Robert Shaner, Ph.D. Superintendent

Debi Fragomeni Deputy Superintendent for Instruction



PRIDE IN EXCELLENCE

Dana J. Taylor, CPA, CFF Deputy Superintendent for Business Affairs

> Elizabeth A. Davis Chief Human Resource Officer

Memorandum of Recommendation

DATE: February 4, 2021

- TO: Dr. Robert Shaner, Superintendent
- FROM: Dana Taylor, Deputy Superintendent for Business Affairs
- RE: Network Switches, Wireless Access Points, and Firewall 2021 Project

In coordination with the District's e-rate consultant Triple-R, the Technology Services and Purchasing departments issued an RFP to provide network switches, wireless access points, and a firewall. This project addresses the infrastructure required to continue to provide a robust, adaptable, and secured state-of-the-art network. Included in this project is the replacement of aged equipment, support for the expansion of the District's wireless network, and a design that will help keep the District's network, systems, and data secured.

Network switches: RCS maintains over 400 network switches that reside in the main data center and tech closets throughout District buildings. The switches support network connections for student and staff devices, phones, computer labs, video cameras, wireless access points, secure entrances, security monitors, multi-function printers, and more. Many of these switches were purchased in 2009 and should be replaced. A new switching infrastructure is required that can support increased wireless access and next gen devices and speeds.

Wireless Access Points: the proposal includes expanding wireless access to facilitate instruction throughout each entire school and increase capacity to support high density areas and the many 1:1 devices per student and staff member.

Firewall: The current firewall solution is approaching 5 years of service and cannot be upgraded to new code versions moving forward. There is also a new generation of users, applications, and security threats posing risks to the District's infrastructure of networks and systems that require a "Next Generation Firewall". The firewall proposal is comprised of:

- Dual firewalls to load balance traffic, provide increased throughput/bandwidth to support the 1:1 student device model, and provide failover if one firewall goes down.
- External and internal firewalling to protect applications hosted internally.
- Next generation features with Advanced Threat Protection, Unified Threat Management (UTM), • Intrusion Prevention System (IPS), Antivirus/Antispyware, Application Controls, and Sandbox Security
- Firewall Log Analyzer for advanced logging and reporting capabilities and real-time and historical views into network activity.

These next generation firewall features offer a powerful combination of advanced detection, automated mitigation, and actionable insight. The recommended solution is essential to help secure the District's electronic environment, provide threat prevention, reduce vulnerabilities, and defend RCS from cyberattacks.

The District received one compliant proposal and after a comprehensive analysis of the bid, is recommending Delta Networks. The Delta Network bid met the bid specifications, offered pricing that is lower than REMC, and provided 5 years of warranty. Delta Networks has also been the District's long-standing network service provider. The Network Switches, Wireless Access Points, and Firewall 2021 Project will be funded from the 2016 Bond Capital Projects Fund in coordination with e-rate funding for an approximate reimbursement of 40% on eligible equipment and services.

Based on this information, we recommend that the District award the Network Switches, Wireless Access Points, and Firewall 2021 project to Delta Networks, in the amount of \$1,531,726.70, plus a 5% contingency of in the amount of \$76,586.34 for a total project cost of \$1,608,313.04.

TO:	Cindy Linder, Director of Technology Rochester Community Schools
FROM:	Robert Rice, President Triple R Consultants
DATE:	February 5, 2021
RE:	Approval for Network Electronics

BOARD OF EDUCATION RECOMENDATION

- Whereas Rochester Community Schools initiated a cost saving competitive bid process by releasing a 2021-2022 Universal Service Fund (USF) E-Rate Request for Proposal (RFP) for eligible switches, access points, firewall, structured cabling, and Internet Access. Rochester Community Schools released RFPs for the above service through the E-Rate program.
- Whereby Rochester Community Schools received one bid for the network switches from Delta Networks, which is the district current network infrastructure service provider.
- Whereas in a comparison of the bidder's proposed pricing versus the Michigan REMC pricing, it was determined that Delta provided a 62% discount off list price and the REMC discount is only 48%. After further review, it was determined that the Delta Network bid was complete at a cost of \$1,078,212.10, with an expected E-Rate reimbursement of \$431,284.84. The district's portion would be \$646,927.26 and be paid for using bond funds.
- Whereby Rochester Community Schools received one bid for the access points from Delta Networks, which is the district current network infrastructure service provider.
- Whereas in a comparison of the bidder's proposed pricing versus the Michigan REMC pricing, it was determined that Delta provided a 52% discount off list price and the REMC discount is only 40%. After further review it was determined that the Delta Network bid was complete at a cost of \$132,255.60 with an expected E-Rate reimbursement of \$52,902.24. The district's portion would be \$79,353.06 and be paid for using bond funds.
- Whereby Rochester Community Schools received one bid for the firewall from Delta Networks, which is the district current network infrastructure service provider.
- Whereas in a comparison of the bidder's proposed pricing versus the Michigan REMC pricing, it was determined that Delta provided a 57% discount off list price and the REMC discount is only 40%. After further review, it was determined that the Delta Network bid was complete at a cost of \$321,259.00, with an expected E-Rate reimbursement of \$53,944.64. The district's portion would be \$267,314.36 and be paid for using bond funds. Note: Only the hardware portion of the firewall and installation are E-Rate eligible for firewall products, however, this hardware appliance along with the software protection services is critical to maintaining a secure and safe network within the school district. The solution helps protect the school district against cyber-attacks (i.e., ransomware and denial of service attacks) from both outside the network and internally.
- Therefore, based on the review of the bid response, it is recommended that Rochester Community Schools enter into a conditional E-Rate agreement with the Delta Networks for the amount of \$1,531,726.70, with an expected E-Rate reimbursement of \$538,131.72.