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PROFESSIONAL COST ESTIMATING

Statement of Qualifications

Updated August 2023

An aerial photograph of a lush, green forested area. A road or path winds through the trees, and a body of water is visible in the lower right corner. The sky is overcast and grey.

“ JLD Cost Consulting managed the budget and project completion for a Federal Navy Project, and estimated changes in accordance with Federal standards. JLD was extremely honest, fair, and always displayed a willingness to find a solution that would work for everyone. This professionalism, integrity, and technical knowledge would be a benefit to any organization.”

PAUL WEYANT, U.S. NAVY, CIVIL ENGINEER CORPS

JLD Cost Consulting

Firm Profile

JLD Cost Consulting is a well-established cost consulting firm serving project owners and design teams in the Pacific Northwest and beyond. With offices in Portland, Seattle, and Bend, JLD's project footprint reaches across the region. Founded in 2011 with the purpose of delivering high quality and accurate estimates to clients, JLD is focused on maximizing value, reducing project risk, and building confidence, value and quality in construction projects. JLD specializes in:

- **Cost Estimating**
- **Cost Control**
- **Value Engineering**
- **Life Cycle Costing**
- **Constructibility**

The firm's professional staff brings a diverse skillset of expertise in construction, engineering, architecture, and landscape architecture. This collective knowledge allows the firm to serve a variety of clients and projects.

JLD serves public agencies and multi-billion-dollar publicly held companies (both domestic and international), as well as some of the top design firms in the U.S. and abroad. JLD's project portfolio is diverse, including public works facilities, fire stations, transportation project, K-12 schools and athletic facilities, higher education facilities, public parks, waterfront developments, mixed-use and affordable housing developments, hospitals, high-tech



cleanrooms, recreation and entertainment facilities, and projects requiring historic preservation. This diversified portfolio equips JLD with holistic expertise in cost estimating.

SMALL BUSINESS CERTIFICATIONS

- State of Oregon, **Emerging Small Business** Certified: ESB #9477
- King County, **Small Contractor and Supplier** Certified: SCS #2225
- COBID Certified

SELECTED EXPERIENCE

JLD has provided cost estimating services throughout the Pacific Northwest and beyond. Our territory of projects and array of experience covers nearly every corner of the country and project type—from the nation's first LEED-Certified tea manufacturing facility in Eugene to the largest capital project in the history of Seattle-Tacoma International airport.

This wide spectrum of experience allows staff to draw on cost-saving solutions and value-added opportunities from a variety of project types, allowing each project to inform another.

- CIVIC/PUBLIC WORKS
- PORTS/WATERFRONT
- TRANSPORTATION
- INDUSTRIAL
- PARKS/RECREATION
- OFFICE/RETAIL
- ENTERTAINMENT
- EDUCATION
- HEALTHCARE
- MIXED-USE/RESIDENTIAL
- INFRASTRUCTURE
- HISTORIC



UNION PACIFIC RAILROAD: We will be researching and delivering cost estimates to Union Pacific Railroad for the Bailey Yard Industrial Wastewater System in North Platte, Nebraska. While we will always retain our Pacific NW roots, it is exciting to continue expanding as a nationally recognized firm in the field of construction cost estimating.



MOJAVE AIR & SPACE PORT - Runway Rehabilitation at Mojave Air & Space

JLD Cost Consulting had the privilege of partnering with Mojave Air and Space Port on this significant runway rehabilitation project. To accommodate a larger spectrum of aircraft, this ambitious project involved expanding the main 150-foot runway to a 200-foot runway. This mission-critical task required our expert services in cost estimating and value engineering.

A key element of JLD's estimate for this project was our analysis of the labor market in Kern County. By accurately establishing those rates, factoring in union and non-union work, then comparing them with the project schedule, we were able to provide the Port with an accurate picture of the cost of the project.

Mojave Air and Space Port required a targeted estimate of a part of the project not yet financed by grant funding. Our subsequent research and cost estimate gave the Port the data they needed to apply for the additional funds.

The runway rehabilitation was a complex project, entailing the careful and efficient allocation of resources to ensure cost-effectiveness and the successful acquisition of grant funding for MASP. The broad scope of the project, coupled with its technical demands and the unique challenges associated with construction in a desert climate, required an in-depth understanding of project cost estimation and resource management and it exemplifies the work we do and the value we offer our clients.

"JLD Consulting did a great job - they responded immediately to our inquiry about performing an independent third-party cost estimate for a federal grant, and when we gave the go-ahead they got started right away. They also ended up finishing way ahead of schedule, providing us with a comprehensive final package."

Mojave Air & Space Port



airport

KING COUNTY INTERNATIONAL AIRPORT - Runway 14R-32L Rehabilitation & Lighting

King County International Airport approached JLD Cost Consulting to establish a detailed cost estimate for the Rehabilitation and Lighting of Runway 14R-32L. The scope of work included:

- Entire Airfield Utility Improvement
- Repaving of the entire runway, requiring over 150,000 tons of asphalt
- Replacement of existing lighting system
- Conceptual improvements to storm water drainage system
- Conceptual improvements to electrical and lighting systems

Given the magnitude of paving involved in the project, it was essential for JLD to conduct detailed research on local pricing for the materials needed for the runway renovation. To establish financial feasibility for the project, finding the best price for 150,000 tons of asphalt was of paramount importance. Moreover, this example of Value Engineering identified an opportunity for

cost savings without compromising the project's quality, providing additional value to our client. Ultimately, we identified the lowest overall cost for asphalt and gave near-future estimates on cost escalation to help inform decision making.

This project highlights JLD's commitment to providing timely, precise, and reliable cost estimate services tailored to the unique needs of our clients. Through this on-call, we look forward to helping Palm Springs International Airport achieve project objectives and grant funding requirements with the same rigorous approach to cost estimation that we provided to King County International Airport.

"JLD Cost Consulting provided cost estimating services to King County International Airport/ Boeing Field for an upcoming project and throughout our experience with them they were highly knowledgeable, experienced, and great to work with. When questions or comments arose they were quick to respond and make sure the issue was resolved before moving on."

**Eric Miller, Capitol Project Manager,
King County International Airport**



library

DESCHUTES COUNTY LIBRARY BOND PROJECT

Deschutes Public Library. JLD was recently awarded the cost-estimating scope of work for this \$250 million bond, which funds new construction and renovation projects for libraries across Deschutes County. JLD is sought out by owners and design teams for projects that demand responsiveness to multiple client and user groups and withstand exceptional public scrutiny. Projects for the bond have so far included:

New Construction

- Central Library Conceptual - \$92,654,426
- Stevens Ranch Library - \$83,005,989
- Redmond Library - \$33,002,162

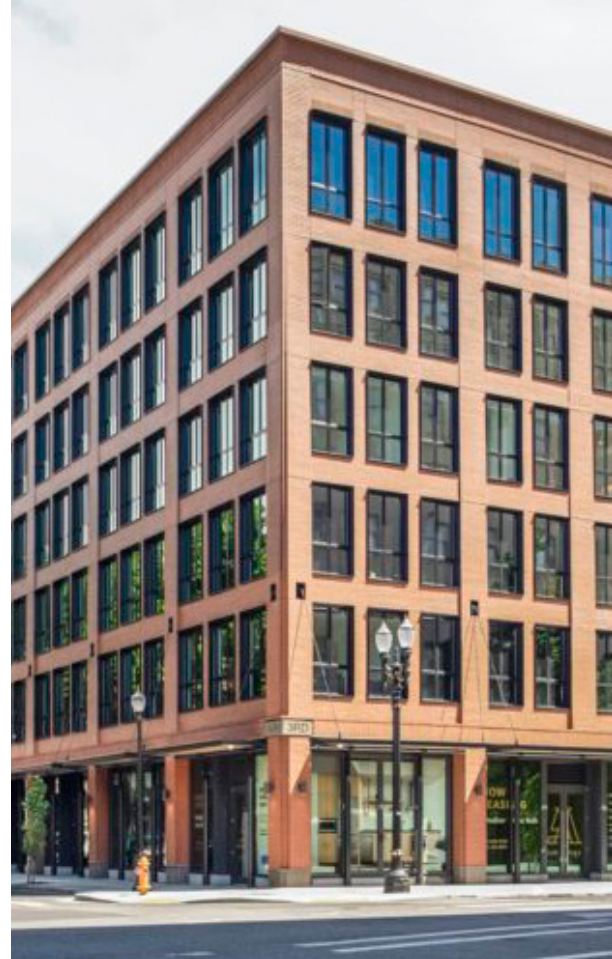
Renovation

- Sisters Library - \$2,694,712
- La Pine Library - \$2,980,379
- Sun River Library - \$2,656,699

We have provided project estimates for Schematic and Design Development phases at 50%, 90%, and 100% and an estimate for the Construction Design phase at 50%.

At the conclusion of each project, we conducted full reconciliations with the contractors to assess the true costs. This provided Deschutes County with a detailed understanding of how their resources were utilized by vendors in the construction process, and a clearer financial picture of the progress made on the county's libraries relative to the remaining bond resources.





Architectural rendering of the 230 Ash Apartments

multifamily/affordable housing

230 Ash Apartments

PORTLAND, OREGON

230 Ash is a six-story multiuse mixed-income housing and retail building in Portland's historic Skidmore/Old Town Historic District. It is the first of 11 new buildings planned for the ambitious Ankeny Blocks project, which represents the City of Portland's ongoing effort to revitalize the district and provide more affordable housing in the downtown core.

JLD developed detailed cost estimates and provided value engineering recommendations. JLD developed and integrated 3D models into these estimates, clearly tying cost to function and demonstrating the impact each element has on cost. JLD was successfully able to identify various discrepancies in the existing project documents, including line item omissions and a misinterpretation of the geotechnical report. Overall, JLD identified

almost \$1 million in savings for the owner, allowing for a reinvestment of that capital into energy efficiency improvements and higher end finishes to be installed in each unit, increasing the overall project value.

The project received a DeMuro Award from Restore Oregon in 2020, as well as 1st Place in the Multifamily/New Construction category at the Daily Journal of Commerce's Top Project Awards in 2021. The project achieved LEED Platinum certification.

SIZE: 123,000 SF / 133 units

SCOPE: Cost estimates; value engineering

CLIENT: Downtown Development Group

COMPLETED: 2020



The new Fleet services Building at Bonneville Power Administration's Ross Complex in Vancouver, WA

public works

Bonneville Power Administration, Ross Complex

VANCOUVER, WASHINGTON

JLD provided cost estimating and related services to Bonneville Power Administration for extensive renovations across several buildings at their Ross Complex facility in Vancouver, Washington. This project had an initial estimated construction cost of \$40 million; JLD identified nearly \$8 million in potential cost savings for this project, reducing the final project cost to \$32.2 million. These savings were achieved without cutting project scope, through recommendations such as a condensed project schedule that reduced labor costs.

The project included a 36,000 SF fleet services building, a secondary 7,500 SF Bronto building, civil site improvements, and mechanical upgrades. The new fleet services building houses BPA's fleet administration division including service bays, wash and work stations, a conference

room, break room, and training facility. JLD's goals were to shorten the project schedule, enhance cost control, improve risk identification and mitigation, and to identify and manage construction project risks. JLD worked closely with the project team to reconcile cost discrepancies and to assist in understanding the project's scope of work. **JLD's estimate came out to be within 0.82% of the final project cost.** This project was completed in 2021, and received LEED Gold certification.

SIZE: 43,500 SF

SCOPE: Cost estimating; consulting

CLIENT: Bonneville Power Administration

COMPLETED: April 2021



A classroom at Vancouver Public Schools' new iTech Preparatory School

k-12 education

iTech Preparatory School

VANCOUVER, WA

JLD provided cost estimating, value engineering, and related cost consulting services to Vancouver Public Schools for the development of their new, \$37.7 million, STEM-focus school serving grades 6 through 12. The 3-story school building features classrooms, laboratories, art studios, media fabrication spaces, and a unique indoor turf fitness field allowing for robust physical education opportunities throughout the school year.

Funded by a 2017 bond measure, the school provides STEM-focused education for students across Vancouver School District. The school is located immediately adjacent to the Washington State University-Vancouver campus, and the two institutions have partnered to offer early college options to high schoolers at iTech Prep.

This unique education project required JLD to leverage experience in various market sectors in order to provide reliable cost estimates. JLD's wide range of experience in educational facilities, mechanical systems, athletic fields, and other disciplines enabled JLD to provide project based recommendations to reduce costs without sacrificing function. This project was completed in 2020.

SIZE: 80,000 SF

SCOPE: Cost estimating, value engineering

CLIENT: LSW Architects

COMPLETED: 2020



Exterior view of Veterans Memorial Coliseum

civic

Veterans Memorial Coliseum

PORTLAND, OREGON

Originally constructed in 1960 and listed on the National Register of Historic Places, the Veterans Memorial Coliseum is one of the most iconic buildings in Portland. The 197,000-square foot arena and events center was the original home of the NBA's Portland Trail Blazers and currently serves as home of the WHL's Portland Winterhawks. The arena hosts several concerts, trade shows, and exhibitions as well.

JLD was awarded the cost estimating scope of the City of Portland's \$80 million reinvestment project at the Coliseum. The project includes a comprehensive renovation of the building's mechanical systems, the installation of new curtain walls, the renovation of food and beverage vendor stations, new bleachers, structural improvements, and more. Due to the historic status of the building, all renovations

must be in accordance with historic preservation guidelines.

JLD's work on this project demonstrates the firm's ability to work on capital projects with large scopes. While this project has a large budget, it is still important to control costs and ensure that money is being spent wisely. JLD is working closely with the City of Portland, the design team, and the general contractor to ensure that the value of the city's investment is maximized without sacrificing function. This project is ongoing.

SIZE: 197,000 SF

SCOPE: Cost estimates; value engineering

CLIENT: Perkins + Will

COMPLETED: Ongoing



Streetside view of Oregon Institute of Technology's Klamath Falls campus

higher education

Oregon Institute of Technology, Boivin Hall

KLAMATH FALLS, OREGON

JLD provided cost estimating services for the renovation and seismic retrofit of Oregon Tech's Boivin Hall, located at their flagship campus in Klamath Falls, OR. This 47,000 SF facility was originally constructed in 1976, and houses learning spaces and offices essential to the institution. These include several classrooms, faculty offices, a student support and retention center, and various student laboratories.

The project includes a complete overhaul of the existing building that will culminate in what is essentially a new building, keeping only sections of the existing roof and structural support columns. The new, high-tech science facility will also receive a seismic retrofit and repairs to the existing foundation. Additionally, this project includes several site improvements designed to enhance the function

and longevity of the building, including landscaping, sidewalks, transportation, and ADA accessibility improvements.

During the schematic/design phase of the project, JLD utilized 3D-modeling technology to gain a robust understanding of the project and to produce a comprehensive cost estimate for the project. The project has a projected completion date of December 2022.

SIZE: 180,000 SF

SCOPE: Cost estimating; project auditing

CLIENT: TriMet

COMPLETED: Ongoing; projected 2022



Rendering of TriMet's renovated Powell Garage facility

transportation

TriMet, Powell Garage

PORTLAND, OREGON

Originally built in 1976 as a temporary facility, TriMet's Powell Garage has remained in continuous operation in order to meet sustained public need. Now in need of significant upgrades, TriMet approached JLD to help control costs for this \$133 million renovation. The scope of the renovation included building expansion and renovation, new fueling and washing stations, parking surface re-pavement, various site improvements, and more. Essentially, the facility was to receive a complete overhaul.

JLD estimated the costs for the project, which was already under construction, while the design of the building was still in progress. Throughout the lifespan of the project, JLD produced over 50 individual cost estimate reports for various change orders. JLD's estimates captured all of the

project's minutiae, including pricing for rigid conduit down to the individual fittings. JLD performed extensive market research to ensure that the estimate reflected fair market rates for materials and labor.

JLD secured an average cost savings of 20% overall, and upwards of 60% on some items. This resulted in over \$3.6 million in potential savings for TriMet, helping the agency to better understand the project's scope and requirements and realize the best value for their investment.

SIZE: 180,000 SF

SCOPE: Cost estimating; project auditing

CLIENT: TriMet

COMPLETED: Ongoing; projected 2022



Historic Caretaker's House building at Lewis and Clark State Park in Winlock, WA

historic preservation

Washington State Parks Historic Preservation Projects

VARIOUS LOCATIONS, WASHINGTON

JLD performed condition analysis studies and provided cost estimating services to Washington State Parks for several historic preservation projects across the state. These included projects at:

- **Beacon Rock State Park**
(Stevenson, WA)
- **Millersylvania State Park**
(Olympia, WA)
- **Lewis and Clark State Park**
(Winlock, WA)
- **Larrabee State Park**
(Bellingham, WA)
- **Twanoh State Park**
(Union, WA)
- **Moran State Park**
(Olga, WA)

The scope of these estimates covered a number of historic park structures built by the Civilian Conservation Corps, as well as

other buildings from the 1930s and 1940s. In total, JLD's estimates covered 32 buildings, ranging in size from 140 SF to 2,800 SF.

These buildings each required substantial repairs for historic preservation. JLD's work included a review of the original construction documents for each building, ensuring that the repairs did not compromise their historic nature. JLD's work was crucial in ensuring that these buildings remain safe, intact, and in-operation to be enjoyed by future generations.

SIZE: 32 historic buildings

SCOPE: Cost estimating; condition analysis

CLIENT: Washington State Parks

COMPLETED: 2017



The newly renovated swimming pool, located at the Peninsula Park Community Center in Portland

parks and recreation

Peninsula Park Community Center Swimming Pool

VARIOUS LOCATIONS, WASHINGTON

Originally built in 1913, the Peninsula Park Community Center is one of the most beloved public institutions in the North Portland community. JLD provided cost estimating and related cost consulting services for upgrades to the swimming pool and community center building - a major \$4.7 million renovation funded by the 2014 Parks Replacement Bond and additional public funding.

Upgrades to the swimming pool were extensive, and achieved a goal of allowing more users to enjoy the pool each summer. The pool's footprint was expanded, increasing total capacity from 188 to 296 swimmers. An in-pool wall was installed to separate the deep and shallow ends of the pool, allowing for undisturbed lap swimming, swim lessons,

and free swim simultaneously. A wheelchair lift was installed in the shallow end of the pool, bringing the facility in-line with ADA Accessibility standards. This complemented a new elevator that was installed in the community center, enabling people with disabilities to access the basement-level classrooms and amenities of the building.

JLD provided comprehensive cost estimates for this project throughout all phases of its development. This project was completed in 2020.

SIZE: 21,190 SF

SCOPE: Cost estimating

CLIENT: Portland Parks and Recreation

COMPLETED: 2020

Additional Experience

public works

- City of Florence Public Works Campus, Florence, OR
- City of Wilsonville Public Works Campus, Wilsonville, OR
- Oregon City Operations Complex, Oregon City, OR
- Tualatin City Services Center, Tualatin, OR
- Columbia Boulevard Wastewater Treatment Plant, Portland, OR
- Oregon Metro, South Transfer Station Site Analysis Study, Clackamas, OR



Florence Public Works. The City of Florence's new public works campus is just one of several such facilities estimated by JLD, whose estimate for this project **came within 1% of the final project cost.**

public safety

- Stevens County Fire Stations, Stevens County, WA
- Tualatin Valley Fire & Rescue Stations, Washington County, OR
- Jackson County Fire District, Scenic Avenue Station, Central Point, OR
- Portland Police Bureau Training Complex, Portland, OR
- Washington County Public Safety Training Center, Hillsboro, OR
- City of Toledo, Police Station Feasibility Study, Toledo, OR

civic & municipal

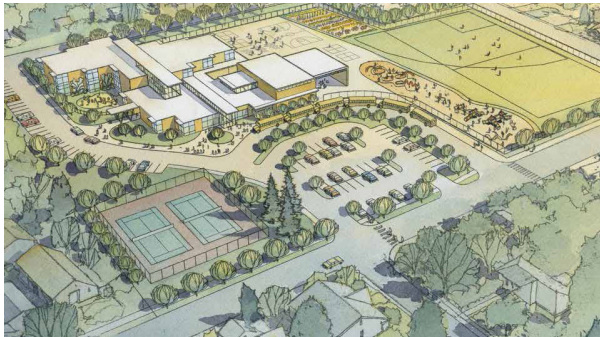
- Port of Vancouver, Terminal 1 Redevelopment, Vancouver, WA
- Providence Park ADA Improvements, Portland, OR
- City of Portland, City Hall 30-Year Plan, Portland, OR
- Umatilla Business Center, Umatilla, OR



Jackson County Fire District #3, Scenic Avenue Station JLD's portfolio of successful projects includes several public safety projects, including this new 10,000 SF fire station located in Central Point, OR. JLD's estimate **came within 3.4% of the final project cost.**

k-12 education

- Garfield Elementary School, Corvallis, OR
- Lincoln Elementary School, Corvallis, OR
- Bessie Coleman Elementary School, Corvallis, OR
- Condon Grade School, Condon, OR
- Raleigh Hills K-12 School, Beaverton, OR
- Sacajawea Elementary School Value Study, Vancouver, WA
- Grant High School Historic Study, Portland, OR



Corvallis School District. JLD provided cost estimating for several bond-funded new construction and renovation projects for Corvallis School District, including the replacement of Garfield Elementary School (rendered above).



Condon Grade School. JLD worked alongside Steele Associates Architects on this new, 17,000 SF elementary school located in Central Oregon.

higher education

- Oregon State University, Graduate Student Housing, Corvallis, OR
- Eastern Oregon University, Inlow Hall Renovation, La Grande, OR
- Evergreen State College, Campus Decarbonization Study, Olympia, WA
- Portland State University, Fourth Avenue Building Generator Upgrades, Portland, OR
- Clackamas Community College, Randall Athletics Complex, Oregon City, OR
- Clackamas Community College, Barlow Hall, Oregon City, OR



Inlow Hall. JLD was recently awarded the cost estimating scope for the renovation of this historic building located at Eastern Oregon University.



Oregon State University Graduate Housing. JLD provided estimating and value engineering for this proposed 95,000 SF graduate student dormitory at Oregon State University, providing 290 units of studio-style apartments for upper-division students.

multifamily housing

- **Beatrice Morrow Apartments, Portland, OR**
- **Hillside Manor, Milwaukie, OR**
- **Parkview at Terwilliger Plaza, Portland, OR**
- **Portland Police Bureau, Training Complex, Portland, OR**
- **Garden View Apartments, Lebanon, OR**
- **Olympia Crest Apartments, Olympia, WA**
- **30 Hudson Yards, New York, NY**



Lake Oswego Recreation & Aquatics Center. JLD provided estimates and crucial cost-motivated design input for this new, state-of-the-art aquatics center located in Lake Oswego, OR.



Couch Park. JLD has estimated parks and recreation projects for clients across the Northwest, with scopes including playground design, sport court and athletic field installation, accessibility improvements, public art installations, and more.



Beatrice Morrow Apartments. JLD provided cost consulting for this innovative mixed-use housing complex in Portland, OR



30 Hudson Yards. JLD contributed to the 30 Hudson Yards development in New York City - one of the largest and most complex real estate development in North American history.

parks and recreation

- **Couch Park Play Area Improvements, Portland, OR**
- **Gilbert Park Play Area Improvements, Portland, OR**
- **Kenton Park Play Area Improvements, Portland, OR**
- **Glenhaven Park Renovation, Portland, OR**
- **Mill Park Renovation, Portland, OR**
- **Mountain View Champions Park Sport Courts, Aloha, OR**
- **Lake Oswego Recreation and Aquatic Center, Lake Oswego, OR**

healthcare

- Mid-Columbia Center for Living, The Dalles, OR
- Mann-Grandstaff Medical Center, Spokane, WA
- Vernonia Senior Care Center, Vernonia, OR

ports & industrial

- Yogi Tea Manufacturing Facility, Eugene, OR
- Intel, Multiple Projects, Hillsboro, OR
- Port of Columbia County, McNulty Industrial Park, St. Helens, OR
- Port of Vancouver Marine Improvements, Vancouver, WA
- Seattle-Tacoma International Airport Concourse Improvements, SeaTac, WA
- Port of Long Beach, Hanjin Grain Export Facility, Long Beach, CA
- Port of Portland, Terminal 6 Rehabilitation, Portland, OR



Veterans Administration, Mann-Grandstaff Medical Center. JLD provided estimating and value engineering to a complex, multi-phased renovation of this regional VA hospital in Spokane, WA.

transportation

- TriMet, Division Transit Project, Portland and Gresham, OR
- TriMet, Columbia Bus Base, Portland, OR
- ODOT, Meachum Maintenance Station, Meachum, OR
- ODOT, Ona Beach Maintenance Station, Seal Rock, OR
- Salem-Keizer School District, Gaffin Road Transportation Center, Salem, OR
- Deschutes County Road Department, Needs Assessment and Master Plan, Redmond, OR



TriMet, Division Transit Project. JLD is providing ongoing estimates and change order review for several transit-related improvements, as part of TriMet's Division Transit Project.



Yogi Tea. JLD estimated a new tea manufacturing facility for Yogi Tea - the first LEED-Certified facility of its kind in the world.

EXPERTISE

Cost Estimating

The cost of operating and maintaining (O&M cost) a building is as important as the initial cost to build it. This is especially true in public projects, where building lifespans can reach 50 years or more. Whether it is a new office building, a workplace tenant improvement, roadway modifications, or water resources enhancement, JLD always emphasizes the importance of providing a basis for effective cost benefit analysis, and as early in the design process as possible.

JLD's cost estimates establish functional benchmarks for the project team. From room finish standards to high-performance equipment for energy conservation and whole life-cycle costs for equipment operation cost benchmarks, the firm's

staff works closely with owners, designers, engineers, and contractors to:

- **Establish cost targets or benchmarks with clear understanding of the scope;**
- **Identify key cost drivers that provide direction during the development process;**
- **Provide constructibility review and share value engineering (VE) opportunities; and**
- **Prepare cost options for material and equipment selection.**

Cost is a reality that determines the feasibility of all projects.

COST REPORTS

JLD's cost reports provide clients with correct, sound, and pragmatically based information to enable unbiased decisions from the whole project team.

Cost Estimate Report Summary

VALUE ENGINEERING

JLD was founded with the mission to maximize the worth of its clients' investments, and demonstrate the value they add in tangible and measurable ways. This includes the quantification of:

- **Savings achieved on the project**
- **Value of risk mitigated**
- **Cost analysis of needs vs wants**

The firm's staff consistently uncover opportunities to lower project costs and add value. Cost savings have been realized in environmental remediation methods; geo-technical and foundation design; reduced structure cost from relocated mechanical equipment; building envelopes; finishes; and multiple best value alternates associated with the project delivery methods and contracts. Many of these individual value engineering (VE) items saved clients several million dollars. The firm is committed to efficiency in design, and adds value in helping clients realize current market rates.

ESCALATION

JLD understands the **commodity indexes**, **Bureau of Labor, Producer Price Index** (PPI) and have thorough knowledge of the **regional labor agreements**, and how to assemble true fully burdened labor costs. Some local products are related to currency exchange rates. Project complexity and duration of project are important considerations to bring into cost estimates, as well.

JLD brings escalation into estimates to accurately estimate the **year of expenditure** (YOE) **project cost**. The firm's detailed approach achieves the most efficient capital improvement for their clients' current and future projects.

PROFESSIONAL AFFILIATIONS

As a professional cost estimating firm, JLD is an active and contributing member of numerous professional organizations. This includes institutions directly related to the cost consulting profession as well as the larger AEC industry.

JLD staff also hold certifications with and serve on local and national industry boards, in addition to holding government-appointed positions.



Life Cycle Cost Analysis Studies

As a supplement to our cost estimates and value engineering services, JLD performs life cycle cost analyses (LCCAs) to ensure that projects are designed and executed with value in mind. In accordance with federal regulations, JLD compares the projected future costs of maintenance and operation for all materials and equipment included in a project, including both monetary and environmental costs. These studies reveal the true cost of project decisions, granting project owners the confidence that they are receiving maximum value for their investment.

Life cycle cost analysis is an important aspect of any construction project. While often overlooked, life cycle cost analyses have the potential to create significant long-term savings for a project. This frees up future capital for additional investments.

Left: a sample from one of JLD's LCCA studies.

Comparison of Present-Value Costs PV Life-Cycle Cost				
	Base Case	Alternative	Savings from Alternative	
Initial Investment Costs:				
Capital Requirements as of Base Date	\$298,033	\$346,345	-\$48,312	
Future Costs:				
Energy Consumption Costs	\$258,281	\$51,469	\$206,812	
Energy Demand Charges	\$0	\$0	\$0	
Energy Utility Rebates	\$0	\$0	\$0	
Water Costs	\$0	\$0	\$0	
Recurring and Non-Recurring OM&R Costs	\$37,500	\$52,500	-\$15,000	
Capital Replacements	\$0	\$0	\$0	
Residual Value at End of Study Period	\$0	\$0	\$0	
Subtotal (for Future Cost Items)	\$295,781	\$103,969	\$191,812	
Total PV Life-Cycle Cost	\$593,814	\$450,314	\$143,500	
Net Savings from Alternative Compared with Base Case				
PV of Non-Investment Savings	\$191,812			
- Increased Total Investment	\$48,312			
Net Savings	\$143,500			
Savings-to-Investment Ratio (SIR)				
SIR =	3.97			
Adjusted Internal Rate of Return				
AIRR =	8.84%			
Payback Period				
Estimated Years to Payback (from beginning of Service Period)				
Simple Payback occurs in year	5			
Discounted Payback occurs in year	6			
Energy Savings Summary				
Energy Savings Summary (in stated units)				
Energy	—Average	Annual	Consumption—	Life-Cycle
Type	Base Case	Alternative	Savings	Savings
Electricity	0.0 kWh	55,675.0 kWh	-55,675.0 kWh	-1,391,684.5 kWh
Natural Gas	14,600.0 Therm	0.0 Therm	14,600.0 Therm	364,950.0 Therm
Energy Savings Summary (in MBtu)				
Energy	—Average	Annual	Consumption—	Life-Cycle
Type	Base Case	Alternative	Savings	Savings
Electricity	0.0 MBtu	190.0 MBtu	-190.0 MBtu	-4,748.6 MBtu
Natural Gas	1,460.0 MBtu	0.0 MBtu	1,460.0 MBtu	36,495.1 MBtu



BPA Ross Complex

JLD performed a series of life cycle cost analyses on behalf of the Bonneville Power Administration, for the extensive renovations to their Ross Maintenance and Operations Complex located in Vancouver, WA. By comparing the life-cycle costs of materials and equipment used in this project, JLD was able to identify opportunities to implement best-value alternatives and save future maintenance and operation costs by nearly 50%. These studies also discovered opportunities to reduce greenhouse gas emissions by 86%.

Constructibility Reviews

In addition to the typical cost estimates and value engineering delivered to clients, JLD is proud to be able to provide consultation on the constructibility of projects. While reviewing design documents, JLD takes note of any challenges or irregularities that may impact the constructibility of a project.

Issues in constructibility can originate from a number of sources. Equipment size, building clearances, existing construction sites, and other factors can all impact the feasibility and construction of a project. Challenges such as these often go unanticipated during project design, and often can delay a project weeks or months—if not years, or forcing the project to be canceled altogether. That's why JLD reviews design documents carefully for irregularities and unaccounted-for conditions to ensure that project owner investments are protected. When identifying challenges to constructibility, JLD develops potential

solutions. When accounted for, constructibility conflicts can often be avoided through proper equipment selection, schedule evaluation, site studies, and other logistical considerations. If JLD encounters a potential issue on a project, the firm will provide direction towards solutions while identifying potential costs associated therewith. JLD's constructibility reviews inspire confidence for project owners and inform further work on the project.



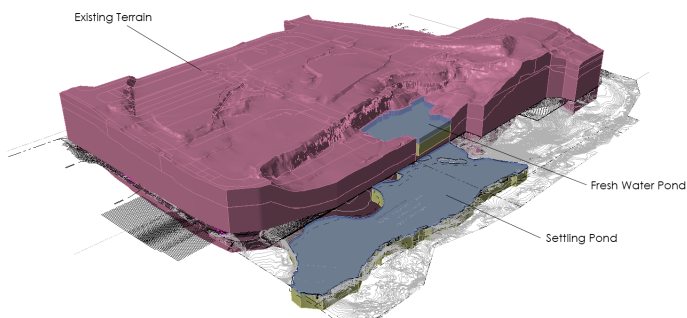
PSU 4th Avenue Building

During a project to upgrade mechanical components of Portland State University's 4th Avenue Building, JLD identified several potential conflicts for constructibility. These primarily consisted of existing construction along 4th Avenue affecting crane placement, and roof clearances constraining the installation of a new medium-voltage generator. JLD identified a preferable location to place a crane with a shorter reach, and modifications to the original construction plan, as solutions to these challenges.

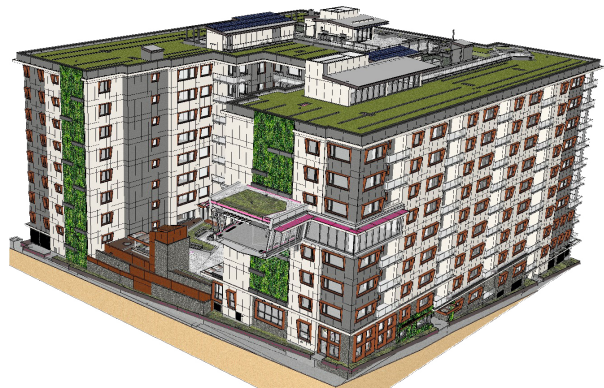
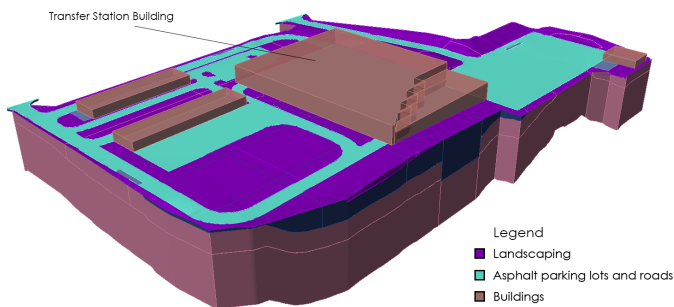
Advanced Technology

JLD is a leader in utilizing advanced estimating tools and methods that have not yet been widely adopted across the industry. While 2D modeling software is in broad use across the industry, it does not take full advantage of technological advancements since the proliferation of computers and 3D imaging. 2D modeling software platforms such as Bluebeam are useful, but do not offer much that cannot be accomplished using paper drawings and a scaled ruler. JLD utilizes the most advanced tools available to develop 3D models based on 2D conceptual drawings. This allows for greater detail when performing estimating take-offs and for a greater familiarity with the project itself. This information is useful not just for estimating, but for the project team at large—the 3D models that JLD develops help project owners and design teams to better understand the project.

Existing Site Jennifer St - Metro South Transfer Station



Proposed Jennifer St Site - Metro South Transfer Station



3D MODELING FOR SITEWORK AND BUILDINGS

Above are examples of 3D models utilized by JLD for two recent projects. On the left are models of sitework for a proposed solid waste transfer station, located on a 26-acre site in Clackamas County. These models depict the existing site and proposed building. On the right is a model

of Parkview at Terwilliger Plaza. Models such as these capture more information than traditional two-dimensional drawings, incorporating all of the knowledge put into the project by the design team. This results in a more efficient workflow for the entire project team, as well as more detailed and accurate cost estimates.

Team



John Drentlaw, LEED AP

John Drentlaw's experience in owner, designer, and general contractor roles gives him the ability to understand the challenges of each party and enhance team collaboration. He is experienced in project management, estimating, cost consulting, risk management, scheduling, and claims. John has managed cost estimating, design, and construction teams on multiple projects ranging in price from \$200K to \$300M. He is well-versed in project site planning and the importance of project estimates that will identify areas to incorporate added value opportunities.



Curt Kolar, CPE

Curt Kolar has provided estimates for bids and budgets, as well as vital cost analyses back-up for owners for over 40 years. Curt captures what is shown and advises on what is not. His track record for material, labor, general conditions, and soft cost pricing has put him within 5% of market values over 90% of the time, leading to more effective contract negotiations. He is inquisitive by nature, and once saved a project owner nearly \$1.5 million by asking a single question. His contributions to project teams include identifying contract irregularities and potential risk exposure language.



Jacqueline Stewart

Jacqueline Stewart brings seven years of experience in project coordination of large and complex projects. This includes serving as project coordinator for Puget Sound Energy's new commercial construction projects; operations administrator for General Dynamics' AT&T Turf project at SeaTac; and project coordinator positions for a commercial contractor and concrete manufacturer. Jacqie is currently inspecting construction projects at SeaTac Airport, including the new, expanded International Arrivals Facility.



Terrea Pope

Terrea Pope is a highly motivated and well-organized person. Terrea has strong personnel skills including performance coaching and customer satisfaction. Terrea is a strong team member that is skilled at performing tasks quickly, correctly, and on-time. Terrea has demonstrated leadership skills throughout her work history and college classes. Terrea is inspecting construction projects at SeaTac Airport, including the new, expanded International Arrivals Facility.

Eli Mandel



Eli has a diverse portfolio of project experience, specializing in mechanical design, heat/fluid systems, landscape architecture, and material estimating. He strives for a deep familiarity with all facets of his projects. He has strong technical and customer service skills, which allow him to develop long-lasting relationships with clients. His precise attention to detail enables him to produce accurate, detailed cost estimates. His combination of education and work experience has prepared him to provide high-quality cost estimates for projects of all types.

Alexei Marin-Cortes, EIT



Alexei brings expertise in sitework, civil engineering, and structural engineering to the JLD team. Born in Colombia, Alexei moved to Washington, DC to pursue a career in the A/E/C industry. He later moved to Portland to pursue his Master's degree. Since then he has worked as a construction estimator for a general contractor and as a structural engineer for a nationwide firm. Alexei takes a holistic approach to his work, letting his experience on prior projects inform his work. He is a creative problem solver who takes initiative in searching for solutions.

Ivy Cherotech Drentlaw



Ivy earned her bachelors degree in Electrical Telecommunications Engineering in Kenya and is currently pursuing her Masters in Electrical Engineering at Portland State University. Ivy takes an environmentally-oriented approach towards electrical estimating and brings in a blend of creativity and attention to detail to the JLD team. Services performed include examining electrical designs to develop MEP cost estimates of for public and privates clients for projects involving waste treatment plants, hydrogen fueling, and industrial buildings.

Sakshi Sharma



Sakshi has been in the construction industry for over 2.5 years and holds diverse experience from having worked on variety of projects ranging from wastewater treatment plants to multifamily and single-family residential communities to sitework and commercial projects. After completing her bachelors from India and experiencing construction industry there, she moved to the US to earn her master's degree in Construction Management degree from Arizona State University. Sakshi will be assisting the JLD team primarily with estimation of MEP services alongside other civil and architectural estimates.



Kevin McElroy

Having graduated from Portland State University two years ago, Kevin now mixes 15 years of contract work experience with 4 years of CAD and GIS modeling, and applies that meticulousness to estimation with JLD. Kevin's contracting experience, including phase I, II, and III environmental site assessments with a local environmental geologist, provide significant insights into constructibility and safety in projects ranging from residential to industrial.



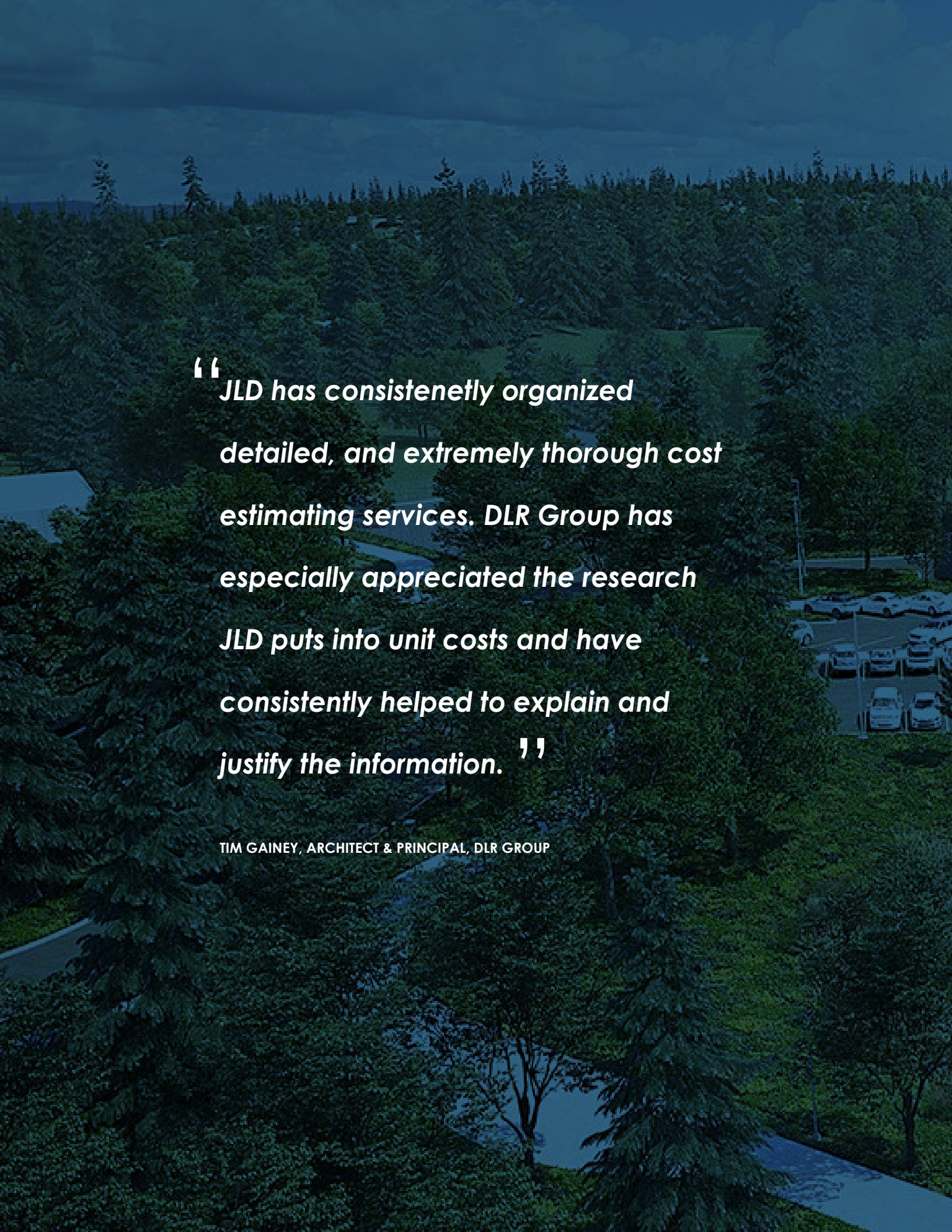
Matisse Stone

Matisse has a strong organizational and creative thinking on how to get the documents sorted in a timely manner. She has many tasks that use time management with determining the importance of each item at that time. Some of her tasks: billing, office upkeep, filing, as well as document control for many projects, make it so that our team is up to date with all the information that is needed to get this project done on time and efficiently.



Walker Faison

Walker holds a BA in English from Portland State University. A natural communicator and storyteller, he handles marketing and copywriting for JLD. He has training as an actor and videographer, as well as diverse experience working in the non-profit sector, professional benefit auctioneering, and healthcare. He takes a relationship based approach to his work and believes in overcoming obstacles through collaboration, transparency, and cooperation.



“JLD has consistently organized detailed, and extremely thorough cost estimating services. DLR Group has especially appreciated the research JLD puts into unit costs and have consistently helped to explain and justify the information.”

TIM GAINEY, ARCHITECT & PRINCIPAL, DLR GROUP



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