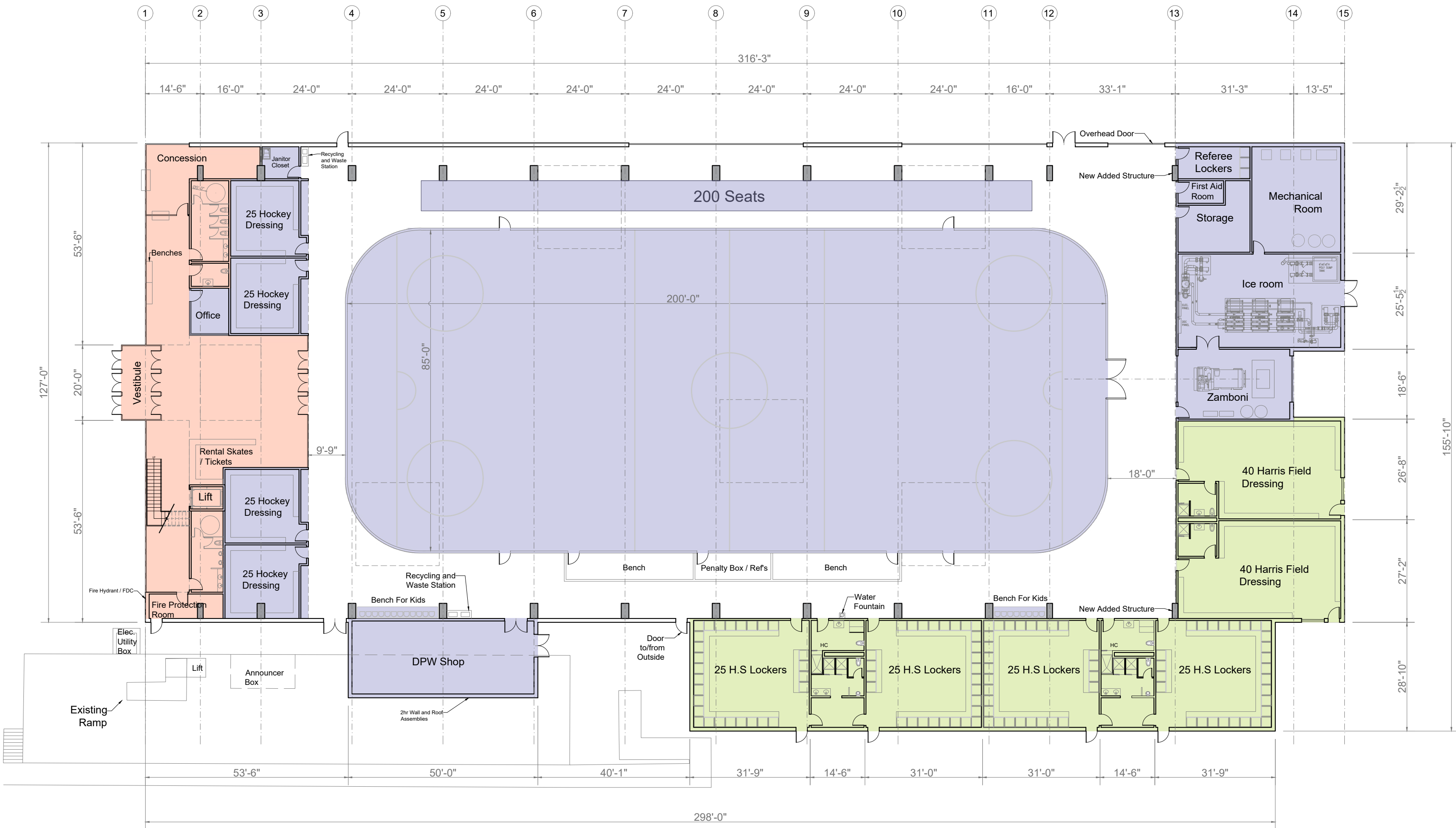
What has changed?

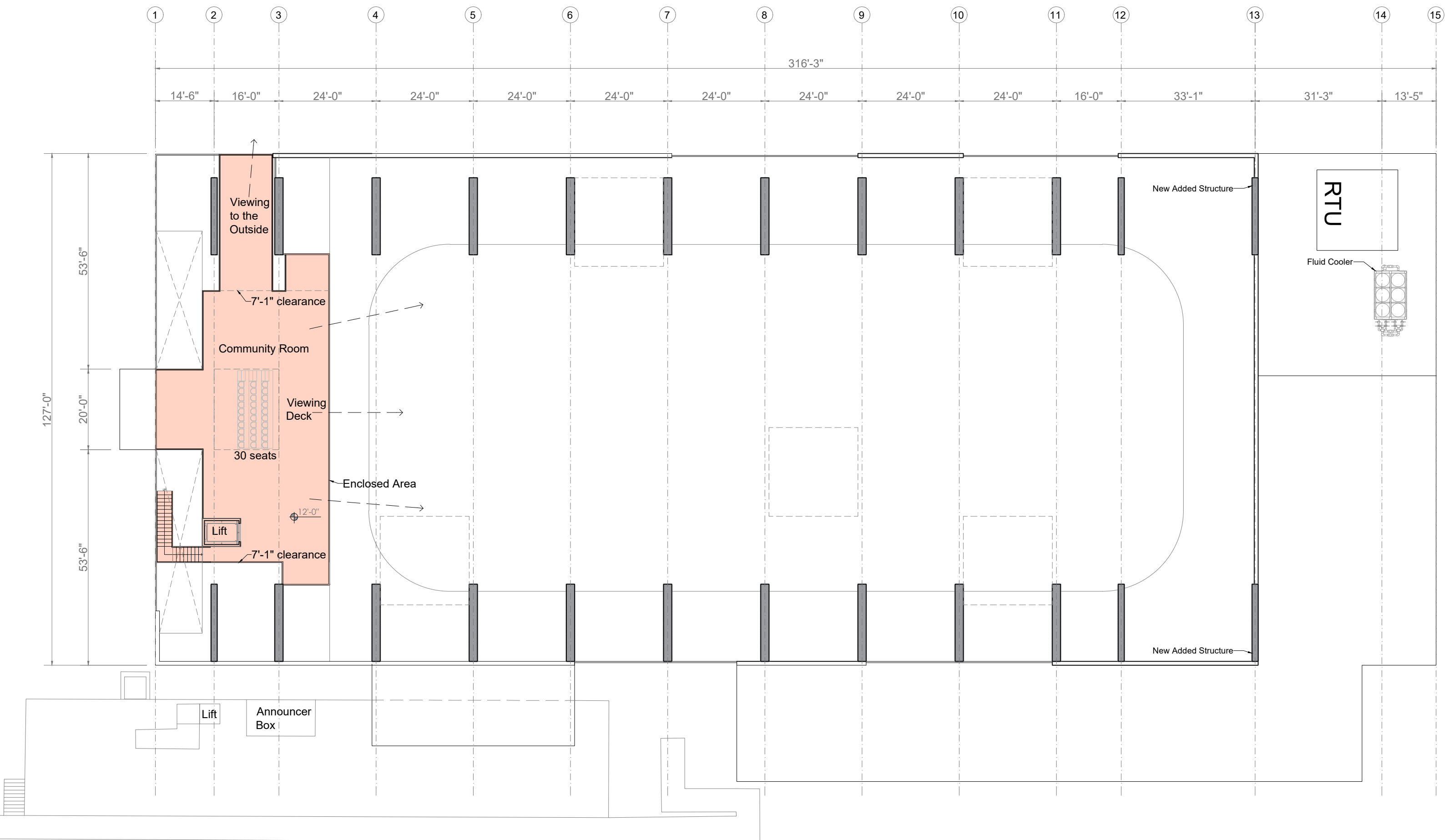
- Reduced square footage of building footprint
- Removed mezzanine, stairs, elevator
- Reduced building volume / decreased HVAC need
- Eliminated renovation cost of re-using steel
- Removed White Field House and Parking from project
- Together these reduce cost to below \$30,000,000.00

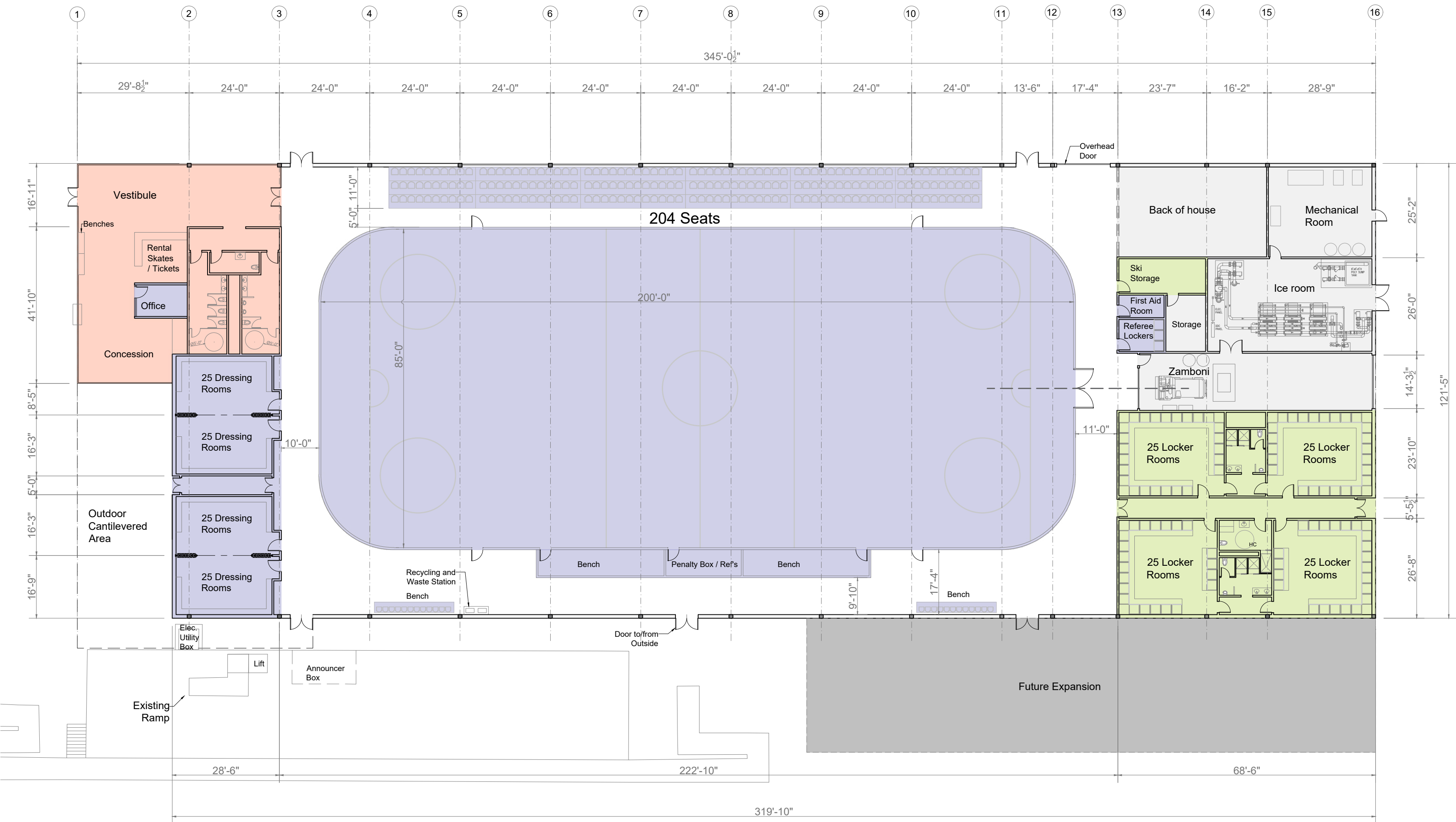


Existing Floor Plan $\pm$ 29,600 sf
Building occupied for 4 months









Spring 2023 - Proposed Floor Plan ± 40,313 sf
 Building occupied for 12 months for Athletic and Recreation programs

2.

How much will the Rink and Sport Facility project cost?

New Belmont Municipal Skating Rink at 40,313 sf

Trade Costs	\$	15,163,735
Solar PV	\$	1,092,000
GCs and Fee	\$	2,729,472
Sub-total	\$	18,985,207
Projected Cost Escalation of 11%	\$	2,088,373
Sub-total	\$	21,073,580
Design Contingency - 16%	\$	3,371,773
Owners Contingency - 5%	\$	1,053,679
Sub-total	\$	25,499,032
Allowances		
Hazardous Materials - Rink	\$	400,000
Sub-total	\$	400,000
Design & OPM Fees		
Architecture & Engineering Fees - 10%	\$	2,550,000
Solar Design (allowance)	\$	125,000
OPM Fees	\$	906,000
Sub-total	\$	3,581,000
Project Related Costs		
Legal Fees & Advertising	\$	30,000
Owners Insurance	\$	100,000
Geotech & GeoEnvironmental	\$	50,000
Site Survey	\$	18,000
Utility Company Fees	\$	25,000
Testing Services	\$	100,000
Furniture Fixtures & Equipment	\$	100,000
Technology	\$	50,000
Sub-total	\$	473,000
Total Project Cost	\$	29,953,032

3.

Are there any changes to
parking?

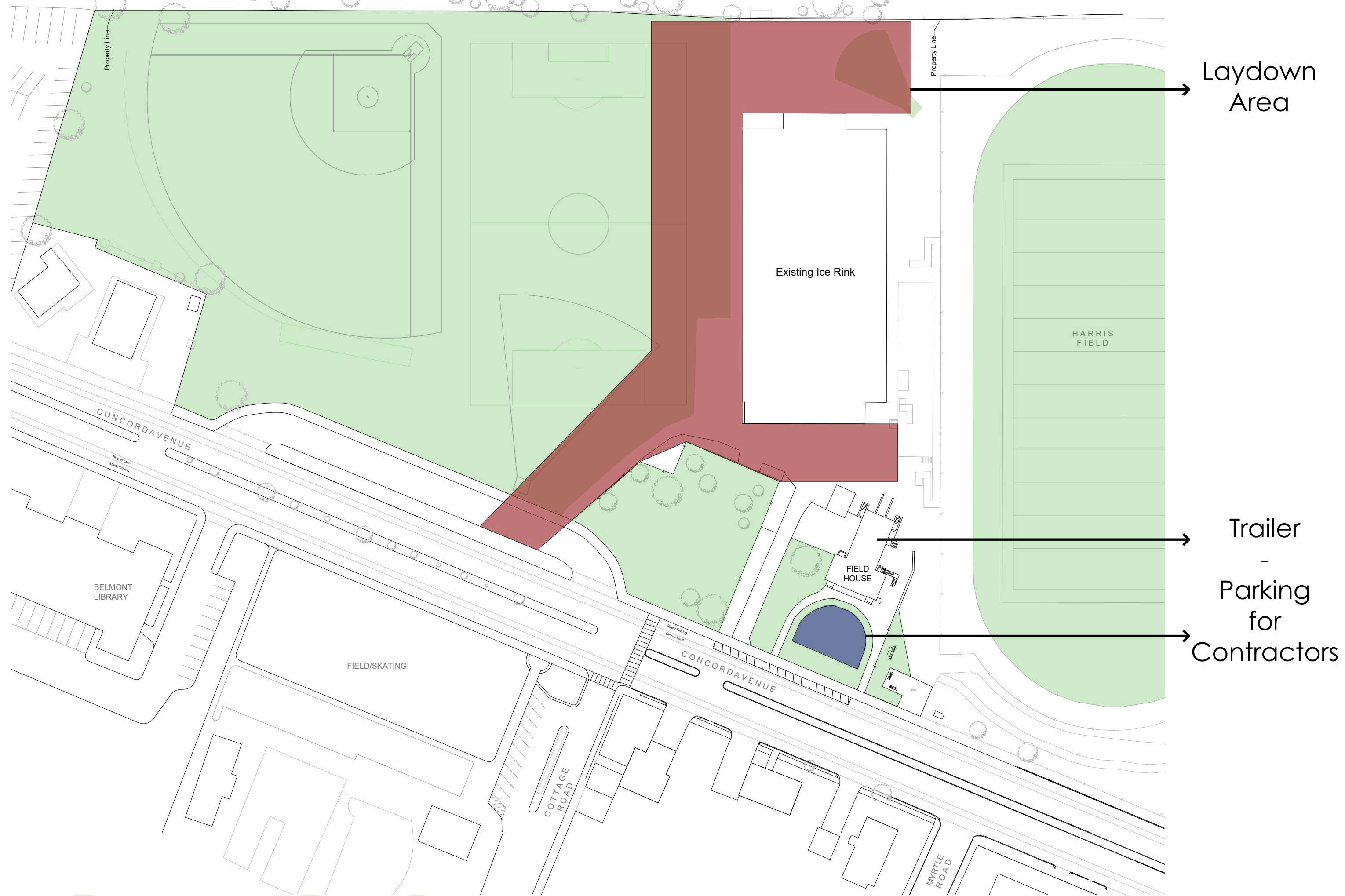


Proposed Site Plan - Photovoltaic Panels

4. What is the status of the White Field House and adjacent shed?



Existing Site Plan

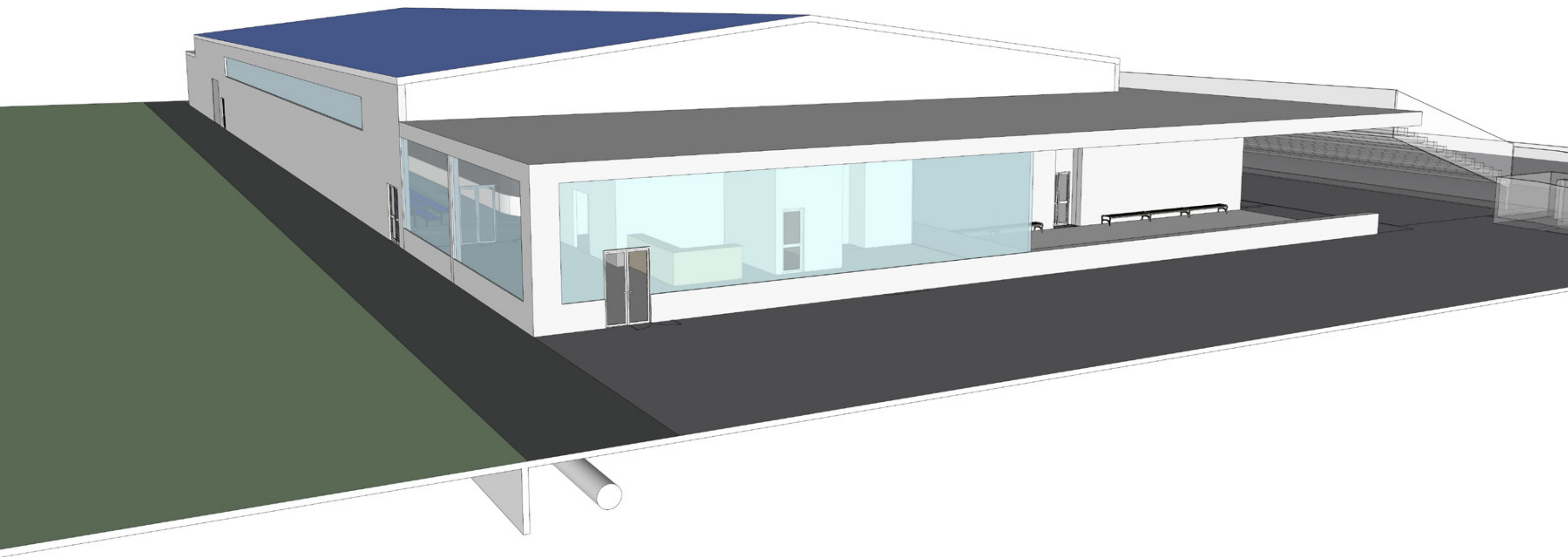


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PROPOSED



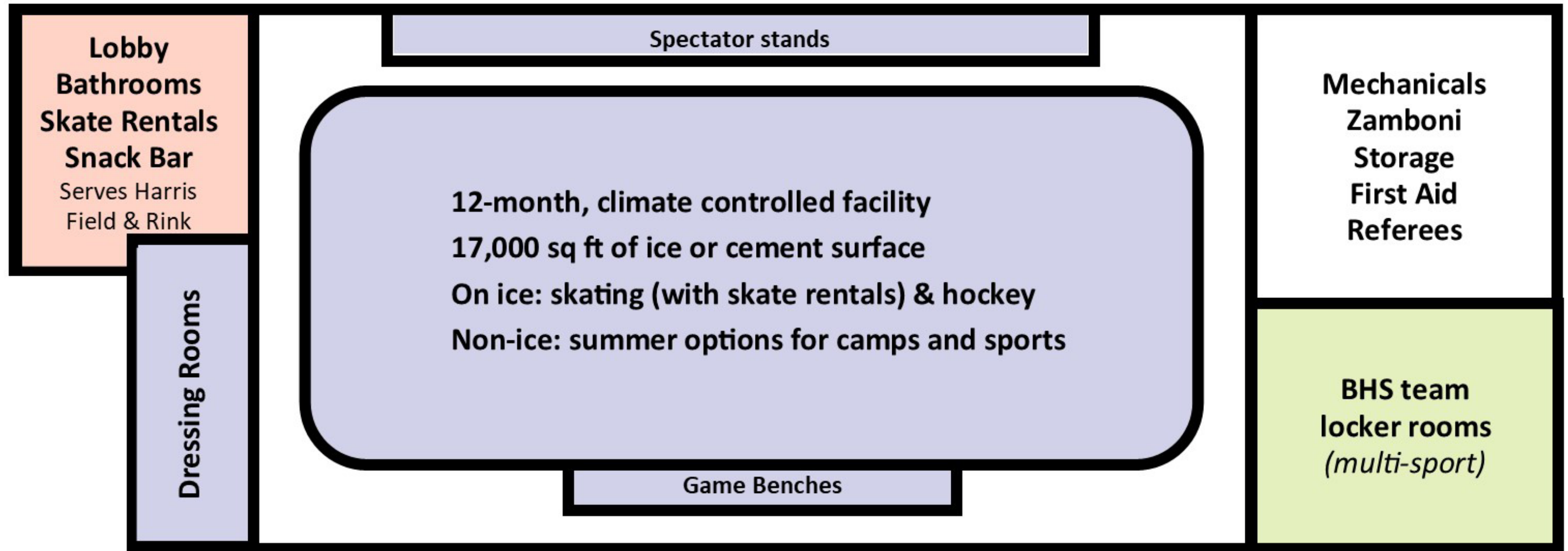
5. How or who will manage the Facility?



PROPOSED

MORE than a Skating Rink

6. Will there be ice all year or just
for 4 months?



Spring 2023 - Proposed Floor Plan $\pm$ 40,313 sf
Building occupied for 12 months for Athletic and Recreation programs

7.

What other activities or programs might use the rink when there is no ice?

8.

How can the building
accommodate so many
different user groups?

Fall

Winter

Spring

Summer

(#) Number of Teams

Shared Space

Service Space

Future Expansion

Ice Sheet (Sept-Apr) TBD

BHS

Field Hockey (2)

BYHA

Youth Hockey (25)

Belmont Rec Programs & Events

S.P.O.R.T Skate

Rec Community Use

Events/Private Rentals
Community Room
PTO / School Events

Figure Skating

Figure Skating Clubs

Leagues

League Hockey
Men
Women
First Responders

Soccer (6)

Hockey Skills Programs

Skating Lessons
Public Skate
Stick and Puck

Football (3)



Fall

Winter

Spring

Summer

BHS

Ice Hockey (4)

Ski Team Storage

BYHA

Youth Hockey (25)

Hockey Skills Programs

Belmont Rec Programs & Events

S.P.O.R.T Skate

Skating Lessons
Public Skate
Stick and Puck

Rec Community Use

Events/Private Rentals
Community Room
PTO / School Events

Figure Skating

Figure Skating Clubs

Leagues

League Hockey
Men
Women
First Responders

(#) Number of Teams

Shared Space

Service Space

Future Expansion

Ice Sheet (Sept-Apr) TBD



Fall

Winter

Spring

Summer

BHS

Lacrosse (4)

BYHA

Youth Hockey (25)

Belmont Rec Programs & Events

S.P.O.R.T Skate

Rec Community Use

Events/Private Rentals
Community Room
PTO / School Events

Figure Skating

Figure Skating Clubs

Leagues

League Hockey
Men
Women
First Responders

Track and Field (2)

Skills Programs / Tournaments

Skating Lessons
Public Skate
Stick and Puck

Rugby (4)

JV Softball / JV Baseball

(#) Number of Teams

Shared Space

Service Space

Future Expansion

Ice Sheet (Sept-Apr) TBD



Fall

Winter

Spring

Summer

BHS



Summer Recess

BYHA



Skills Programs /
Camps

Belmont Rec
Programs & Events

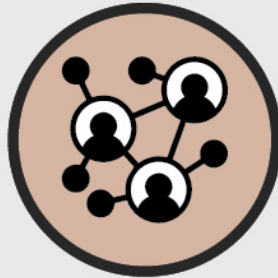


Summer
Programs



Camps
Tennis
Pickle ball
Other sports
Events

Rec Community
Use



Events/Private Rentals
Community Room

Figure Skating

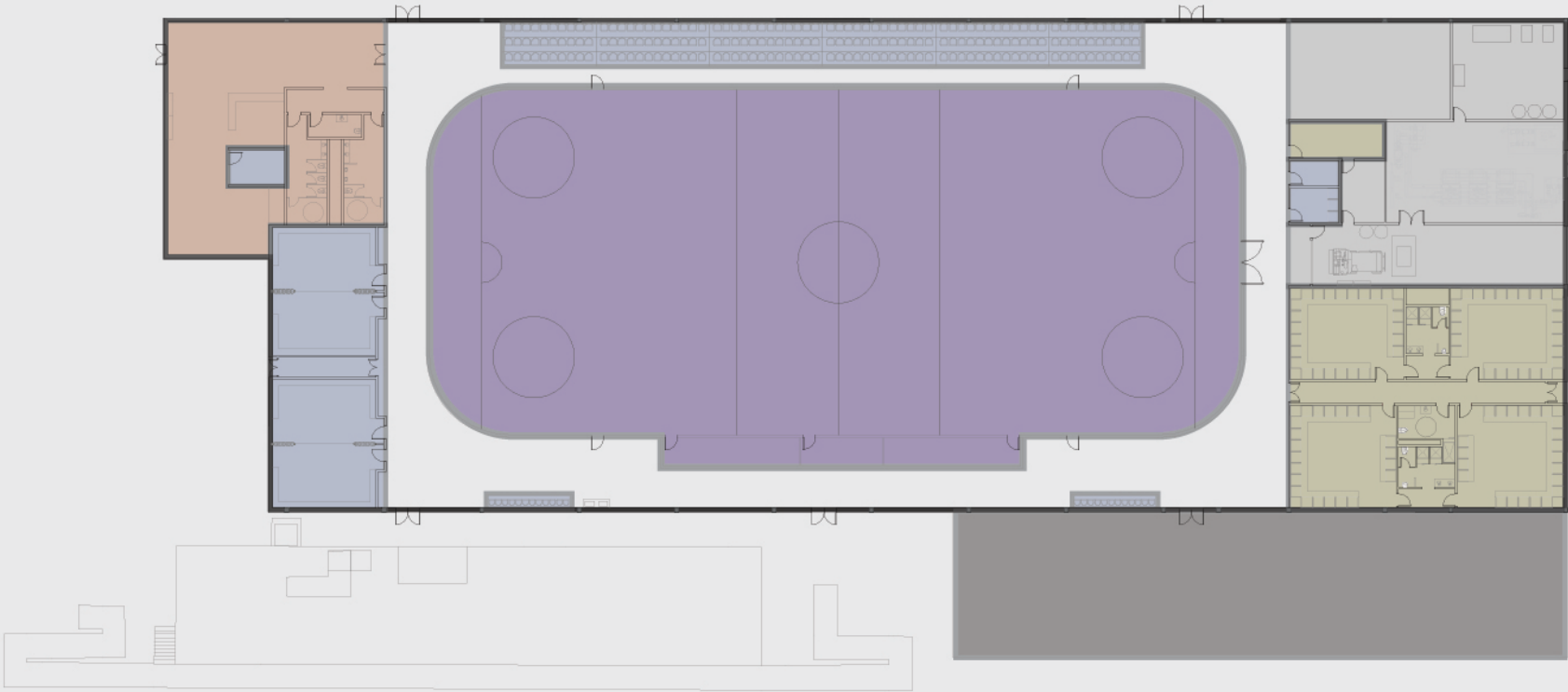


Figure Skating
Clubs

Leagues



League Hockey
Men
Women
First Responders



(#) Number of Teams

Shared Space

Service Space

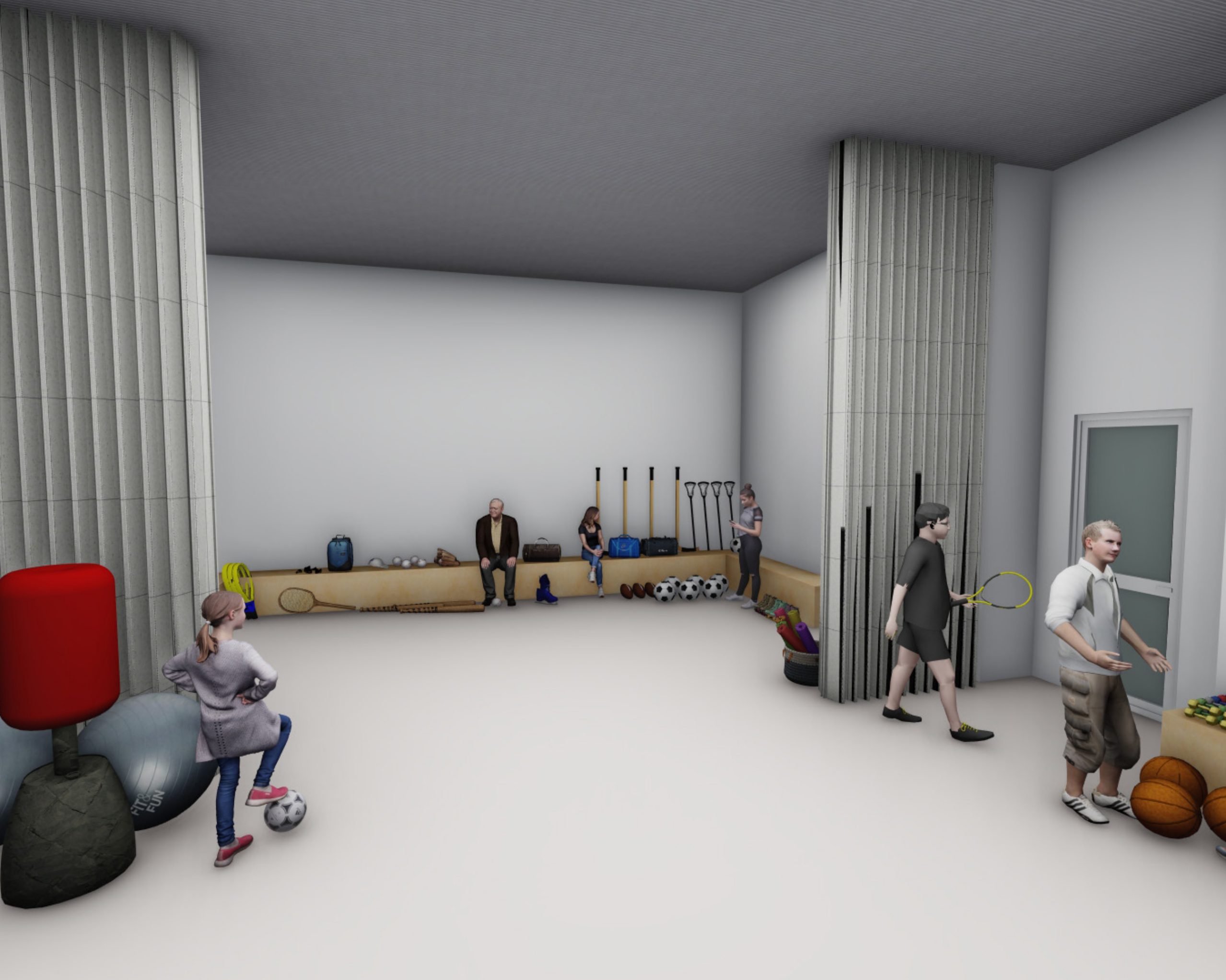
Future Expansion

No Ice (Programming TBD)



9.

Will the facility have locker
rooms for High School
Athletes?



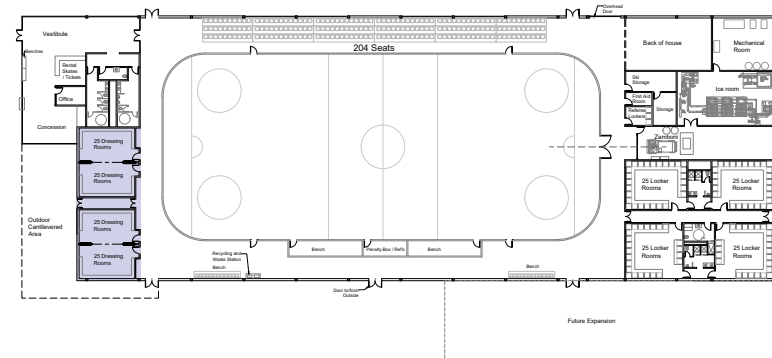
SUMMER CAMPS



STREET HOCKEY



CURLING





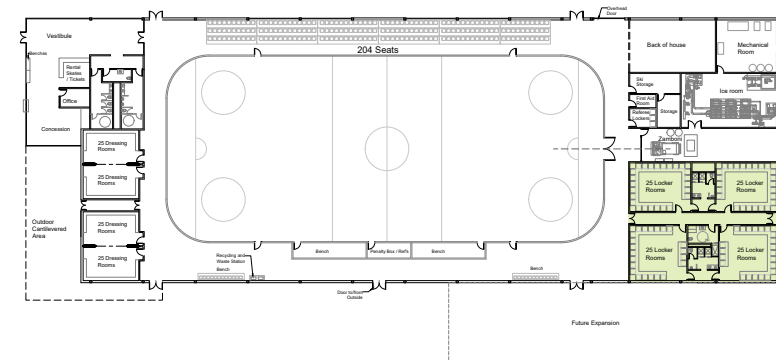
SLED HOCKEY



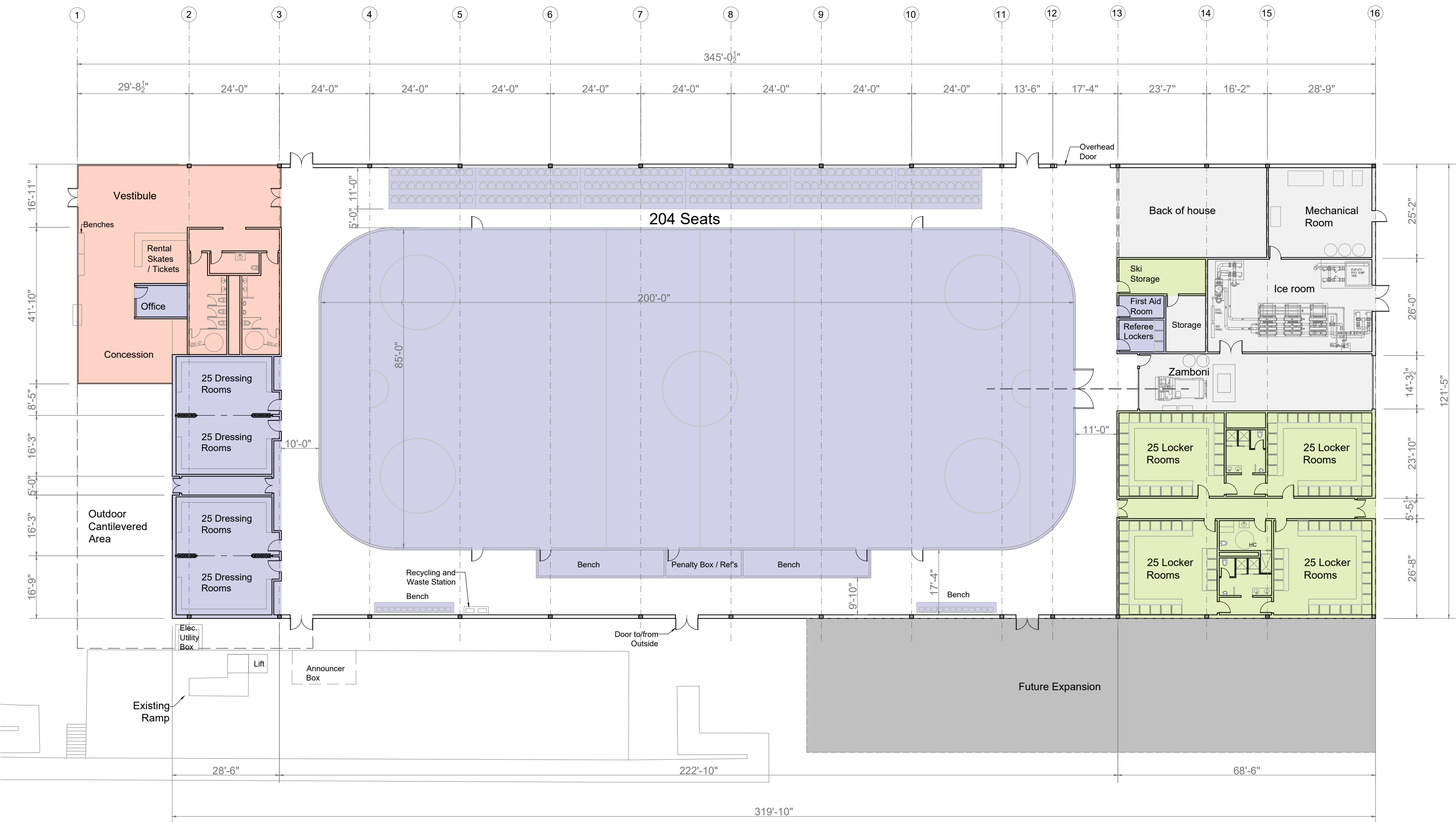
WHEELCHAIR RUGBY



POWER SOCCER



10. Will there be a space for skate sharpening and rentals?



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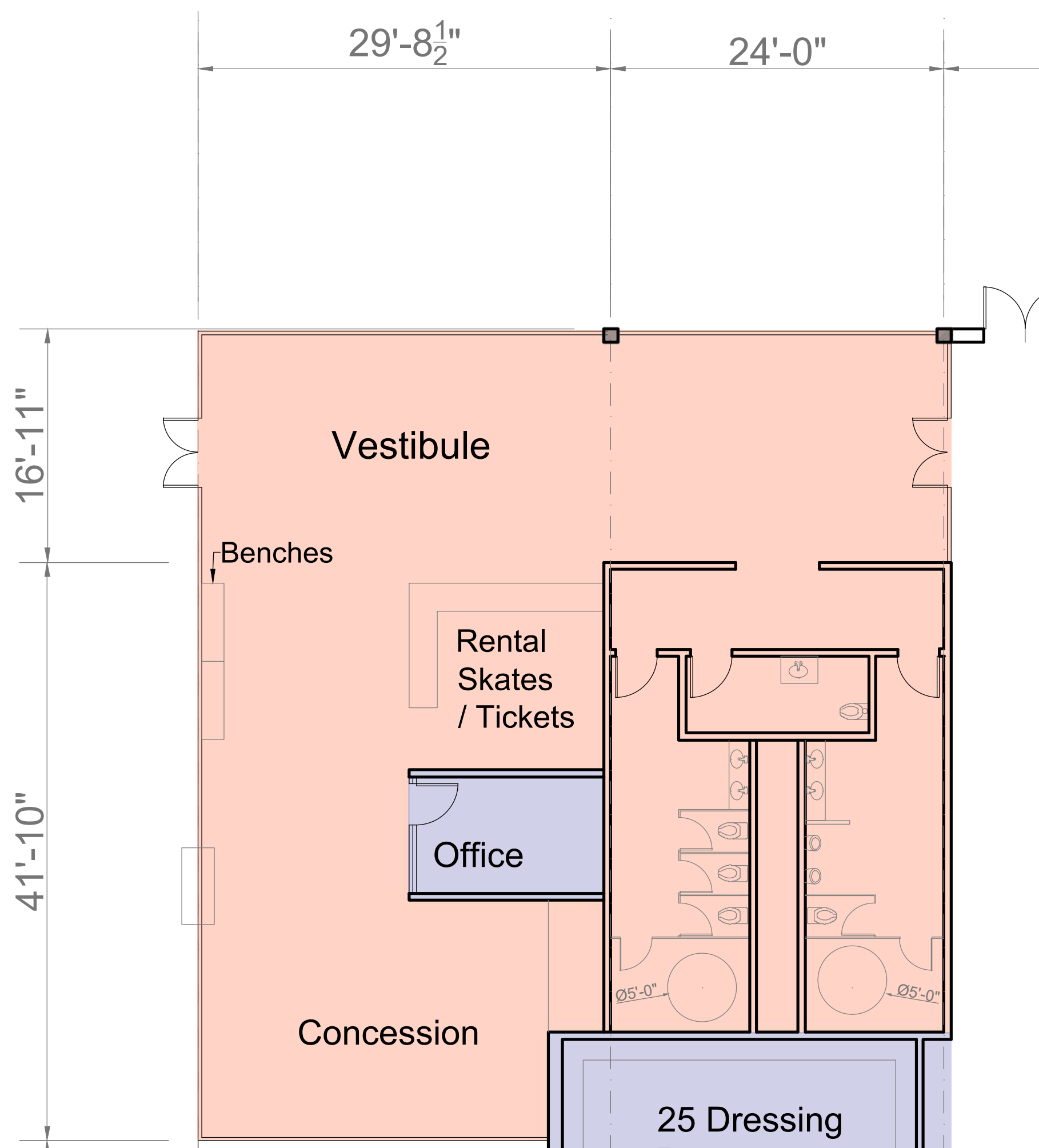
11.

Will public restrooms be provided for those attending games at Harris Field?

Public Community Use

Lobby

Concessions & Restrooms



Community Use

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Community Concession & Restrooms





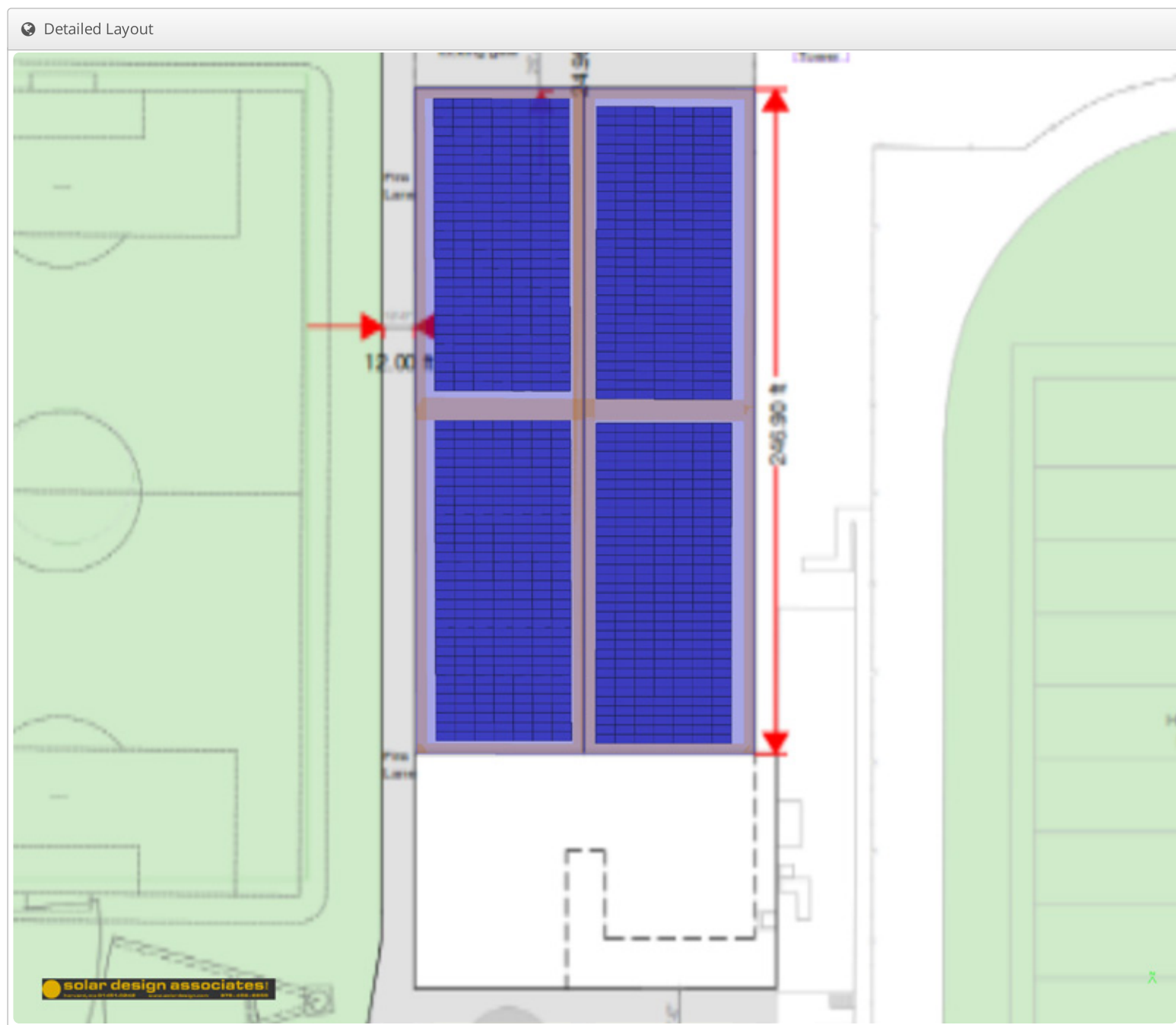
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Community Concession & Restrooms



12. Will there be solar panels to
off-set energy costs?
What other energy measures
have been included?



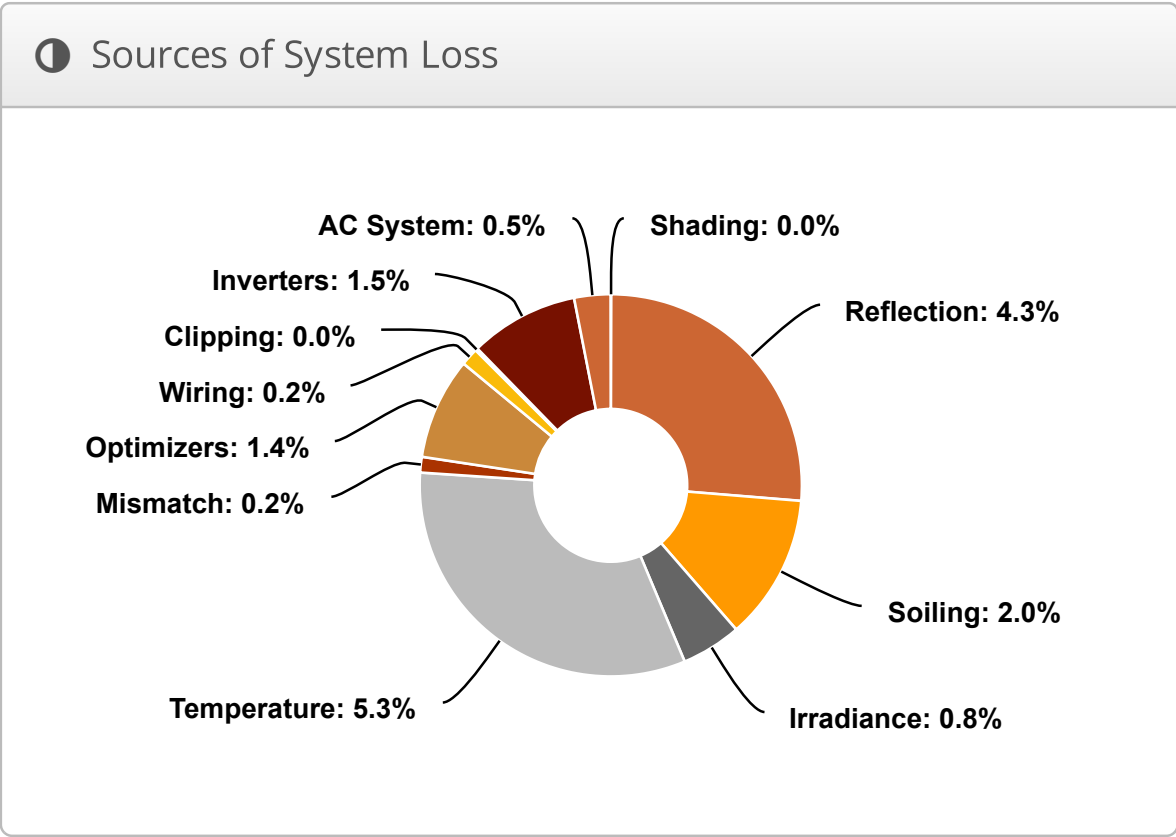
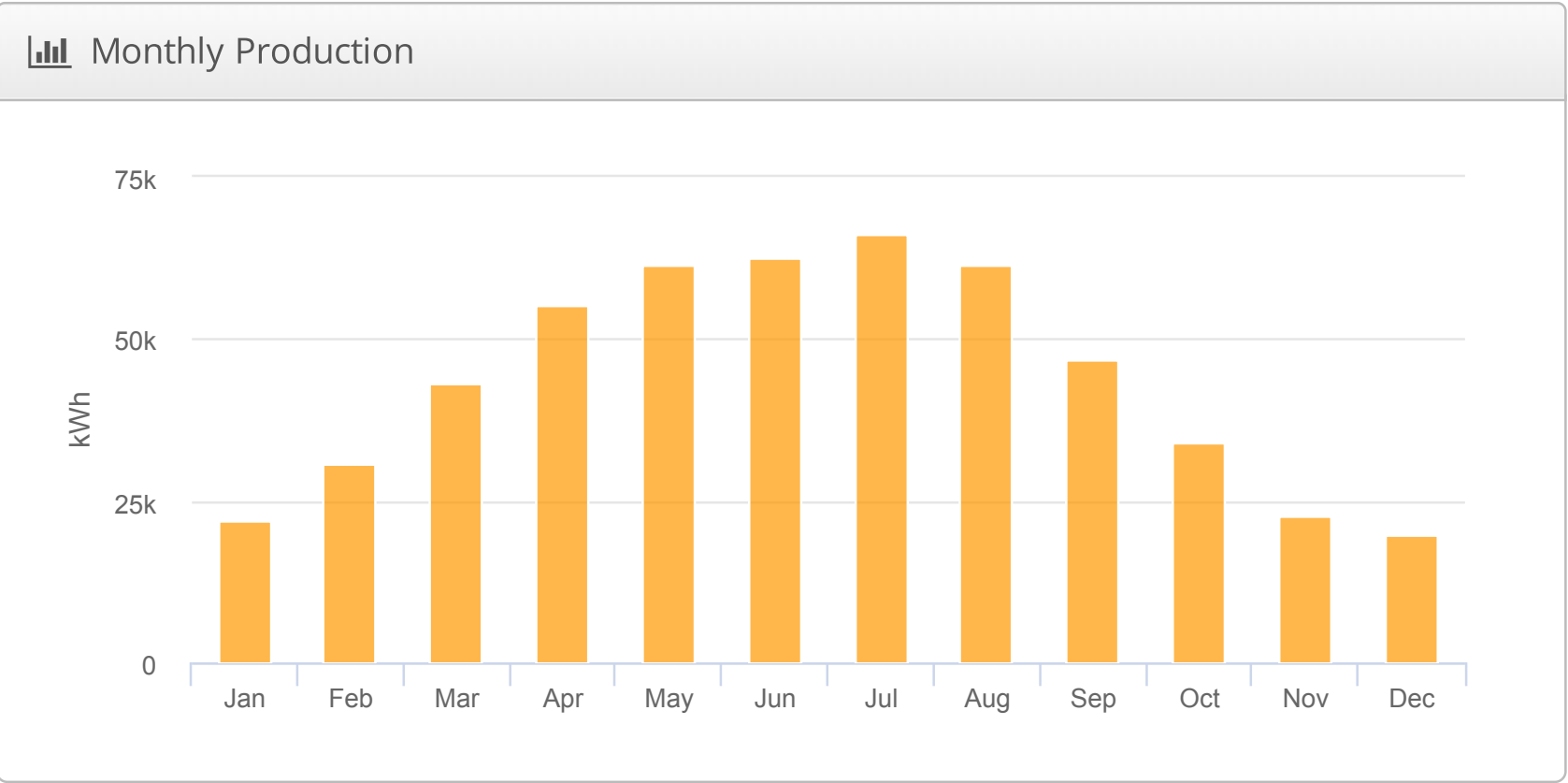
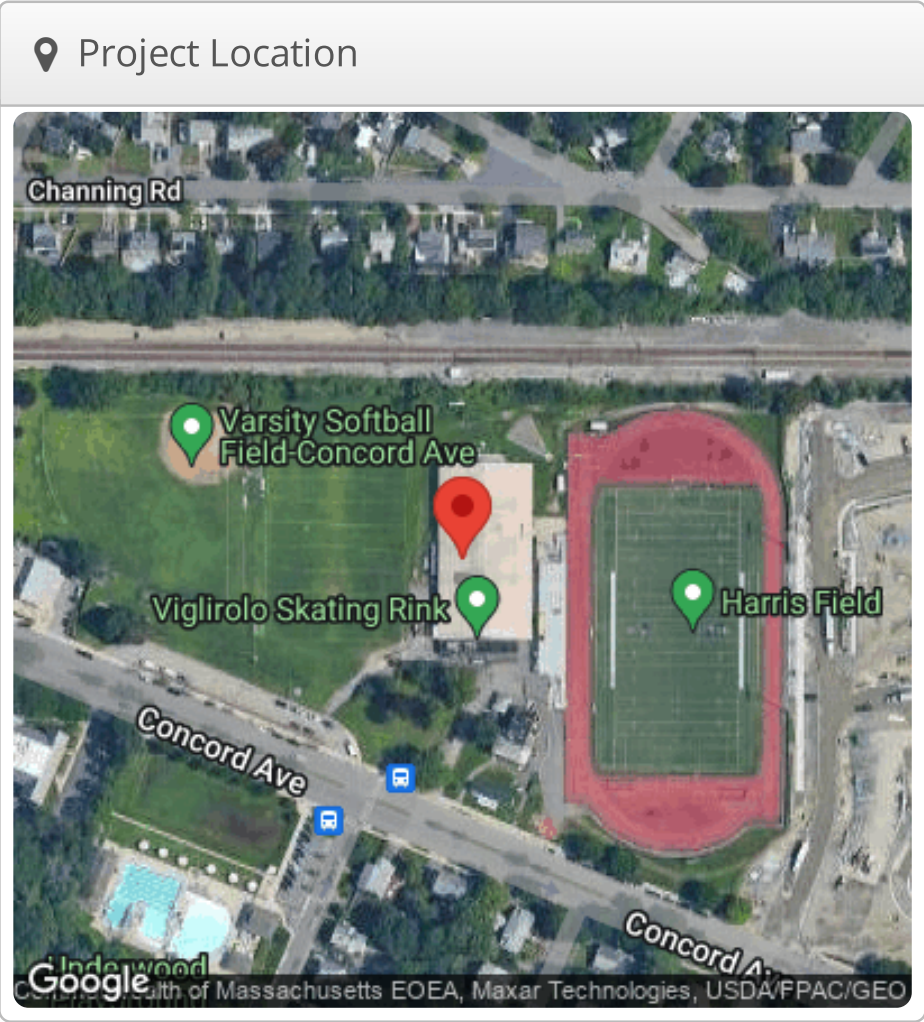
Preliminary estimate at system sizing and cost:

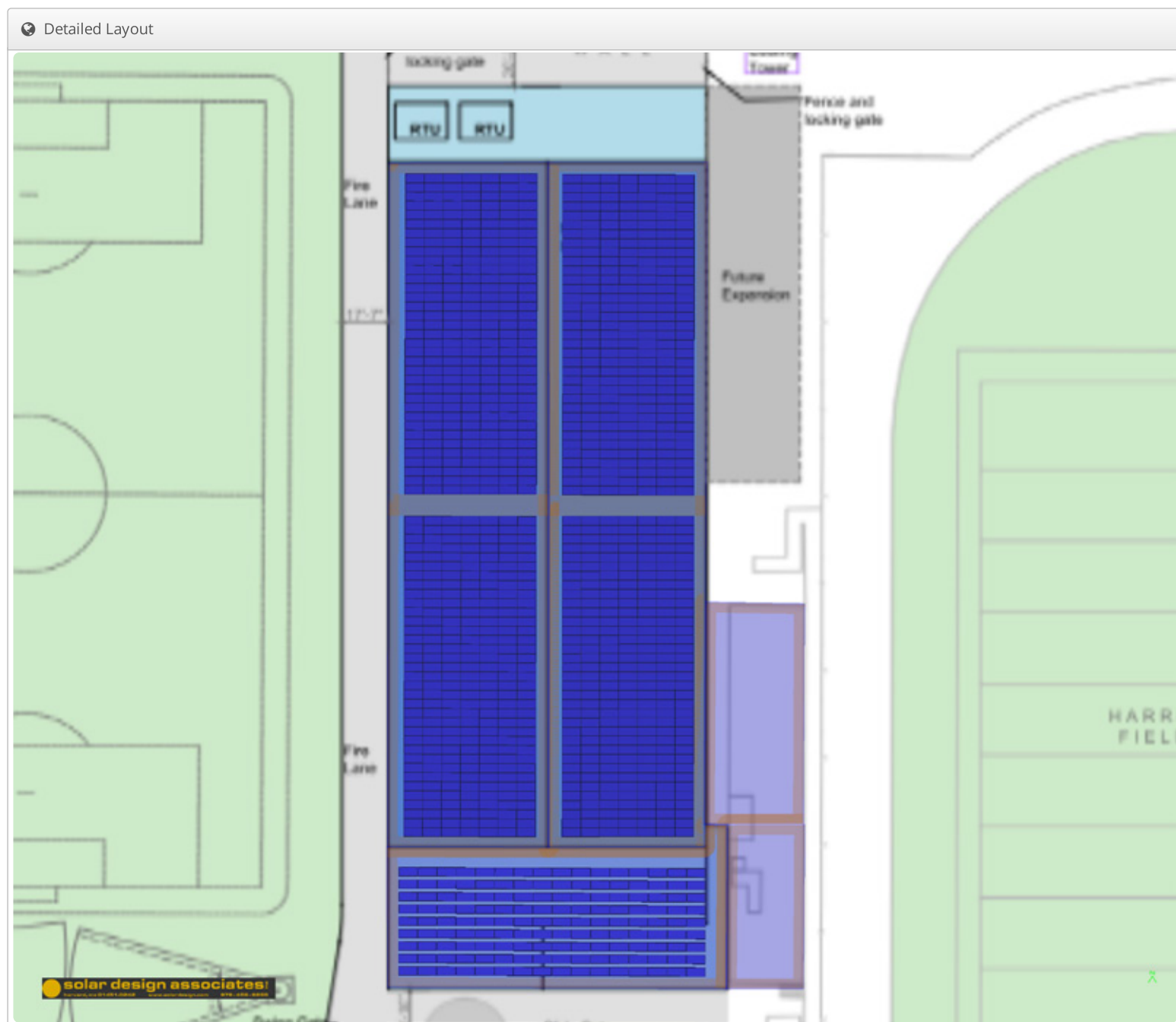
- 436.8 kWdc
- 400.0 kWac
- 526,070 kWhr/year
- \$1,092,000 total system cost, assuming \$2.50/Wdc

As a note: under the IRA, municipal projects now qualify for an ITC direct payment of ~26.5% of the total system cost, or ~\$289,380. This should be vetted by town officials and lawyers.

🔧 Report	
Project Name	Belmont Skating Rink
Project Address	221 Concord Ave, Belmont, MA 02478
Prepared By	Nicholas Lawrence nlawrence@solar design.com

📊 System Metrics	
Design	Parametric design 1
Module DC Nameplate	436.8 kW
Inverter AC Nameplate	400.0 kW Load Ratio: 1.09
Annual Production	526.1 MWh
Performance Ratio	84.8%
kWh/kWp	1,204.4
Weather Dataset	TMY, 10km grid (42.35,-71.15), NREL (prospector)
Simulator Version	42f17df9d2-29fbd7cae3-be39569fd0-3d3015eac0





Preliminary estimate at system sizing and cost:

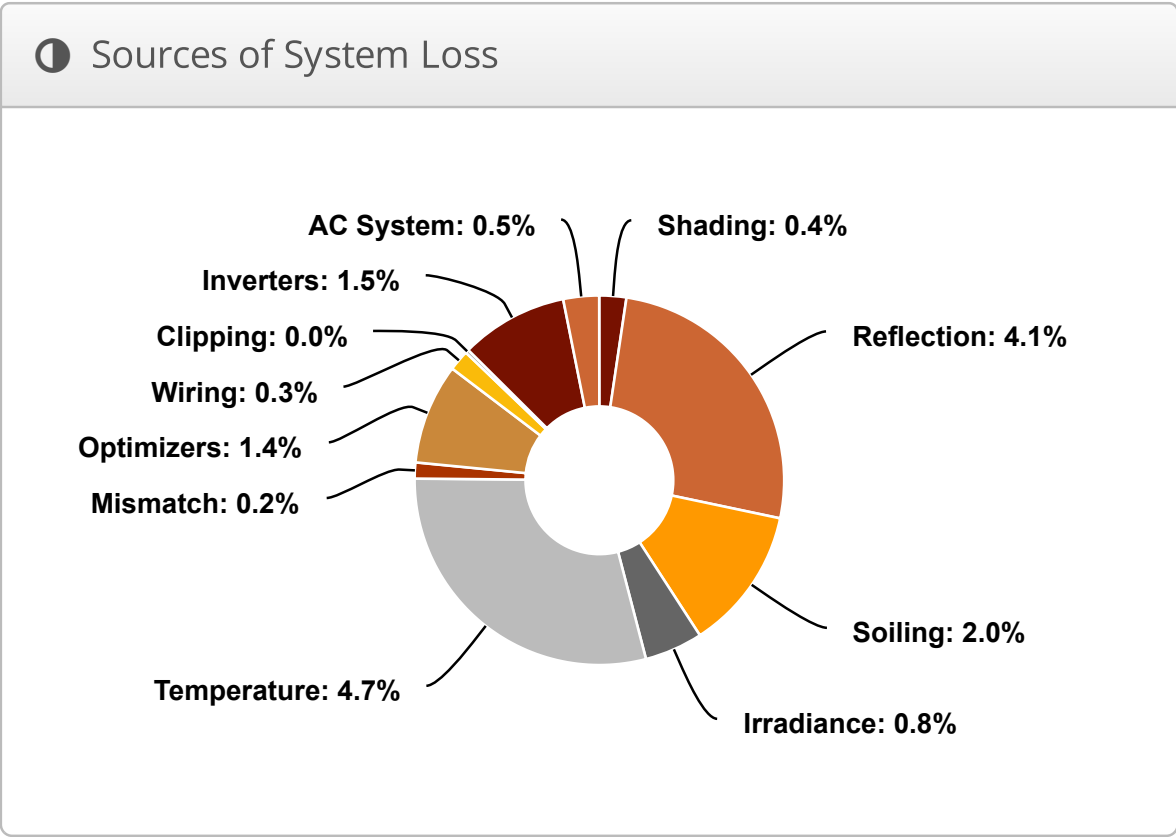
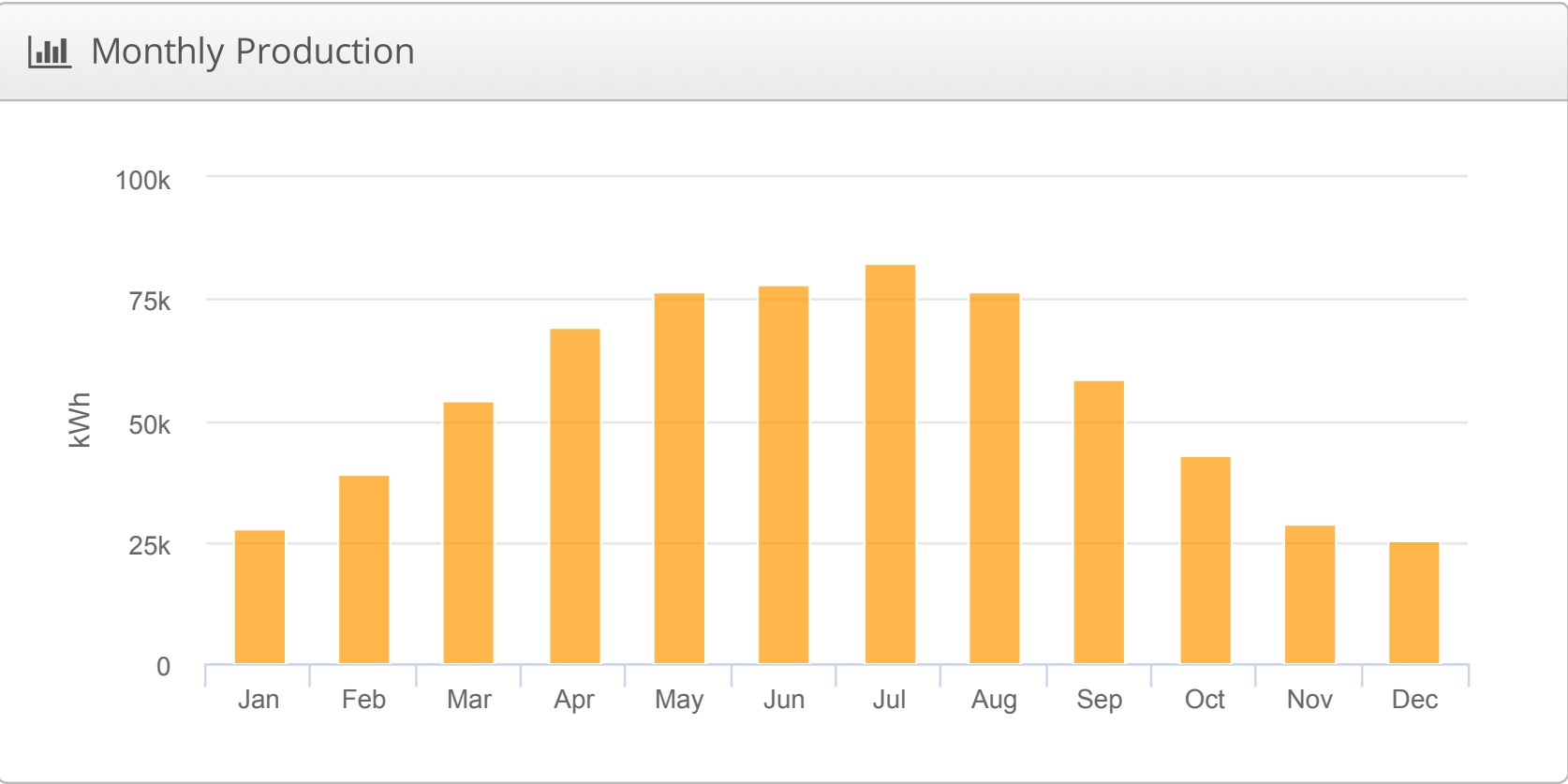
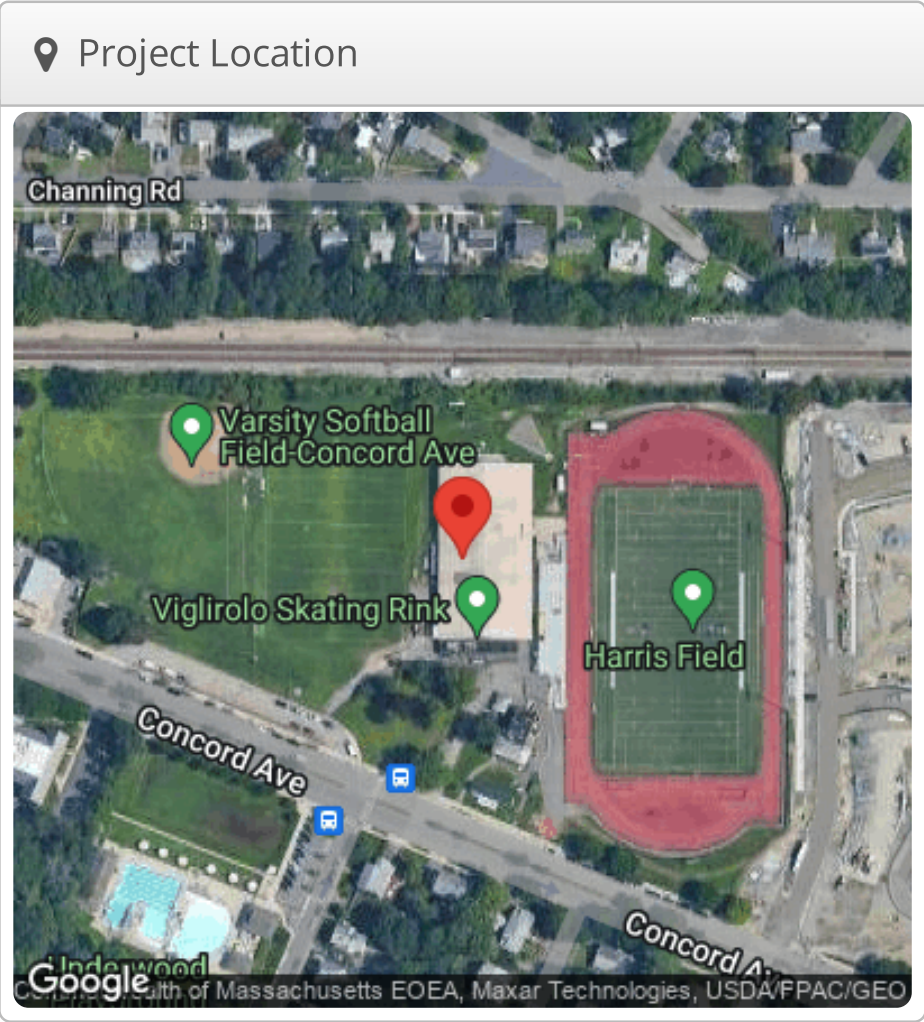
- 539.5 kWdc
- 466.6 kWac
- 659,242 kWhr/year
- \$1,349,000* total system cost, assuming \$2.50/Wdc

As a note: under the IRA, municipal projects now qualify for an ITC direct payment of ~26.5% of the total system cost, or ~\$357,485. This should be vetted by town officials and lawyers.

*To be confirmed

🔧 Report	
Project Name	Belmont Skating Rink
Project Address	221 Concord Ave, Belmont, MA 02478
Prepared By	Nicholas Lawrence nlawrence@solar design.com

📊 System Metrics	
Design	Parametric design 2
Module DC Nameplate	539.5 kW
Inverter AC Nameplate	466.6 kW Load Ratio: 1.16
Annual Production	659.2 MWh
Performance Ratio	85.1%
kWh/kWp	1,221.9
Weather Dataset	TMY, 10km grid (42.35,-71.15), NREL (prospector)
Simulator Version	a5a2eb7823-61c71e8a65-d850928be8-6d900b2c1d



Building Use

A Facility For You



PICKLE BALL



TENNIS

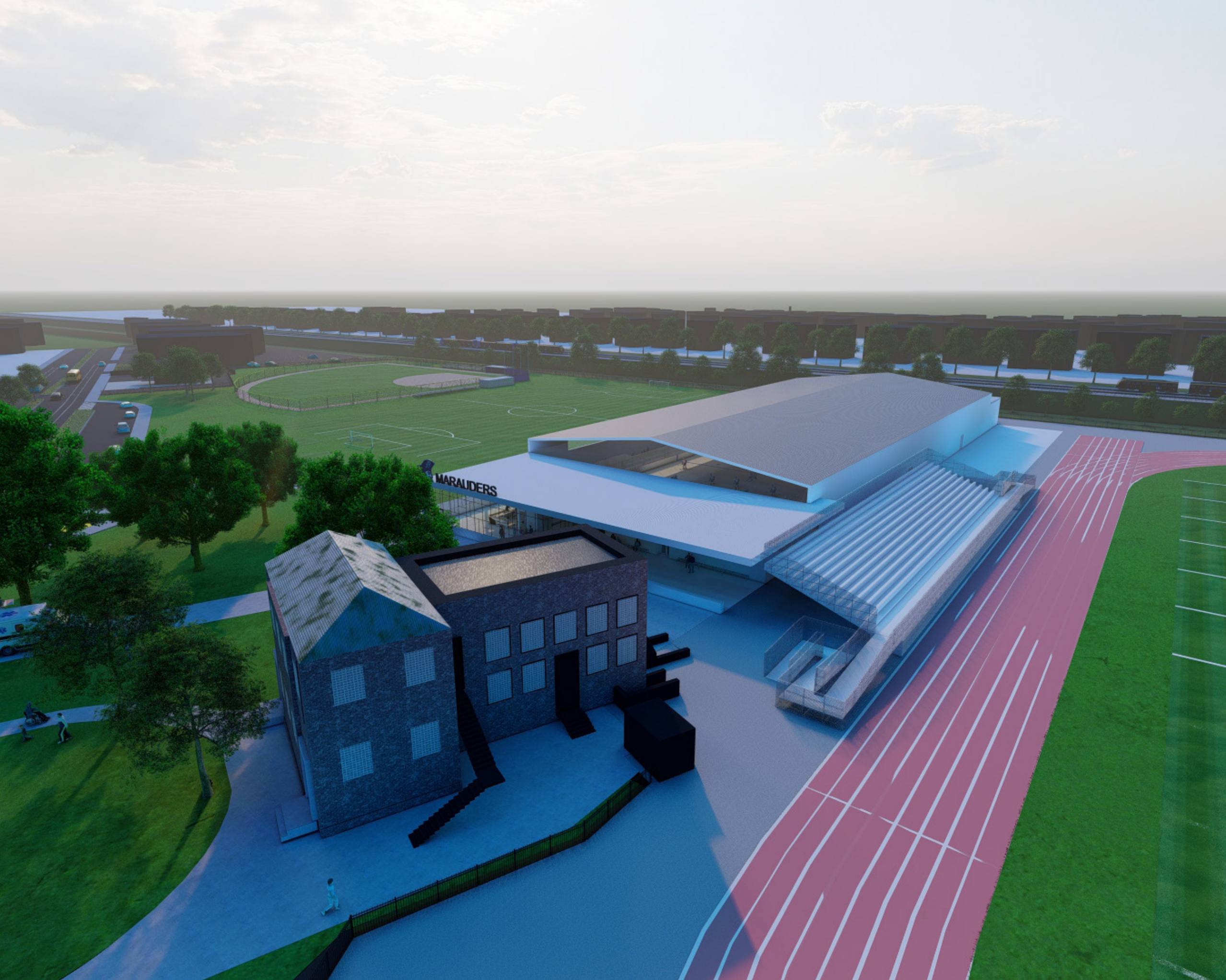


FUTSAL



INDOOR SOCCER





MARTIAL ARTS



YOGA



PILATES



LOW IMPACT AEROBICS





BOX LACROSSE



BADMINTON



DOG TRAINING



VOLLEYBALL





BASKETBALL



NETBALL



BOWLS



GYMNASTICS





STRETCHING & MOBILITY



DANCING



SPIN CLASS



SELF DEFENSE





FITNESS GROUP



ROLLER HOCKEY



ROLLER SKATING



CRICKET



13. Why is a public procurement process required for this facility and how does this affect the overall cost of the project?

14.

Is the project cost offset
by fundraising from the
community?

15.

How much will it cost per household?

16. What is the operating budget
for the new facility?

17.

What is the difference between a town-owned, community operated facility and a privately run facility?



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PROPOSED

QUESTIONS



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