

Complete and submit this form, along with any supplemental documentation, to the Office of the President by 5:00pm on the seventh day prior to the Board meeting.

**Date of Board Meeting:** May 21, 2024

**Subject:** Network Infrastructure Upgrade – Richmond Campus Phase 1

**Recommendation:** Approve the RockIT proposal to complete Phase 1 of the WCJC network infrastructure upgrade on the Richmond Campus at a cost of \$185,866.18 using monies transferred from the MIS Fund.

**Background and Rationale:**

WCJC's current and future technology needs require an improved network infrastructure and wireless environment. In an effort to modernize and future-proof our various systems, this proposal seeks to complete the network upgrade on the Richmond Campus, similar to the project that has been completed on the Wharton Campus. Phase 1 will consist of:

- Replacement of current internet service provider (ISP) rack with a 4-post server rack.
- Reconfiguration of existing network 2-post rack.
- Removal of legacy equipment that is at (or past) end-of-life.
- Installation of ladder racks to connect all racks in the main distribution frame (MDF).

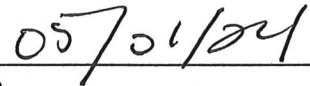
RockIT has quoted and priced the items needed using TIPS Cooperative Contract #220105. Items purchased under this contract satisfy all State of Texas bid requirements.

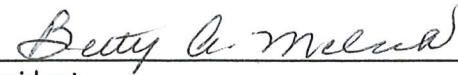
**Cost and Budgetary Support:** \$185,866.18 (Transfer from MIS Fund: \$176,866.18 project; \$9,000 contingency)

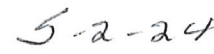
**Strategic Priority Alignment:**       Student Success                       Community Impact  
    Resource Optimization               Institutional Excellence

**Resource Person(s):** Amanda Allen, Ed.D.; Executive Vice President

**Signatures:**  
  
\_\_\_\_\_  
Cabinet-Level Supervisor

  
\_\_\_\_\_  
Date

**President's Approval:**  
  
\_\_\_\_\_  
President

  
\_\_\_\_\_  
Date



We have prepared a quote for you

**Phase 1 - Richmond Refresh**

Quote # 002941  
Version 2

Prepared for:

**WCJC**

Robby Mathews  
robbym@wcjc.edu



**CO-OP Info**

**TIPS - 220105 Technology Solutions Products and Services**

We recommend contingency be set aside by WCJC for any oversights on projects this size.

**Hardware**




Description	Price	Qty	Ext. Price
C9500-24Y4C-A Catalyst 9500 24x1/10/25G and 4-port 40/100G, Advantage	\$13,488.59	2	\$26,977.18
CON-SSSNT-C95024YA SOLN SUPP 8X5XNBD Catalyst 9500 24-port 25/100G only, Adva	\$8,016.81	2	\$16,033.62
C9K-PWR-650WAC-R/2 650W AC Config 4 Power Supply front to back cooling	\$1,697.82	2	\$3,395.64
CON-SSTCM-C9524YCA SOLN SUPP SW SUB SOLN SUPP SW SUBC950	\$951.21	2	\$1,902.42
C9500-DNA-L-A-5Y DNA Advantage 5 Year License	\$7,171.69	2	\$14,343.38
MS390-48UX2-HW Meraki MS390 48m5G L3 UPOE Switch	\$5,814.40	1	\$5,814.40
MS390-48P-HW Meraki MS390 48GE L3 POE+ Switch	\$4,652.44	6	\$27,914.64
LIC-MS390-48E-5Y Meraki MS390 48-port Enterprise License and Support, 5 Year	\$2,278.72	7	\$15,951.04
MA-CBL-120G-3M Meraki MS390 120G Data-Stack Cable, 3 meter	\$216.25	1	\$216.25
MA-CBL-120G-50CM Meraki MS390 120G Data-Stack Cable, 50 centimeter	\$72.09	6	\$432.54
MA-CBL-SPWR-150CM Meraki MS390 Power-Stack Cable, 150 centimeter	\$129.72	2	\$259.44
MA-CBL-SPWR-30CM Meraki MS390 Power-Stack Cable, 30 centimeter	\$63.42	5	\$317.10
MA-MOD-8X10G Meraki MS390 8x10GE Module	\$1,524.99	2	\$3,049.98
MA-PWR-1100WAC Meraki MS390 1100W AC Power Supply	\$1,135.81	1	\$1,135.81

Hardware

Description	Price	Qty	Ext. Price
QSFP-100G-AOC1M= <b>100GBASE QSFP Active Optical Cable, 1m</b>	\$813.54	2	\$1,627.08
SFP-H10GB-CU1M= <b>10GBASE-CU SFP+ Cable 1 Meter</b>	\$82.16	1	\$82.16
SFP-H10GB-CU3M-FL <b>FluxLight Brand Cisco compatible (10GBase-10GBase,SFP+-SFP+,Twinax,3m,Passive)</b>	\$17.15	6	\$102.90
GLC-T-FL <b>FluxLight Brand Cisco compatible (1000Base,T,SFP,N</b>	\$33.75	10	\$337.50
SFP-10G-LRM-FL <b>FluxLight Brand Cisco compatible (10GBase,LRM,SFP+,1310nm,MMF,300m,Dual-LC,DOM,COM)</b>	\$29.99	12	\$359.88
NKFP62ELLSSM010 <b>Panduit NetKey Fiber Optic Patch Network Cable - 32.81 ft Fiber Optic Network Cable for Network Device - First End: LC Network - Male - Second End: SC Network - Male - Patch Cable - Orange - 1</b>	\$37.44	1	\$37.44
 F92ERLNLNSNM003 <b>Panduit Fiber Optic Duplex Patch Network Cable - 9.84 ft Fiber Optic Network Cable for Network Device - First End: 2 x LC Network - Male - Second End: 2 x LC Network - Male - Patch Cable - Yellow</b>	\$52.19	4	\$208.76
 UTP28SP1BU <b>Panduit Cat.6 UTP Patch Network Cable - 1 ft Category 6 Network Cable for Network Device - First End: 1 x RJ-45 Network - Male - Second End: 1 x RJ-45 Network - Male - Patch Cable - Blue - 1</b>	\$9.44	336	\$3,171.84
 25PC25L3 <b>Lynn Electronics Category 3 25 Pair Telco Assemblies, Male to Female - 25 ft Category 3 Network Cable - First End: 1 x RJ-21 Network - Male - Second End: 1 x RJ-21 Network - Female - Shielding</b>	\$64.06	2	\$128.12
5PX3000RTG2 <b>EATON 5PX G2 UPS 3000VA 3000W PERP NETWORK CARD OPTION 2U RACK/TOWER</b>	\$1,821.44	4	\$7,285.76
103007018-5591 <b>Eaton 2 Post Mounting Rail Kit</b>	\$87.55	1	\$87.55
EMPDT1H1C2 <b>ENVIRN MONITORING PROBE GEN2 ACCS</b>	\$231.65	2	\$463.30
NETWORK-M2 <b>GIGABIT NETWORK CARD CTLR</b>	\$327.34	4	\$1,309.36



## Hardware

Description	Price	Qty	Ext. Price
 <b>SRSHELF2PDP</b> Tripp Lite by Eaton SmartRack 2U Cantilever Fixed Shelf (60 lbs / 27.2 kgs capacity; 21 in. / 533.4 mm Deep) - 2U Rack Height - Rack-mountable - Black - Steel - 60 lb Maximum Weight Capacity	\$89.81	1	\$89.81
 <b>UTPSP100RY</b> PANDUIT Cat.6 UTP Patch Cord - RJ-45 Male Network - RJ-45 Male Network - 10ft - Orange, Clear	\$25.00	10	\$250.00
<b>B040-008-19</b> TRIPP LITE B040-008-19 8P RACK CONSOLE KVM SWITCH 19" LCD, 1U, VGA	\$1,678.12	1	\$1,678.12
 <b>P780-006</b> Tripp Lite by Eaton USB/PS2 Combo Cable Kit for NetController KVM Switches B040-Series and B042-Series 6 ft. (1.83 m) - HD-15 Male - HD-15 Male, mini-DIN (PS/2) Male, Type A Male USB - 6ft"	\$18.38	4	\$73.52
<b>EA-5002-C</b> 24 (5-20) OUTLET SWITCHED PDU 120V 30A - BLACK	\$2,031.25	2	\$4,062.50

**Subtotal: \$139,099.04**

## Cabling

Description	Price	Qty	Ext. Price
<b>MISC-CABLING-MATERIALS-WCJCR-1-0324</b> Miscellaneous Cabling Materials and Equipment	\$536.48	1	\$536.48
<b>FIBER-INSTALLATION-WCJCR-1-0324</b> MMF Fiber From: LDF Access Rack To Core, IDF 1 to Core. SMF Fiber From: IDF 2 to Core	\$6,017.22	1	\$6,017.22
<b>RACK-INSTALLATION-WCJCR-1-0324</b> Installation of new 4 post rack and associated hardware in the site MDF and removal of the exiting wall cabinet.	\$11,209.86	1	\$11,209.86
<b>CAT6-1P12-P1PL053-0105</b> 1x CAT6 Plenum Unshielded Drop Biscuit Wall - Purple	\$409.18	1	\$409.18



**Cabling**

Description	Price	Qty	Ext. Price
<b>CAT6-RETERM- BLUE-WCJCR- 0224</b> <b>Retermination and labeling of keystones to modular Cat6 keystones - Blue</b>	<b>\$103.44</b>	<b>10</b>	<b>\$1,034.40</b>

**Subtotal: \$19,207.14**

**Professional Services**

Description	Price	Qty	Ext. Price
Professional Services - IT - Fixed <b>Please see Scope of Work.</b>	\$18,560.00	1	\$18,560.00

**Subtotal: \$18,560.00**



## ▶ Scope of Work

### Campus Wide

- Onsite Coverage following cutover.

### MDF

- Replace current ISP rack with a 4-post server rack.
  - Move network core and new fiber terminations to this rack.
  - Install and configure UPSes to support network infrastructure.
  - Install and configure server switching/routing equipment.
  - Install power delivery equipment and KVM.
  - Relocate existing servers into new server rack.
- Reconfigure the existing network 2-post rack.
  - Connect rack to Core/ISP rack.
  - Install new Cat6A AP drops.
  - Install a single Security Drop that connects to the security system.
  - Reterminate free hanging drops into a modular patch panel.
  - Rack switches directly below patch panels and configure for operation.
  - Replace all switch end patch cables.
  - Install and configure UPSes to support network infrastructure.
- Remove legacy equipment from the second 2-post rack.
- Run ladder racks to connect all racks in the MDF.

### Assumptions

- WCJC will remove equipment from areas to make them accessible to install in.
- WCJC will assist in identifying legacy ISP/Telco equipment and remove where possible.
- WCJC will install seven L5-30 receptacles on dedicated circuits.
  - 2 Behind ISP Rack
  - 2 Behind MDF Access Rack
  - 2 Behind IDF1 Access Rack
  - 1 Behind IDF2 Access Rack
- New cable drops and fiber can be cabled before cutover.
- Access will be provided after hours and during cutover times for installation and cabling.
- Weekend long downtime at the Richmond campus will be acceptable to perform the installation tasks.

## Phase 1 - Richmond Refresh

### Prepared by:

RockIT - Houston



Nicky Stavinoha  
832-723-9732

nstavinoha@rockit-consulting.com

### Prepared for:

WCJC

911 Boling Hwy  
Wharton, TX 77488  
Robby Mathews

robbym@wcjc.edu

### Quote Information:

Quote #: 002941

Version: 2

Delivery Date: 03/25/2024

Expiration Date: 04/11/2024

## Quote Summary

Description	Amount
Hardware	\$139,099.04
Cabling	\$19,207.14
Professional Services	\$18,560.00

**Total: \$176,866.18**

Taxes, shipping, handling and other fees may apply. We reserve the right to cancel orders arising from pricing or other errors.

### RockIT - Houston

Signature: \_\_\_\_\_



Name: Nicky Stavinoha

Title: Senior Sales / Account Manager

Date: 03/25/2024

### WCJC

Signature: \_\_\_\_\_

Name: Robby Mathews

Date: \_\_\_\_\_





We have prepared a quote for you

**Phase 2 - Richmond Refresh**

Quote # 002944  
Version 2

Prepared for:

**WCJC**

Robby Mathews  
robbym@wcjc.edu

 CO-OP Info

TIPS - 220105 Technology Solutions Products and Services

We recommend contingency be set aside by WCJC for any oversights on projects this size.



Hardware

Description	Price	Qty	Ext. Price
MS390-48UX2-HW <b>Meraki MS390 48m5G L3 UPOE Switch</b>	\$5,814.40	2	\$11,628.80
MS390-48P-HW <b>Meraki MS390 48GE L3 POE+ Switch</b>	\$4,652.44	10	\$46,524.40
LIC-MS390-48E-5Y <b>Meraki MS390 48-port Enterprise License and Support, 5 Year</b>	\$2,278.72	12	\$27,344.64
MA-CBL-120G-3M <b>Meraki MS390 120G Data-Stack Cable, 3 meter</b>	\$216.25	2	\$432.50
MA-CBL-120G-50CM <b>Meraki MS390 120G Data-Stack Cable, 50 centimeter</b>	\$72.09	10	\$720.90
MA-CBL-SPWR-150CM <b>Meraki MS390 Power-Stack Cable, 150 centimeter</b>	\$129.72	4	\$518.88
MA-CBL-SPWR-30CM <b>Meraki MS390 Power-Stack Cable, 30 centimeter</b>	\$63.42	8	\$507.36
MA-MOD-8X10G <b>Meraki MS390 8x10GE Module</b>	\$1,524.99	4	\$6,099.96
MA-PWR-1100WAC <b>Meraki MS390 1100W AC Power Supply</b>	\$1,135.81	2	\$2,271.62
SFP-10G-LRM-FL <b>FluxLight Brand Cisco compatible (10GBase,LRM,SFP +,1310nm,MMF,300m,Dual-LC,DOM,COM)</b>	\$29.99	8	\$239.92
F92ERLNLNSNMO03 <b>Panduit Fiber Optic Duplex Patch Network Cable - 9.84 ft Fiber Optic Network Cable for Network Device - First End: 2 x LC Network - Male - Second End: 2 x LC Network - Male - Patch Cable - Yellow</b>	\$52.19	8	\$417.52





## Hardware

Description	Price	Qty	Ext. Price
 UTP28SP1BU <b>Panduit Cat.6 UTP Patch Network Cable - 1 ft Category 6 Network Cable for Network Device - First End: 1 x RJ-45 Network - Male - Second End: 1 x RJ-45 Network - Male - Patch Cable - Blue - 1</b>	\$9.44	464	\$4,380.16
5PX3000RTG2 <b>EATON 5PX G2 UPS 3000VA 3000W PERP NETWORK CARD OPTION 2U RACK/TOWER</b>	\$1,821.44	3	\$5,464.32
103007018-5591 <b>Eaton 2 Post Mounting Rail Kit</b>	\$87.55	2	\$175.10
EMPDT1H1C2 <b>ENVIRN MONITORING PROBE GEN2 ACCS</b>	\$231.65	2	\$463.30
NETWORK-M2 <b>GIGABIT NETWORK CARD CTRL</b>	\$327.34	3	\$982.02
 UTPSP10ORY <b>PANDUIT Cat.6 UTP Patch Cord - RJ-45 Male Network - RJ-45 Male Network - 10ft - Orange, Clear</b>	\$25.00	10	\$250.00

**Subtotal: \$108,421.40**

## Cabling

Description	Price	Qty	Ext. Price
<b>MISC-CABLING-MATERIALS-WCJCR-2-0224</b> <b>Miscellaneous Cabling Materials and Equipment</b>	\$720.21	1	\$720.21
<b>FIBER-INSTALLATION-WCJCR-2-0224</b> <b>MMF Fiber From: LDF Access Rack To Core, IDF 1 to Core. SMF Fiber From: IDF 2 to Core/IDF Single Mode Fiber - 12 Strand - Armor</b>	\$8,381.88	1	\$8,381.88
<b>RACK-INSTALLATION-WCJCR-2-0224</b> <b>Installation of new 4 post rack and associated hardware in the site MDF and removal of the exiting wall cabinet.</b>	\$2,950.00	1	\$2,950.00
<b>CAT6-1P12-P1PL053-0105</b> <b>1x CAT6 Plenum Unshielded Drop Biscuit Wall - Purple</b>	\$446.42	1	\$446.42
<b>CAT6-RETERM-BLUE-WCJCR-0224</b> <b>Rermination and labeling of keystones to modular Cat6 keystones - Blue</b>	\$140.07	72	\$10,085.04

### Cabling

Description	Price	Qty	Ext. Price
<b>CAT6-RETERM- PURPLE-WCJCR- 0224</b> Retermination and labeling of keystones to modular Cat6 keystones - Purple	<b>\$103.44</b>	<b>12</b>	<b>\$1,241.28</b>

**Subtotal: \$23,824.83**

### Professional Services

Description	Price	Qty	Ext. Price
Professional Services - IT - Fixed <b>Please see Scope of Work.</b>	<b>\$9,920.00</b>	<b>1</b>	<b>\$9,920.00</b>

**Subtotal: \$9,920.00**



## ▶ Scope of Work

### Campus Wide

- Onsite Coverage following cutover.

### IDF1

- Reorganize existing 2-post rack.
- Install new fiber to MDF.
- Install a single Security Drop that connects to the security system.
- Rerterminate drops in 24 port patch panels into a modular patch panel.
- Rack switches directly below patch panels and configure for operation.
- Replace all switch end patch cables.
- Install and configure UPSes to support network infrastructure.

### IDF2

- Reorganize existing 2-post rack.
- Install new fiber to MDF.
- Rerterminate drops in 24 port patch panels into a modular patch panel.
- Rack switches directly below patch panels and configure for operation.
- Rerterminate data and security drops to standardize patch panel structure.
- Replace all switch end patch cables.
- Install and configure UPS to support network infrastructure.

### Assumptions

- WCJC will remove equipment from areas to make them accessible to install in.
- WCJC will install L5-30 receptacles on dedicated circuits.
- 2 Behind IDF1 Access Rack
- 1 Behind IDF2 Access Rack
- New cable drops and fiber can be cabled before cutover.
- Access will be provided after hours and during cutover times for installation and cabling.
- Weekend long downtime at the Richmond campus will be acceptable to perform the installation tasks.
- Stranded patch cables run directly IDF1 will not be rerminated due to physical limitations. These cables may be plugged into a legacy switch that connects to the renovated switching infrastructure while future considerations of these cables are made.

## Phase 2 - Richmond Refresh

### Prepared by:

RockIT - Houston



Nicky Stavinoha  
832-723-9732  
nstavinoha@rockit-consulting.com

### Prepared for:

WCJC

911 Boling Hwy  
Wharton, TX 77488  
Robby Mathews

robbym@wcjc.edu

### Quote Information:

Quote #: 002944

Version: 2  
Delivery Date: 03/25/2024  
Expiration Date: 04/11/2024

## Quote Summary

Description	Amount
Hardware	\$108,421.40
Cabling	\$23,824.83
Professional Services	\$9,920.00
<b>Total:</b>	<b>\$142,166.23</b>

Taxes, shipping, handling and other fees may apply. We reserve the right to cancel orders arising from pricing or other errors.

### RockIT - Houston

Signature:



Name: Nicky Stavinoha

Title: Senior Sales / Account Manager

Date: 03/25/2024

### WCJC

Signature:

Name: Robby Mathews

Date:





We have prepared a quote for you


**Phase 3 - Richmond Refresh**

Quote # 002945  
Version 4

Prepared for:

**WCJC**

Robby Mathews  
robbym@wcjc.edu

 **CO-OP Info**

**TIPS - 220105 Technology Solutions Products and Services**

We recommend contingency be set aside by WCJC for any oversights on projects this size.

**Hardware**

Description	Price	Qty	Ext. Price
CW9164I-MR <b>Catalyst 9164I AP (W6E, tri-band 4x4) w/Meraki</b>	\$854.81	42	\$35,902.02
1011-00-WH <b>RIGHT-ANGLE AP MOUNT WITH UNIVECPNT NEW BROWN BOX SEE WARRANTY NOTES</b>	\$115.66	5	\$578.30

**Subtotal: \$36,480.32**

**Cabling**

Description	Price	Qty	Ext. Price
<b>MISC-CABLING-MATERIALS-WCJCR-2-0224</b> Miscellaneous Cabling Materials and Equipment	\$720.21	1	\$720.21
<b>CAT6A-1P12-P1RD034-0103</b> 1x CAT6A Plenum Unshielded Drop Biscuit - Red	\$556.81	42	\$23,386.02

**Subtotal: \$24,106.23**

**Professional Services**

Description	Price	Qty	Ext. Price
Professional Services - IT - Fixed <b>Please see Scope of Work.</b>	\$6,400.00	1	\$6,400.00
Professional Services - Cabler <b>Hang APs &amp; Mounts</b>	\$50.00	47	\$2,350.00

**Subtotal: \$8,750.00**



## Scope of Work

### Campus Wide

- Install new cabling and additional APs throughout campus (42 APs) in a new wireless layout.
- Label, Patch in, and Configure all new APs.
- Revise wireless configurations to meet best practices where possible.
- Place APs on maps in Meraki.

### Assumptions

- Phases 1 and 2 will be completed before this phase of the project is initiated.
- New cable drops and fiber can be cabled before cutover.
- Access will be provided after hours and during cutover times for installation and cabling.
- After hours downtime during the week will be provided for cutover and testing.

## Phase 3 - Richmond Refresh

### Prepared by:

RockIT - Houston



Nicky Stavinoha  
832-723-9732  
nstavinoha@rockit-consulting.com

### Prepared for:

WCJC

911 Boling Hwy  
Wharton, TX 77488  
Robby Mathews

robbym@wcjc.edu

### Quote Information:

Quote #: 002945

Version: 4

Delivery Date: 03/25/2024


Expiration Date: 04/11/2024

## Quote Summary

Description	Amount
Hardware	\$36,480.32
Cabling	\$24,106.23
Professional Services	\$8,750.00
<b>Total:</b>	<b>\$69,336.55</b>

Taxes, shipping, handling and other fees may apply. We reserve the right to cancel orders arising from pricing or other errors.

### RockIT - Houston

Signature:   
Name: Nicky Stavinoha  
Title: Senior Sales / Account Manager  
Date: 03/25/2024

### WCJC

Signature: \_\_\_\_\_  
Name: Robby Mathews  
Date: \_\_\_\_\_