

#### **Detroit Historic Commission Meeting – Feb 8, 2023**

# Request for blanket resolution approval to perform 4.8-13.2kV conversion work in Historic Districts

Julie Jozwiak – DTE Regional Relations, City of Detroit Danielle Browning – Sr. Strategist Tree Trim AJ Smith – General Supervisor Tree Trim Andrea Ahler – Manager Tree Trim Sarah Kosmicki-Johns – Regional Forester Tree Trim Leamon Swink – General Supervisor Overhead/Underground

### 4.8 to 13.2 Conversion Overview

#### **Basic Description**

Modernizing the underground and overhead distribution systems, which deliver power to homes and businesses.
Upgrading miles of overhead and underground infrastructure including new cables, conduit and other electrical equipment.

•Replacing utility poles with taller, stronger poles, which will better withstand the elements. Restoration of property will follow in areas where poles are removed.

•Trimming or removing trees that may interfere with power lines.

#### **Benefits**

Increased safety and power quality.
Reduced wire down events.
Decreased outages during extreme weather.
Increased grid capacity.



Powering Corktown now, into the future - Empowering Michigan

#### **Conversion Process Steps**

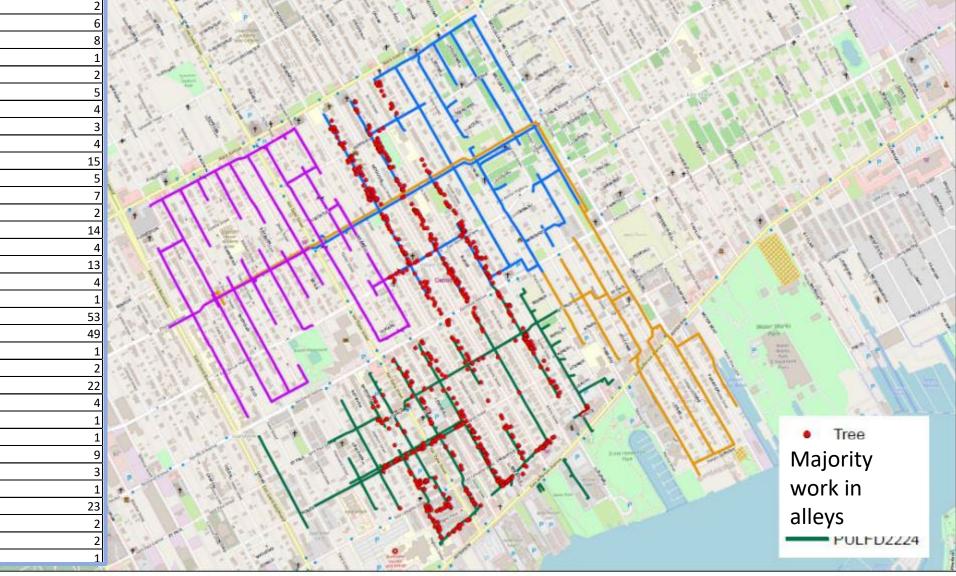
- Tree Trim in all areas
- New poles set next to old
- New wires set on poles
- Poles 'top cut' cut just above the communication lines
- ATT/Comcast etc transferred to new poles
- Old poles removed; restoration items completed
- Energize new lines/poles with 4.8kV
- Energize new lines/poles with 13.2kV

Service interruptions will be communicated directly to customers. Goal is to get this to under 2 hours.



Circuit	Species	Frequency	
1	Elm	1	Pre-Conversion T
	Maple	2	
	Norway maple	2	and the second of the
2	Ailanthus	6	
	Apple	8	
	Arborvitae	1	
	Ash	2	
	Birch	5	
	Black locust	4	The Area of the state of the st
	Black walnut	3	
	Box-elder	4	
	Cedar	15	
	Cherry	5	
	Cottonwood	7	
	Crab Apple	2	
	Elm	14	
	Hackberry	4	
	Hardwood-other	13	
	Hawthorn	4	
	Linden	1	
	Maple	53	
	Mulberry	49	
	Northern Catalpa	1	
	Norway maple	2	
	Oak	22	
	Ornamental	4	
	Osage orange	1	
	Pear	1	
	Pine	9	
	Silver maple	3	
	Softwood-other	1	
	Spruce	23	
	Sycamore	2	
	White pine	2	
	Willow	1	

### ree Trimming



DTE

0.25 0.5 Miles

### **Pre-Conversion Tree Trimming**

# What's different than our standard Tree Trim maintenance?

- Clearing around DTE poles need between 5 and 10 ft of clearance.
- Will talk to homeowners before removing a tree and get signed agreement.
- We will pick up larger than 4" branches upon request (part of agreement)
- We work with City's forestry dept if tree is in berm



#### What to Expect

#### How We Trim

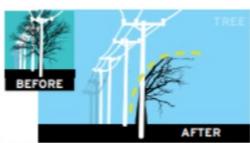
Crews will trim a radius of approximately 15 feet around DTE electrical equipment, including poles. Tree limbs below and above our equipment will **NOT** be left on trees. All branches within 10' of DTE poles will be trimmed to allow line crews safe access.

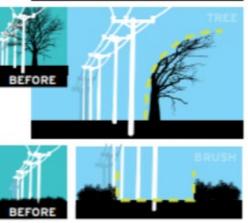
Smaller trees and brush near poles will be targeted for removal to allow safe access to DTE equipment for upgrades.

#### **Debris Policy**

- Debris we'll remove: small branches and limbs.
- Debris we'll leave behind: larger pieces of wood (cut in manageable lengths); dead or diseased wood or debris; trees and/or limbs that fell due to natural causes.

Please note: we do not remove dead or diseased vegetation to prevent the spread of tree diseases.





### **Pre-Conversion Tree Trimming**

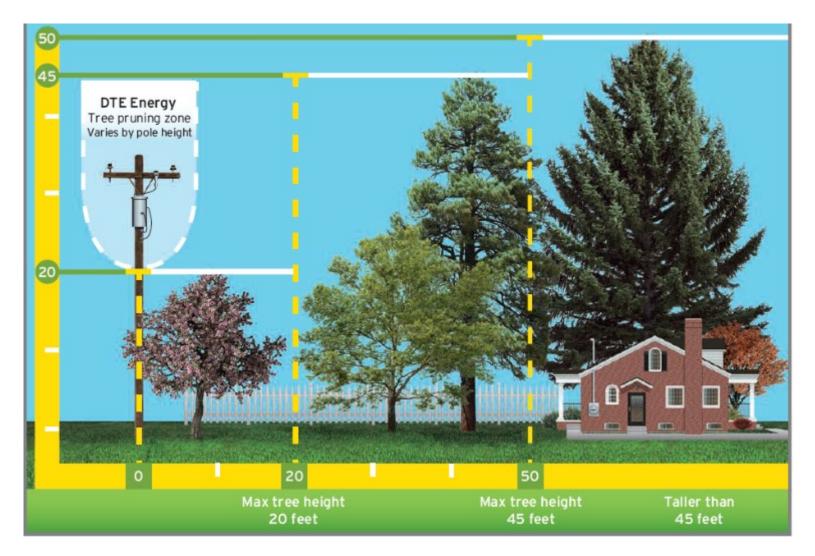


View looking down Agnes to East shows view of trees pre-bloom – have been previously trimmed by regular maintenance program Example of a tree that MAY be requested to be cut at base – close to utility pole.



### In an Ideal World....

DTE



Directly under power lines to 20 feet away, maximum height 20 feet. From 20 to 50 feet away, maximum height 45 feet. More than 50 feet away, no maximum height.

WARNING: DO NOT ATTEMPT TO TRIM TREES NEAR POWER LINES

# New Pole Installation/old pole removal, additional details

- Contractor LeCom will be placing new pole, adding wires
- Backyard machines can bring poles, other equipment in as needed while larger trucks will be used on streets and in alleyways.
- New Pole Height 45-55' For the most part, today's poles are in the 35-40' range.
- Depth into ground? Rule is 10% of pole height + 2' so roughly 6'
- LeCom (different crew) comes in after main job and moves ATT/Comcast wires over to new pole. They will remove the pole, backfill, restore cement (if needed)









## **Current Conversion Area Maps**

Corktown Islandview Midtown/Downtown Promenade

### Downtown and Midtown

#### Garfield:

- AC Network Conversion:
  - o Conduit Construction
  - Cable Pulling/Installation
- Circuit Conversion Project
  - Preconversion Construction
  - Conduit Construction

#### Charlotte:

- AC Network Conversion:
  - Cable Pulling/Installation
  - Conversion Operations (outages)
- 4800V Radial UG Load Transfers/Cutovers

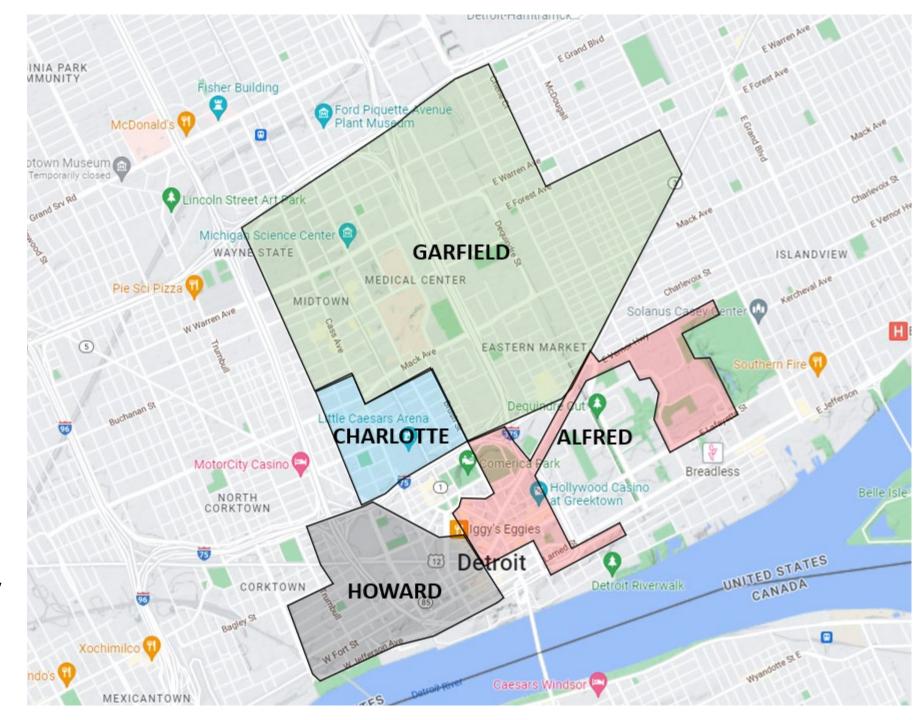
#### <u>Alfred</u>:

- Circuit Conversion Project
  - Radial OH Preconversion
     Engineering & Design Only

#### Howard:

DTE

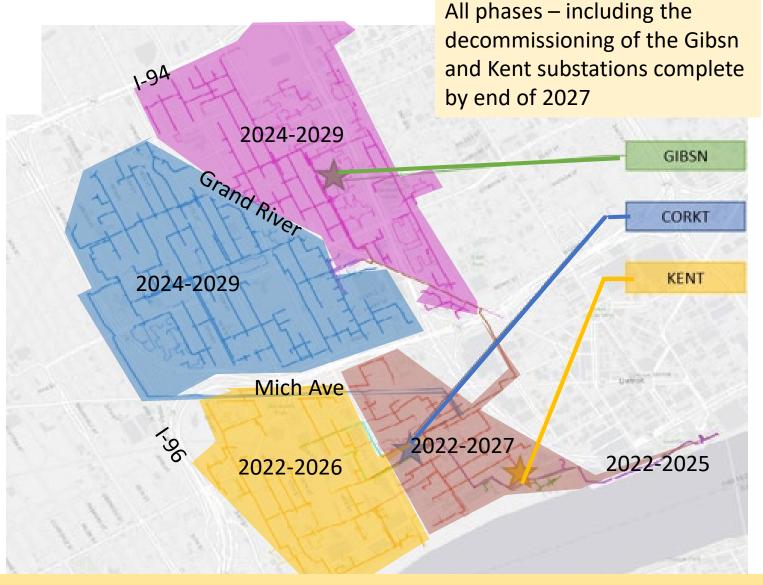
AC Network Engineering & Design Only



### **Corktown Substation**

- 1548 Porter St (near Trumbull, between Labrosse and Porter)
- Complete by 2029

6218 Customers total



Hubbard Richard \* Corktown \* North Corktown \* Core City \* Woodbridge \* Jeffries



### **Islandview Substation**

- 6501 Beaufait (Beaufait from E Vernor to Charlevoix)
- Complete area conversion 2031 (sequenced)

8500 Customers total



Coast \*JB Sub\*Marina District\*East

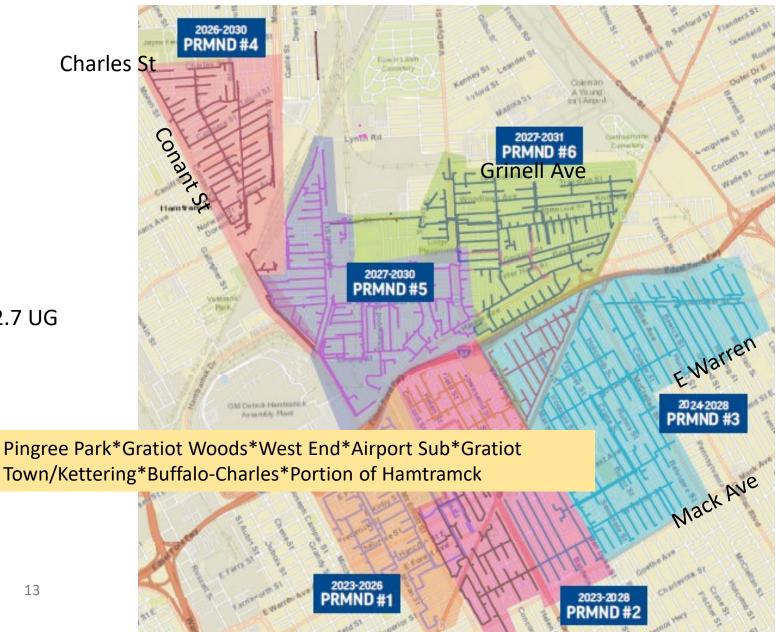
Village\*McDougall-Hunt (S of Gratiot)

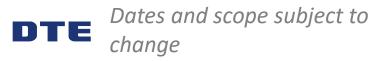
**DTE** Dates and scope subject to change

### **Promenade Substation**

- 7630 E Edsel Ford (Van Dyke and Harper)
- Complete area conversion • 2031 (sequenced)

9300 Customers total, 105 miles OH, 22.7 UG





# **Q & A**

