

SHAPING FUTURES

Chaffey High School
Gardiner W. Spring Auditorium Modernization

Shaping Futures at Chaffey Joint Union High School District

Serving the Chaffey Joint Union High School District under Measure “P” since 2014, the Tilden-Coil team has continuously lived out their purpose which is “We exist to serve by shaping futures”. This is evident with the transformation of the historic Gardiner W. Spring (GWS) Auditorium at Chaffey High School; a high school serving 3,300 students and founded in 1911.

GWS Auditorium Modernization Quick Facts

- Architect:** DLR Group
- Delivery:** CM Multi-Prime
- Size:** 62,000 sf
- Capacity:** 1,850 seats
- Completion:** June 2019

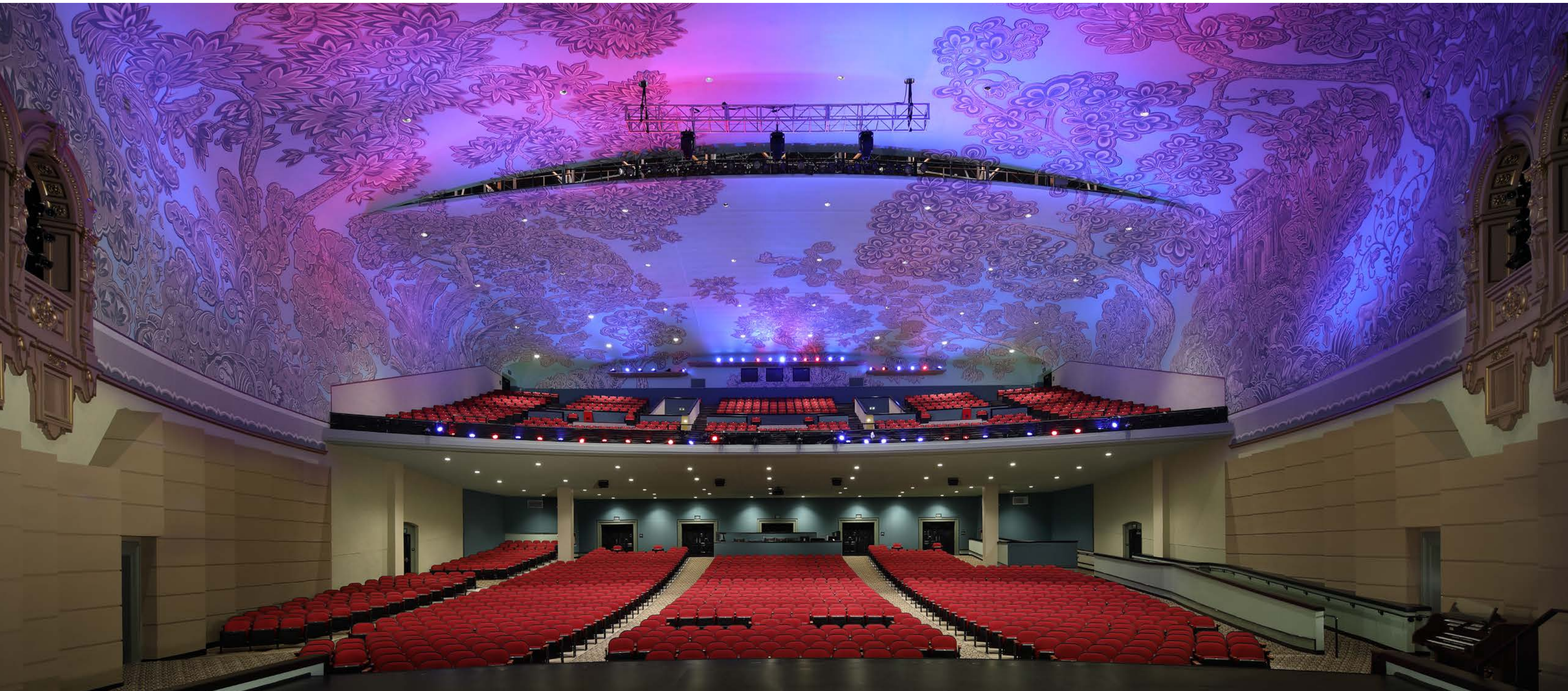
The Transformation

Originally designed in the 1930’s by architects Allison and Allison of Los Angeles, the Gardiner W. Spring Auditorium is meticulously restored and enhanced to meet the current demands for a 1,850 seat theater at the heart of Chaffey High School’s campus in Ontario.

The two-year theater modernization began construction in June 2017 and was delivered on-time and on-budget through the CM Multi-Prime delivery method. Work on the 62,000 square foot structure included interior and

exterior historic restoration, structural seismic retrofit, new mechanical, electrical and plumbing systems, a new catwalk, new elevators, theatrical lighting, new audio visual system and acoustical upgrades.

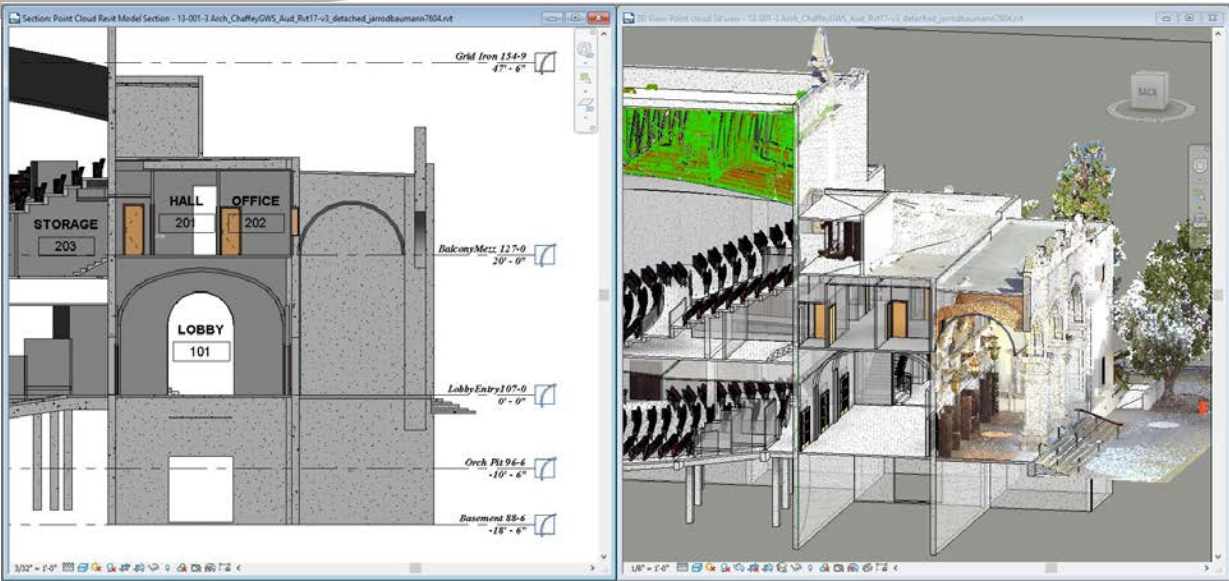
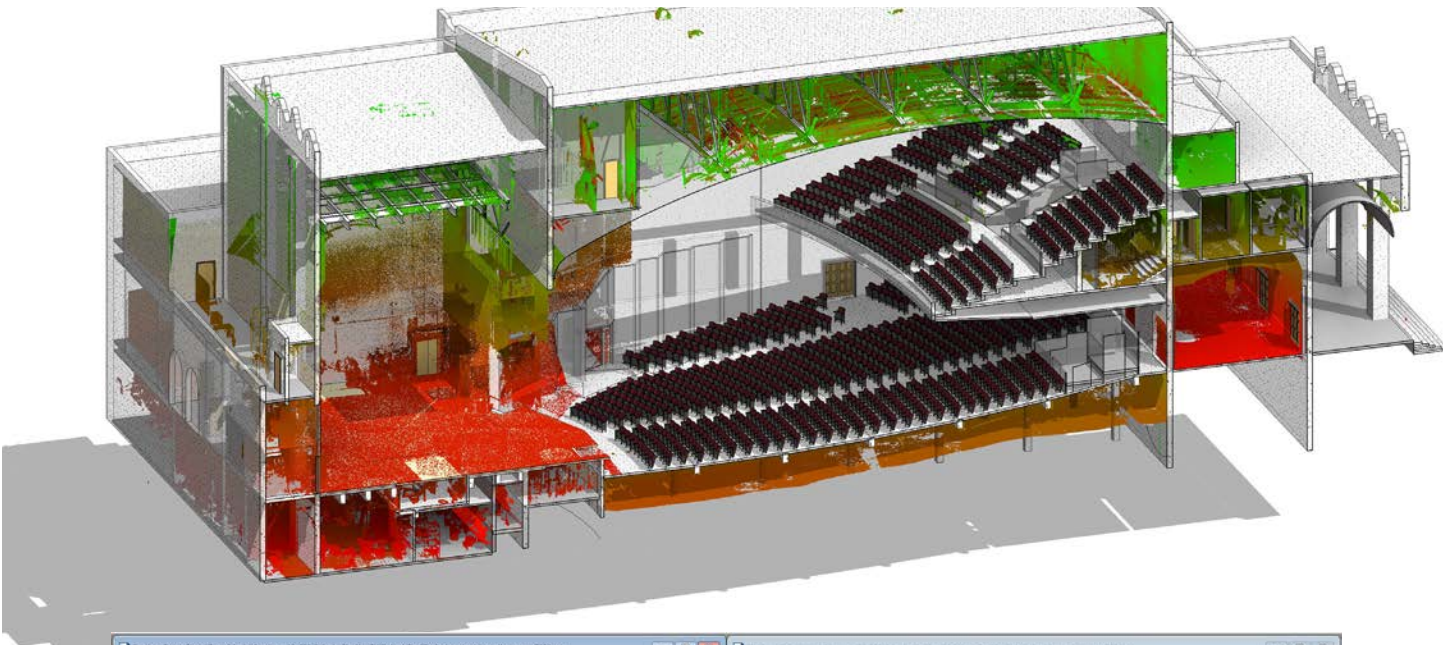
The first significant challenge to overcome was the lack of accurate as-built drawings for the structure. The complexity of the building required a sophisticated approach to capture accurate dimensions without significant delay.



Building Information Modeling

Early in design, Tilden-Coil solved this challenge by utilizing its in-house BIM (Building Information Modeling) team and 3D laser scanning equipment. The BIM team performed 215 scans from the 4 foot crawl space to the attic and everything in-between. Over the course of only 4 days, our team completed the onsite scanning process. The as-built architectural and structural 3D models were produced and provided to the design team in only 50% of the time expected to complete the task, allowing the architect to advance their design with better information and without delay.

The building information model produced by the laser scan was also utilized by Tilden-Coil for trade coordination throughout preconstruction and construction.



The original auditorium was constructed with poured in place concrete around structural steel. We engaged Cano Architecture Concrete Repair, a historical concrete restoration company, to address the cracked and chipped concrete that occurred over the building's 80+ year life. A fog coat of lightweight concrete mist was sprayed over the exterior to create a new, uniform finish.

A new catwalk, self-supporting and independent of the roof structure, was added to the scope of work as construction began. The Tilden-Coil team met the challenge to incorporate the catwalk construction within the original construction schedule. Steel fabrication and installation of the catwalk grid was



compressed to 75 days for the multiple 110 foot long, three foot wide grid structure. The catwalk was lowered in pieces via crane through a hole in the roof. It was then assembled on an interior scaffold platform and raised into place with two cranes.

Safe abatement of existing hazardous material required the removal of the original hand painted elliptical ceiling. Tilden-Coil laser scanned the ceiling mural prior to demolition so that it could be precisely replicated. The 12,000 square foot mural was then recreated by twelve artists who simultaneously painted the refurbished ceiling using a pounced method made of pricked holes in the ceiling and a chalked rag for outlining. A lead artist orchestrated the connection among the twelve artists' work over the 45 days of painting.





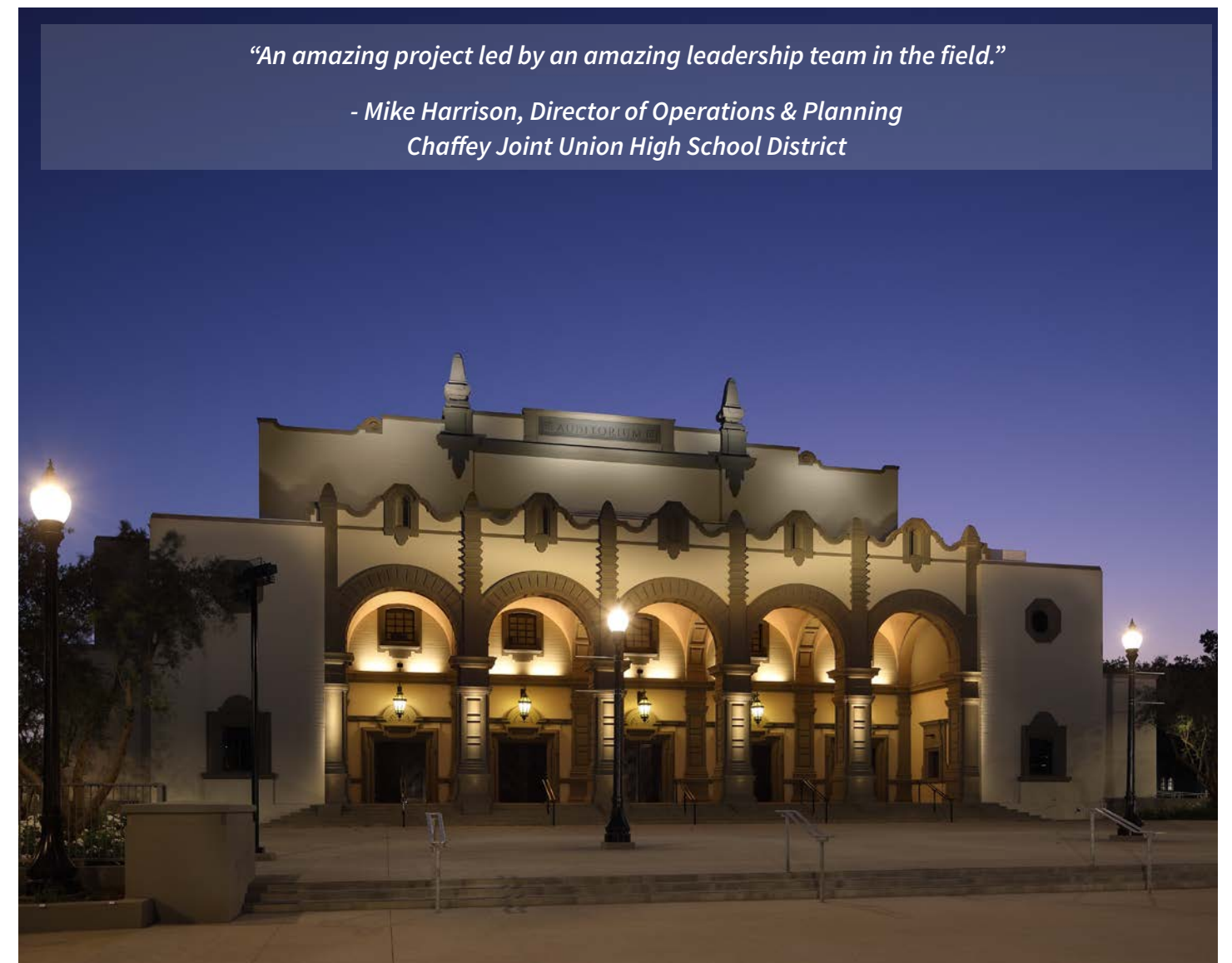
Partners

Great accomplishments require great partnerships! Tilden-Coil recognizes those exceptional subcontractors who played a major role in completing this monumental project:

- ACT
- Adkan Engineering
- Air West Mechanical Construction, Inc.
- Anderson Charnesky Structural Steel, Inc.
- Best Contracting Services, Inc.
- Brickley Environmental
- Burgess Moving & Storage Co.
- Cano Architecture Concrete Repair Crew, Inc.
- Diamond Environmental Services, LLC
- Donald M. Hoover Company
- Enko Systems
- Evergreen Architectural Arts, Inc.
- Floored Tile and Stone
- Infinity Drywall Contracting
- Inland Building Construction Companies, Inc.
- J.G. Tate Fire Protection
- KAR Construction, Inc.
- Kretschmar & Smith, Inc.
- Mike Cox Electric, Inc.
- Netronix Integration
- Rancho Pacific Electric, Inc.
- Rivco Coatings, Inc.
- River City Testing
- Safeway Services, LLC
- Sierra School Equipment Company
- Top End Terrazzo
- T.Y.R., Inc.
- Valley Pipeline Services, Inc.
- Velocity Glazing, Inc.
- Verne's Plumbing, Inc.

“An amazing project led by an amazing leadership team in the field.”

*- Mike Harrison, Director of Operations & Planning
Chaffey Joint Union High School District*





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