

# Garrett Park Arboretum Workflow Management Analysis

Aliyah Abdulmalek, Michael Hough, Marzena Hurtado, Nur Mulugeta, Samrah Shaikh





# Context and Goals

In Garrett Park, MD the Town office is responsible for the maintenance of trees and shrubs. Currently, the team in charge struggles with communication and has workflow issues hindering their productivity. The current inventory of the town -managed trees exceeds 1500 and the management of related tasks is conducted using a series of spreadsheets and the online ArcGIS map; it also relies heavily on email and verbal communication.

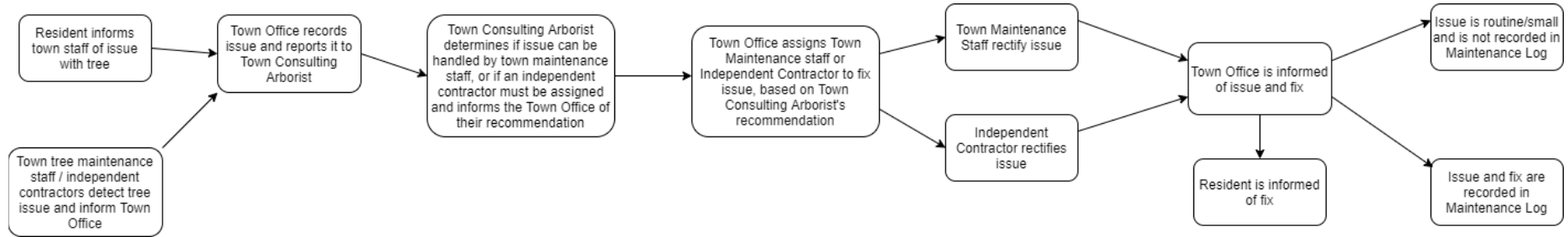
Our goal: Reassess the current workflow at Garrett Park Arboretum and implement a method that streamlines Arboretum -related management tasks.



# Our Understanding Of The Objectives

- Improving tools that support residents' participation in identifying tree maintenance needs
- Tree database and tree service log version control
- Streamlining communication in the process of identifying and addressing tree maintenance needs
- Avoiding redundancies in information exchange
- Easy access to generate up-to-date relevant reports
- Optimizing processes to minimize related costs

# Current Workflow





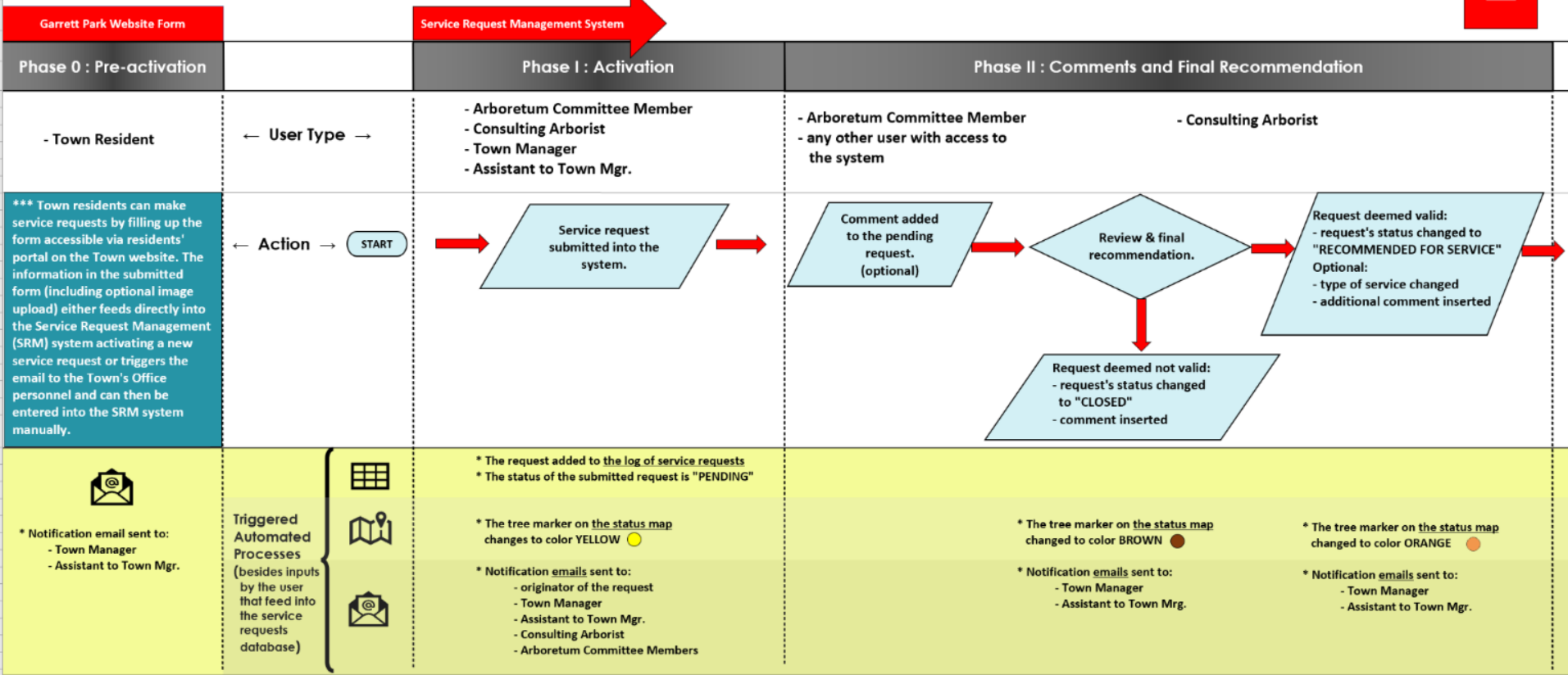
# Key Strategic Services

These are the identified key strategic services associated with arboretum management that will need to be addressed in the suggested system

- Tree care
  - Tree removal, pruning, re-planting, inspection
- Handle requests from residents
- File annual DNR tracking form
- Maintain/record; “watch” list, open spaces list, work list

# Arboretum Maintenance Service Request Lifecycle

1



## LEGEND:



← email



← Service Request Status Map



← Log file (register) for Service Requests

## STATUS MAP CODING



BROWN – No Pending Service Requests



YELLOW – Service Request Pending Recommendation



ORANGE – Service Request Pending Final Approval



RED – Service Request Approved



GREEN – Work Assigned to the Town Maintenance Staff



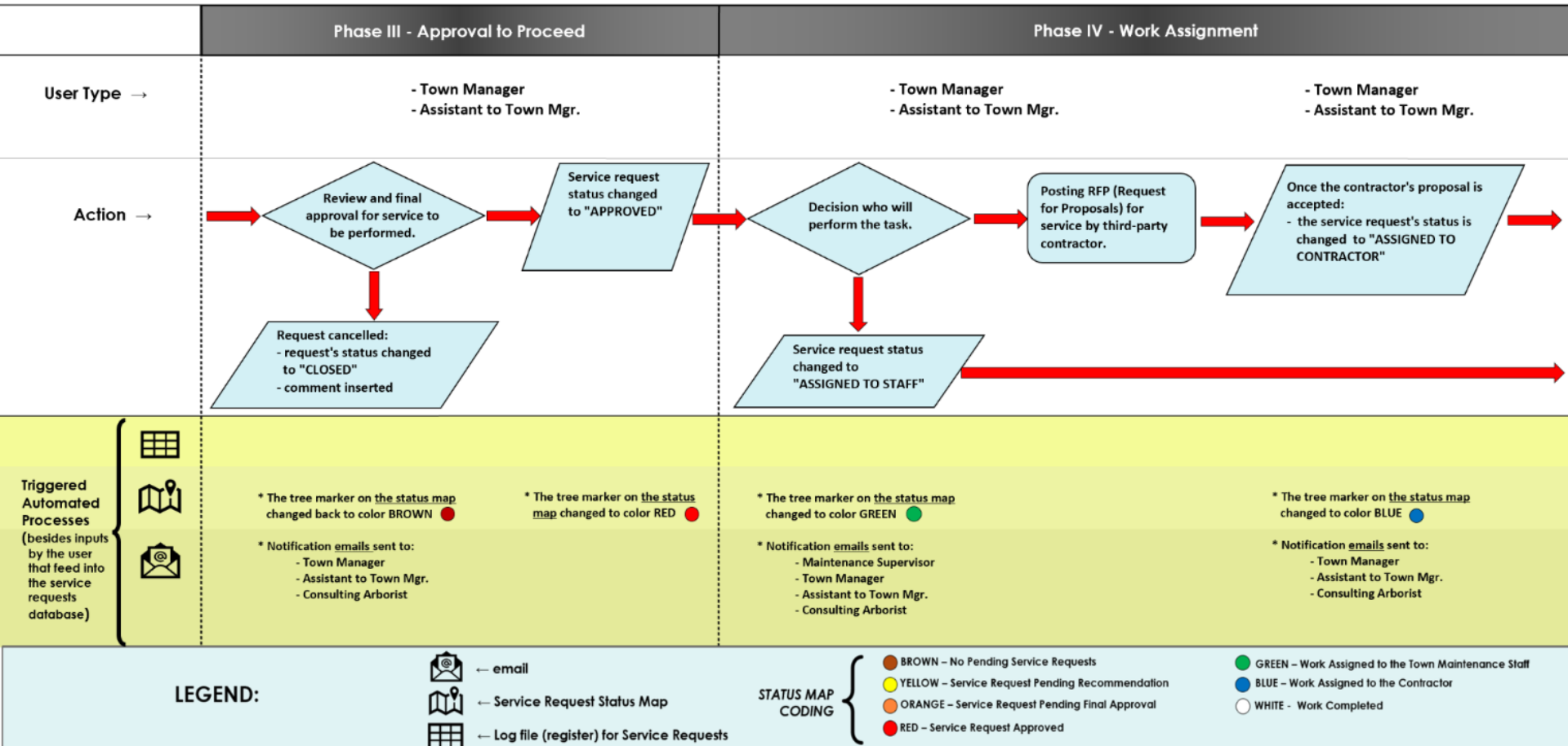
BLUE – Work Assigned to the Contractor



WHITE - Work Completed

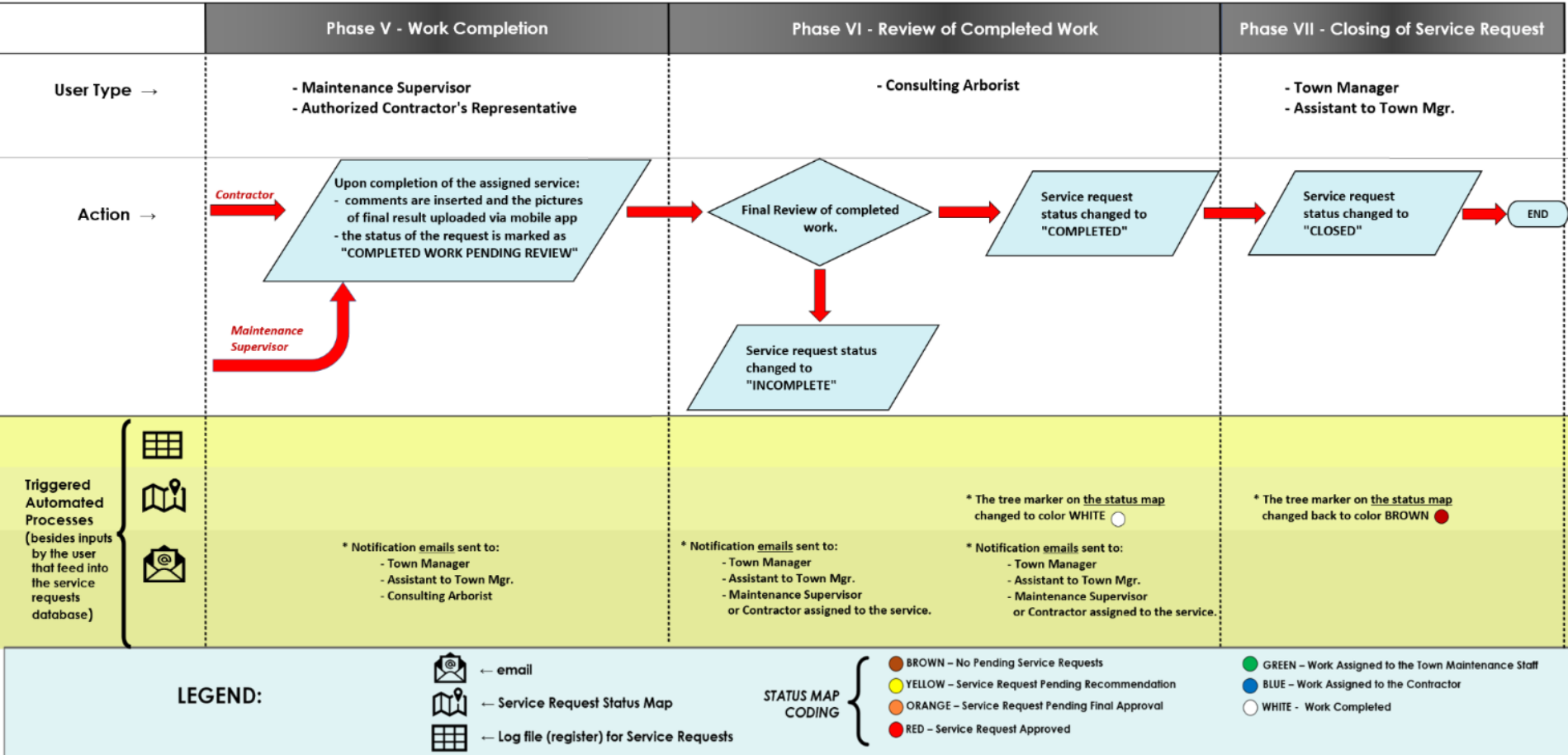
# Arboretum Maintenance Service Request Lifecycle

2



# Arboretum Maintenance Service Request Lifecycle

3







# Opportunities for Workflow Improvement

- Field Service Management (FSM)- Software that will help automate tasks and make it easier to do work on the field.
- Some FSM are made specifically for arboretums workflow management.
- There are some that have an option to be accessed by a mobile app or a desktop computer.
- If a cloud based FSM is used any updates needed will be done without the need for additional IT services.
- Some FSM are compatible with the use of ArcGIS (There are also separate apps just for ArcGIS).



# Opportunities for Workflow Improvement Continued

The second opportunity is through the use of Microsoft Office 365 umbrella services.

- This system can be used to track tasks and manage requests.
- This also can be used in the cloud so no physical server is needed.
- By inputting all information into this system the workflow could be improved.
- Can be used on mobile or desktop devices.
- ArcGIS can be used through Excel and shared through SharePoint.



# Thank you!

We appreciate the opportunity to work on this project  
and value your feedback.

Now we are ready to answer any questions  
and listen to comments you may have.