Nelson A Boylen Collegiate Institute, North York, Ontario

LOCATION : 155 Falstaff Avenue, North York, Ontario

OWNER : Toronto District School Board TDSB.

TEAM MEMBERS :

Mechanical Consultant
Mr. Imran Majeed
Advanced Buildings Solutions Inc.

Electrical Consultants
Suri & Associates Ltd.

MECHANCIAL ENGINEERING SERVICES:

Mr. Majeed engaged to provide following services:

- Mechanical - Roof top unit Assessment
- Site review
- Concept Studies & Design Development
- Preparation of Construction Documents
- Estimating Construction Cost
- Cost Control & Value Analysis throughout the Design Process
- General Administration & Design Coordination
- throughout the work

PROJECT DESCRIPTION:

The project includes upgrade existing roof top units, exhaust fans, ductwork, piping, condensing unit, electrical upgrades in support of mechanical upgrades and services.

Existing System:

The building has minimal rooftop equipment detailed as follows:

1. There are several exhaust fans on the roof. One of the roof mounted exhaust fan serve Boys change rooms was 3600 CFM and other was inline supply fan 2500 CFM. No equipment details label could be found on it. The fans are old and show signs of noise and vibration.

2. There is one (1) condenser units close to the west edge of the roof. This unit is 50 tons Carrier make. The units are connected to indoor direct drive compressors. The unit reached its life expectancy and need to be replaced with piping.

Recommendations:

Most of the rooftop equipment have recommended lifespan of 15-20 years. As noted above number of equipment exceeded their lifespan and have operational issues and are recommended to be replaced. It is recommended that one (1) 50 ton condensing unit shall be replaced on immediate basis. In addition we recommend to replace two fans as noted above.

Existing & New System Photography