

# a living laboratory

Ford Rouge Center is a world-class workplace where innovation thrives

The Dearborn Truck Plant (DTP) is one of the world's most advanced and flexible manufacturing facilities, able to produce up to nine different models on three vehicle platforms. Equally important, this factory has environmentally-inspired features that make it a desirable place to work.

## Cleaner

DTP Final Assembly has the world's largest living roof, a 10.4-acre field of sedum that helps reduce the urban heat effect and improve air quality. The living roof is also part of an extensive natural storm water management system that includes porous pavement, natural treatment wetlands, and vegetated swales. The fully integrated system significantly reduces the amount of storm water runoff flowing into the Rouge Watershed, and it improves water quality.

Also on the roof (*see photo above*),

monitors and 36 smaller skylights flood the plant with natural light, which lowers energy costs and creates a more pleasant working environment.

## Greener

The gateway to the Rouge, Miller Road has been transformed into a 1.5 mile green-belt boulevard with hundreds of new trees and thousands of new shrubs and perennials. Many of these plants capture airborne dust. The roots of some help clean the soil.

Over 22 acres of sustainable landscaping has been planted. Sustainable landscaping requires less maintenance, mulching and mowing than a typical lawn or garden. The new trees, shrubs and wetlands along Miller Road also support a diverse animal habitat.

## A global leader

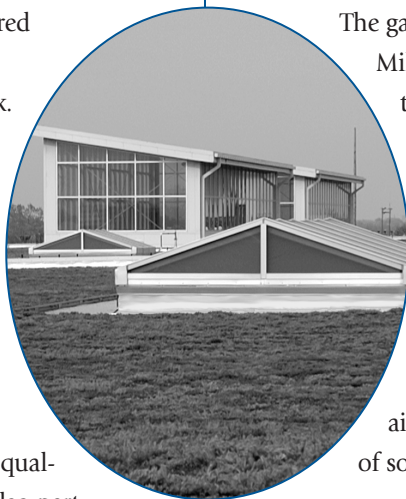
Environmentally-inspired innovations like these and others — such as con-

"It's easy to get caught up in the science of what we're doing at the Ford Rouge Center. But what matters most is how this groundbreaking revitalization affects the lives of individual Ford employees, their families, the community, and other forward-thinking companies."

*Tim O'Brien  
Vice President  
Corporate Relations*

verting paint fumes into a source of clean energy, and using an innovative and cost-effective "Big Foot" air tempering system instead of stale air conditioning — position the Ford Rouge Center as a model for balancing the needs of people, industry and the environment. We look forward to sharing what we learn with others around the world.

**The Ford Rouge Center is  
a living laboratory of ideas  
being developed to meet the  
demands of the 21st century.**

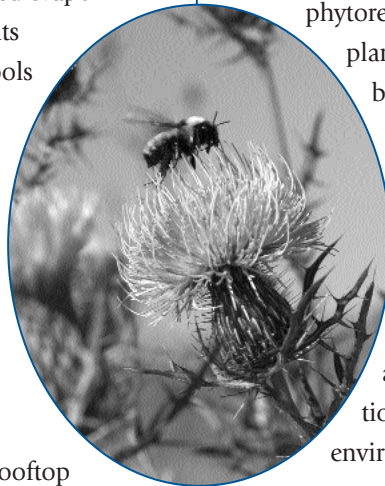


## What's growing on the roof?

The 10.4-acre living roof is planted with sedum, a low-growing, drought resistant perennial groundcover that is also known as stonecrop. Sedum requires no mowing and little other maintenance. Its foliage changes color with the seasons and flowers during the summer.

## How does a living roof cool the factory and clean the air?

On hot summer days, sedum growing on the roof and vines growing on the outside walls of the factory reflect heat from the sun that otherwise gets soaked up by the building. Through a biological process called evapotranspiration, the plants release water which cools the air. Plants also clean the air by trapping airborne dust, absorbing carbon dioxide, and producing oxygen.



## How big are the rooftop monitors?

Each of the ten huge rooftop monitors is 115 feet long, 25 feet wide, and up to 22 feet high (*see front page photo*). Together they are glazed with over 53,000 square feet of energy-efficient glass. DTP Final Assembly also has 36 smaller skylights. By reducing the need for artificial light during the day, monitors and skylights reduce electrical energy usage and costs in the factory. Plus, research shows that natural light improves color perception, reduces

eyestrain, and helps to improve mood in the workplace.

## What else is new along Miller Road?

The old road has been replaced by a boulevard with a wider median to make turning easier. The new median also captures and cleans storm water runoff naturally.

Commemorative architecture built along Miller Road includes a new pedestrian overpass at Gate 4 that was designed in the same style as the historic pre-World War II bridge.

## How do plants clean soil?

Through a biological process called phytoremediation, certain plants (*see inset photo*) break down contaminants in the soil into safe, organic compounds. This costs less than conventional cleanup methods that merely haul the soil away to another location. And it is more environmentally friendly.

## How do ditches clean storm water?

Special vegetated ditches called swales mimic the filtering action of natural treatment wetlands by slowing down the flow of storm water runoff and filtering it through sand, gravel and the thick roots of certain plants.

## What is air tempering?

DTP's innovative, ductless system replaces air in the factory with fresh air every 30 minutes. Inside each

## It's historic...

At 600 acres, the Ford Rouge Center is the largest brownfield redevelopment in the United States.

At 10.4 acres, the living roof on DTP Final Assembly is recognized by the Guinness Book of World Records™ as the largest vegetated roof in the world.

## It's clean and green...

On Miller Road alone, hundreds of white oak, hawthorn and hackberry trees and over 85,000 flowering perennials have been planted. These plants not only beautify the Ford Rouge Center, many have the ability to renew the soil, filter storm water runoff, and remove dust from the air.

"Big Foot" air tempering unit, air flows across coils filled with chilled water, which makes the air cooler and less humid. The cool air mixes with warm air in the plant to create a more comfortable temperature at work level, eliminating the need for stale air-conditioning. Plus, the water is chilled in a million-gallon tank at night, when electricity is cheaper.

## What is porous pavement?

Porous pavement is honeycombed with small holes that allow rain and snow to seep into underground rock storage basins, where it is filtered. The water then flows into nearby swales and natural treatment wetlands for further filtering before entering the Rouge watershed. The porous pavement lot next to DTP is the world's largest, covering more than 16 acres.

