High Access Solutions

Case Study

FSG LED Retrofit for TCCC

Fort Worth Texas

Customer Profile:

Tarrant County Community College River Campus is a spectacular site. It was originally the Radio Shack Home Office on the Trinity River in downtown Fort Worth. The architecture is beautiful with multiple building being connected by a below level court yard that has a water feature that runs like a river through it down to a waterfall at the lowest level. From street level the building cascade down on multiple levels toward the Trinity River. The buildings have the louvered window shades system to reduce the Texas afternoon sun effects.

Customer Needs.

TCCC had 3 large stair cases and an open atrium 3 levels below street level that needed to be converted to LED with no street access. This project posed many problems. Stair case #1 was 60 feet long and went straight down 3 levels. It was huge. Stair case #2 and 3 were also 2 levels and 3 levels below street grade. The lower atrium was 3 levels down.

Challenges:

A wide range of problems needed to be solved:

* How to reach lights on staircase #1 that are 50-foot-high in a closed area
* How to reach lights on staircase #2 only 30-foot-high down 2 levels
* How to reach lights on staircase #3 35-foot-high down 3 levels to the rear of the project with no access.
* How to reach lights in a atrium 35-foot-high down 3 levels
* combining reach and height concerns

Assessment:

We walked the project with FSG Electric the contractor for the project and came up with multiple High Access Solutions. We would use the Bluelift 85, the LL 76 lift and the LL63 lift along with scaffolding to complete the project

Solution:

Staircase #1

This was the most complicated of the 4 areas. We decided to use the B 85 on top of the stairs and reach out as far as we could to reach lights. Then we built a large 60-foot ramp from street level down 2 levels to bring down the 2 lifts needed to be able to reach the bottom of the stair case. We could not reach from the bottom of the staircase back up because of a structural header in the way. So we decided to take two of the sun shade panels off the side of the staircase to reach through them to reach the lights. The panels where aluminum and where 12-foot-long and 15 foot high. We needed 2 lifts to accomplish this, one on each side of the panel to lift and lower the panels. We took them down and where able to reach all lights by working the lift through the hole we created by removing the panels. Then we replaced the shade panels.

Staircase #2

This we decided was a scaffolding project. The problem was it was to the rear of the campus and on the mid-level. What we had to do was bring the scaffolding in from the river level below. We trucked ii in as far as we could then carted it the rest of the way up walkway to mid-level.

Staircase #3

This also was a scaffolding project but one level lower.

Lower level Atrium

We needed to use the LL63 for this and had to bring it in on the river dirt trail. This lift has tank tracks, so it was able to negotiate the terrain. The river bottoms were below the building level, so we needed to bring the lift up a steep incline to get it into the lower atrium to reach all lights needed.

Summary:

This project took just under 3 weeks, we used 3 different lifts, designed and build 2 scaffolding platforms. Build a huge 60-foot ramp to get the lifts down to the work area. All accomplished on time with no issues. FSG Electric only needed to deal with the lighting instillation and we handled all High Access issues. This project is one of the many that we can do to make the instillation process much easier and less expensive. Our knowledge and expertise were used in this project to make our High Access Solutions work for our client.