

NYSERDA

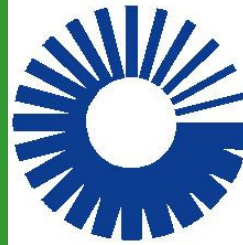


**New York State Energy Research
and Development Authority**



New York City

**Habitat
for Humanity®**



**United
Technologies**

MIZUHO



TWIN CITIES HABITAT FOR HUMANITY

Affiliate Overview:

- Build 50 – 60 housing units/year
- Mix of multi-family and single or twin home units
- Partnership with Minnesota Environmental Initiative (MEI)

First Major Project w/MEI Before



BROWNFIELD CLEANUP OF FORMER DUMP SITE

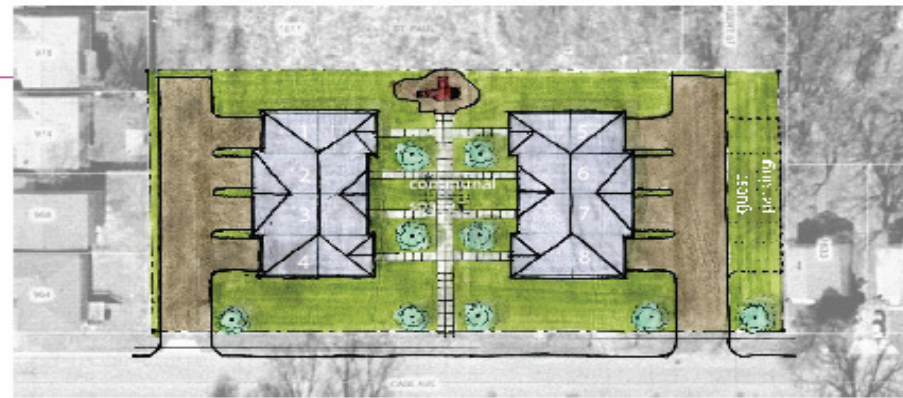
First Major Project w/MEI After



1611 Case Avenue Site Design Options

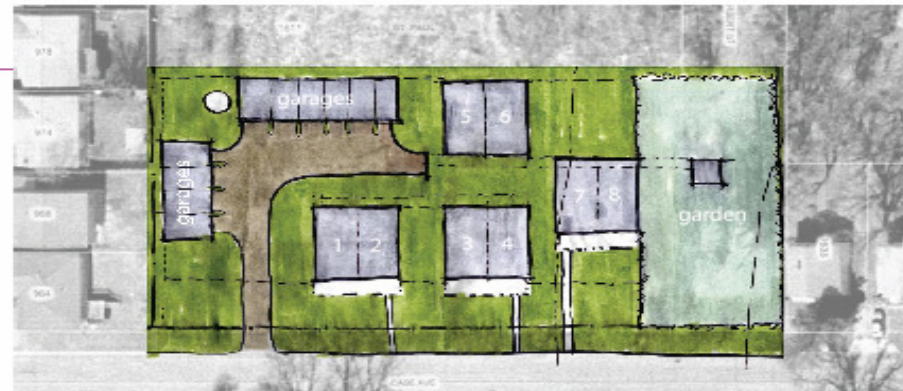
Option A

- Simple footprint
- Minimal impact on street front
- Separation of people and cars
- Simple utility design capabilities



Option B

- Smaller scale buildings
- Minimal hard cover
- Balance of private and public outdoor space



1611 Case Avenue Townhomes

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1611 Case Avenue Site Design Options

Option C

- Modular forms
- Balance of private and public outdoor spaces
- Available community space to the east
- Possible photovoltaic field behind garages on unusable land



1611 Case Avenue Townhomes
Twin Cities Habitat for Humanity

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ALL WISCONSIN

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First Major Project w/MEI

- MEI: Leadership and Technical Assistance
- One of five pilot programs with EPA throughout country in 2000
- Cost of environmental work was reduced by more than 75% by pilot's partners

Some Current Best Practices by TCHFH

- Reuse of urban land
- House orientation for solar gain
- Energy Star rated appliances
- Low-flow faucets and shower heads
- High efficiency furnaces and water heaters
- ICF foundations
- Glueless laminate flooring
- High efficiency windows (Andersen)
- Increased use of cement board siding and composite trim materials
- Increased use of rain gardens to control storm water run-off
- Increased use of CFL's

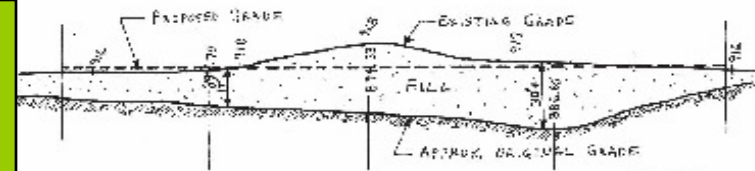
What's Next

- Brownfield in St. Paul – 1611 Case Avenue
- Phase I & II environmental testing results lead to preparing a Response Action Plan (RAP)
- City of St. Paul assisted with land acquisition from county
- Land to be sold to TCHFH for \$1.00

1611 Case Avenue Site Design Criteria



- Integrate buildings with neighborhood
- Use of south light
- Balance equity of space and amenities



ALA Minnesota

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1611 Case Avenue Building Design Options

- Mix siding materials
- Slab on grade
- Large grouping of high efficiency windows



1611 Case Avenue Townhomes

Twin Cities Habitat for Humanity

A/E

AIA Minnesota
a Society of Professional Architects of Minnesota

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1611 Case Avenue Sustainable Strategies

Exterior

- Cement board siding
- Long life shingles
- Pervious paving

Interior

- Incorporate building science principles with green materials
- CFL usage
- Limited use of carpeting
- Slab on grade structure

Education

- Homeowner education on maintenance and equipment



Design Team

John Dwyer
Hermann Klass
Kat Gerzina
Johanna Friedebuh
Sam Kellerman
Nellie DeBruyn

AIA Minnesota
Member of the American Institute of Architects

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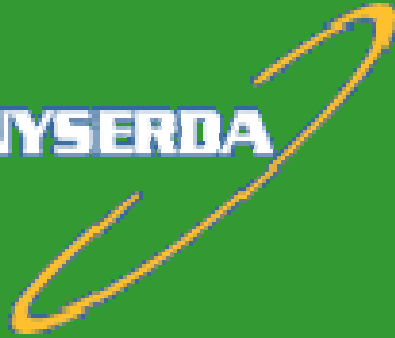
New York City

**Habitat
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Affordable Housing Green Building Symposium

April 12 – 13, 2007

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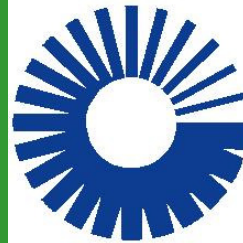


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