

# Undergrounding Opportunity

## Eden Hill - Town of Bassendean

18 February 2020

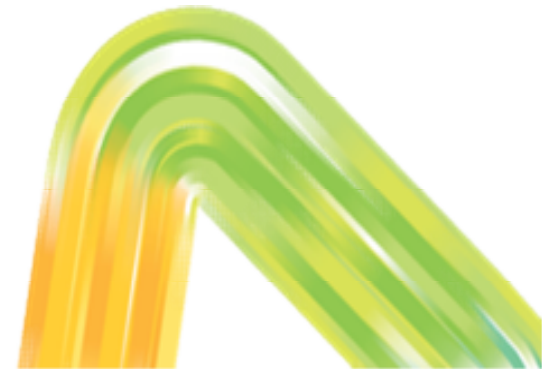


# Background to underground power



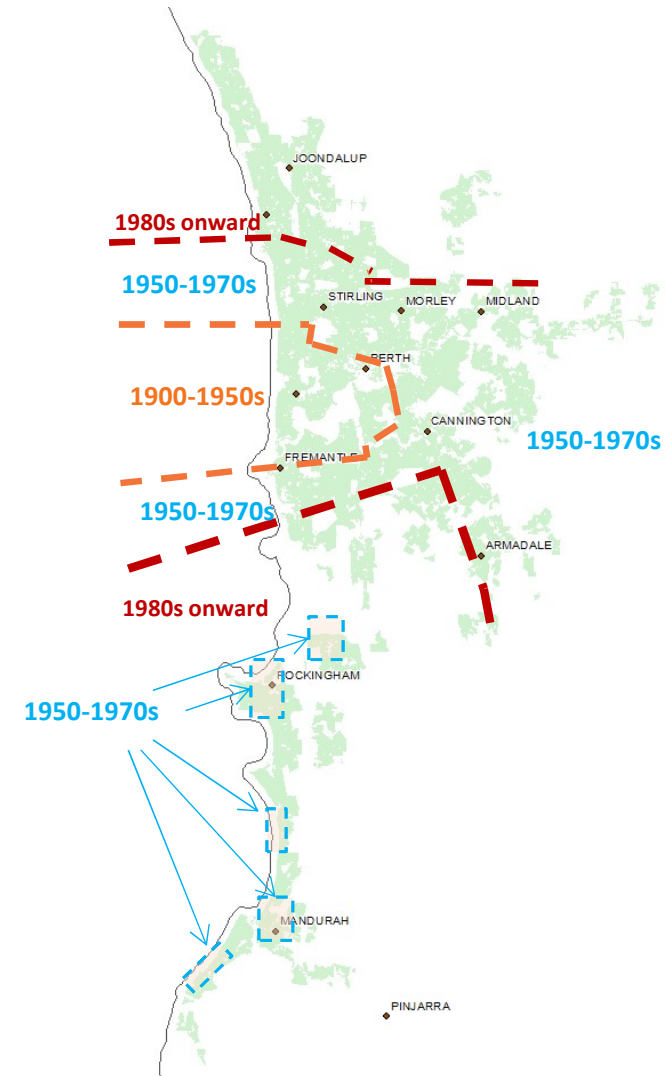
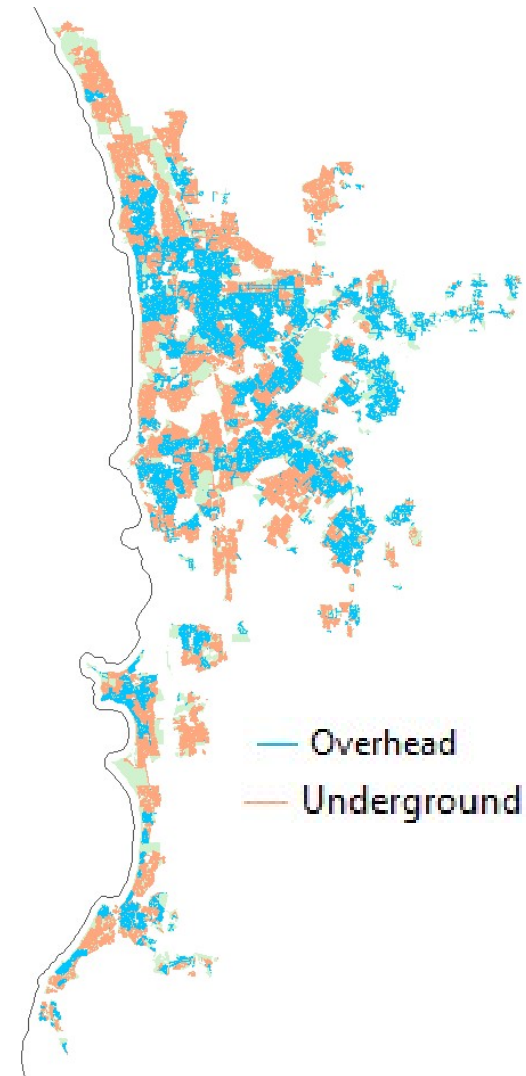
# Key benefits of underground power

- Improved public safety
- Improved reliability and security of supply
- Improved street appearance
- Increased property value
- Reduction in tree pruning & increased tree canopy
- Lower life-cycle costs
- Improved opportunity for emerging technologies



# Western Power's Network

- Many of the oldest suburbs established in the 1900s-1950s were undergrounded by the State Underground Power Program between 2000 and present day.
- A lot of older inner city suburbs are still served by overhead networks. They were established in the 1950s to early 1970s.
- Most of the outer suburbs established after 1980s were undergrounded by the Urban Residential Development program.



# Funding Models

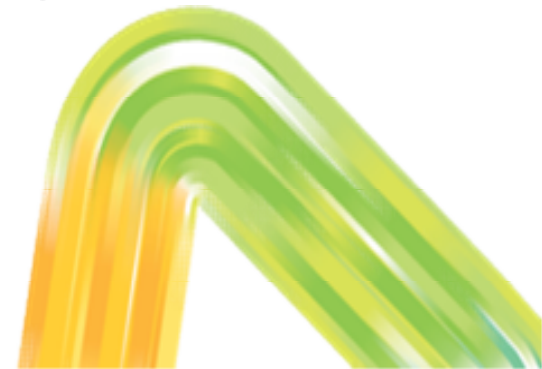


# Undergrounding Programs

Program type	Project selection		Funding		Likely LGA cost comparison (per property)	Is Network renewal required?
	By	Criteria	Contributor	Method		
SUPP	Underground Power Steering Committee (EPWA)	<ul style="list-style-type: none"> <li>Local government contribution 50% or above</li> <li>Network renewal requirements</li> <li>Community support above 50%</li> </ul>	LGAs	LGA 50% or above	Mid (\$3k-\$9k)	Maybe - Variable
			WP			
			State Gov't	Western Power avoided costs		
				State Government to fund remainder		
Customer Funded	LGA	<ul style="list-style-type: none"> <li>Local amenity</li> <li>Community consultation</li> </ul>	LGAs	Project costs (balance)	Most (\$4k-\$10k)	Maybe - Variable
			WP	Avoided costs		
WP's Network Renewal Underground Program Pilot	WP	<ul style="list-style-type: none"> <li>WP network renewal requirements</li> <li>Community awareness</li> </ul>	LGAs	Project costs (Opex)	Least (\$1.5k -\$2.5k)	Yes - maximised
			WP	Project costs (Capex)		

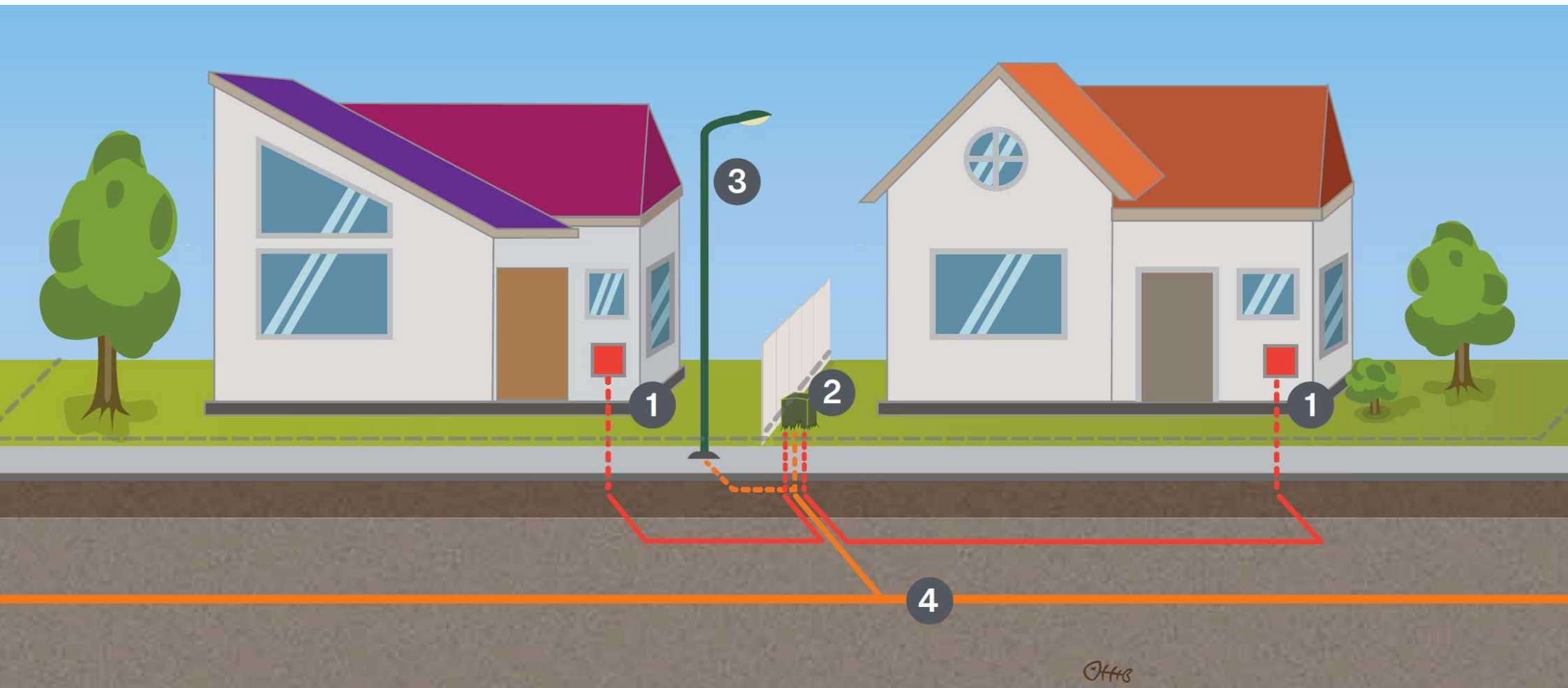
# Network Renewal Underground Program Pilot

- WP has identified overhead assets that are reaching the end of their life and need to be replaced
- It is more efficient for WP to replace overhead assets with underground assets
- Current undergrounding programs underway result in improving cost competitiveness
- Renewal & maintenance work will be carried out in the area either way (ie. overhead or underground)



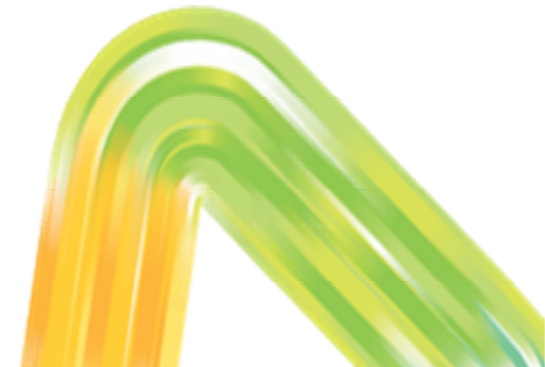
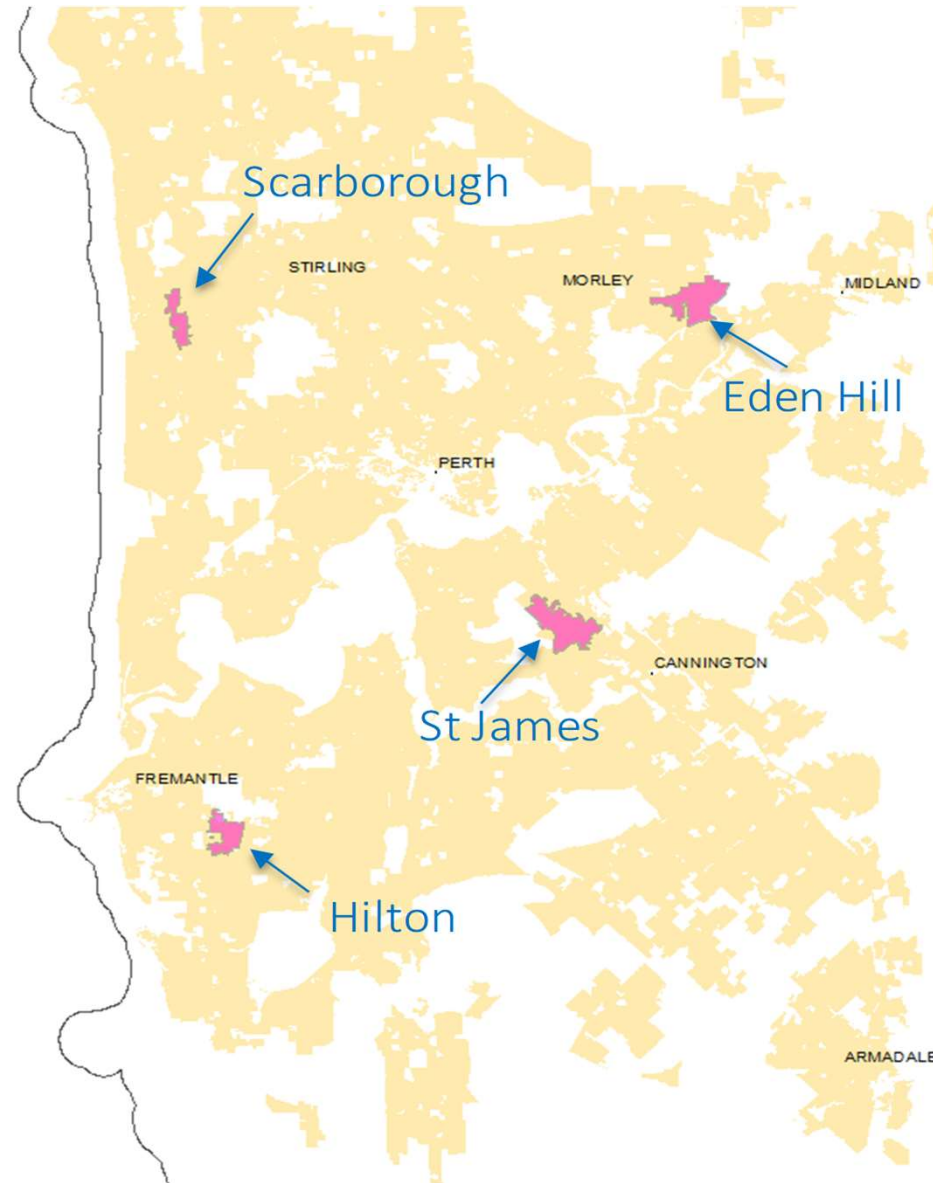
# Funding Model

- Local Government Authorities will be requested to fund the consumer mains connection (1)
- Western Power will fund the Capital Expenditure portion of the undergrounding works that includes all of Western Power's infrastructure (2,3,4)





# Current Pilot Opportunities

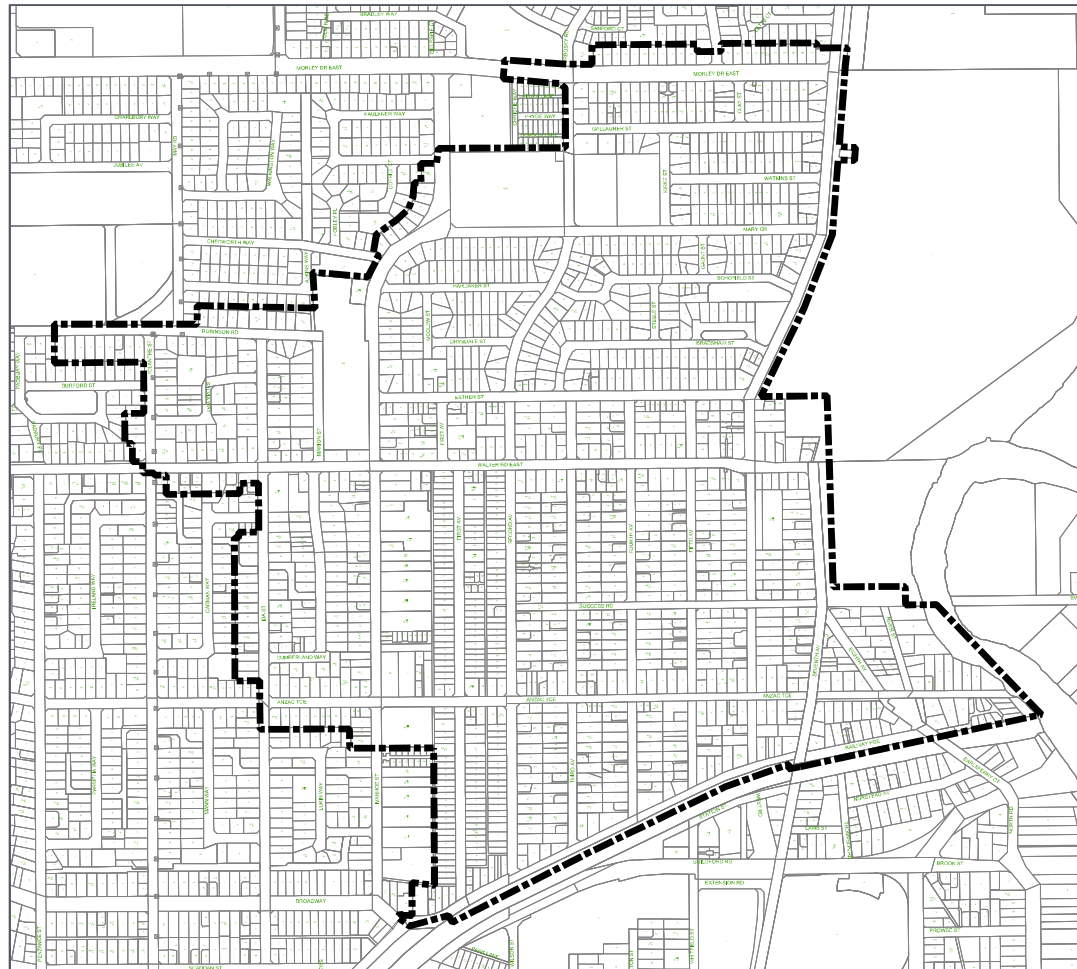


# The proposed project in Eden Hill



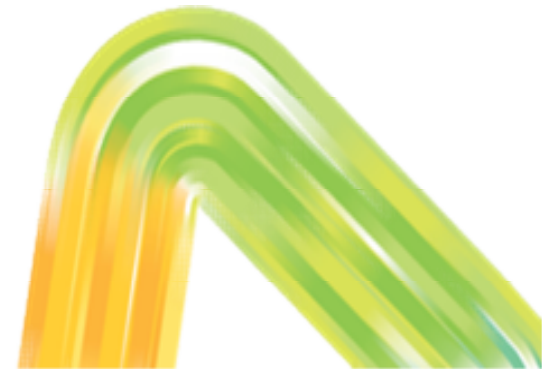
# Proposed Project Boundary – Eden Hill

- Project boundaries are determined by the age & risk profile of the overhead assets in the area
- Expanding the boundaries beyond the area identified means the project is not viable for WP



# The way forward

1. Western Power has finalised its Business Case (January 2020)
2. Western Power commenced the detailed design (February 2020)
3. Presentation to community (now)
4. Town of Bassendean to letterbox-drop to all households (ratepayers) within boundary to raise awareness of opportunity (March 2020)
5. Council to consider Western Power offer to co-fund the project and payment plan for households (TBC)
6. Western Power completes detailed design (May 2020)
7. Western Power calls tenders for construction (May 2020)
8. Construction starts (August 2020)



# More information

- Western Power: [undergroundpower@westernpower.com.au](mailto:undergroundpower@westernpower.com.au)
- Town of Bassendean: [yoursay@Bassendean.wa.gov.au](mailto:yoursay@Bassendean.wa.gov.au)

