

# Devenney Group Ltd., Architects

e-SPECS BIM Solutions Team partners with the Devenney Group to provide integrated specifications as a member of the Integrated Project Delivery team for the Sutter Medical Center Castro Valley project.

**e-SPECS®**  
Success Story

## OVERVIEW

As a premier architectural firm with nearly 50 years of experience, **Devenney Group Ltd., Architects** is 100% dedicated to healthcare facilities design. They have recently been named one of the "Top 100 Firms" by Modern Healthcare and they are widely recognized as innovative leaders in the use of Revit and Building Information Modeling, Leadership in Energy and Environmental Design, Lean Design Principles, and Integrated Project Delivery Methodologies.

**"The e-SPECS technology and BIM Solutions Team helped us meet a very demanding schedule with timely delivery of quality submissions."**

James W. Mobley, AIA, COO/Principal  
Devenney Group Ltd., Architects

## CHALLENGE

Devenney had been selected by **Sutter Health**, a leading non-profit health care provider, as the principal architects for their new \$320m medical center in Castro Valley, CA. Key project goals were to design and deliver a facility of the highest quality with an accelerated completion target date that was at least 30% faster than a conventional schedule, for no more than the target cost of a conventional schedule, and to accomplish this as part of an Integrated Project Delivery team that included **Capital Engineering, DPR Construction, The Engineering Enterprise, Ghafari Associates, J.W. McClenahan, Morrow Meadows, Superior Air Handling, TMAD/Taylor & Gaines, Transbay Fire** and over a dozen other engineering and consulting firms. The project was also to be one of the first to use California's Office of Statewide Health Planning & Development (OSHPD) Phased Plan Reviews to accelerate permitting adding additional coordination demands.

Technology was to play an important role, particularly the extensive use of BIM. Revit Architecture was to be the



*Using e-SPECS Online and virtual access to the Devenney Group's Revit models, the e-SPECS BIM Solutions Team was fully integrated with the design team to prepare the project specifications and keynotes coordinated with the models for the Sutter Medical Center.*

principal design application with a range of other applications depending on the discipline, with many of the models to be developed collaboratively. Reuse of model information for downstream processes was a key management goal, as was a need for real-time access to all project information by all members of the IPD team.

While Devenney had extensive experience with BIM applications, estimating tools, project management systems and other technology solutions, they had little experience with advanced solutions for managing the constructions specifications. They needed a team approach to integrating the entire extended team in the development, review and approval of the products and specifications. It was imperative to get everyone integrated into the specification project at the earliest possible time as the OSHPD rolling review process was going to require early and frequent construction document submissions. Furthermore, given the time constraints and the dynamic nature of the design process, it was important to have some assurances that the specifications were tracking the model designs consistently. The conventional word processing approach to this challenge was not an option.

## SOLUTION

Devenney found the answers with the **e-SPECS BIM Solutions Team**. The

BIM Solutions Team provides remote specification management and model integration solutions combining its **e-SPECS Specification Management Systems** with its team of professional specifiers, BIM integration specialists, document administrators and technical support staff. e-SPECS provides automated integration to Revit and AutoCAD based applications and ensures that the models, drawings and specifications remain in sync throughout the project lifecycle.

With its e-SPECS technology, the Solutions Team acts as an integrated part of the design team, combining technology and experience to provide high quality, cost effective remote specification management. They have completed projects for hundreds of customers across the country and beyond, including many medical facilities in California regulated by OSHPD, which was an ideal fit for Devenney's Sutter project.

## RESULTS

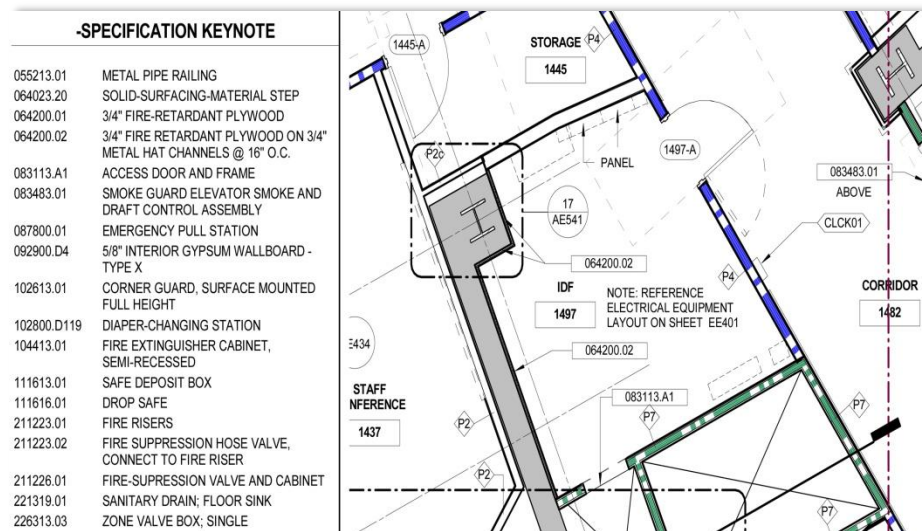
The e-SPECS BIM Solutions Team was responsible for developing the architectural specifications, coordinating the engineering and other consultant specifications, and integrating them into the consolidated project manual. In order to have the specification project instantly available to the entire dispersed IPD team with minimal installation effort, the specification

database was set up on InterSpec's cloud-based version of its applications, **e-SPECS Online** (EOL). **EOL** is an installation option where the e-SPECS databases are managed by InterSpec on their servers and the e-SPECS applications can be accessed either through a web browser or the e-SPECS data can be accessed from a locally installed version of e-SPECS. It provides considerable flexibility to dispersed design teams and was particularly beneficial for Sutter's IPD team. To facilitate the development of the

changes to the specs could be readily identified by the e-SPECS specifiers. They were able to ensure that the architectural models and the specifications were tracking well in real time as the designs evolved. The specifiers and the project architects coordinated refinements with markups and project notes. The specifiers were able to generate and assign **coordinated keynotes** that were used on the Revit models. The Devenney design team was provided additional installations of the e-SPECS

modifications online without having to re-import and reformat a section with each subsequent alteration and submission.

To complete the integration of the rest of the IPD team, the contractors, owner's representatives, and other consultants were provided with the **e-SPECS Desktop** application so they could access the project data on the EOL servers to review, redline, and comment on the specifications as required throughout the design lifecycle.



*e-SPECS allowed the BIM Solutions Team to remotely access and manage the integration to the architectural models, including redlining, updates, and keynote and annotation management.*

architectural specifications, Devenney provided Remote Desktop access to the Revit building models so that the e-SPECS team's **Revit Specialists** could manage the links to e-SPECS while the team's **Specifiers** could refine the specification content in collaboration with the project architects. The e-SPECS team installed the e-SPECS for Revit Plug-in Console on the remote workstation and simply pointed the connection to the EOL cloud servers to complete the integration setup. This access allowed the e-SPECS team working from the east coast to have real-time access to the Devenney models on the west coast, eliminating the time consuming, disparate upload/download process. The e-SPECS team was truly integrated into the design process as if they were sitting in the same office. The Remote Desktop access to the BIM models allowed the e-SPECS team to develop the integration to the architectural models as the project proceeded in real time. Any changes to the models that necessitated

for Revit Plug-in Console so that they could review the specifications directly from the Revit models and collaborate with the e-SPECS Specifiers on any required refinements necessitated by design changes. Non-Revit using design members were provided direct access to the project specifications through the **e-SPECS Desktop** application so that they could review and markup the specification as needed and correspond with the e-SPECS team through the project notes facilities.

Project Engineers were given the option to import their specification sections for inclusion in the integrated specification project manual as they were developed and reformatted. This made for consistent header/footer formatting, TOC inclusion, and page formatting with all the other sections in the project created by the e-SPECS document administrators. Once imported, the engineers were also provided markup access to their spec sections on EOL so that they could make minor

The e-SPECS document administrators coordinated the project manual integration and publication to comply with the frequent submissions demanded by the OSHPD Phased Plan Review process. With all the specifications incorporated into the master projects, the e-SPECS document administration team was able to provide timely publications of the consolidated project manual to fulfill the demands of the OSHPD approval schedule, at least nine submissions in total. The administration costs of this alone would be beyond the budget if all the various sections from the various design disciplines had to be accumulated, compiled with consistent H&F, TOC, inter-sections numbering checking, etc. With e-SPECS' collaboration structure, this was reduced to a manageable and inexpensive process.

All specifications submissions were delivered **on time** and **on budget** and able to meet the demanding project schedule. In addition, with detailed integration to the Revit elements having been established in this project, all subsequent projects in which Devenney uses those family elements will already be fully specified, saving Devenney additional time and money on subsequent projects.

#### FOR MORE INFORMATION

To learn more about the e-SPECS family of products, contact your local e-SPECS Solutions Provider or call 1-888-50-SPECS. To read more customer success stories and view on-line demos, visit: [www.e-SPECS.com](http://www.e-SPECS.com).

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