



# OAA HQ

## Walking the Talk

ONTARIO ASSOCIATION  
OF ARCHITECTS  
111 Mainfield Drive



# Agenda

- WHY are we doing this?
- WHERE should HQ be located?
- WHAT has been approved?
- WHEN will it happen?
- HOW will we pay for it?
- DISCUSSION



# WHY...

The OAA is Focused on Advocacy for the Profession

Our building is a symbol of all Architects. We need it to:

- Function well
- Look great
- Be energy efficient
- Be financially prudent
- Preserve our heritage as a moment in time



WHY

Demonstrate Energy Efficiency?

“Achieve energy performance not less than 25% better than MNECB as demonstrated by energy modeling analysis”



WHY

## Demonstrate Energy Efficiency?

“The project shall be demonstrated to use no more than 100 kWh/m<sup>2</sup> annually”

“The proponent team shall be responsible for funding any excess energy costs over a 25 year lifecycle”

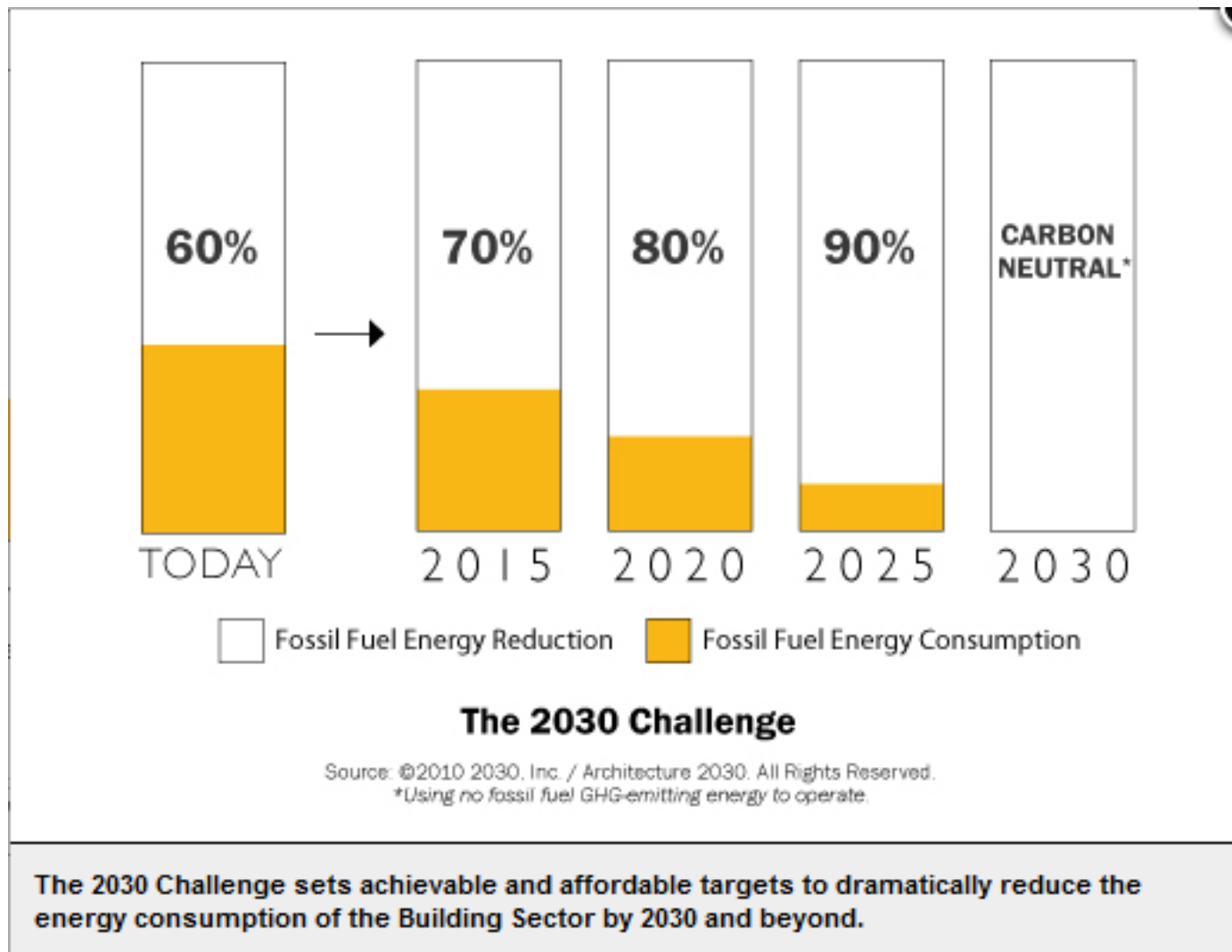
# Why

## Demonstrate Energy Efficiency?

- OAA HQ before new Curtain Wall:  
482 ekWh/m<sup>2</sup>yr
- BOMA benchmark 282 ekWh/m<sup>2</sup>yr
- Current Ontario Building Code Av.:  
259 ekWh/m<sup>2</sup>yr
- Infrastructure Ontario Target:  
100 ekWh/m<sup>2</sup>yr

# WHY...

## Is the 2030 Challenge OAA Policy?





WHY...

Are we doing this now?

- We have already replaced the curtain wall system with Heat Mirror glazing
- The mechanical system is starting to fail and needs to be replaced.
- Codes and performance expectations have changed in 22 years.



# WHERE..

## Should we be located for member convenience?



# WHERE...

## Cost - Benefit to move?

From the Cushman Wakefield Lepage report,  
based reducing area by 3800 sf:

- Net Cost to build an excellent Class A building:  
\$4,774,000
- Net Cost to build a good Class A building:  
\$3,504,000
- Net cost to sell, and lease in a LEED building  
downtown for 10 years: \$3,782,000

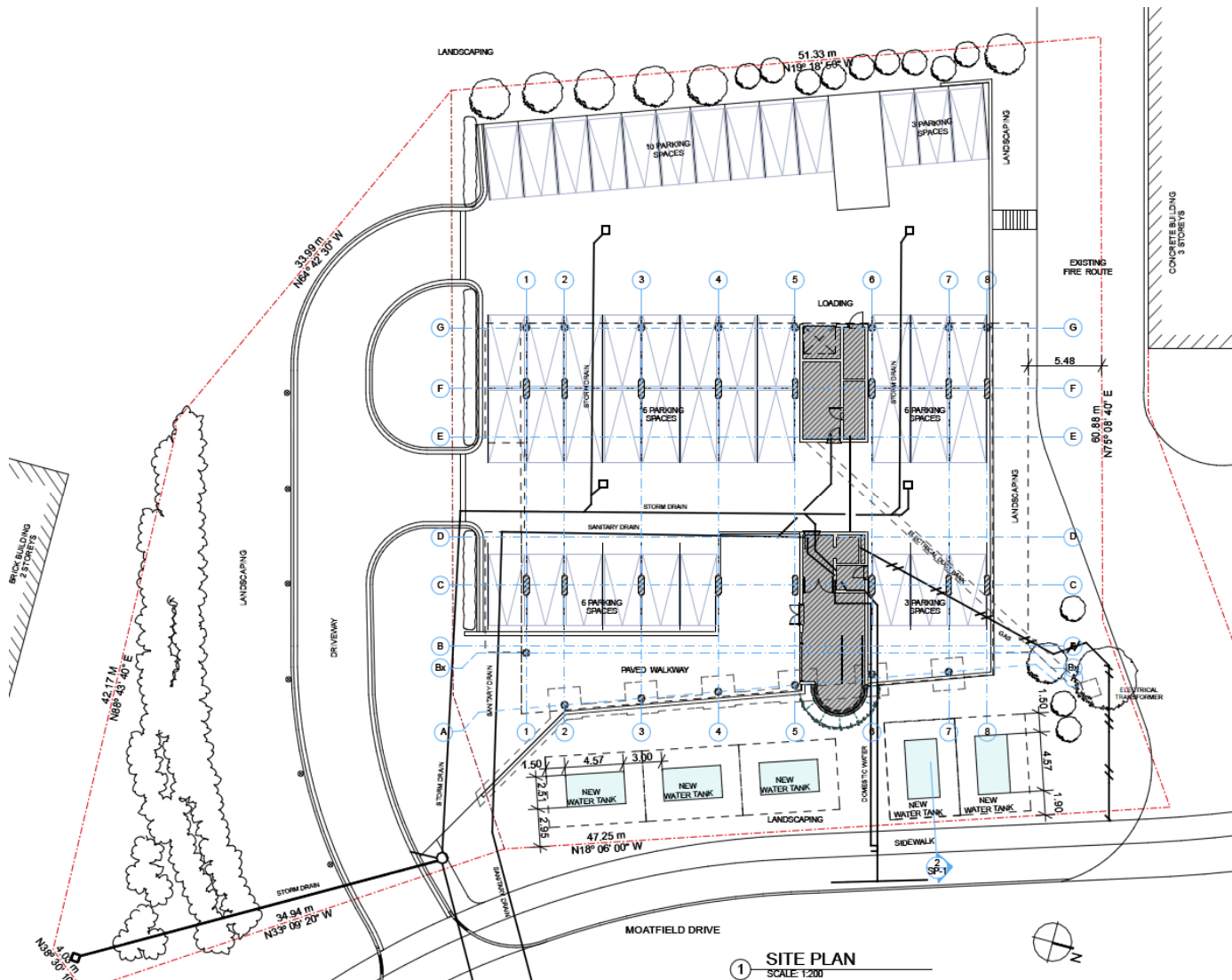
WHERE...

is the best location environmentally?



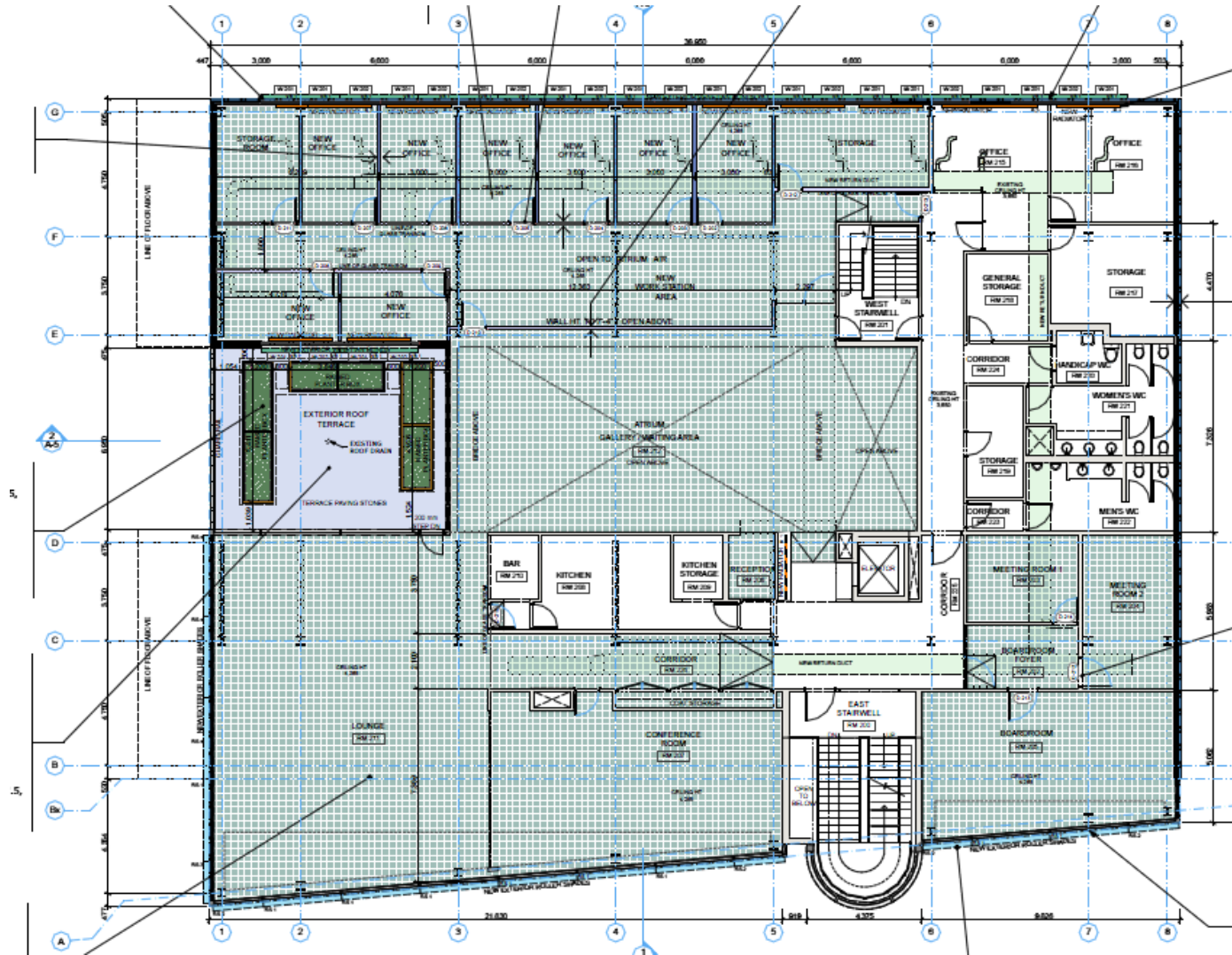
# WHAT...

# is proposed to make HQ more functional?

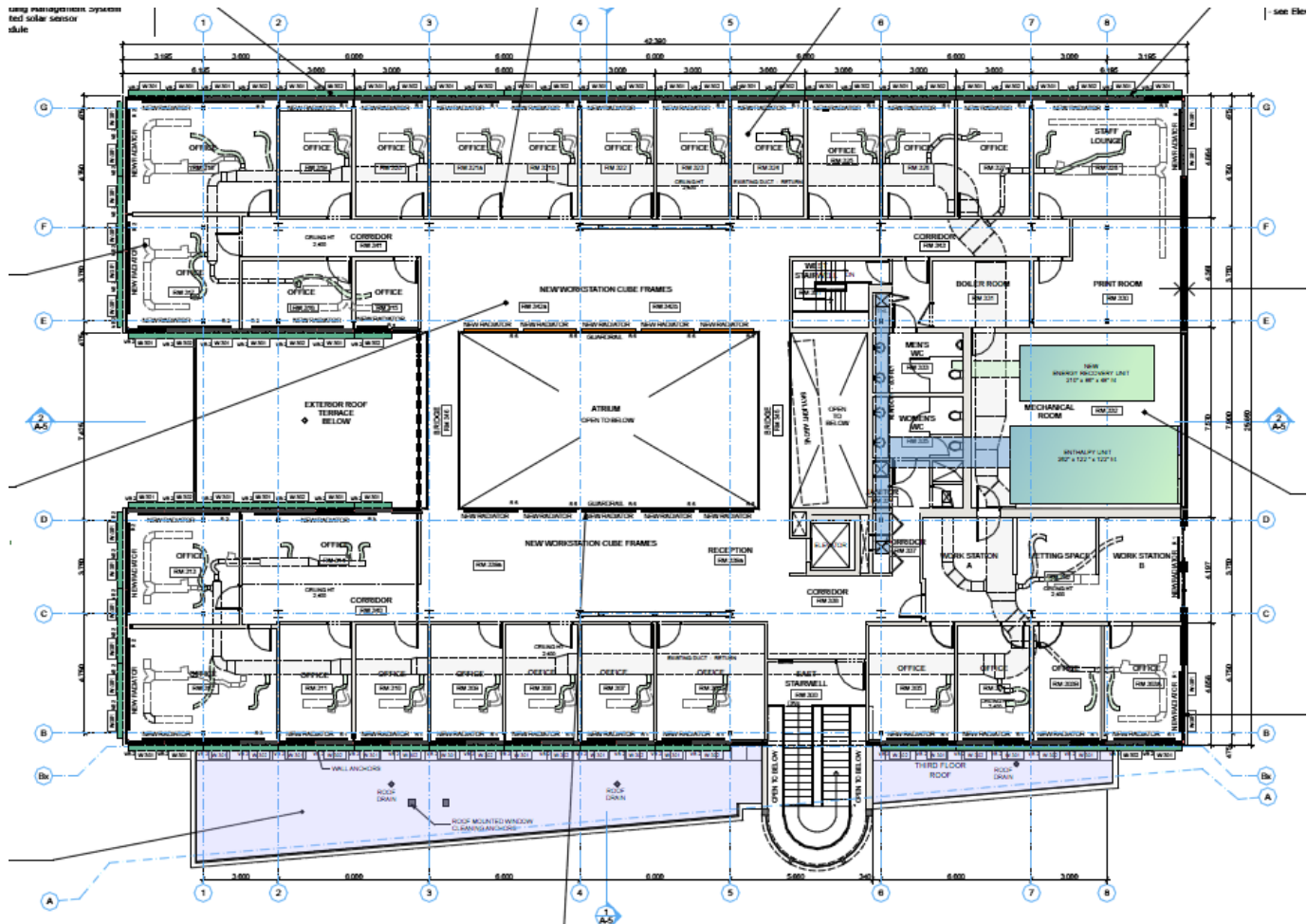




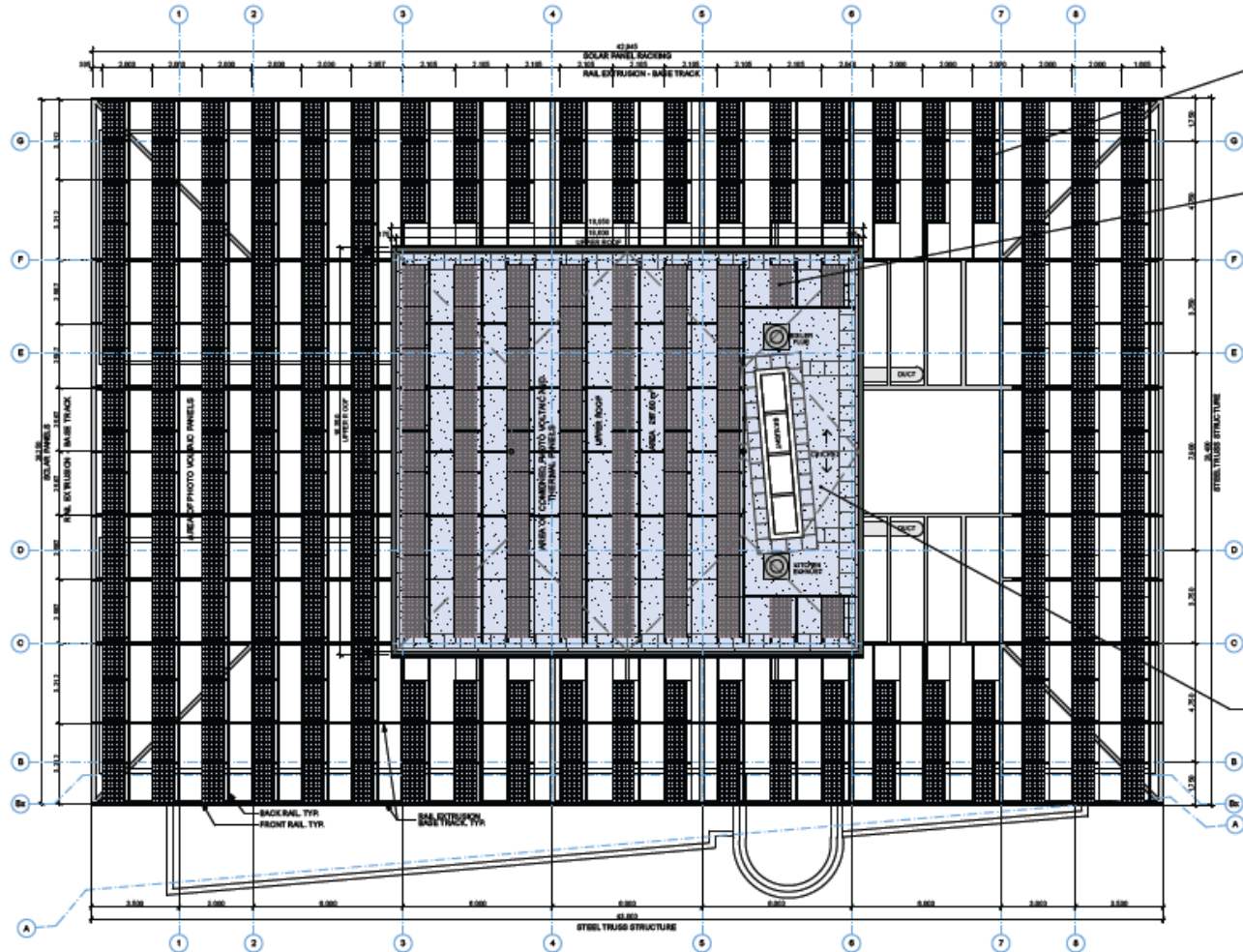
# Creating more functional space on 2<sup>nd</sup> floor



# Third Floor Plan

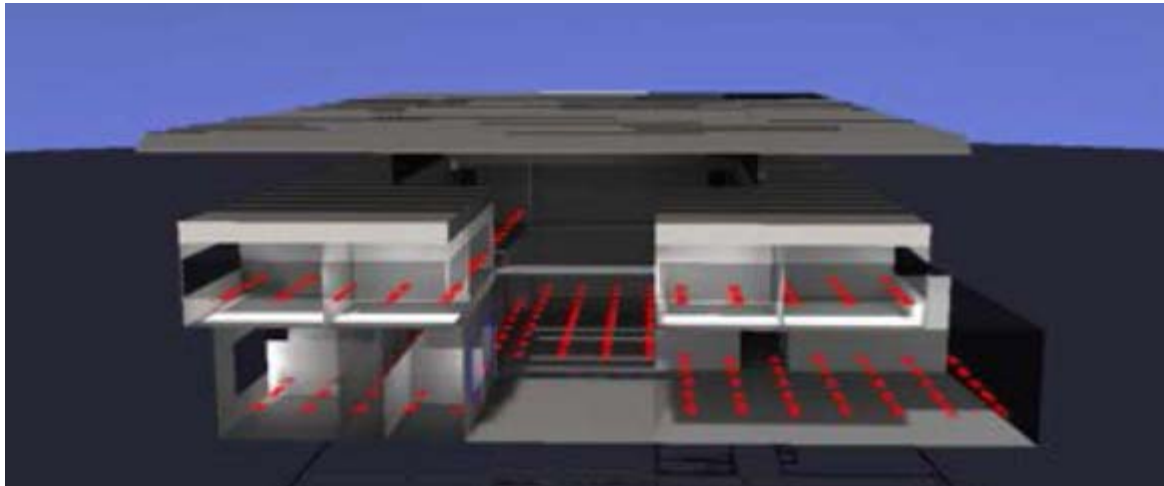


# Roof Plan – Solar Panels



# WHAT...

## Are the proposed lighting upgrades?



- Changes to glazing
- New exterior shading system
- New electric lighting system and controls
- Maximize daylight harvesting





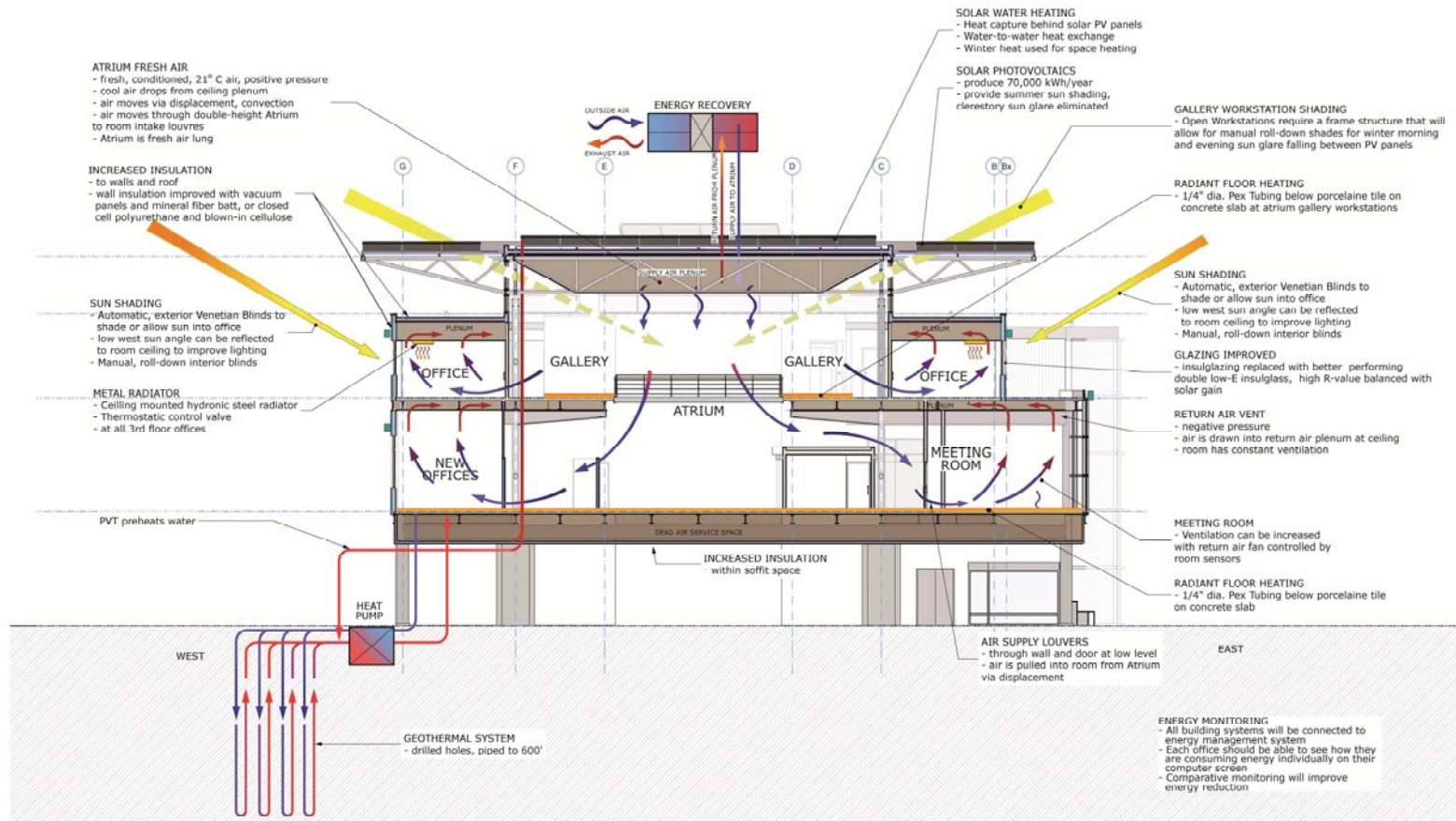
WHAT...

Are the Options for Mechanical Upgrades?

1. Maintain what we have
2. Component upgrades
3. The 2030 Proposal: Demolish and Re-build the mechanical systems

# WHAT:

## The 2030 proposal is based on displacement ventilation



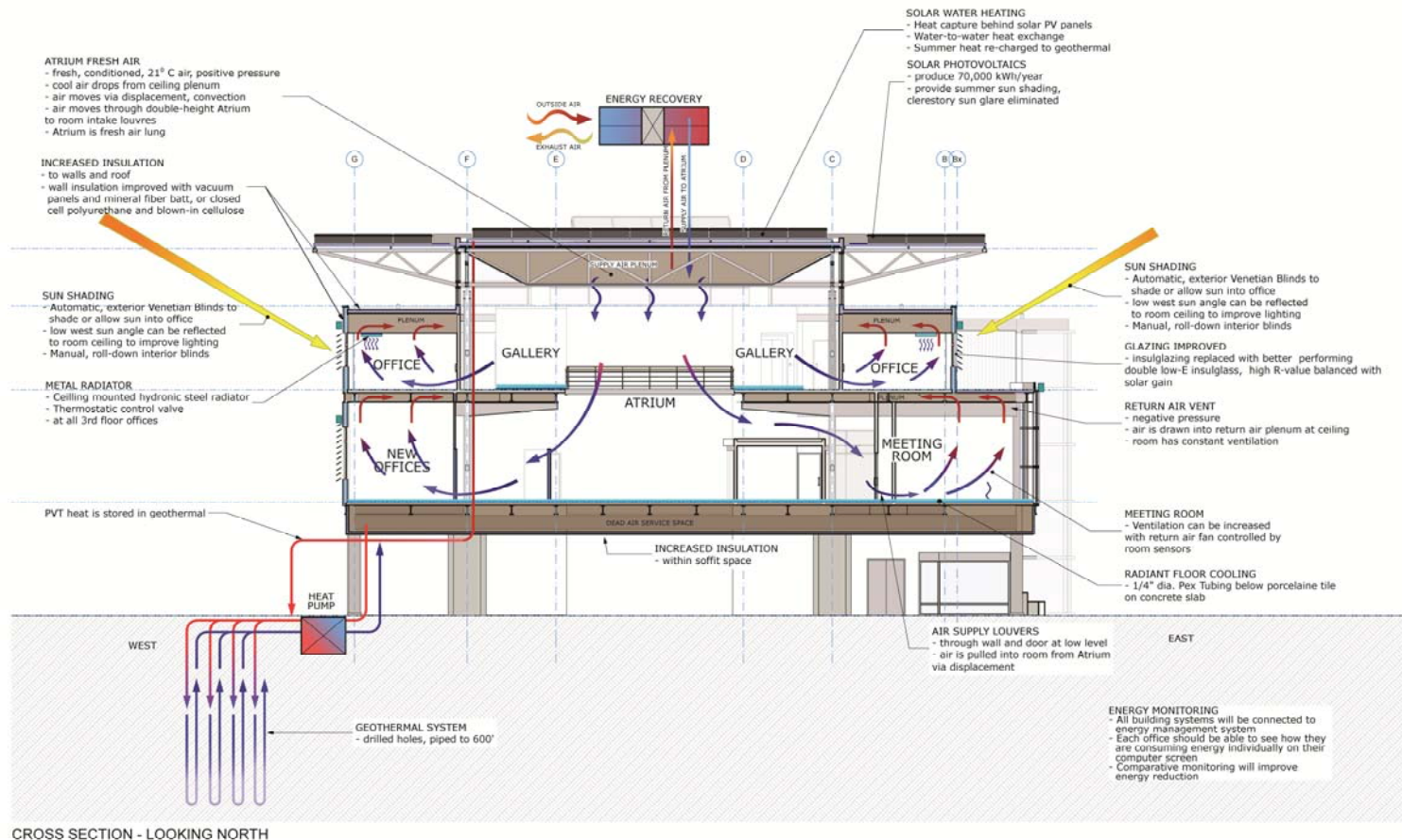
CROSS SECTION LOOKING NORTH

### WINTER TEMPERED DISPLACEMENT VENTILATION

October 30, 2013

# WHAT:

## The 2030 proposal is based on displacement ventilation



**SUMMER TEMPERED DISPLACEMENT VENTILATION**

October 30, 2013

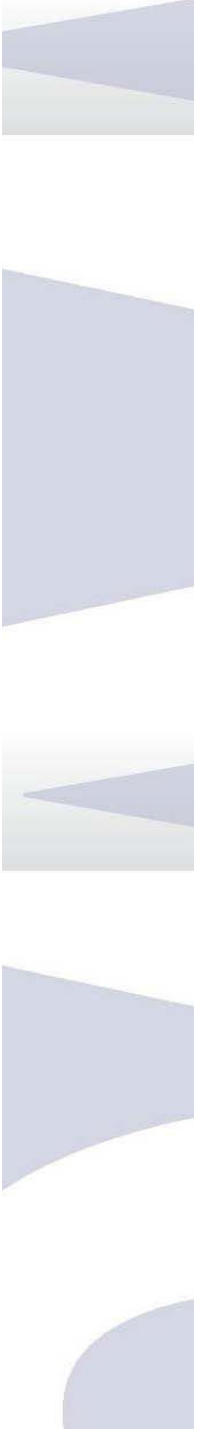
# WHAT...

## is the cost/benefit of each option?

	Maintain current System	Component upgrade (TMP/DWA)	Demolish and refurbish (SE/DFA)
Initial Capital Cost	\$1.24 mil	\$2.34 mil	\$3.89
Energy Costs over 25 years	\$3.10 mil	\$2.12 mil	\$0
Maintenance Costs	\$.675 mil	\$.55 mil	\$.375 mil
NVP	-\$5.02 mil	-\$4.71 mil	-\$4.2 mil
Simple Payback	N/A	25 years	17 years
Advocacy Value	Negative	Neutral	High
Risk	Low	Mid-High	Mid-High

Notes:

1. Interior upgrade estimates are the same for all scenarios
2. Lighting upgrades are the same for all scenarios
3. Payback and NVP includes interior upgrades



# WHEN... will it happen?

- Schematic Design approved in April 2014
- Design development should be complete early Fall 2014
- Earliest Construction Start: January 2015



HOW...

can we pay for it?

Current reserves +  
planned budgeting/status quo +  
Our increasing membership

OR

Borrow

OR

Design Build Finance (Toronto Atmospheric  
Fund)



# DISCUSSION

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