Project Owner:	Wayne-Westland Community School District	
Project Name:	District Router Project	
Issue Date:	March 16, 2022	

PROJECT QUESTIONS AND ANSWERS

This document provides answers to questions asked by bidders who have reviewed the <u>Technology Request for Bid</u> for the above referenced project.

Q1: Can we be sent a connection diagram for site connectivity as discussed?

A: Yes. See Addendum #1

Q2: Do the switches at the remote schools have all the remote school VLAN default gateways on them or are all the school default gateways on the datacenter switches?

A: The default gateway for all school buildings is the core Fortinet firewall device.

Q3: To route traffic between VLANs at a school, does the network traffic need to travel from the school to the datacenter to be routed between VLANs before the traffic returns to the school? **A:** Yes.

Q4: Are the VLANs/IP Subnets at a particular school specific to that school and only exist at that school or are VLANs spanned between multiple schools? For example, do you have a VLAN and corresponding IP subnet available at more than 1 school?

A: Some instances of each example exist. But, as pointed out during the pre-bid meeting, not all VLANs are necessary to be routed over the back-up links. Only "critical" VLANs need to be routed, and that configuration can be adjusted to support a simple and elegant back-up router implementation as may be needed.

Q5: What is the speed of the current primary connectivity between the schools and the datacenter (e.g. 1gig, 10gig, etc.)?

A: The current fiber between the sites operates at 10G. However, new routers are not anticipated to have direct connection to the current private fiber directly, and therefore is not deemed to be particularly relevant to this installation.

Q6: Do the private fiber connections between the schools and the data center use single mode SFPs/SFP+s and if so, what type do they use (LX/LR, EX/ER, ZX/ZR, or other?)

A: Yes. A variety of optics are used depending on the distance of the particular fiber link. See Q5 above for further information.

Q7: For the \$8,500 allowance for select rack and room renovations, are there any pre-known accommodations already identified?

A: None to be identified at this time.

Q8: What licensing level (e.g. lan base, ip base, ip services, dna/network essentials, dna/network advantage, etc.) is on the network switches at the schools?

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A: The existing switching infrastructure is mainly Meraki equipment. No such licensing levels as indicated in the question are applicable to Meraki equipment.

Q9: Is multicast routing required on the backup Internet link between school and data center or just on the primary link (is it ok to lose multicast routing when failed over to the backup link)? **A**: Yes, some of the emergency systems rely on multicast routing for proper operation.

Q10: Is it acceptable for end user Internet access is disabled / not available when running on the VPN backup?

A: As discussed during the prebid meeting, it is anticipated that end user Internet access will be disabled when the primary link is down. Only critical internal traffic between the school and the data center is expected to traverse the back-up link.

Q11: If end user Internet access must be maintained during VPN backup, is it acceptable for Internet access to be backhauled over the backup VPN to the datacenter before going out to the Internet?

A: See QA10. If any Internet access were ever to be allowed in the future, it would be expected that it would be backhauled over the backup VPN to the datacenter first.

END OF QUESTIONS AND ANSWERS #1

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