City of Dearborn City of Detroit Detroit Future City Detroit Greenways Coalition Downriver Delta Community Development Corporation Friends of the Rouge Greening of Detroit Marathon Petroleum Company LP Michigan Department of Transportation Michigan Sea Grant

> Southwest Detroit Environmental Vision Southwest Detroit Business Association University of Michigan – Dearborn United Auto Workers Local 600

Sierra Club

# Fort Street Bridge Park

Concept Plan

A Fort-Rouge Gateway (FRoG) Project



0520

#### **Project Vision**

# The Fort-Rouge Gateway (FRoG) Project



Construction of the new Fort Street Bridge and adjoining interpretive site will serve as a catalyst for more comprehensive and sustainable redevelopment in the lower Rouge River corridor.

#### FORD HUNGER MARCH

On March 7, 1932, in the midst of the Depression, unemployed autoworkers, their families and union organizers braved bitter cold temperatures and gathered at this bridge, intent on marching to the Ford Rouge Plant and presenting a list of demands to Henry Ford. Some three thousand "hunger marchers" paraded down Miller Road.

historical significance

#### **Green Infrastructure**

- Ecological framework that allows environmental, social and economic sustainability
- Healthy systems require well developed hubs and linkages



# **Project Vision**

Non-motorized Transportation and Habitat Significance



Detroit Riverfront Greenway



Bike lanes on Vernor through Mexicantown

#### **Project Vision**



New Fort Street Bridge: 3-D Model

#### **Project Vision**

Draft – Governor's Showcase Trail Belle Isle to Ironwood

Crosses over the Rouge River at the Fort Street Bridge





# Underground Railroad



#### *Historical route will utilize the new Fort Street Bridge.*

#### United States Bicycle Route System





Dix

ATM

Proposed Marathon Petroleum Company Green Buffer Program Elements Under Consideration:

Fordson

Island

- wildlife refuge
- stormwater filtering
- urban farming
- urban forestry
- education opportunities

Company

# Context Analysis

Fordson Island – potential for partial acquisition by City of Dearborn

# Project Site

- dining

Bridge Cafe

convenience Store

Rouge River – potential blueway /greenway trail

gas station

 potential Rouge Gateway and Detroit River nonmotorized path

# Preliminary Program

# The Fort-Rouge Gateway (FRoG) Project



Potential program elements for the interpretive site include:

- Memorial feature
  - Interpretation of the 1932 "Hunger March" and former bascule bridge
  - Interpretation of how transportation evolved in southeast Michigan from shipbuilding to automobile manufacturing
  - Utilization of salvaged materials from former bridge control tower
- Stormwater BMP interpretation
- Non-motorized boat launch
- Bike racks
- Seating
- Parking
- Bus pull-off
- Restrooms
- Landscaping / BMP for stormwater management



### Site Analysis

The MDOT property is approximately .5 acres. Adding the Marathon Petroleum Company LP (MPC) property to the north would roughly double the land area.

The site gently slopes to a sharp 3-4' drop-off at the river's edge - rip-rap reinforces a vegetated bank.

In 1932, 3000 "Hunger Marchers" paraded over the adjacent Fort Street bridge intent on presenting a list of demands to Henry Ford. Five were killed.

The former Fort Street Bridge is one of three historic "bascule" style bridges constructed over the lower Rouge River.





#### Concept Plan

#### **Plan Features:**

- A entry wall
- B bike loops
- C gathering plaza
- D interpretive signage
- E sculptural element
- F stormwater feature
- G entry drive
- H entry arch or gate
- I parking/loading
- J paddleboat launch
- K boardwalk
- L rain garden
- M habitat
  - enhancement
- N curb cut
- O bio-swale





#### Entry Feature

- Street side of entry wall can express character of new bridge.
- Wall façade provides opportunity for park name: "Fort Street Bridge Park."
- Inside wall incorporates salvaged panels from control tower.



# Gathering Plaza

- A Porous paving (grass pavers)
- B Seating
- C Interpretive signage
- D Sculptural element
- E Bike loops





Gears salvaged from former bridge



Sculptural element concept



*"Twig" bench by Landscapeforms provides inspiration for seating design.* 

# Seating and Interpretive Signage





Interpretive signage panels are supported by salvaged materials from former bridge.

#### Stormwater Management Feature



- A River water can be pumped by solar voltaic cells to a concrete basin and filtered through earth tiers.
- B Bioswale can receive stormwater from street, or street runoff can be piped to the earth-tier filtering system.
- C Plaza, entry drive and parking area are surfaced with porous paving (grass pavers).
- D Rain garden provides final filter before seeping to river.



The concrete pool empties into an earth filtering system. The water becomes cleaner when appearing on the side of each tier.

### Stormwater Swirl Chamber



A swirl chamber can remove debris, sediment and oils from street runoff before it enters the site.

The Vortechs<sup>®</sup> system removes:

- fine sediment particles
- free oil
- Debris

#### Allows for:

- easy inspection
- unobstructed maintenance access.



# Riverfront

#### A Boardwalk

- B Boardwalk over-look area
- C Entry drive with barrier free parking, loading/unloading and turn-a-round
- D Adaptive launch universal access
- E Habitat enhancement and safe kayak staging area

#### F Native boulder rip-rap



#### Adaptive Kayak Launch



Newly constructed launch on the Detroit River at Bishop Park in Wyandotte

Floating platform with hinged approach will be required due to fluctuating river elevation.

Platform is equipped with electronic lift powered by solar voltaic cells.



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First Construction Phase – Gathering Plaza and Stormwater Management Features