# **Economic Rationale**

1. Density

Open Space Size

- 3. Open Space Cost in \$
- 4. Open Space Cost as % of Building SF
- 5. Real Estate Costs

# Sustainability

- Current Efforts
- Overview
- Analysis
- Discussion

## Highlights of Current Efforts

- LEED-CI Gold renovations
- Waste management and recycling
- Energy conservation

#### Plaza Revitalization Project Objectives

- Enhance the Open Space
- Improve the Environmental Sustainability of the Plaza
- Identify Opportunities for New Development

## Sustainability Framework

Celebrate community

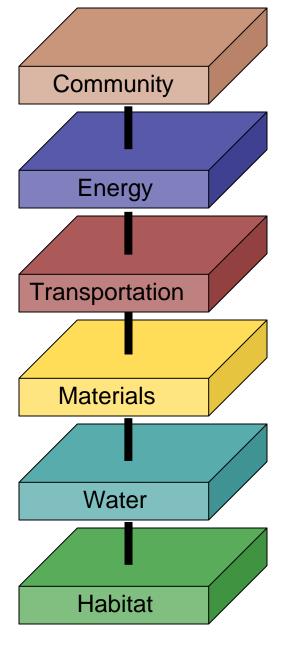
Achieve energy efficiency

Promote transportation options

Manage materials

Enhance water resources

Champion natural environment



#### Sustainability Issues: Water

Water identified as significant set of issues

- Church foundation piles
- Groundwater Conservation Overlay District
- Importance of water features
- Almost all water drains to Combined Sewer

## Sustainability Issues: Integrated Environments

- Lack of and need for access across site
- Create a "more welcoming site"
- Lack of uses and activities, especially in winter months
- Lack of comfortable seating

# Sustainability Issues: Transportation

 Transportation Oriented Development: Capitalize/build on excellent T and bus connections

Reduce pedestrian-vehicular conflicts

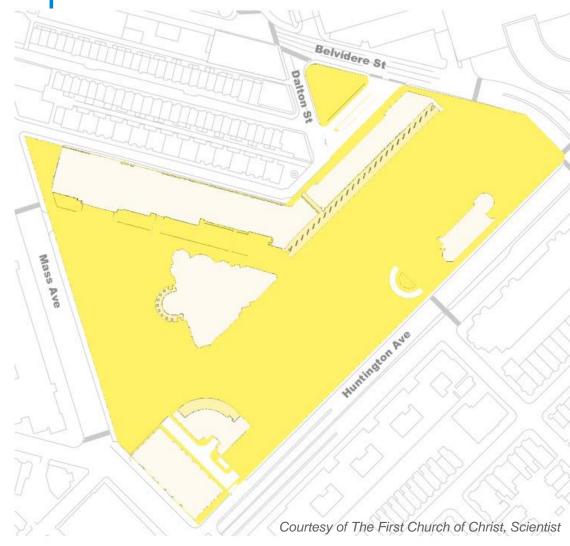
#### Sustainability Issues

- Energy and Atmosphere
  - Heat Island
  - Shadows
  - Wind issues
- Habitat
  - Lack of grass and trees
  - Barren in winter months
- Materials
  - Repurposing of existing buildings
  - Reuse and recycling of site materials

**Existing Site Open Space** 

- 14.5 acre site, 2/3 of which is open space
- 67% of the site is open space
- 24% occupied by buildings
- 9% streets or parking

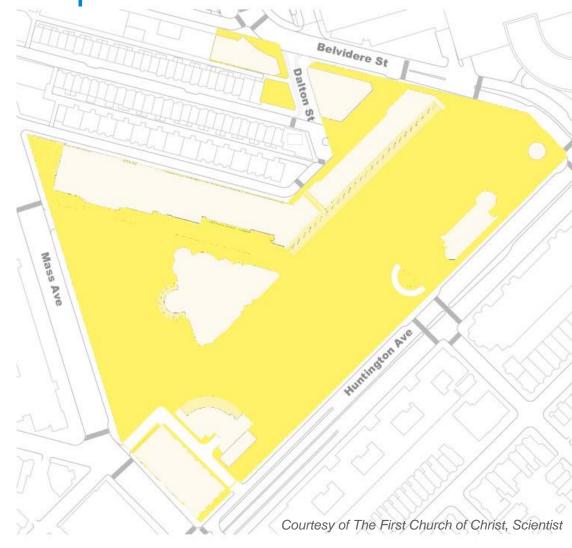
Open Space: includes hardscape, lawn, planters, and water



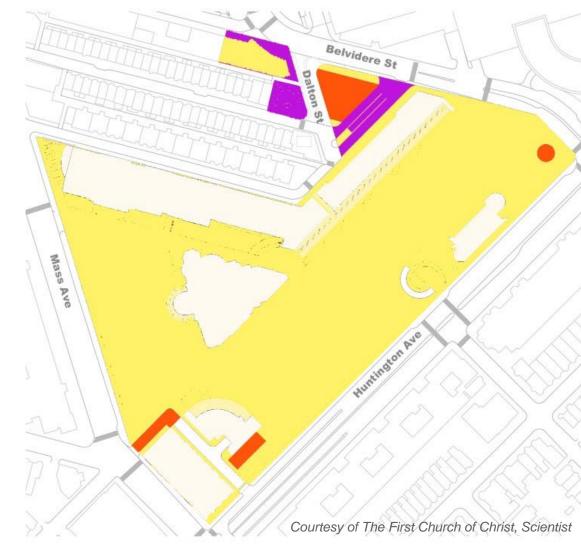
Proposed Site Open Space

- 14.5 acre site, 2/3 remains open space
- 69% of the site is open space
- 28% is occupied by buildings
- 3% is in streets or parking

Open Space: includes hardscape, lawn, planters, and water

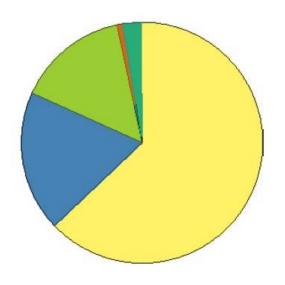


# Open Space



- Open Space
- New Open Space
- Open Space converted to other use

# **Existing**



	EXG.	%
OPEN SPACE	427,694	68%
Pavers	259,162	41%
Water	79,517	13%
Grass	63,568	10%
Planters	10,883	2%
Bosque	5,746	1%
Shared Circulation	8,817	1%

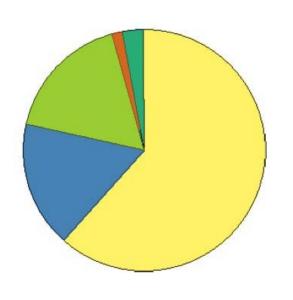
BUILDINGS	152,266	24%
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STREETS/PARKING	51,220	8%
Parking Lot	29,817	5%
Street	21,403	3%





# Proposed



					1 / //•
	EXG.	%	PROPOSED	%	DELTA
OPEN SPACE	427,694	68%	442,775	70%	15,081
Pavers	259,162	41%	259,922	41%	760
Water	79,517	13%	74,912	12%	(4,605)
Grass	63,568	10%	72,947	12%	9,379
Planters	10,883	2%	18,496	3%	7,613
Bosque	5,746	1%	5,239	1%	(507)
Shared Circulation	8,817	1%	11,259	2%	2,442

Mass Ave

BUILDINGS	152,266	24%	176,953	28%	24,687

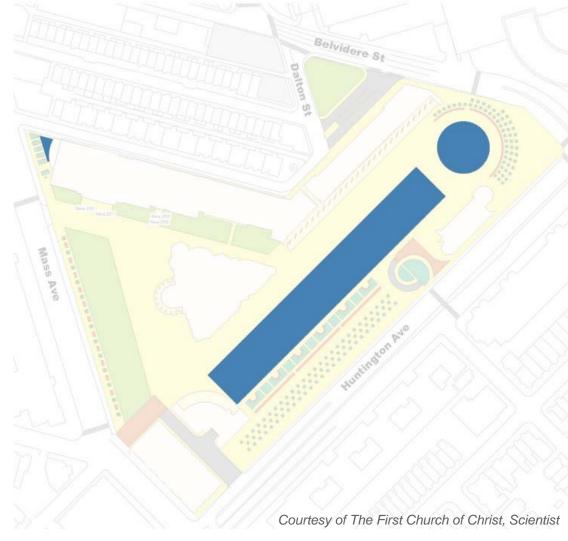
STREETS/PARKING	51,220	8%	11,452	2%	(39,768)
Parking Lot	29,817	5%	-	0%	(29,817)
Street	21,403	3%	11,452	2%	(9,951)

GRAND TOTAL	631,180	100%	631,180	100%	0



**Existing Water Features and Use** 

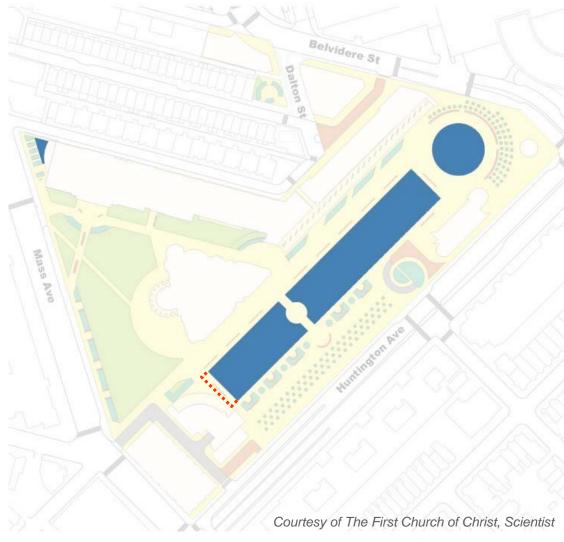
 Pool uses approximately 5 million gallons of water per year





#### Proposed Water Features and Use

- Pool reduced from 26" to between 6" and 12" inches
- Pool water use reduced between 50% and 75% from reduction in depth and area (bridge)
- Water



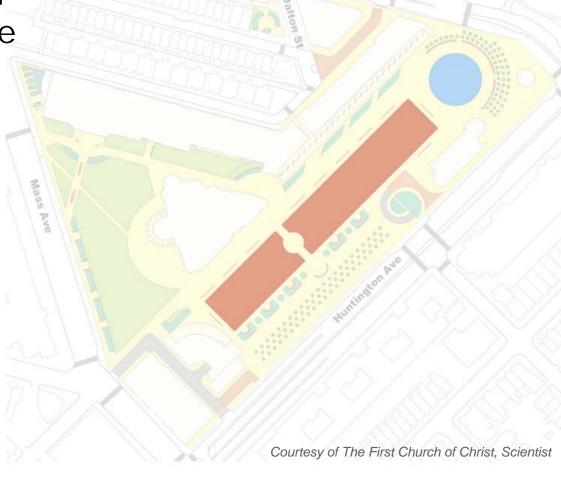
**Proposed Winter Uses** 

 Children's Fountain could accommodate ice skating

 Floor of Reflecting Pool visually attractive when drained



Visual enhancement



**Existing Landscaped Areas** 

10% of the site is lawn



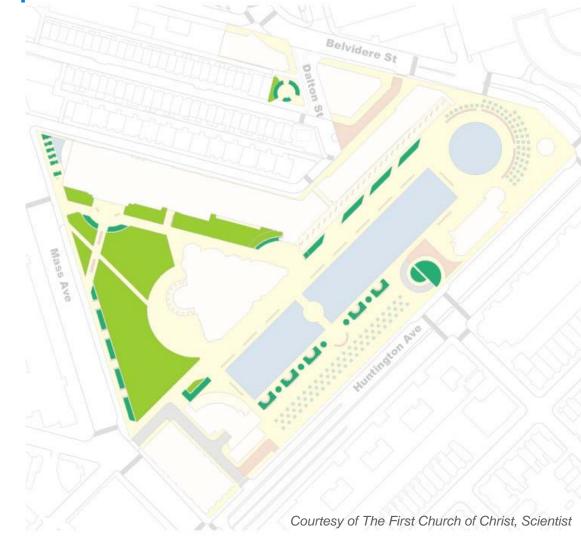




**Proposed Landscaped Areas** 

 Lawn Area increased 20%

 Net gain of 12,700 sf of lawn





## Landscaped Areas

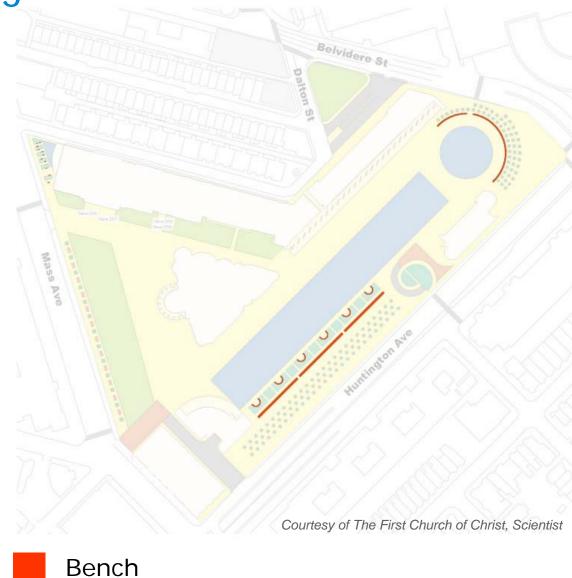
- Lawn Area increased 20%
- Net gain of 12,700 sf of lawn
- Improvements in terms of pervious surfaces
- Reduction of urban heat island effect



A More Welcoming Site

#### **EXISTING**

- Limited seating areas – mostly concrete
- Limited access to and from Huntington

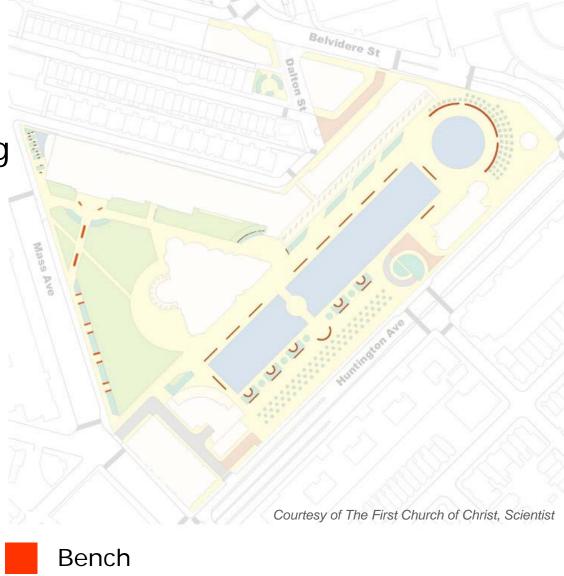


A More Welcoming Site

#### **PROPOSED**

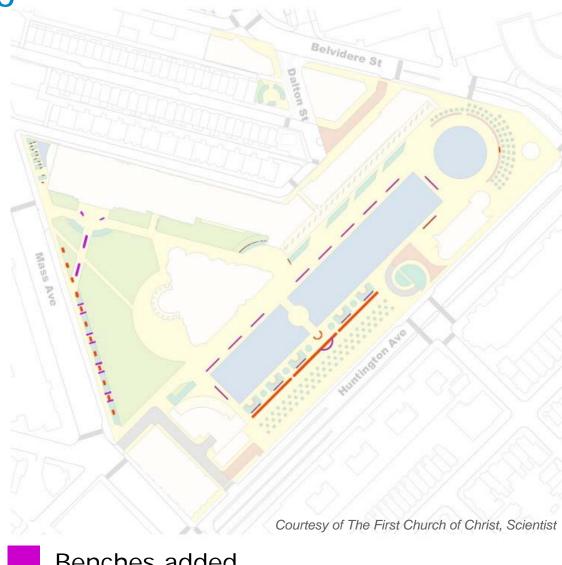
 Pedestrian crossing through Reflecting Pool

- Additional opening in Belvidere Bosque bench
- More seating around Reflecting Pool



\_ \_

A More Welcoming Site



Benches added

Benches converted to other use

# Trees: Existing



Benches added

Benches converted to other use

# Trees: Proposed



Benches added

Benches converted to other use

# Trees



# Repurposing of Existing Buildings



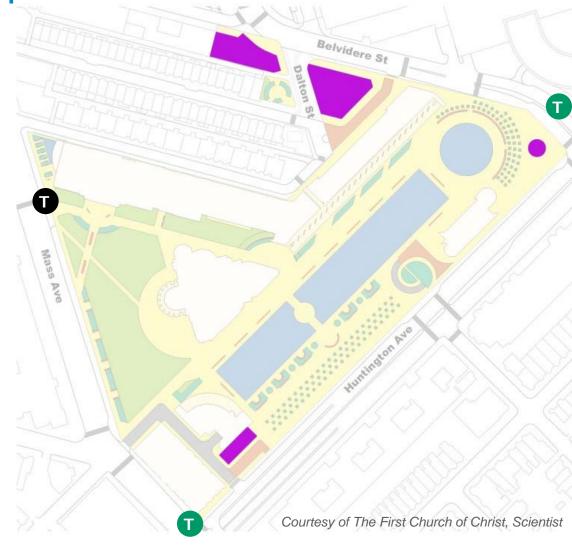
Repurposed existing building

Mixed-Use Development

 Introduction of retail, residential, hotel, and office

 Transit-Oriented: capitalizing on existing transit and bus service

Repurposed existing building



## Summary

- Open space retained and enhanced for yearround enjoyment – more trees, grass, and benches
- Existing buildings repurposed (no demolition)
- Water efficiency improved
- Improved groundwater management
- Improved pedestrian access and circulation

# Christian Science Plaza Revitalization Project Plan Document

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- Executive Summary
- Context
- Purpose and Need
- Objectives and Design Criteria
- Objective 1: Enhance Open Space
- Objective 2: Sustainability
- Objective 3: Plan for Underutilized Real Estate
- Environmental Studies
- Implementation, Permitting and Schedule