



# The Chicago Center for Green Technology

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ENVS 635

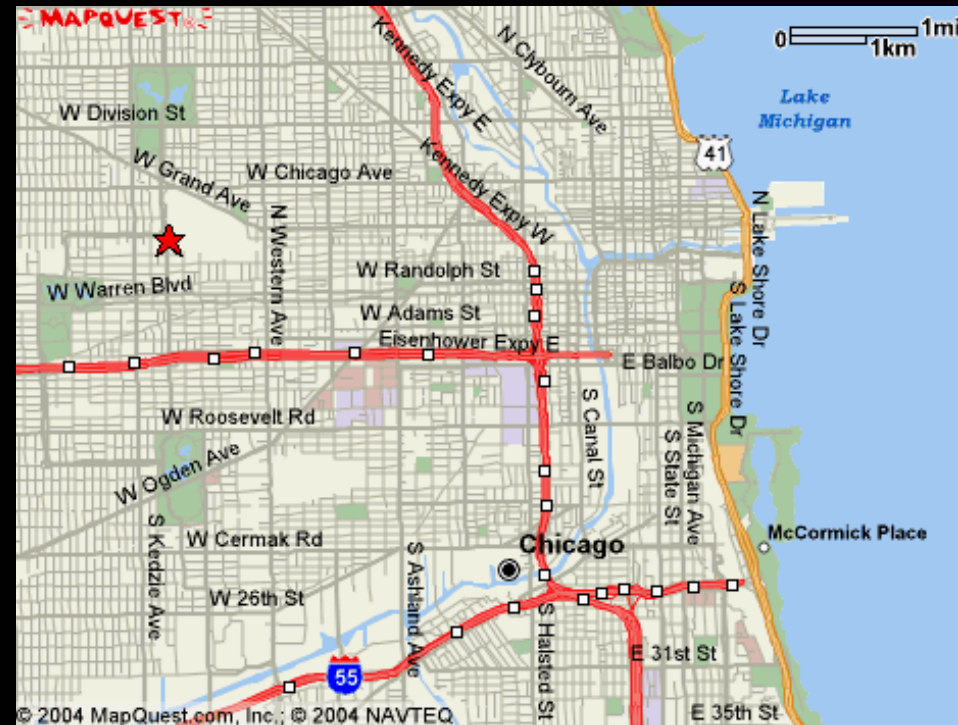
# Chicago, Illinois

- Rail Hub
- Industrial Powerhouse
- Deindustrialization
- Greenest City in America



# The Site

- Owned by the Sacramento Crushing Company
- Illegally Dumped Construction Materials
- See You in Court!!!



# The Cleanup

- \$9 million in public funds
- 600,000 tons of debris, much of which was recycled
- 18 month process



# The Project

- \$100 million to spend
- Used the highest standards of Green Tech available
- \$5.4 million renovation
- Green tenants



# Green Location

- Infill project
- Proximity to CTA
- Encourages alternative modes of transportation



**Chicago Transit Authority 7373 at the North Park Garage, Chicago, IL - 10-14-02.**

# Green Construction

- Asbestos Removed
- Natural, Light-Colored Paving Materials
- Green Elevator
- Green paints, sealants, and adhesives
- 30% Recycled Materials



# Water Management

- Green Roof
- Cisterns for runoff
- Irrigation for vegetation
- Low-flow fixtures
- Filtered runoff



# Water Management



# Energy Efficiency

- Geothermal Wells
- Solar Panels
- Daylighting
- 54% onsite, renewable energy



# 38 LEED Points



Chicago Center for Green Technology  
**LEED® Project # 0005**  
**LEED Version 1 Certification Level: PLATINUM**  
**June 17, 2003**

**38 Points Achieved** Possible Points: **51**

Bronze 22 to 26 points Silver 27 to 30 points Gold 31 to 35 points Platinum 36 or more points

**10 Planning Sustainable Sites** Possible Points: **11** **5 Enhancing IEQ** Possible Points: **7**

1	Credit 1	Landscaping for Erosion Control	1
2	Credit 2	Reduced Heat Islands (1 or 2 points)	2
1	Credit 3	Infill Development	1
1	Credit 4	Reduce Habitat Disturbance	1
	Credit 5	Site Preservation/ Restoration	1
1	Credit 6	Efficient Building Location	1
2	Credit 7	Alternative Transit Facilities (1 or 2 points)	2
1	Bonus	Bonus Credit 1 - Alternative Fueling Facilities	1
1	Bonus	Bonus Credit 2 - Brownfield Development	1

Y	Prereq 1	Elimination/Control of Asbestos	
Y	Prereq 2	Indoor Air Quality	
Y	Prereq 3	Smoking Ban	
Y	Prereq 4	Thermal Comfort	
1	Credit 1	IAQ Management Plan (1 or 2 points)	2
2	Credit 2	Low VOC Materials (1 or 2 points)	2
	Credit 3	Permanent Air Monitoring	1
1	Credit 4	Chemical Storage Areas	1
1	Credit 5	Architectural Entryways	1

**9 Improving Energy Efficiency** Possible Points: **11**

Y	Prereq 1	Building Commissioning	
Y	Prereq 2	Energy Efficiency	
5	Credit 1	Energy Efficiency (1 to 5 points)	5
	Credit 2	Natural Ventilation, Heating & Cooling	1
	Credit 3	Waste Heat Recovery	1
3	Credit 4	Renewable/Alternative Energy (1 to 3 points)	3
1	Bonus	Bonus Credit 1 - Measurement and Verification	1

**5 Safeguarding Water** Possible Points: **8**

Y	Prereq 1	Water Conservation	
Y	Prereq 2	Elimination of Lead	
	Credit 1	Water Conserving Fixtures	1
1	Credit 2	Water Recovery System	1
1	Credit 3	Water Conserving Cooling Towers	1
1	Credit 4	Water Efficient Landscaping	1
1	Credit 5	Surface Runoff Filtration	1
	Credit 6	Surface Runoff Reduction	1
	Bonus	Bonus Credit 1 - Biological Waste Treatment	1
1	Bonus	Bonus Credit 2 - Measurement and Verification	1

**7 Conserving Materials & Resources** Possible Points: **12**

Y	Prereq 1	Elimination of CFCs	
Y	Prereq 2	Storage & Collection of Recyclables	
2	Credit 1	Existing Building Rehab (1 or 2 points)	2
	Credit 2	Resource Reuse (1 or 2 points)	2
1	Credit 3	Recycled Content (1 or 2 points)	2
1	Credit 4	Construction Waste Management (1 or 2 points)	2
1	Credit 5	Local Materials	1
1	Credit 6	Elimination of CFCs/Halons (1 or 2 points)	2
1	Credit 7	Occupant Recycling	1

**2 Improving the Design Process** Possible Points: **2**

1	Credit 1	LEED® Accredited Professional	1
1	Credit 2	Reduction in Pollution	1

# Conclusion

- Lacking in a few areas of LEED Standards
- A lot to be desired from an Urban Design Viewpoint
- But a GREAT project for the Environment and Chicago



# Sources

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