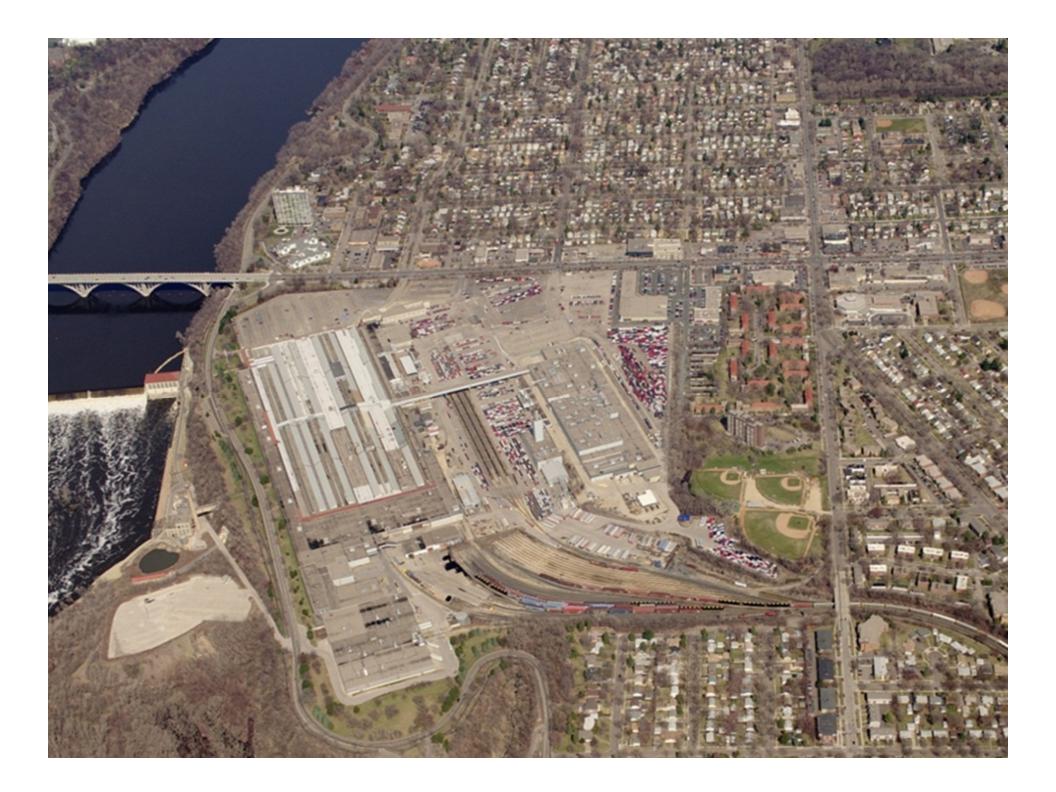
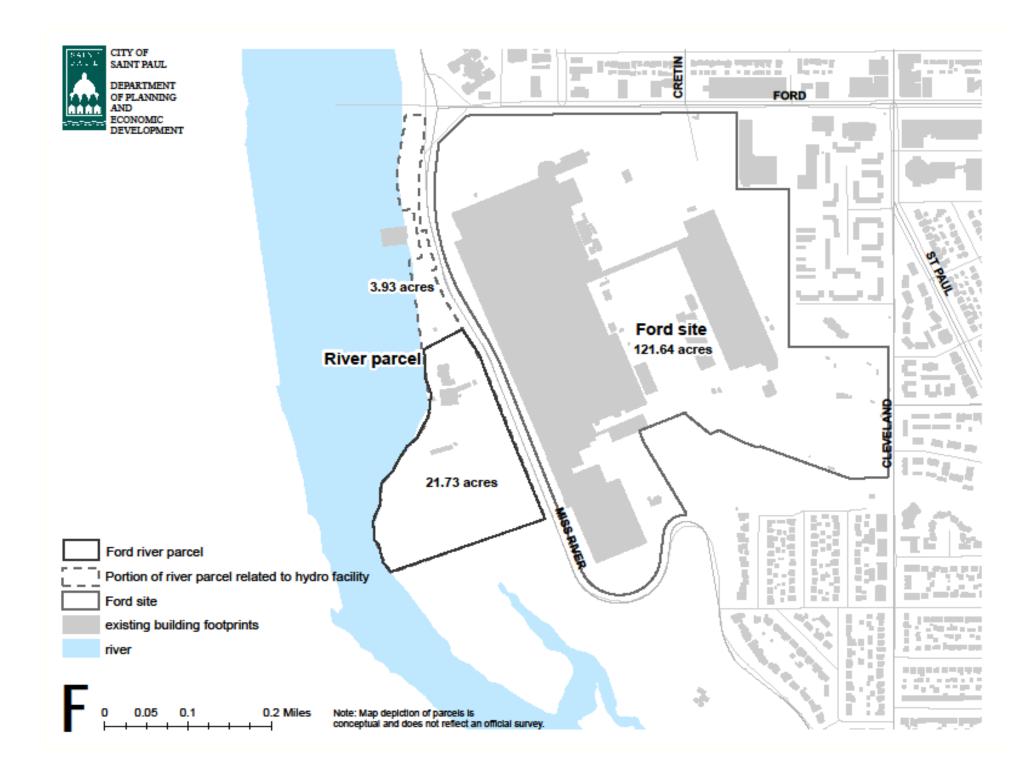
FORD SITE ENERGY STUDY

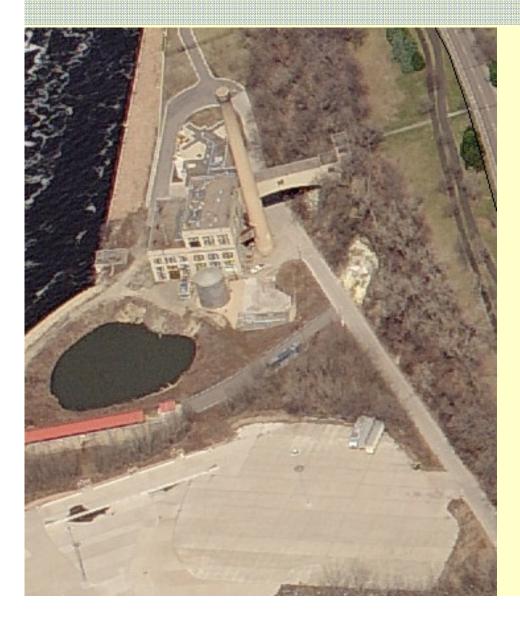
Inspiring and reshaping our energy future by designing a world class energy system for a next generation neighborhood

Technical Advisory Group Meeting #1 – September 5, 2014

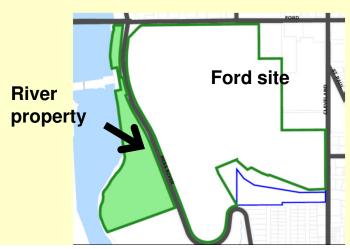




Steam Plant and River Parcel



- 22-acre river property
- Occupied by steam and waste water plants, as well as former dump site
- Future uncertain



GENERAL NOTE:

FORD MOTOR COMPANY MAKES NO STATEMENT OF ACCURACY REGARDING THE LOCATIONS OF THE SUBTERRANEAN FEATURES ON THIS PRINT. ADDITIONAL FEATURES MAY EXIST WHICH ARE NOT REFLECTED HERE. ALL UNDERGROUND TUNNELS, STRUCTURES AND EQUIPMENT MUST BE VERIFIED BEFORE DRILLING OR EXCAVATION. male Q 80000 **B**000 1 0000000 SPRING 00 BENDING PIT ်စ 1 0 MINED SAND TUNNELS 0 ELEVATOR FROM 0 1000 000000 TRAFFIC TUNNEL 0 0 BASEMENT STEAM TUNNEL SAND ELEVATOR -TRAFFIC TUNNELS FANNIT ANNI DANGER 000000 0 0000 CABLE TUNNELS ALL TUNNELS EXCEPT THE STEAM -GAS TUNNE 0 TUNNEL ARE CONFINED SPACES. 0 S. 000000000000 ENTRY CAN BE FATAL DUE TO 0 HAZARDOUS ATMOSPHERE. 0 TUTUTUTU SEE PLANT SECURITY 0 FOR PERMIT BEFORE ENTERING. DISCHARGE TUNNEL 1~ m ADDITIONAL UNDOCUMENTED TUNNELS MAY EXIST HERE 300 600feet 200

FEATURE	REF. DRAWING SET	D₩G.
1. STEAM TUNNEL	STONE & WEBSTER 4066	F905
2. STEAM PLANT INTAKE & DISCHARGE	STONE & WEBSTER 4100 TOLTZ, KING & DAY	V934 ALL
3. CABLE TUNNELS	STONE & WEBSTER 4066	GEN.
4. GLASS BASEMENT	VARIOUS SOURCES	VARI
5. SPRING BENDING PIT	STONE & WEBSTER 3928	V949
6. ELEVATOR FROM TRAFFIC TUNNELS	STONE & WEBSTER 4066	F941
7. SAND ELEVATOR	PLANT ENGINEERING	1952
8. TRAFFIC TUNNELS	STONE & WEBSTER 4066	F898
9. MINED SAND TUNNELS	PLANT ENGINEERING	DWG
10.GAS TUNNEL	PLANT ENGINEERING	PROP

NOTES:

STEAM PLANT DISCHARGE TUNNEL CLOSED DURINC PROCTECTION PROJECT. SEE TOLTZ, KING & DA NOW DISCHARGES THRU UNDERGROUND PIPE AND E OF SCREEN WELL HOUSE.

CABLE TUNNEL LOCATIONS ARE APPROXIMATE AND UNDOCUMENTED TUNNELS ARE SUSPECTED IN AREA HYDROELECTRIC PLANT.

GLASS BASEMENT ORIGINALLY CAPPED AT TIME O DECOMMISSION. SPACE IS CURRENTLY USED FOR

INTERIOR PART OF SPRING BENDING PIT SEALED WITHOUT RECORD AT UNKNOWN TIME. EXTERIOR CAVE" FILLED IN 2003 AT TIME OF FIRELINE

ELEVATOR FROM TRAFFIC TUNNELS CAPPED WITHO

SAND ELEVATOR SHAFT CAPPED AT TIME OF 1958 DECOMMISSION. ADDITIONAL UNDOCUMENTED SHA VICINITY.

TRAFFIC TUNNEL PORTALS CAPPED IN 1952 FLOO PROJECT.

LOCATION OF MINED SAND TUNNELS ARE LARGELY SHOWN HERE IS BASED ON AN UNITILED DRAWING ENGINEERING OFFICE AND SHOULD NOT BE VIEWE THAN A CRUDE REPRESENTATION OF EXISTING CO

gAS TUNNEL (ABANDONED) FROM BLUFF NEAR STE L33. BLUFF ENTRY BLOCKED.

PLOT DATE PLOTTED MON,	JAN/22/07	02:00PM BY MHEISTER	SHEET NO. TTL SHEETS 1 OF 1
"" UND	ERGRO	UND STRUCT	URES/TUNN
		KNOWN SUBTERRA NOT INCLUDED	NEAN FEATURES
DES. BY	DET. BY MKH	FORD MOTOR	
CHECKED BY	APPROVED		in or or
		PL/	ANT ENGINE
DATE	REV. DATE	DMSION BODY & ASS	
	REV. DATE	DMISION BODY & AS	ANT ENGINE sembly s assembly plan



Ford Site Planning, since 2007

- 1. Convened 25-member Ford Site Planning Task Force
- 2. 5 Redevelopment Scenarios Phase I Report and Market Study
- 3. Fiscal Impact Analysis
- 4. Green Manufacturing Reuse Study (MN Legis. grant)
- 5. Open Space priorities and financing study
- 6. Sustainable Stormwater Management (MPCA grant)
- 7. Roadmap to Sustainability for the Ford Site (MPCA grant)
- 8. Historic Preservation eligibility study (Ford)
- 9. Geotechnical evaluation of the Ford tunnels (Ford)
- 10. Environmental Assessment under MPCA review (Ford)

Redevelopment of the Ford Motor Company Site

Prepared for The City of Saint Paul, Minnesota



Phase 1 Summary Report: 5 Major Development Scenarios

Scenario 5 Conceptual Site Plan









The following Vision Statement and Gools were established with the Tatk Force at the care of the project. The next phases of planning work should adhere to these important vision and goal statements. Vision: The redeveloped Ford Ste will balance economic, social and environmental sustainability in a way that conserves and important sustainability in a way that conserves

2: Vision and Goals

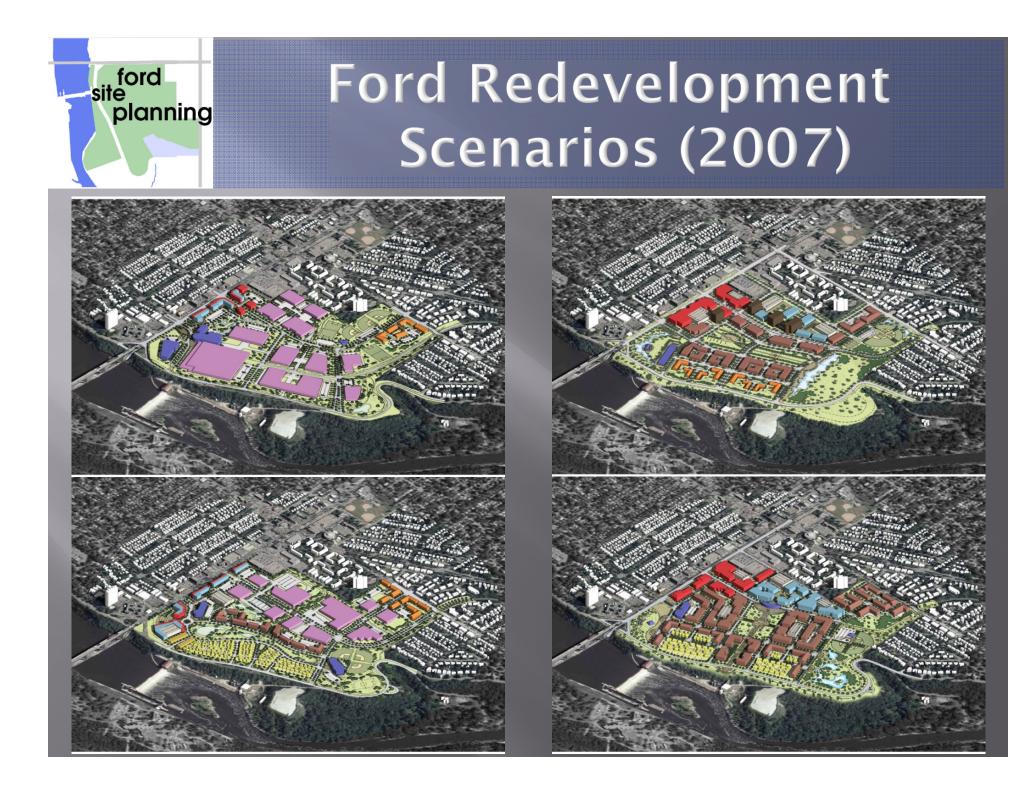
and improves the qualifies and characteristics of the unique Highland Park neighborhood and Mississippi River Valley Caridor in which it sits, while advancing the Chy's economic wealth and community goals, resulting in a forward-thinking 21st Century development.

Goals: Character and Built Form

- Redevelop the site to be integrated with the physical neighborhood and fabric of the community.
- Balance built and natural systems, and implement through zoning, standards and/or guidelines that assure that the form, massing and location of different uses and intensifies complements the surrounding neighborhood.
- Create a street system of tree lined streets and sidewalks, with some boulevards, to complement the surrounding block and street patterns within the Highland Neighborhood.
- Provide opportunities for public art and cultural amenities, some of which reflect the heritage of Ford and the Highland neighborhood.

Vision and Goals 15

Redevelopment Vision: the redeveloped Ford site will balance economic, social and environmental sustainability in a way that conserves and improves the qualities and characteristics of the unique Highland park neighborhood and Mississippi River valley in which it sits while advancing the City's economic wealth and community goals, resulting in a forward- thinking 21st Century development



THE FUTURE OF THE SITE...













From Vision...

Make the Ford site a net zero development through a combination of a distributed renewable energy system and energy efficient design and construction.

The 122 –acre site will be redeveloped from scratch starting in 2018 with installation of new utility and infrastructure systems to support an urban, mixed use neighborhood.

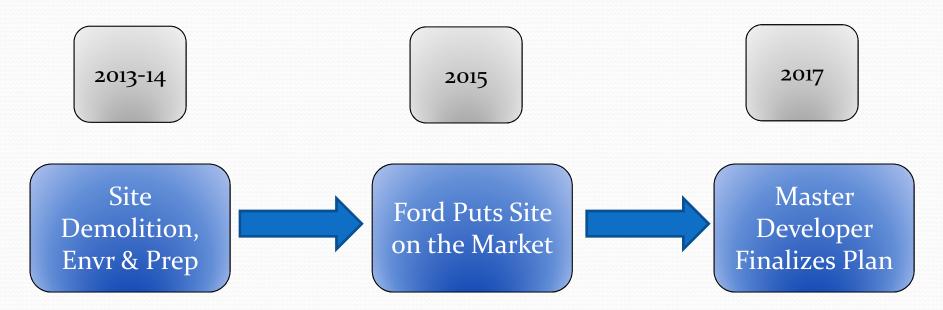
This provides an unprecedented opportunity to design and implement a comprehensive and integrated energy system using best, cutting edge technologies and systems appropriate to the location conditions.

...to Reality

The Ford Site has the potential to be an international model and legacy site, but it will take careful planning and hard work to get there.

It will require inspired commitment and bold leadership from elected officials, key partners, the community, and the land owner / developer.

Ford Project Timeline



Set market expectations on the vision, design and form of development Identify design and location of infrastructure and zoning

Project Goals

1) Identify credible opportunities, technologies and strategies to pursue a "net zero" redevelopment at the Saint Paul Ford site

2) Provide analysis and implementation framework to land owner, developers, and policy makers with the expectation that it will advance

3) Share concepts, study template and findings with other developments

- Once in a lifetime opportunity to create an international model
- Incredible local talent who want to create world class project in the region
- Urgent timeline to guide Ford and the developer

Transportation Energy

Study will analyze the role of transportation infrastructure in reducing energy demand and carbon emissions.

Demonstrate that auto trips and site-related transportation emissions can be reduced through transit-oriented design and a dense mix of uses.

Funding to Date

\$75,000 from McKnight

\$30,000 from City

Additional funding for financial evlauation?



Ford

Constituents



Neighbors



Utilities



Policymakers



Future tenants



Developer

Engagement Methods

- TAC (Technical Advisory Group) oversee the consultant team and evaluation of technical feasibility, policies and implementation
- Public Meetings host 2-3 large public meetings during the study to describe the study process, research, and solicit feedback
- Communications provide ongoing updates about the study through a project website (including FAQs and contact people), emails to interested stakeholders and the public, and periodic media and interviews
- Developer and Builders Panel conduct a focus group or design review "charette" with 10-15 regional developers and builders experienced with large-site development to test and get feedback on draft design concepts
- Targeted Outreach conduct small meetings with and direct communications to key policy makers who are interested in or shape energy legislation and policies

Project Information

Information for Technical Advisory Group at <u>http://stpaul.gov/index.aspx?NID=5516</u>

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