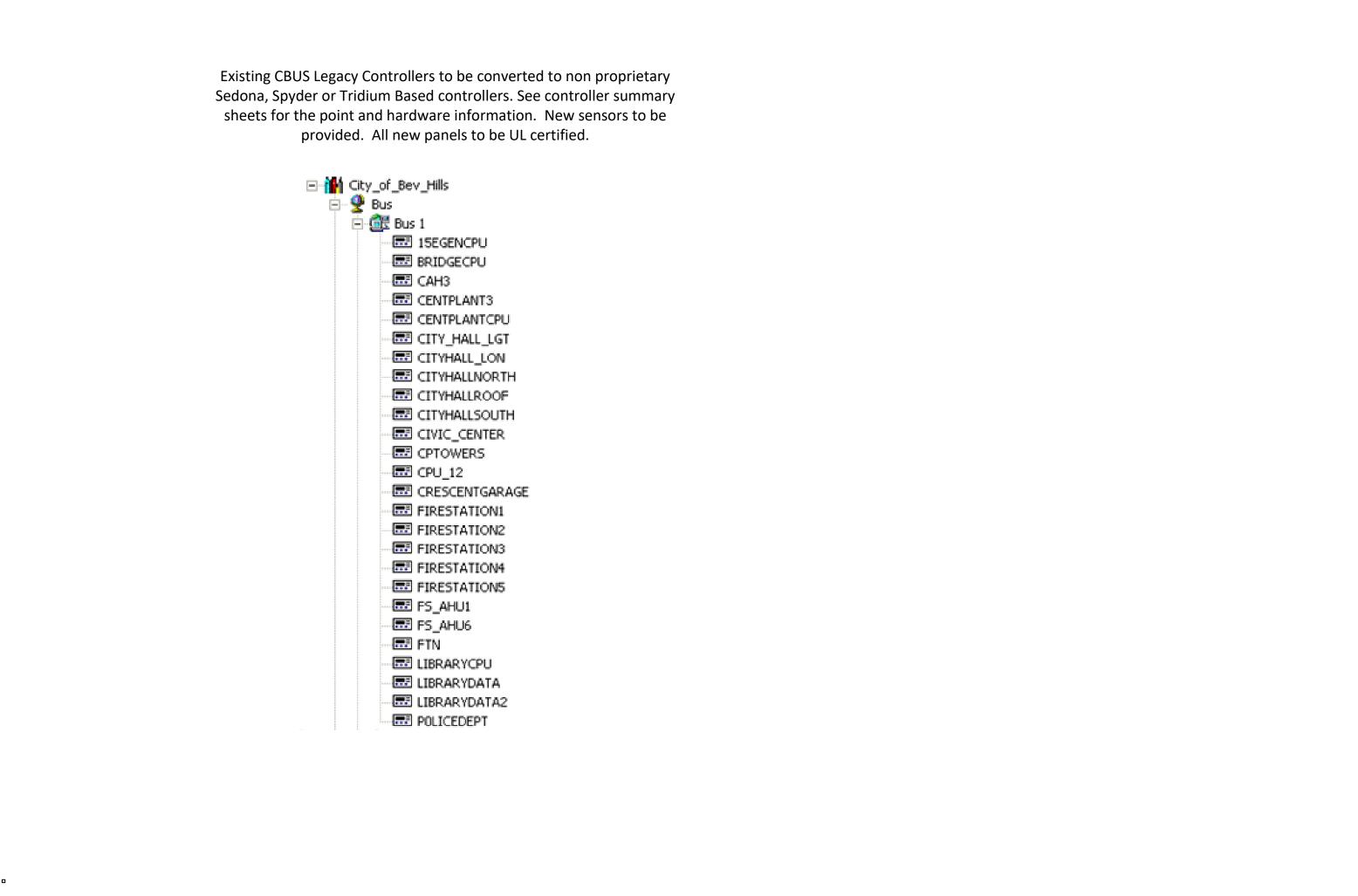
IX. APPENDIX III

<u>Existing System Architecture</u> <u>Showing Network and Basis of Design for the System Modification</u>

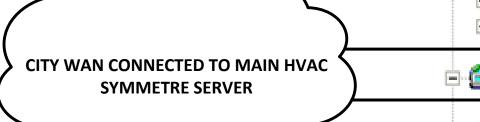


City Hall Controls Architecture

City Hall Existing Network as well as basis of design for the system modifications.

Existing Lonworks FT-10 devices networked with ILON 600 IP devices connecting to the existing Symmetre **HVAC Server**

The new architecture will be designed to utilize the existing FT-10 field devices. The devices will be integrated into N4 JACEs. The new JACEs with have configuration menus to access all configuration properties including user defined configuration properties. The new JACEs will be added to the upgraded N4 Supervisor Station.



- ☐
 ☐ CH_GroundFloor

 - CH_VAVG11

 - CH_VAVG15

 - CH_VAVG17
 - CH_VAVG19

 - E CH_VAVG23
 - CH_VAVG24

 - CH_VAVG7

 - CH_VavTvRoom
 - - Civic_ILon
- ☐ GtyHall2nd
 - ₩ CH_ILON234

- 🔃 📼 CH2_Vav1

- → □ CH2 Vav4

- 🔃 📼 CH2 VavB4a
- 🌊 CityHall3rd

 - EE CH3_Vav22

- LIB_VAV
- **E** CityHall4th
- Council Chambers Controls

 - E CH VAVG29

 - → □□□ Council Cntrl

Police Department Architecture

The Existing Lonworks FT-10 devices network with ILON 600 IP devices connecting to the existing Symmetre HVAC Server. There are three legacy cbus controller at this building that will need to get upgraded to a Tridium or Sedona IP based product. New UL control panels will need to be provided. There is a custom touch screen display utilized for the firing range controls that will need to be integrated into the modified system.

The new architecture will be designed to utilize the existing FT-10 field devices. The devices will be integrated into N4 JACEs. The new JACEs with have configuration menus to access all configuration properties including user defined configuration properties. The new JACEs will be added to the upgraded N4 Supervisor Station.

CITY WAN CONNECTED TO MAIN HVAC SYMMETRE SERVER □ ₩ Police FS AHU1 FS_AHU6 ■ PD_CRAC_02 ■ PD_CRAC_03 PD_CRAC_UNIT_01 ■ PD_FC01 PD_VAV _2_31 PD_VAV _2_32 PD_VAV _2_33 ■ PD_VAV_2 _16 PD_VAV_2 _18 PD_VAV_2 _19 ■ PD_VAV_2_09 PD_VAV_2_12 PD_VAV_2_14 PD_VAV_2_25 PD_VAV_3_02 PD_VAV_3_06 PD_VAV_WtchComm PD_VAV2_4A PD2nd_Ilon VAV_15Polygraph

VAV_15Polygraph VAV_2_6Lobby VAV_29Watchguard ■ VAV2_1 ■ VAV2_10 ■ VAV2_11 ■ VAV2_13 VAV2_17 ■ VAV2_2 ■ VAV2_20 ▼ VAV2_21 ■ VAV2_22 ■ Vav2_23 ■ VAV2_24 ■ VAV2_26 ■ VAV2_27 ■ VAV2_28 ■ VAV2_3 ■ VAV2_4 ■ VAV2_5

■ VAV2_7

■ VAV2_8

🖃 🎊 FiringRange

R FR_ILON

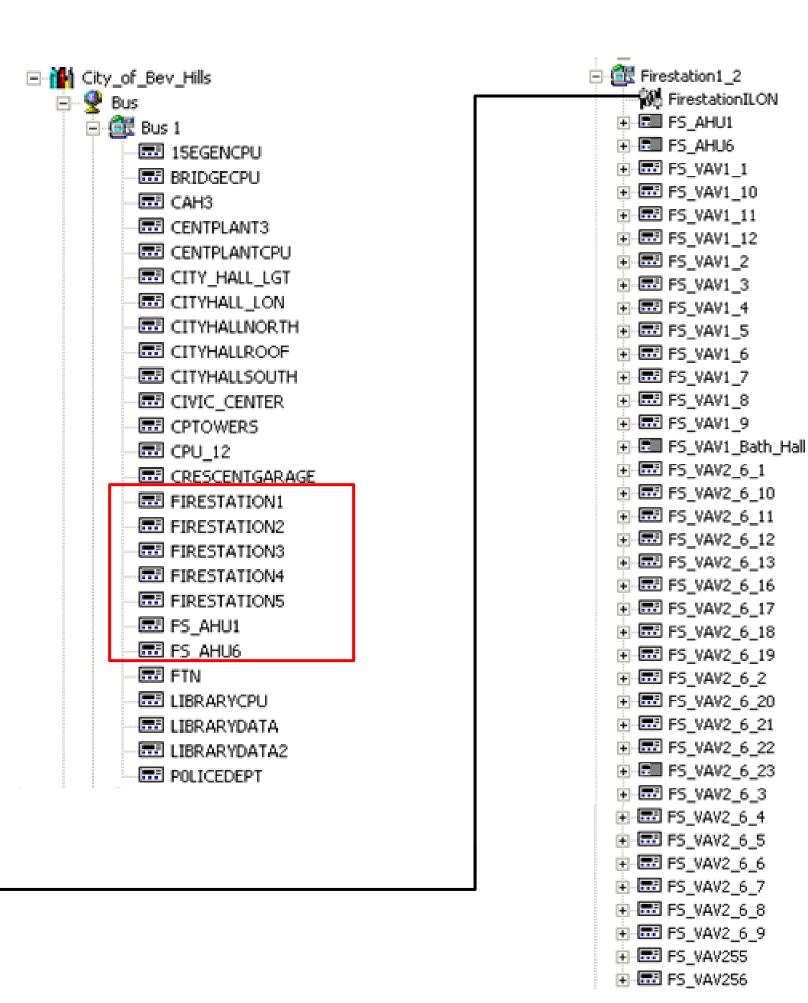
⊕ □ FR VAV2

Fire Department Architecture

The Fire Departments Existing
Network as well as basis of design for
the system modifications.
The Existing Lonworks FT-10 devices
network with ILON 600 IP devices
connecting to the existing Symmetre
HVAC Server. There are 7 Legacy
Cbus controllers that need to be
upgrades to IP based Tridium or
Sedona devices. New UL certified
control panels to be provided were
the existing legacy panels exist.

The new architecture will be designed to utilize the existing FT-10 field devices. The devices will be integrated into N4 JACEs. The new JACEs with have configuration menus to access all configuration properties including user defined configuration properties. The new JACEs will be added to the upgraded N4 Supervisor Station.

CITY WAN CONNECTED TO MAIN HVAC SYMMETRE SERVER

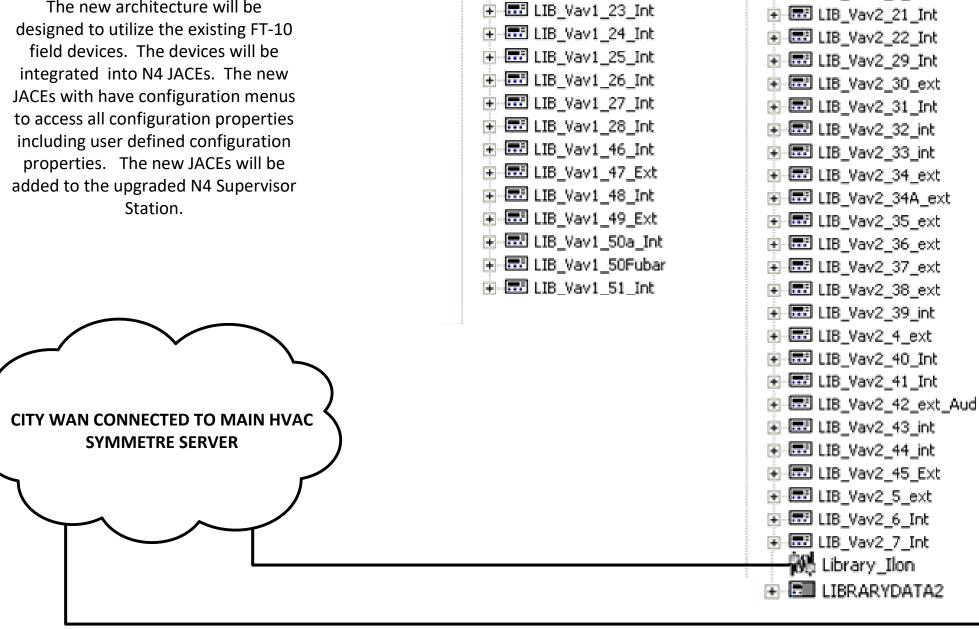


Library Architecture

The Library's Existing Network as well as basis of design for the system modifications.

The Existing Lonworks FT-10 devices network with ILON 600 IP devices connecting to the existing Symmetre **HVAC Server**

The new architecture will be field devices. The devices will be integrated into N4 JACEs. The new including user defined configuration properties. The new JACEs will be



🖃 🌊 Library

■ LIB_Vav1_13_Ext

🛨 📼 LIB_Vav1_16_Ext

🛨 📼 LIB_Vav1_18_Ext

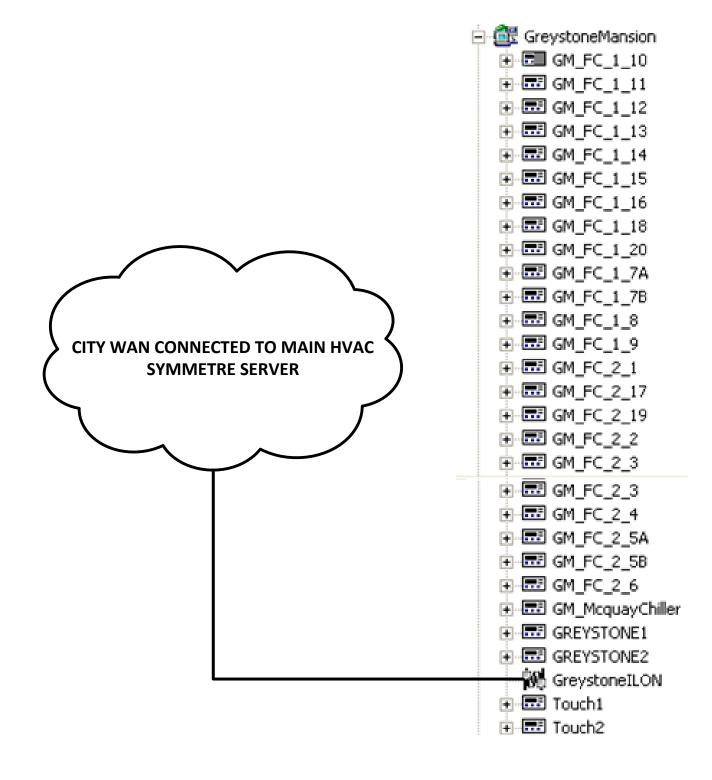
■ LIB_Vav1_19_Int

🔃 📼 LIB_Vav1_52_Ext - 🌊 LibraryLevelsAB LIB_Vav1_54_Ext <u>■ ■ LIB LargePrint A</u> ± ⊞ LIB Vav1 57 Ext ± ⊞ LIB_Vav2_02_Int ± ⊞ LIB_Vav2_03_Ext ■ LIB_Vav2_08_Ext LIB_Vav_11B ± ⊞ LIB_Vav2_21_Int ➡ ■ LIB_Vav_1B <u>■ EIB_Vav_6B</u> ± ■ LIB Vav 9B LibraryAB_ILON

Greystone Architecture

The Greystone Mansions Existing
Network as well as basis of design for
the system modifications.
The Existing Lonworks FT-10 devices
network with ILON 600 IP devices
connecting to the existing Symmetre
HVAC Server. There are two custom
touch screen displays that are on the
network that will need to be
integrated to the new architecture.

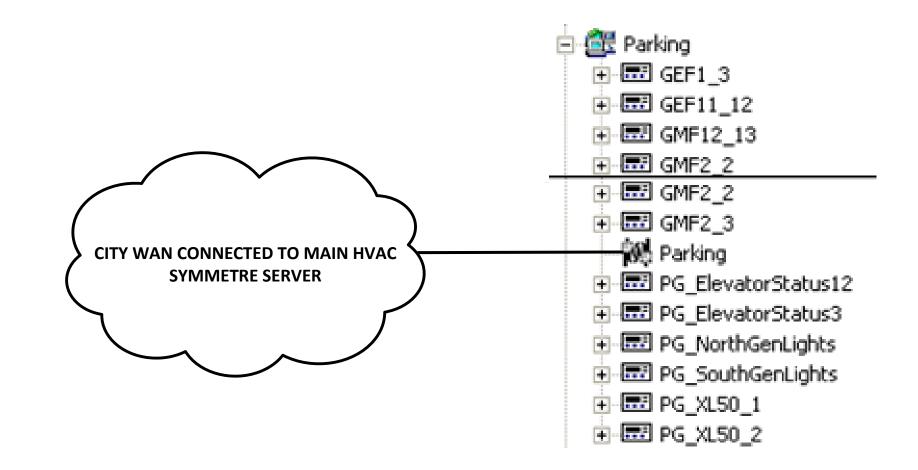
The new architecture will be designed to utilize the existing FT-10 field devices. The devices will be integrated into N4 JACEs. The new JACEs with have configuration menus to access all configuration properties including user defined configuration properties. The new JACEs will be added to the upgraded N4 Supervisor Station.



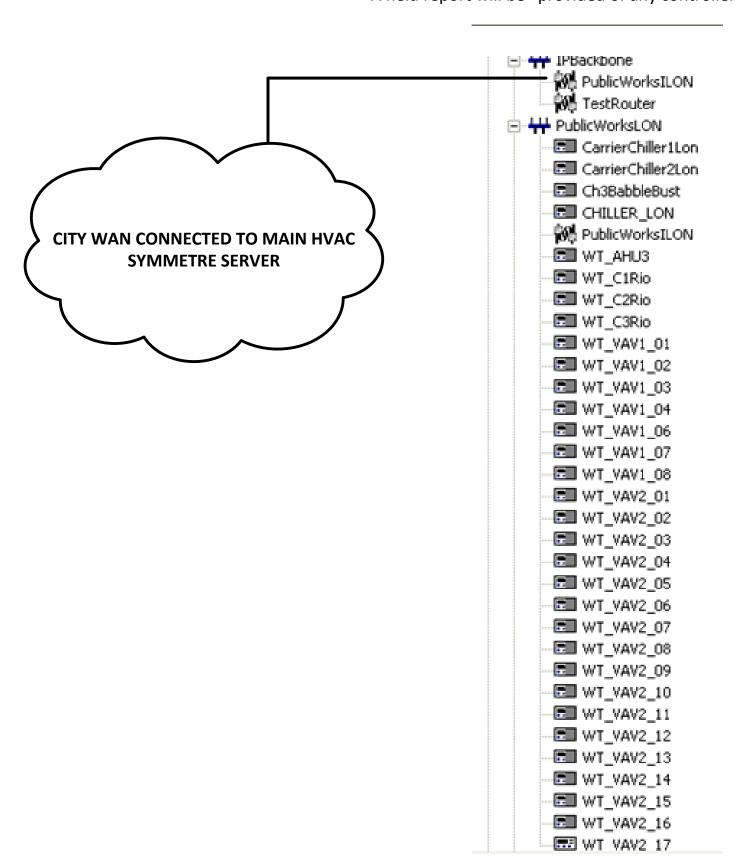
Crescent Garage

The crescent Garage Consist of (2)
Legacy controllers controlling
Honeywell Open IO modules and
VFDs. The Legacy controllers will be
replaced with JACE devices and
connected to the new N4 station

The new architecture will be designed to utilize the existing FT-10 field devices. The devices will be integrated into N4 JACE. The new JACEs with have configuration menus to access all configuration properties including user defined configuration properties. The new JACEs will be added to the upgraded N4 Supervisor Station.



Public Work Building: this site consists of one legacy Controller WT_AHU which is the main controller for the site. All device are FT-10. the new system will keep the FT-10 devices and connect to a FT-10 Card in an N4 JACE. The programming in the legacy controller will be duplicated in the JACE. The new system will be recommissioned and tested to verify operations. A field report will be provided of any controller deficiencies or issues.



Provide Option Pricing to replace the VAV controllers to new FT-10 Stryker Controllers with new wall modules, actuators and sensors.