

## **Charlotte County Administration**

December 1, 2025

### **Subject: Asset Management and Project Management Modernization**

#### **Executive Summary**

This proposal recommends migrating our existing Cityworks platform to the Trimble Unity cloud environment, implementing ArcGIS Indoors for vertical asset management, and adopting Unity Construct for our capital project management software. These upgrades will reduce long-term costs, improve system reliability, and enhance operational efficiency. While the initial investment is estimated at \$1.4 million, projected savings and efficiencies are expected to offset the cost within 24 months.

#### **Background**

In 2019, Charlotte County entered a contract with Jones Edmunds/Cityworks to implement a Computerized Maintenance Management System (CMMS). Public Works went live in October 2022, Utilities in September 2023, and Facilities in October 2024. The County has adopted an Asset Management Charter, Policy, and Strategic Plan to formalize consistent asset practices.

Since this project was started in 2018 the chosen software system Cityworks has been purchased by Trimble. Trimble has implemented many enhancements to the system as well as moving forward with a new cloud-based platform called Unity. This suite includes a whole lifecycle system including the project management and maintenance software with a field application. These three systems speak to each other allowing a centralized GIS centric solution for management of our assets from design through end of life. Currently Trimble is concentrating all new enhancements to the new cloud-based platform and not updating the older on prem Cityworks software.

Included in Phase Two of this project is the expansion of the program to include the implementation of Community Services, additional connections to Granite Net (camera system used by Utilities and Public Works) and 811 as well as the expansion of our GIS system to include a 3d versioning of our vertical assets for functionality.

There are currently over 1.2 million assets being tracked in the system by over 625 licensed users. Some of the benefits we have already seen with the program is the improved tracking of work being done which allows us to know the true cost of maintaining our assets, to make better to data driven lifecycle decisions. This more detailed tracking has also provided an above average cost recovery for Public Works amounting in \$8.7 million over the last two years compared to the prior two year. Our Utilities department has seen an increase of over 25% being charged to projects. As we continue with proficiency, both Utilities and Public Works have seen an improvement in the accountability of inventory parts.

#### **Why Upgrade to the Cloud**

Migrating to Trimble Unity Maintain (cloud-based) provides clear operational and financial advantages for Charlotte County:

- Reduced long-term costs by eliminating server hardware, IT maintenance, and manual updates (estimated 30–40% savings).
- Improved reliability with 99.9% system uptime and built-in disaster recovery.
- Automatic updates and enhanced cybersecurity protections.
- Improved productivity with mobile access and real-time collaboration.
- Data-driven decision-making through predictive analytics and reporting.

Trimble Unity incorporates emerging artificial intelligence (AI) and machine learning tools that help identify maintenance trends, predict asset failures before they occur, and optimize resource allocation. These capabilities allow the County to move from a reactive maintenance approach to a predictive one—reducing emergency repairs, extending asset life, and lowering long-term operating costs.

Cost: **\$481,370.81** (Breakdown Below)

Migration of current system to cloud	\$11,700 (one-time fee)
Annual Software Licensing for Unity Suite	\$469,670.81 (software year 1,2&3)
<i>Maintain</i>	<i>\$200,000</i>
<i>Construct</i>	<i>\$335,000</i>
<i>Less a bundle discount of</i>	<i>\$ 26,775 (Suite package)</i>
<i>Less a discount of</i>	<i>\$ 57,054.19 (for signing before the end of the year)</i>

The discount for early signing is locked in for the next two software license renewals saving approximately \$123,500 over the next 2 years.

Current cost for Cityworks software \$126,000 and we have no current project management software.

### ArcGIS Indoors Integration

ArcGIS Indoors enables staff to visualize and manage County building assets through interactive indoor maps rather than tables, leading to measurable gains in efficiency and accuracy. The 3d imaging will also allow for better space planning. Currently there are over 43,000 vertical assets in the system that are maintained by both Utilities and Facilities, and this number will increase drastically with the inclusion of Community Services.

Key benefits include:

- 20–30% faster work order completion
- 15%+ improvement in asset utilization
- Reduced maintenance backlog and operational costs
- Enhanced compliance tracking and preventive maintenance

Estimated cost: **\$415,000** (Breakdown below)

Building Scanning Services and Configuration of ArcGIS Indoors	\$370,000
Updating configuration of Maintain	\$ 45,000.

## Trimble Unity Construct

This Project Management software will standardize and centralize County construction project management, replacing fragmented tools like Excel, Word, and shared drives. This solution improves Project Management Lifecycles by providing improved budget tracking, standardized workflows, and integrated project oversight. It will provide a central location for updates on all infrastructure projects and keep in line with formalizing and standardizing processes across the organization. In addition, this system integrates with the maintenance system for whole life cycle management. This allows our maintenance and operations staff to have quick access to all the Project Management files for an easier turn over to operations after project completion.

Key benefits include:

- Streamlined project planning and scheduling
- Improve communication and collaboration by providing real-time communication between design consultants, contractors, field and office teams
- Standardized processes across departments by implementing templates and workflows based on the county's governance structure and standard operating procedures
- Integration with asset management for lifecycle tracking and streamlined asset data with automatic transfers to and from the Unity Maintain platform
- Improved budget management and data visibility for CIP reporting

Cost: **\$192,500** for Facilities as first department.

## Trimble Managed Services

A one-year engagement with Trimble Managed Services is recommended to ensure successful implementation. This includes a dedicated expert (40 hours per week) to assist with setup, training, maintenance, and department onboarding. This reduces reliance on in-house IT staff and ensures optimal configuration of both Maintain and Construct platforms. In addition, the utilization of Managed Services will allow us to save on professional services for the implementation of Community Services into the maintenance systems as well as the implementation of the Project Management software for Utilities, Public Works and Community Services.

Estimated cost: **\$300,000.**

## Separate Professional Services Costs (if not Managed Services are contracted)

### Community Services Implementation

Community Services will be implemented into Unity Maintain following the cloud migration, ensuring consistency across County departments.

Estimated cost: **\$125,000.**

### Construct Project Management Software Implementation (remaining departments)

Additional 15 process workflows total for the remaining departments to be implemented in the Unity Construct Software system.

Cost: **\$162,225**

## Training

Includes four days on site training for approximately 20 staff members.

Cost: **\$15,000**

## Summary of Initial Costs

Component	Estimated Cost
Unity Suite (Cloud Migration & Software)	\$ 481,370
ArcGIS Indoors (3D GIS implementation)	\$ 415,000
Unity Construct Implementation (Facilities)	\$ 195,000
Trimble Managed Services (1 year)	<u>\$ 300,000</u>
Total	\$1,391,370

*If no Managed Services as stated above are contracted professional services listed below would be the minimum needed for implementation.*

Community Services Implementation	\$125,000
Training	\$ 15,000
Project Management Software Implementation remaining	\$162,225

## Fiscal Responsibility and ROI

These costs are included in the recently approved budgets in both the CIP for Asset Management Software upgrade as well as the IT operating budget.

While the total investment is significant, the modernization will continue to reduce operating costs, extend asset life, and increase staff efficiency. Savings from reduced IT overhead and improved maintenance decision-making are projected to offset initial costs within 24 months.

## Recommendation

Proceed with the planned upgrade and modernization of the Asset and Project Management systems as proposed with a one-year Managed Services contract with Trimble for the additional implementation and other services under CIP C141601. This initiative supports efficient operations, enhances fiscal stewardship, and positions Charlotte County for future scalability.