**DISTRICT OF METCHOSIN**
**AGENDA**

## FIRE HALL STEERING COMMITTEE MEETING

**December 4, 2024 at 7:00 p.m.**
**Council Chambers**

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**1. Agenda, Additions, Approval**

**2. Introductions, Shayne Cyr, new member**

**3. Presentations**

**4. Public Participation**

**5. Adoption of Minutes**
a) Fire Hall Steering Committee Meeting, May 29, 2024 ..... 1

**6. Business Arising from the Minutes**

**7. Other Business**
a) Firehall Feasibility Study..... 3

**8. Adjournment and next meeting**

**District of Metchosin**

**Minutes**
**Firehall Steering Committee Meeting**
**May 29, 2024 at 7:00 p.m.**
Metchosin Firehall

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**Present**: Scott Henning, Mike Hornick, Brent Donaldson, Steve Malkow, Bruce McCall, Councillors Sharie Epp, Shelly Donaldson, and CAO Bob Payette

The meeting was called to order at 7:01 p.m.

**1. Agenda, Additions and Approval**

**Moved and Seconded** by Brent Donaldson and Scott Henning that the Committee approve the agenda as presented.

**Carried**

**2. Public Participation**

Sarah Anthony: Wants detail on new proposals.

Jennifer Burgis: Referenced discussion on housing from a meeting Tuesday evening. Supports idea of additional housing being associated with new firehall.

Bob Burgis: Potential for provincial grant money a positive. Urged that we move ahead with building a new firehall.

Gillian Meyer: Looking for detail, supportive of all first responders and appreciates the service they offer.

Avril Buck: Feels that additional housing being added to firehall will be a burden on the municipal staffing and will not be a positive for the community.

Eric White: Support offered to make the firehall a reality.

**3. Adoption of Minutes**

**Moved and Seconded** by Brent Donaldson and Steve Malkow that the Committee approve the minutes of the Firehall Steering Committee meeting held on October 3, 2023.

**Carried**

**4. Business Arising from the Minutes**

None.

**5. Reports**

a) Presentation and review of RFP document. Discussion curated by Bob Payette
b) Various amendments recommended and accepted which will be incorporated in the final draft

**Moved and seconded** to accept the RFP with amendments and put it out for fulfilment**.**

**Carried**

**7. Other Business**

**Moved and Seconded** that the District will post invitation to apply to sit on the Firehall Replacement Committee to fill vacancy.

**Carried**

**8. Adjournment and Next Meeting Date**

**Moved and Seconded** that the meeting adjourn at 8:00 p.m.

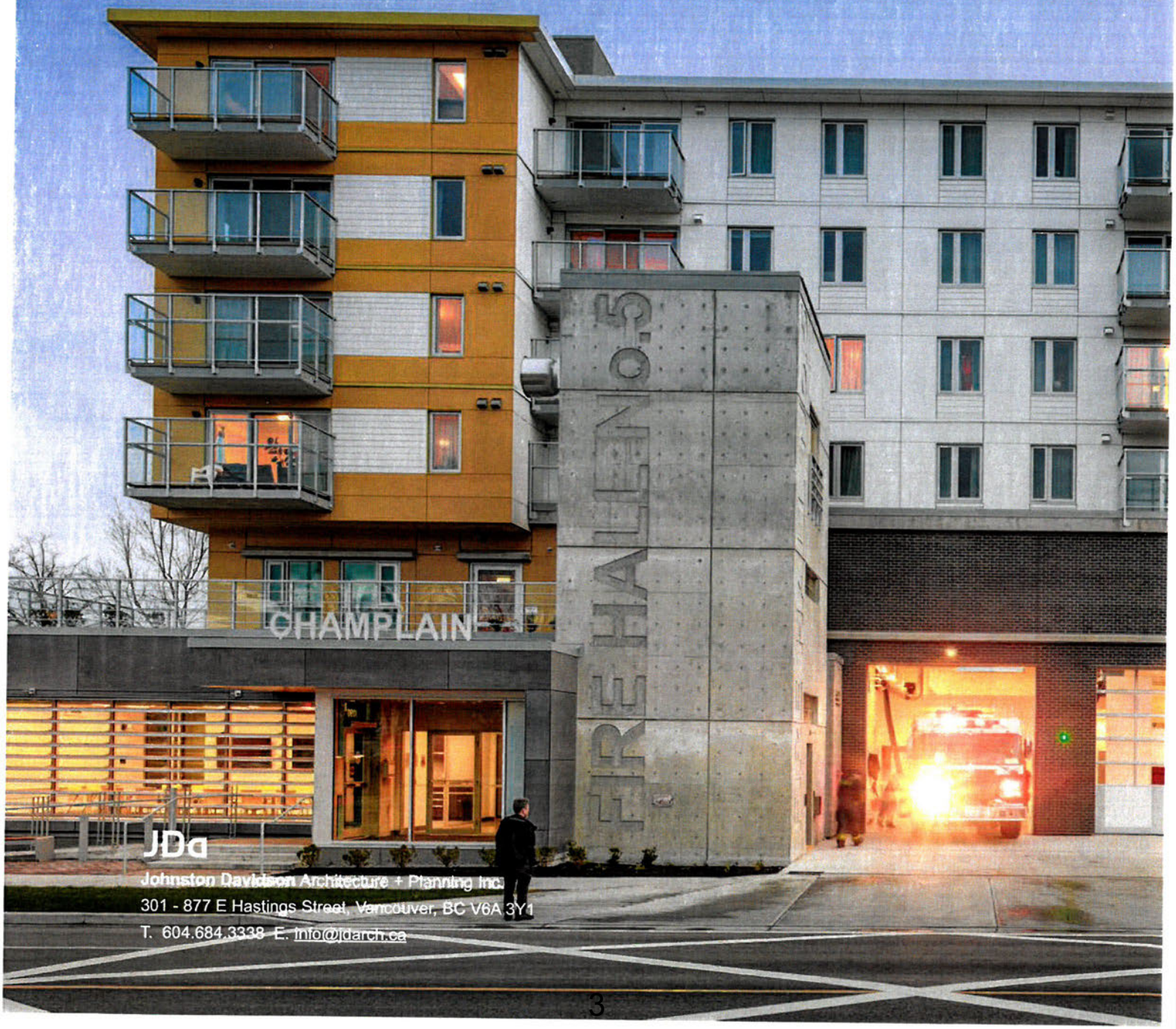
**Carried**

The next meeting will be held on July 10, 2024 7:00 p.m.

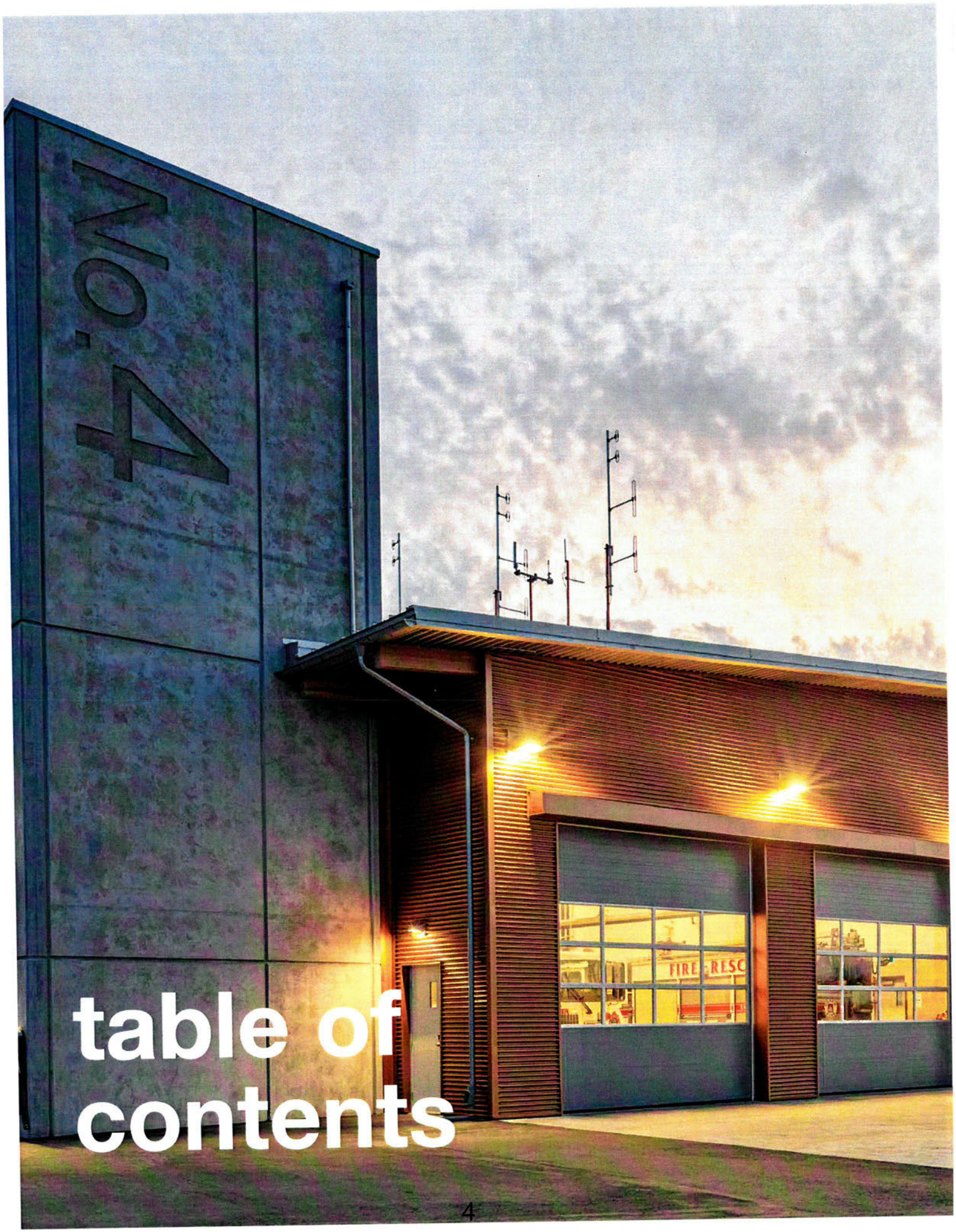
# request for qualifications

# firehall feasibility study

The District of Metchosin
4440 Happy Valley Road,
Victoria, BC V9C 3Z3
June 28, 2024, 3:00 pm PST




JDa
Johnston Davidson Architecture + Planning Inc.
301 - 877 E Hastings Street, Vancouver, BC V6A 3Y1
T. 604.684.3338 E. info@jdarch.ca




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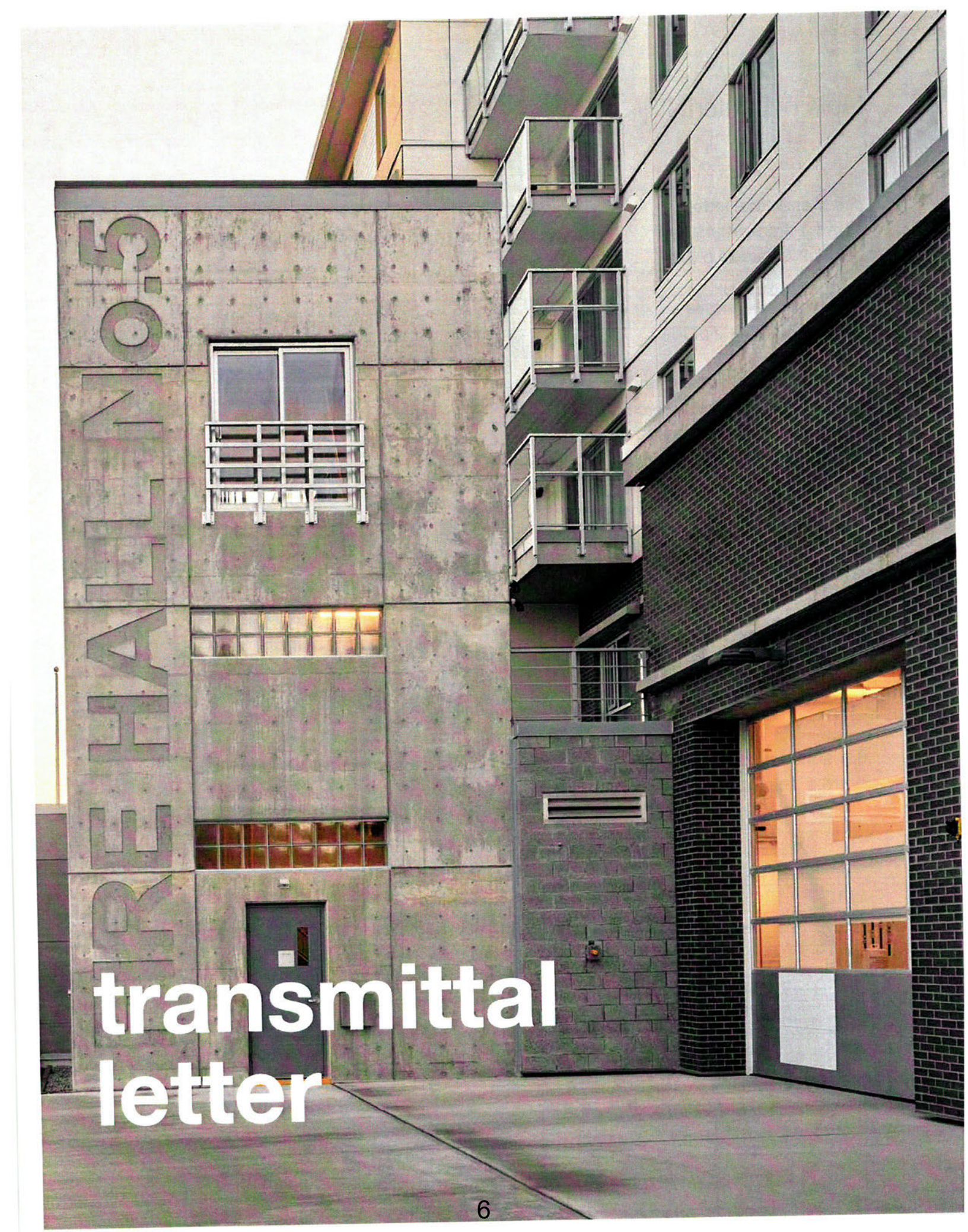
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# transmittal letter

June 28, 2024

**District of Metchosin**
4440 Happy Valley Road
Metchosin, BC
V9C 3Z3

**Re: District of Metchosin -** Firehall Feasibility Study

Dear Stephanie Dunlop,

We are pleased to submit our proposal to the District of Metchosin in response to the Request for Proposal for the firehall feasibility study project. In response to the programmatic requirements and design objective detailed for this project, Johnston Davidson Architecture is prepared to provide protective services design expertise in the development and construction of the co-located project. Our team has completed over 70 fire hall projects across Western Canada in areas and communities similar to that of the District of Metchosin, and as such brings a comprehensive understanding of the needs and services required for this project.

We can confirm our understanding of the project requirements and challenges with a focus on the following objectives:

- Assist the District in long-term infrastructure planning, long-term growth projection requirements, impact of future densification
- Analyze a municipal pulbic safety building vs a stand-alone firehall with an option to embed a District Emergency Operation Center
- Evaluate the potential for integrating housing units within the proposed replacement of firehall
- Provide reasonable options and alternatives for renovating / replacing portions of the existing structure based on current codes and post-disaster requirements
- Evaluate current site
- Explore various methods of construction for the replacement of the firehall

For the life of this project, Principal and Lead Architect Kimberly Johnston will be the designated primary contact between the District of Metchosin and additional stakeholders involved with the project, with Senior Associate, John Botelho as the Design Project Manager and day-to-day contact. We understand the firehall feasiblity study is imperative to providing the community of Metchosin with a modern and effective facility that is designed to post-disaster standards and accommodates the needs of firefighter personnel.

I certify the accuracy of all information in our proposal, and commit our firm to this Request for Proposal. In addition, we can confirm that we have no actual or potential conflicts of interest or existing business relationships with anyone within the community of Metchosin or the District of Metcoshin. We look forward to working with the District of Metchosin's user groups and stakeholders throughout the conceptual design process of this project.

Please do not hesitate to call or email me regarding any questions you may have about our proposal.

Yours Sincerely,



Kimberly Johnston, Architect AIBC, MRAIC, LEED® AP
Principal
t: 604. 684. 3338 e: kim@jdarch.ca

RFP 11-2023 – Fire Hall Feasibility Study

**Submitted to:** **Corporation of the District of Metchosin**

**RFP No.:** **002-2024**

## SUBMISSION CHECKLIST AND FORMAT

*This section is intended as a checklist for proponents assembling their proposal. If your response requires more space than provided, enclose a supplementary page(s) and reference the page(s) in the space provided. For all enclosures, indicate the part and section to which they correspond.*

| | |
|---|---|
| Schedule 'C' – Form of Proposal | ☑ |
| Schedule 'C1' – Questionnaire | ☑ |
| Schedule 'C2' – Financial Proposal | ☑ |
| Other attachments as required | ☐ |

## PROPONENT INFORMATION

Legal Name of Proponent: Johnston Davidson Architecture + Planning Inc.

Business Address: 301 - 877 E Hastings St, Vancouver, BC V6A 3Y1

Phone Number: 604 684 3338

Email Address: Promo@jdarch.ca / Kim@jdarch.ca

Contact Person and Title: Kimberly Johnston, Principal

Business Website: www.jdarch.ca

*Identify Business Structure:*

☑ **If a Company**

Incorporated under the laws of what jurisdiction: Province of British Columbia

Incorporation number: 379110

☐ **If a Partnership**

Partner Name(s): _____

Partner Address(es): _____

☐ **If an Individual**

Operating Name:

RFP 11-2023 – Fire Hall Feasibility Study Schedule C – Form of Proposal

## CONFLICT OF INTEREST DISCLOSURE

*In this Part, the Proponent must declare that neither it, nor any of its officers, directors, principals, or employees, have or have had any relationship with any employees, representatives or elected officials of the District which creates or has the potential to create a real or perceived conflict of interest or provide an unfair advantage. Individually, for each such relationship, identify the following:*

Name of Party or Individual from the Proponent Involved: N/A

Nature of the Relationship: N/A

Measures Implemented to Mitigate the Conflict (if any): N/A

## PROPONENT DECLARATION AND SIGNATURE

*The Proponent declares the information provided in this Proposal is true and accurate. Submission of a Proposal is a representation that the Proponent has obtained a complete copy of the RFP Documents, including any and all Addenda which may be issued. The Proponent also agrees that it agrees with all the terms and conditions of this RFP as stated therein.*

**Authorized Signatory(ies):**

Kim Johnston

Signature

Kim@jdarch.ca

Email


corporate
profile

# corporate profile

## OFFICE LOCATION

Johnston Davidson Architecture + Planning Inc.
301-877 E Hastings St. Vancouver, BC V6Y 3Y1

| | |
|---|---|
| Phone: | 604.684.3338 |
| Website: | www.jdarch.ca |

## DESIGNATED CONTACT PERSON

| | |
|---|---|
| Name: | Kimberly Johnston<br>ArchitectAIBC,MRAIC,LEED®AP<br>Principal |
| Email: | kim@jdarch.ca |

Annual Value Work (Construction) -
Approximately 150 million dollars per year

Annual Revenue

| Name: | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|
| Email: | $2.2M | $2.2M | $2.4M | $5.1M |

Memberships and Affiliations:

- AIBC
- RAIC
- CaGBC
- USGBC
- Fire Chief's Association of BC
- Fire Chief's Association of Alberta

## BACKGROUND

Johnston Davidson Architecture (JDa) opened its doors in 1976 and over the past 48 years our firm has cultivated the experience and capability required to coordinate projects similar to that of the architectural services required for the District of Metchosin RFQ. JDa is a company built on creativity, efficiency and teamwork. We are prepared to provide the District of Metchosin with enthusiastic and experienced personnel, who will listen carefully to the District's needs. As designers we are still as passionate and vibrant today as the first day our pencils hit the tracing paper. The essence of hard work and perseverance runs strong through our team and we will always endeavor to create projects that ultimately focus on and serve community.

For this project, Principal Kimberly Johnston will take on the role of Team Leader, Design Architect and Coordinating Professional. Kimberly will be the client's main contact and will ensure that the client's needs are met. She will be responsible for attending and chairing meetings and making sure that the project is achieving its objectives.

The remaining JDa team consists of fourteen (14) employees, including Senior Associates Edward Craig and John Botelho, as well as a number of Junior Architects and Technologists, all of whom collectively have a wealth of architectural and technological experience. In addition, JDa is a full BIM studio which utilizes REVIT to fully model and render designs that are highly coordinated with our design team. The combination of knowledgeable, passionate staff and technology provides JDa with the tools to deliver high quality projects.







# experience and references



# experience and reference

## JDA EXPERIENCE BACKGROUND

Johnston Davidson Architects (JDa) first opened its doors in 1976 and has since cultivated the experience and capabilities required to coordinate this project for the District of Metchosin. Based in Vancouver, JDa has worked with dozens of municipal clients on protective services projects across British Columbia. **JDa is a company build on creativity, efficiency, and teamwork.** Our firm is prepared to provide the District of Metchosin with an enthusiastic and experienced personnel, committed to understanding and meeting the District's needs. The essence of hard work and perseverance is at the core of everything we do, and we will always strive to deliver projects that ultimately focus on serving the community.

JDa has completed over 65 protective services projects across western Canada in areas and communities similar to that of the District of Methchosin As such, we offer a comprehensive **understanding of protective service design, working with municipalities, and adhering to local requirements.**

**we are JDa, we are firehall, we are your team!**

We recently received a 'Gold Award' in the North America wide 2020 Station Design Awards - Shared Facilities category for the Vancouver Fire Hall No. 5 + YWCA Pacific Spirit Terrace. This project is the first of its kind in Vancouver, colocating housing for single mothers and a state-of-the-art fire hall. Additionally, we received the 'Canadian Wood Council Award' in the 2019 Wood Design & Building Awards for Boundary Bay Fire Hall. The building is constructed almost entirely out of wood above grade and uses exposed glulam beams and post disaster wood frame throughout the interior millwork.

Over the years, the JDa team has earned experience working with a variety of clients and projects ranging from educational to protective services to health care - but none more relevant to this project than our experience designing 70+ firehalls across British Columbia and Alberta. Our work on these civic projects has led to a wealth of experience and knowledge on dealings with local authorities and the municipal building processes.

Throughout our years of experience, JDa has demonstrated the ability to meet each project's individual parameters. We have garnered extensive experience from working in a variety of different areas of British Columbia and with an assortment of communities and their municipal governments each with their own special requirements. We have completed similar projects for a number of municipalities including the City of Edmonton, Town of Qualicum Beach, District of Central Saanich, City of Vancouver, City of Delta, District of Squamish, City of Burnaby and Town of Canmore, and are familiar with incorporating municipal requirements into firehall projects, and working with city officials to ensure the validity of each project.

By submitting this proposal, JDa consents to the District contacting the provided references at its discretion, and consents to the District also contacting any other organization for the purposes of evaluating this proposal.

## RELEVANT PROJECT EXPERIENCE

We have worked on a number of past and ongoing municipal projects together and have worked on post disaster facilities with co-located elements of varying types. Vancouver Fire Hall No. 5 and Housing was one of the first and only fire halls throughout Canada to locate housing in a protective services building within the same structure. Understanding this building type takes time, creativity and experience - all of which this team brings to the project, quickly and accurately. In addition, we have worked on projects with tough site conditions and challenging phasing - Boundary Bay Firehall No. 4 and Emergency Operations Centre is perfect example of this. Tight budgets, highly programmatic requirements, post-disaster construction, and liquifiable site conditions were a few examples of the challenges facing JDa throughout this project. We have worked on many fast-tracked projects with aggressive timelines and multi-phased projects with a construction management delivery method, and are confident that this experience would greatly support the successful completion of the District of Metchosin RFP.

We have highlighted on this list those projects which are located in BC and have similar requirements to that of the District of Metchosin RFP with the following symbols:

| | |
|---|---|
| ■ | • Projects outside the Lower Mainland |
| ■ | • Programmatic Studies, Building Audits, Needs Assessment, Facility Needs Studies, Feasibility Studies was included as part of the overall project |

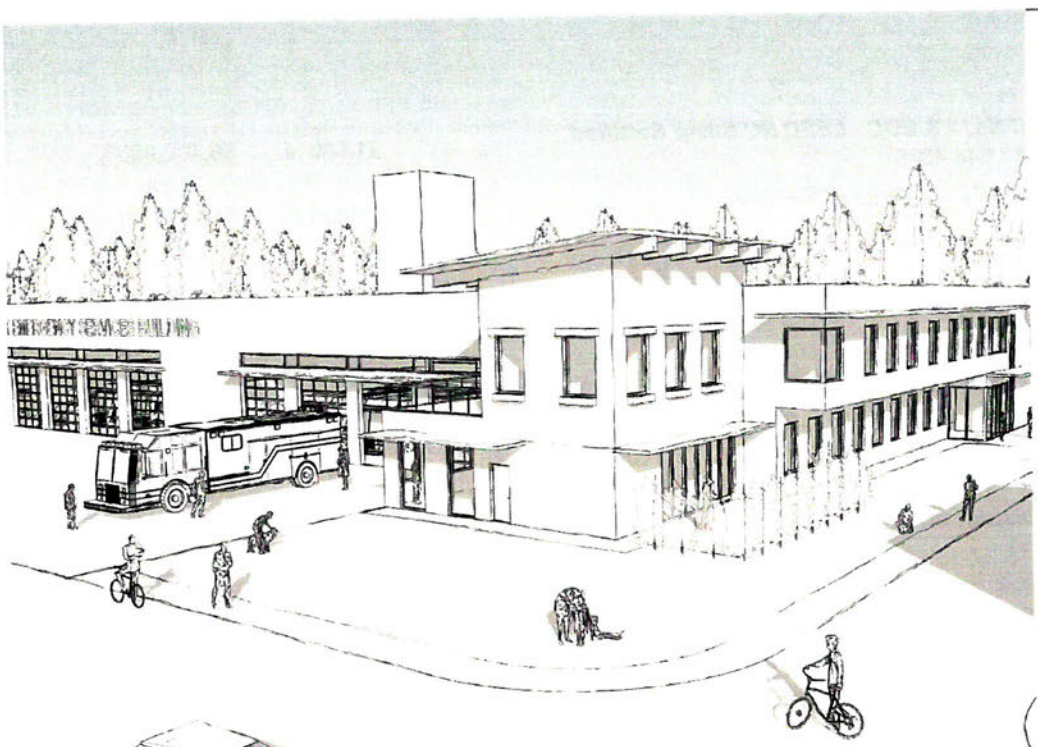
Our extensive protective services design work demonstrates the success of our cooperative design approach resulting in unique creative solutions and happy clients.

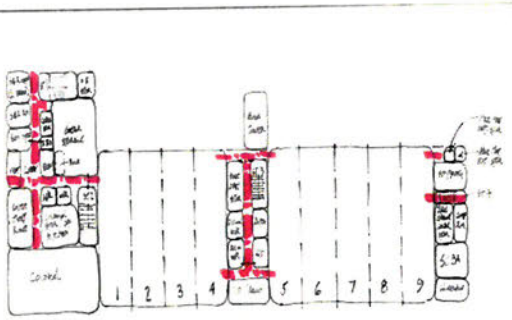
## PAST PROJECT EXPERIENCE

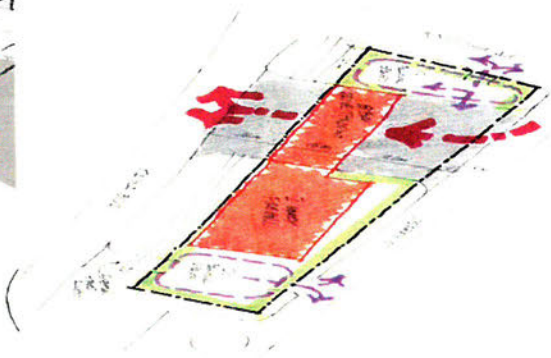
Immediately after our matrix of firehall projects, we have provided a selection of featured projects to represent our design and experience. These projects highlight aspects such as EOC facilities, colocated firehall + housing, team projects, net zero carbon / energy firehalls and client satisfaction. We are happy to provide additional information as requested.

| | | |
|---|---|---|
| Penticton Public Safety Building Feasibility Study | N/A | N/A |
| Kelowna Glenmore Fire Hall | N/A | N/A |
| East Courtenay Fire Hall | N/A | N/A |
| Coquitlam Town Centre Fire Station Training Structure feasibility study | 770 sf | $1,700,000 |
| Township of Langley Fire Hall feasibility study - typical programming | N/A | N/A |
| Cowichan Bay Volunteer Fire Hall feasibility study | 9,978 sf | N/A |
| Powell River Emergency Services Facility feasibility study | 18,406 sf | N/A |
| Anmore & Belcarra Fire Halls condition & needs assessment | 6,631 sf | N/A |
| Squamish Fire Hall feasibility study | 18,000 sf | N/A |
| Ernie Fire Hall & Works Yard study | N/A | N/A |
| Pitt Meadows Fire Hall feasibility study | 42,000 sf | $17,000,000 |
| Victoria Fire Station No. 1 (HQ) - Needs Analysis & Facility Needs Study | N/A | N/A |
| Vancouver Fire Hall No. 17 - Programmatic & Feasibility Study | N/A | N/A |
| Ladysmith Fire Hall Renovation & Addition - Programmatic Study | 13,000 sf | TBD |
| Creston Fire Hall - Feasibility & Siting Studies | 15,500 sf | TBD |
| Vancouver Fire Hall No. 5 - Functional Program Development | 40,242 sf | $17,000,000 |
| Saanich Gap Study - Programming & Needs Assessment Report | various | N/A |
| Port Moody Fire Hall - Siting / Programming Study | 20,000 sf | undetermined |
| Burnaby Fire Hall #4 + #8 | 31,000 sf | $49,000,000 |
| Tantalus Fire Hall | 8,600 sf | $10,000,000 |
| Pitt Meadows Fire Hall | 42,000 sf | $17,000,000 |
| Maple Ridge Fire Hall | 21,000 sf | $15,000,000 |
| Bowen Island Fire Hall | 10,000 sf | TBD |
| East Courtenay Fire Hall | 12,350 sf | $5,600,000 |
| Courtenay Fire Hall No. 1 & Training Facility | 13,300 sf | $1,900,000 |

| | | |
|---|---|---|
| ***Central Saanich Fire Hall No. 1 & EOC - LEED NC Silver Certified*** | 21,500 sf | $6,400,000 |
| ***Qualicum Beach Fire Hall - 72% Energy Efficiency*** | 18,000 sf | $5,400,000 |
| ***Nanoose Bay Fire Hall*** | 11,500 sf | $2,800,000 |
| ***Gabriola Island Fire Hall No. 1*** | 14,500 sf | $3,700,000 |
| ***Nanaimo Fire Station No. 4 - LEED NC Silver Certified*** | 8,300 sf | $2,675,000 |
| ***Oyster River Fire Hall*** | 8,100 sf | $1,500,000 |
| ***North Cedar Fire Hall / District Offices*** | 11,500 sf | $2,100,000 |
| ***Meadowood Fire Hall No. 2*** | 3,600 sf | $750,000 |
| ***Dashwood Fire Hall***<br>Regional District of Nanaimo, 250 390 4111 | 5,500 sf | $1,050,000 |
| ***North Oyster Fire Hall*** | 6,500 sf | $2,400,000 |
| ***Nanaimo Fire Station No. 1 Renovation - (Design Development)*** | 15,000 sf | undetermined |
| ***Langford Fire Hall*** *(design build proposal only)* | 11,000 sf | $1,700,000 |
| ***Vancouver Fire Hall No. 5 & YWCA Housing - LEED NC Gold Registered*** | 46,000 sf | $16,000,000 |
| ***Creston Fire Hall*** | 15,500 sf | $4,650,000 |
| ***Logan Lake Fire Hall*** | 10,800 sf | $2,500,000 |
| ***City of North Vancouver Fire Hall No. 1 Renovation & Seismic Upgrade*** | 18,000 sf | $1,200,000 |
| ***Lewis Farms Fire Station, Edmonton, AB - LEED NC Silver Registered***<br>*(Joint Venture with Architecture \| Tkalcic Bengert)* | 13,000 sf | $6,480,000 |
| ***Pilot Sound Fire Station, Edmonton, AB - LEED NC Gold Registered***<br>*(Joint Venture with Architecture \| Tkalcic Bengert)* | 14,000 sf | $6,875,000 |
| ***Heritage Valley Fire Station, Edmonton, AB - LEED NC Gold Registered***<br>*(Joint Venture with Architecture \| Tkalcic Bengert)* | 14,000 sf | $6,500,000 |
| ***Ellerslie Fire Station, Edmonton, AB - LEED NC Gold Certified***<br>*(Joint Venture with Architecture \| Tkalcic Bengert)* | 15,000 sf | $6,500,000 |
| ***Chilliwack Fire Hall No. 1 / FVRD Office Building*** | 50,000 sf | $7,500,000 |
| ***Fort St. John Fire Hall*** | 23,500 sf | $12,000,000 |
| ***Williams Lake Fire Hall*** | 19,100 sf | $5,400,000 |









# KITIMAT PUBLIC SAFETY BUILDING FEASIBILITY STUDY

## Kitimat, BC

The Kitimat feasibility study was a two-fold project which examined two options: build a new fire hall on the existing site, with the addition of a temporary fire hall, or build an entirely new one at a second site. The program requirements also needed to include an emergency operation center (EOC) and some city hall components, including council chambers, public meeting rooms, and a search and rescue to be developed into the public safety building. The Kitimat Public Safety Building study design serves as a multipurpose building, which meant that the site and emergency access were high-level development integrated into the study. Ensuring not only the safety of the employees working on site but also of the public arriving on site was also an instrument to help the design of the building to be appropriate for the size and not take up too much space and area.

The study also needed to ensure that the building was achieving net zero energy, which was one of the sustainable goals. The District of Kitimat is also trying to apply for the Green Municipal Fund (GMF), and the Federation of Canadian Municipality puts on that grant. This meant that a critical success of the study was ensuring that the building would achieve its sustainable goal, considering the surrounding area, and building a public safety building to best meet its goal and purpose. With that in mind, JDa outlined the importance of the options and allowed the District of Kitimat to build a Public Safety Building that would last more than 50+ years.

We are proud to continue to work with the District of Kitimat for the development of the Kitimat Public Safety Building.

### project challenges

- Existing site location presented a challenge, being a long narrow withh not a lot of depth. Which poses a challenge for emergency service vehicle.
- managing budget between creating temporary firehall and finding an additional site that would allow the current unit to work on existing site while the new building is being built.

**YEAR**
2022

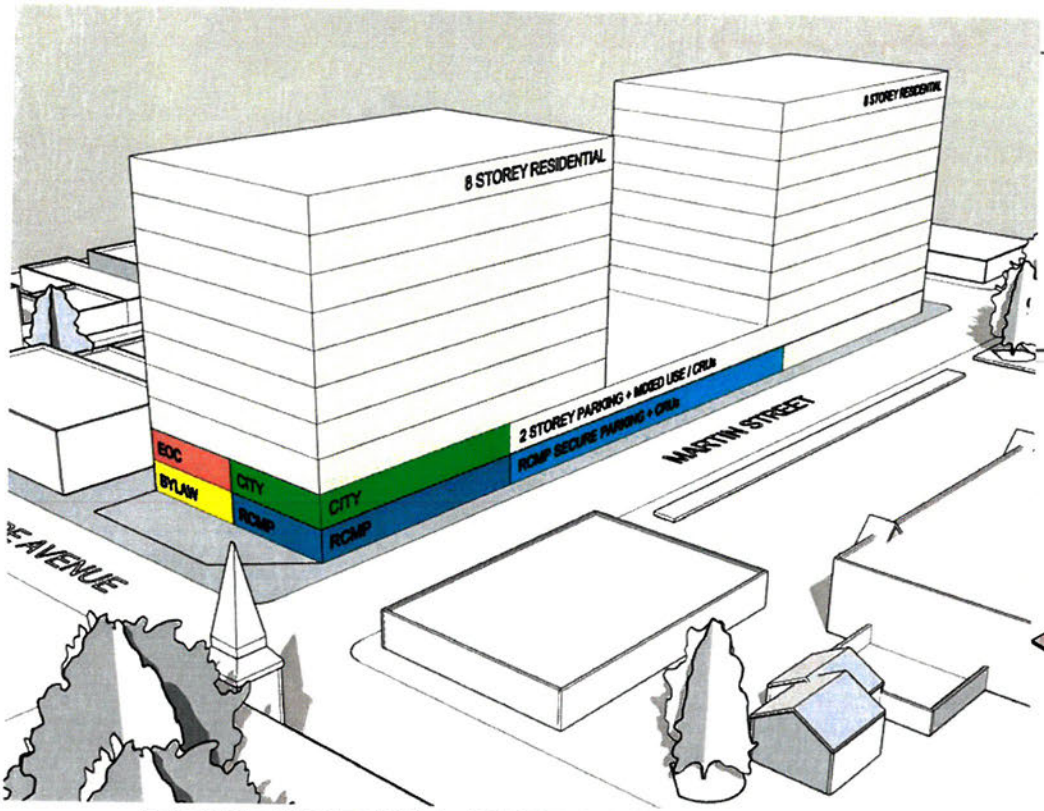
**AREA**
± 29,300ft

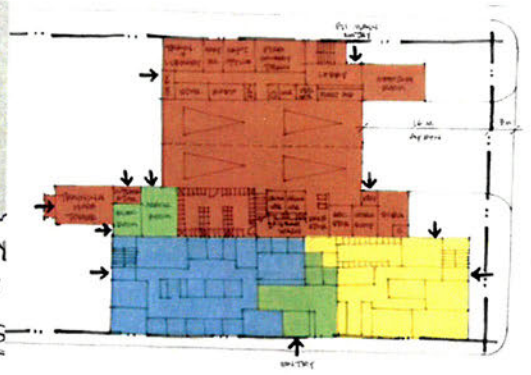
**CONSTRUCTION VALUE**
$ ±32 Million

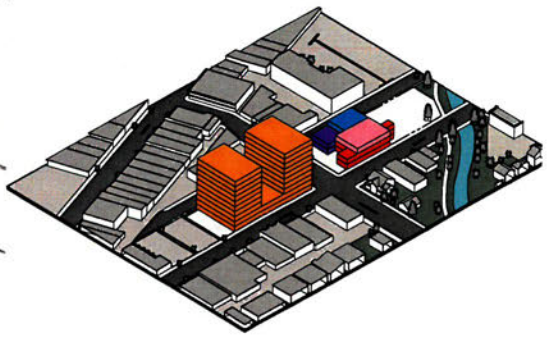
**PROJECT TYPE**
Firehall + protective services + EOC + city hall

**REFERENCE**
Kevin Carlson,
Engineering Services Project Manager, District of Kitimat
t: 250.632.8543

**KEY PERSONNEL**
Kimberly Johnston (Project Architect)
John Botelho (Job Captain)
Ed Craig (Production leader)





# PENTICTON PUBLIC SAFETY BUILDING FEASIBILITY STUDY

## PENTICTON, BC

Johnston Davidson Architecture was commissioned to perform a comprehensive feasibility study to review potential site and building configuration options to provide the City of Pentiction a Community Safety Building, comprised of a new Headquarters Firehall, Community Safety Policing Annex (RCMP) and City Bylaw offices, or a combination of thereof. The study also included a social housing, and housing component to be integrated into a high density neighbourhood area.

The existing firehall, RCMP and City Bylaw Services buildings and facilities have either met their respective service life, out grown or maximized the available floor space. The Client wishes to study the ability to combine all three user groups in an effort to maximize land use.

### project challenge

- multiple site locations with different challenges with each site
- multiple user groups
- social housing and, or housing component to be included to maximize land use

**YEAR**
Ongoing

**AREA**
N/A

**CONSTRUCTION VALUE**
N/A

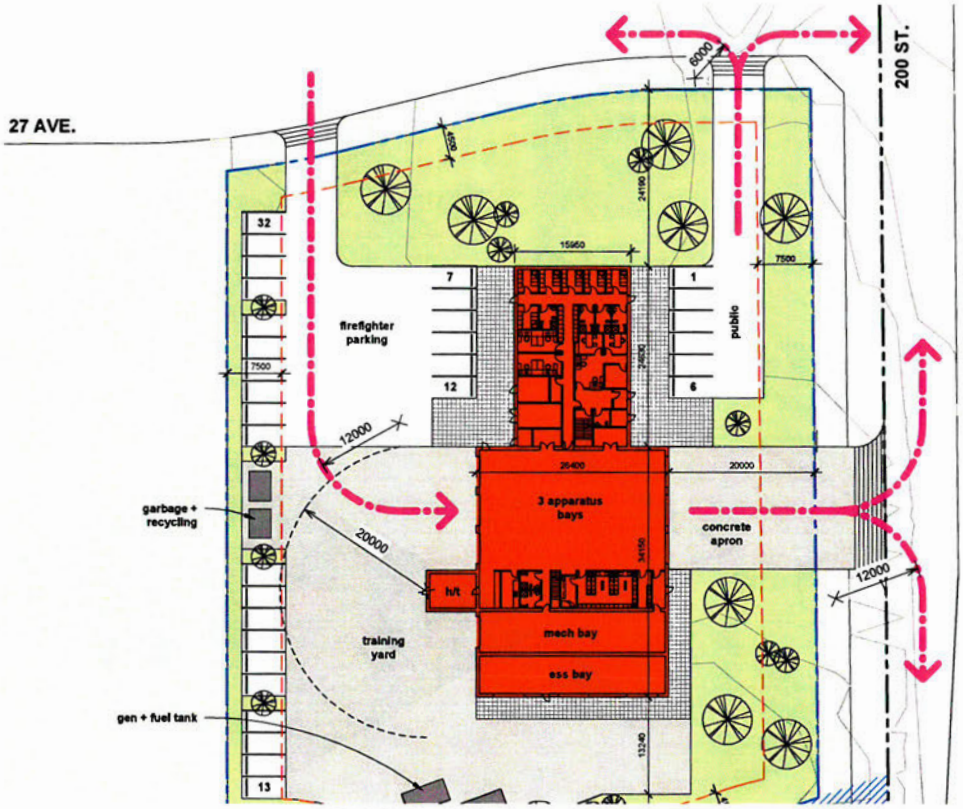
**PROJECT TYPE**
Firehall + housing + densification feasibility study

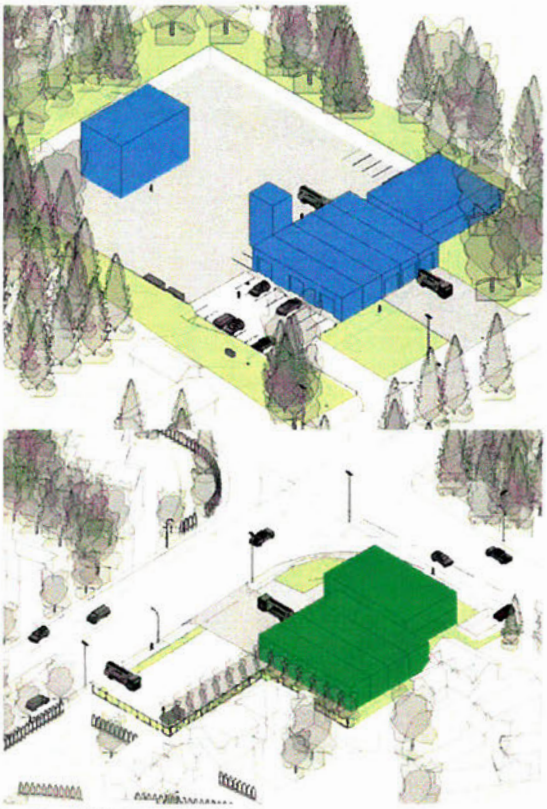
**REFERENCE**

Anthony Policicchio,
Facilities Manager
City of Penticton
t: 250.490.2580

**KEY PERSONNEL**

Kimberly Johnston (Project Architect)
John Botelho (Job Captain)
Ed Craig (Production Leader)



# TOWNSHIP OF LANGLEY FIREHALLS NO. 5, 7 & 8 FEASIBILITY STUDY

## LANGLEY, BC

The Township of Langley commissioned this Feasibility Study to review renewal options for Firehalls #5, #7 and #8 due to facility age, functional program programmatic deficiencies and addressing current industry standards in firehall design. This assessment was outlined to achieve 3 main objectives:

1. To provide a comprehensive analysis of replacements options for all three firehalls and to meet the present and future fire service needs, and undertake extensive consultation with TLFD to ensure the reports capture their needs.

2. To provide high level cost estimates associated with preferred siting and building options to give the Township the tools to assess the future development of these projects.

3. To review potential collocation options suitable to the program and site to be built with the Firehall development.

The design and programming work developed a "same hand" philosophy for each firehall where all three halls would deliver the same functional programmatic elements, such as 3 tandem bays, training tower, and dormitories that would be provided in the same configuration. The goal was to have all new firehalls provides Firefighters the ability to work and operate any hall with little to no learning curve, support faster response times due to the known layout and overall safety, as each hall would be designed with all the necessary amenities and training opportutnities.

### project challenge

- feasibility study
- using IPD way to facilitate the feasibility study

**SCHEDULED YEAR**
completed in 2023

**AREA**
N/A

**CONSTRUCTION VALUE**
N/A

**PROJECT TYPE**
Firehall feasibility study

**REFERENCE**
Harb Chohan,
Director, Facilities and Sustainability
t: 604.532.7306

**KEY PERSONNEL**
Kimberly Johnston (Project Architect)
John Botelho (Job Captain)

# additional references





# key personnel

# key personnel

## PROJECT TEAM

Johnston Davidson Architecture + Planning Inc. (JDa) opened its doors in 1976 and over the past 47 years have cultivated the experience and capability required to handle a project of this type and size. JDa is a company built on creativity, efficiency and teamwork. We are prepared to provide you with enthusiastic and experienced personnel, who will listen carefully to your needs. We are still as passionate and vibrant today as the first day our pencils hit the tracing paper. The essence of hard work and perseverance runs strong through our team and we will always endeavor to create projects which ultimately focus on people.

Led by Principal Kimberly Johnston, who has worked at JDa for over 30 years, and associates John Botelho and Edward Craig, the firm consists of a tight group of experienced team members that combine to create an integrated design unit. The key members of our design team are fully committed to their obligations with the firm and to our clients. For this project, Principal Kimberly Johnston will take on the role of Team Leader, Design Architect and Coordinating Professional. Kimberly will be the client's main contact and will ensure that the client's needs are met. She will be responsible for attending and chairing meetings and making sure that the project is achieving its objectives.

The remaining JDa team consists of fourteen (14) employees, including Senior Associates John Botelho and Edward Craig as well as a number of Junior Architects, all of whom collectively have a wealth of architectural and technological experience. In addition, JDa has improved our technology base by adding Revit Build to our systems which helps create more coordinated working drawings and design renderings. The combination of knowledgeable, passionate staff and technology provides JDa with the tools to deliver quality projects.

**JDa team configuration for this project**
Principal-in-charge / Design Lead - **Kimberly Johnston**
Design Project Manager - **John Botelho**
Intern Architect AIBC - **Cameron Edwards**

## COMPANY PURPOSE

Our goal is to provide the highest level of comprehensive client service and to become an integral part of your facility team. As a partner with you throughout the entire process, our objective is to share your vision and transform it from a concept to a reality. We aim to provide the highest possible quality in design and project management service to ensure that the project implementation lives up to and exceeds all expectations.

Our firm's philosophy is about matching people with a unique architectural solution. Every project is a combination of our architectural creativity, experience and needs of the client group.

Our primary objectives are:

- To establish absolute client trust and satisfaction.
- To provide a uniquely creative architectural solution.
- To develop cooperative relationships with all parties involved.
- To help integrate sustainability on any level to every project.

Our experience as a design team working with decades of municipal and institutional projects gives us a clear understanding of the needs of general community building design, from building code adherence, down to the unique needs of individual projects such as community integration and site requirements. We have completed projects and studies for many cities and communities in BC and are confident in our team's capabilities in providing the services outlined for this project.

## FIREHALL DESIGN EXPERTISE

We feel confident in stating that we are firehall experts. Our track record of over 70 firehall projects, from British Columbia, Alberta and now Eastern Canada, through a joint-partnership in Prince Edward Island can demonstrate that we truly enjoy the study, programming and design of firehalls. Kimberly Johnston, the firm's principal, has continuously worked on firehalls and other public buildings just about everyday over the past 20 years. Kim has given lectures both locally and in the United States on firehall design, as well as has been published in numerous articles in design and industry publications. In addition, JDa has been commissioned to produce countless feasibility and needs assessment studies, plus is a leader in spatial programming and functional programming services. Kim has assembled a design team that has been with her for decades, where their collective experience, knowledge of NFPA, best practices and current standards are an asset for any client wanting the best in firehall design.

## RESUMES

The following pages identify the selected staff who will be allocated for this project, along with a brief biography and list of selected works which demonstrate their specific experience in amenity services design.



# Kimberly Johnston

B.A., M.ARCH., ARCHITECT AIBC, MRAIC, LEED AP
PRINCIPAL | JOHNSTON DAVIDSON ARCHITECTURE

| | |
|---|---|
| Position | Principal |
| Years of Service | 36 years |
| Role | Project Archtect + Design Lead |
| Project Availability | 40% |

## BIO

With over 30 years of experience, Kimberly Johnston is the principal and lead architect of Vancouver-based architecture firm Johnston Davidson Architecture (JDa). As the firm was founded by her father, Kim has worked with JDa in various capacities since the early age where she worked side by side with her Dad to cultivate fun and interesting architectural solutions for Clients. In 2005, Kim became a registered architect and took the lead in designing many of the firm's civic and institutional projects. Her extensive experience in municipal projects has provided her with valuable knowledge navigating complex client groups and intricate design challenges. All of these attributes bring value to the proejct and when matched with her team approach to design, create a balance between achieving design excellence and providing clients with solutions that integrate affordability, innovation and LEED®/sustainable concepts. Kim's work specifically with LEED design and wood structures in has garnered her design recognition across North America.

Her extensive experience with fire hall and protective services projects has provided Kimberly with valuable knowledge of dealing with complex client groups and intricate design challenges. Many of these projects have required intense coordination between client groups, consultants, city/municipal/district departments along with the implementation of strong design ideas. Her creative approach to engaging the various groups and producing visual materials to create a design dialogue amongst all parties has been an integral part of the JDa package and would be a valuable asset to the Mackenzie new fire hall project.

## PROJECT ROLE + EXPERIENCE

Kimberly Johnston will be the designated Design Team Leader / Project Architect for the entire life of the project. She will be responsible for the delivery of all contracted design services to the project. Kimberly shall at all times be directly responsible for the management of the project and the project team and will chair project meetings for the project team during all stages of design. This role will not be delegated, to a junior or less experienced staff person. Kim has worked on over 90% of the municipal projects that JDa has been a part of.

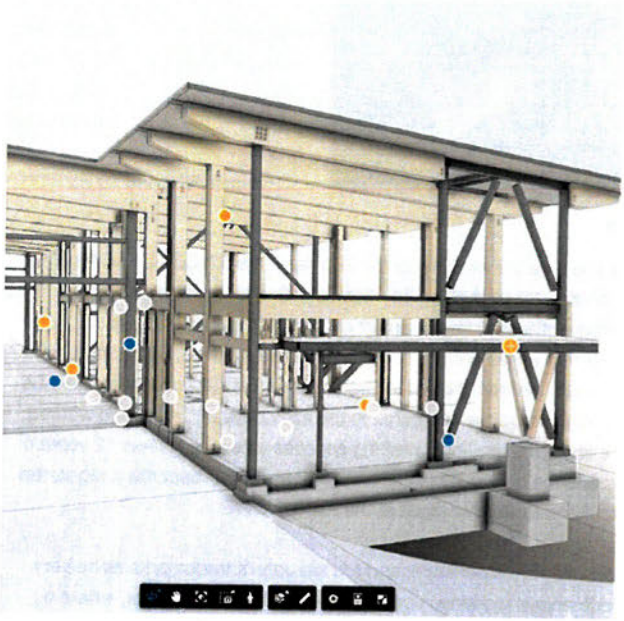
## SELECT RECENT RELEVANT PROJECTS

- Burnaby Firehalls 4 + 8, Burnaby, BC
- Salt Spring Island Firehall, Salt Spring Island, BC
- Penticton Firehall + RCMP Feasbility Study, Penticton, BC
- Nelson Firehall Feasibility Study, Nelson, BC
- Powell River Firehall Feasibility Study
- Kitimat Public Safety Building Feasibility Study, Kitimat, BC
- West Kelowna City Hall + Library, West Kelowna, BC
- Thornhill Firehall Feasibility Study, Thornhill, BC
- Tantalus Firehall No. 2, Squamish, BC
- Palliser Firehall, Canmore, Alberta **
- Pitt Meadows Firehall, Pitt Meadows ,BC.
- Vancouver Firehall no. 5 + Housing, Vancouver*
- Varsity Multi Services Building, Calgary, AB.*
- Victoria Fire Hall #3, Victoria, BC.
- Central Saanich Fire Hall, Central Saanich, BC*
- Maple Ridge Fire Hall & Training Centre, Maple Ridge,BC
- Boundary Bay Fire Hall, EOC & Training Centre, Delta, BC.
- Heritage Valley Firehall, Edmonton, BC.
- Ellerslie Fire Station, Edmonton, AB*
- Lewis Farms Fire Station, Edmonton, AB*
- Pilot Sound Fire Station, Edmonton, AB*
- Qualicum Beach Fire Hall, Qualicum Beach, BC
- North Oyster Fire Hall, Ladysmith, BC*
- Logan Lake Firehall, Logan Lake, BC.
- Oyster River Firehall, Oyster River, BC.
- East Courtenay Firehall, Courtenay, BC.
- Fort St. John Fire Hall, Fort St. John, BC

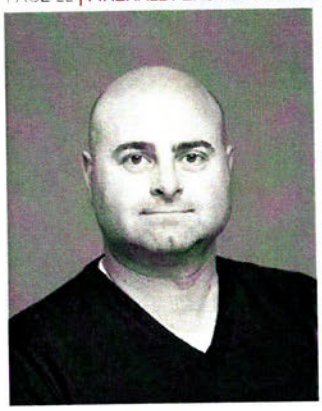
* LEED® Project ** Sustainable Project

# Resume Case Study: Burnaby Firehalls #4 + #8

For this project Kimberly was a partner in the IPD project delivery system along with 8 other parties. Together they have worked on getting two 15,000sf Firehalls to construction in less than 10 months. The use of REVIT Autocad Construction Cloud and tools such as Smarsheet, Asana and Bluebeam have been used by Kim to hep move these project forward with accuracy, design intent and on budget. These project have moved through the standard Permitting processes with speed delivery the project in a more team leveled approach. This project serves and an experience case study for Kimberly as she is a member of a high performing team delivering architectural excellence to a Client with a demanding budget and schedule. She brings to this team all of those characteristics which will help delivery a project which will meets all the needs of the Stakeholders.







# John Botelho

ARCHITECTURAL TECHNOLOGIST AIBC, LEED AP
SENIOR ASSOCIATE | JOHNSTON DAVIDSON ARCHITECTURE

| | |
|---|---|
| Position | Senior Associate |
| Years of Service | 32 (21 years with JDa) |
| Role | Sustainable Design Leader + Quality Control + Quality Assurance |
| Project Availability | 30% |

## BIO

John is a senior member of the JDa team, who has been working at the firm for over 20 years. John's path in architecture is totally unconventional. He was an art geek in high school but was cautioned by his parents to learn a reliable trade as, "art won't pay the bills". He transitioned to Drafting and AutoCAD classes where he soon mastered the program. In the early days of CAD, John worked at a few firms providing drafting services where he gained 12 years of experience before joining JDa in 2002 and later became a registered Architectural Technologist at the AIBC in 2017.

Consistency, experience, and fun are John's trademarks as he very much enjoys working in collaborative team environments, where he can exchange ideas and share previous project examples to help others arrive at decision points. John works primarily on civic and institutional projects focused on sustainability where his primary role is typically Project Manager, where he works closely with Kim on the overall design, but manages the majority of the day-to-day activities, client meetings, consultant coordination and construction administration delivery.

John is very focused on sustainable design and how best to integrate environmentally responsible solutions specifically to each project. As the firm's Sustainable Design Leader, John works on all JDa projects and lends insight during the design process to test sustainable principles and applications. Each project is viewed uniquely when assessing appropriate sustainability strategies which take into account the client's goals, community mandated targets, project location, project type and budget. John and the JDa team then develop a design plan to meet the expected criteria and work towards integrating the customized approach for the project in order to meet the anticipated goals.

## PROJECT ROLE

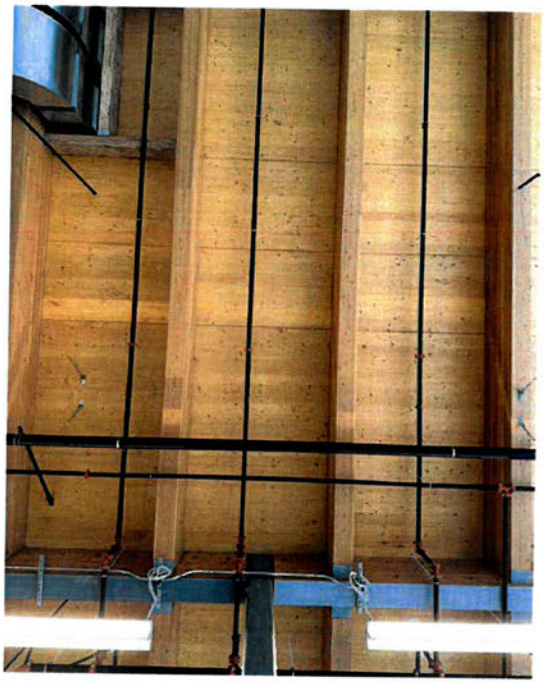
John's previous experience is specifically focused on leveraging his talents to hash out solutions and coordinate disciplines to support a harmonious group atmosphere. John is a big fan of Pull Planning and finds software based pull planning tools, such as Touch Plan a great asset, as everyone can pull plan concurrently, quickly and collaboratively to ensure accountability and achievability can be maintained.

## SELECT RECENT RELEVANT PROJECTS

- Pitt Meadows Firehall, Pitt Meadows, BC
- Burnaby Firehalls 4 + 8, Burnaby BC
- Salt Spring Firehall, Salt Spring Island, BC
- Whislter Fihreall + RCMP, Whistler, BC
- Powell River Firehall Feasibility Study, Powell River, BC
- Thornhill Firehall Feasibility Study, Thornhill, BC
- Houston Firehall Feasibility Study, Houston, BC
- Tantalus Firehall Feasibility Study, Squamish, BC
- Pitt Meadows Firehall, Pitt Meadows, BC
- Central Saanich Fire Hall, Central Saanich, BC*
- Qualicum Beach Fire Hall, Qualicum Beach, BC**
- Victoria Fire Hall Study, Victoria, BC
- Vancouver Fire Hall No. 5 & Housing, Vancouver, BC*
- Nanoose Bay Fire Hall, Nanoose Bay, BC**
- Town Centre Fire Station Addition + Renovation, Coquitlam, BC
- Ladysmith Fire Hall Renovation & Addition - Needs Assessment, Ladysmith, BC
- Montroyal Fire Hall No. 3 Addition & Renovation, North Vancouver, BC**
- Ellerslie Fire Station, Edmonton, AB*
- Dashwood Fire Hall, Qualicum Beach, BC
- Gabriola Island Fire Hall, Gabriola Island, BC**
- Meadowood Fire Hall, Qualicum Beach, BC
- Williams Lake Fire Hall and Ambulance Station, Williams Lake, BC
- Bowen Island Fire Hall/Emergency Operations Centre, Bowen Island, BC
- Salt Spring Island Fire Hall, Salt Spring, BC
- Fort Langley Fire Hall, Langley, BC
- City of Langley Fire Hall, Langley, BC
- Hamilton Fire Hall and Sea Island Fire Hall, Richmond, BC*
- Chilliwack Fire Hall and FVRD Office Tower, Chilliwack, BC

* LEED® Project ** Sustainable Project

# Resume Case Study: Pitt Meadows Firehall + EOC



The Pitt Meadows Firehall was designed and tendered in 2019 with a construction start date of February 2020 during arguably one of the most challenging times that the world has seen in recent history. It took great skill, management and deftness to navigate the waters of a new construction world fraught with supply chain issues, labour shortages, OH+S regulations and potential delays. John has been at the heart of making this project come to life in the field. His ability to manage the stresses of these challenging times and find ways to a completed post disaster, firehall and EOC brings an experience of construction, an expectation of quality and lessons learned about design + constructibility to this project. John will be a integral part of the Quality Assurance / Quality Control piece of our JDa team - helping make the design vision a reality.





# Cameron Edwards

BEDS, M. ARCH | JOHNSTON DAVIDSON ARCHITECTURE

| | |
|---|---|
| Role | Intern Architect AIBC |
| Years of Service | 3.5 year (2.5 years with JDa) |
| Project Availability | 50% |

## BIO

Cameron is an ambitious and driven Intern Architect who joined Johnston Davidson Architecture + Planning to pursue expertise in public Architecture and climate adaptation. He brings with him a diverse background in Architecture, having worked on various projects across different industries such as healthcare, energy retrofit, and long-term care prior to joining JDa.

Throughout his education and practice, Cameron has focused on public buildings with an intent to express the scale and dependencies of human settlement and the natural environment. He draws form experience in Environmental Sustainability studies and non-profit leadership to bolster ongoing practice in the design of community and public service buildings.

Originally from Southern Ontario, Cameron moved to Halifax to pursue Architectural studies due in large part to the program's landscape-driven design tradition. Since graduating he has begun applying his enthusiasm for the landscape and its communities across the West Coast to Firehalls, Protective Services, and Community Facility design and construction.

## PROJECT ROLE

Tyler will be working in a support role on this project, primarily aiding in the production of drawings and models and attending the corresponding meetings.

## SELECT RECENT RELEVANT PROJECTS

- Varsity Multi Services Building, Calgary, AB
- Canmore Firehall, Canmore, AB
- Squamish Firehall No. 2, Squamish, BC
- West Kelowna City Hall, West Kelowna, BC
- Burnaby Firehall No. 8, Burnaby, BC
- Fraser Foreshore Park Washroom, Burnaby, BC
- Kitimat Public Safety Building Feasibility Study, Kitimat, BC
- Apex Mountain Firehall, Keremeos, BC
- Rowan Avenue Childcare Centre, Burnaby, BC

* LEED® Project ** Sustainable Project

## deliverables of key personnel

Section 21 and 22 FIPPA

| COMPANY | NAME | ROLE + RESPONSIBILITY | ESTIMATED NUMBER OF TOTAL HOURS |
|---|---|---|---|
| **ARCHITECT** | | | |
| JDA | Kimberly Johnston | Principal / Project Architect<br>- Kimberly Johnston will be the designated Design Team Leader / Project Architect for the entire life of the project. She will be responsible for the delivery of all contracted design services to the project | [redacted] |
| JDA | John Botelho | Quality Assurance / Quality Control<br>- John will assist in leading the project with Kim, with John handling the day-to-day operations<br>- John will ensure that the project is on-track and ensures that the quality of work is up to standards | |
| JDA | Cameron Edwards | Intern Architect<br>- Cameron will assist John in providing working drawings, site details, and other task as needed | |
| **COST CONSULTANT** | | | |
| [redacted] | | Principal<br>- [redacted] will be primarily responsible for the project kickoff, client meetings and meeting with others as required | |
| | | Team Lead<br>- [redacted] will be primarily responsible to review the final reports, client liaison and team liaison | |
| | | Senior QS<br>- [redacted] will be primarily responsible for compiling the rest of the team and to deliver the final report for review | |
| **Other disbursement:** | | | |
| **Total** | [redacted] | | |

## staff capacity

CAPACITY

[redacted]

# approach & methodology



# approach and methodology

## PROJECT UNDERSTANDING

Every architectural project is unique in its needs and requirements, and as such dictates that the key objectives are understood by the prime consultant in order to ensure objectives and goals are addressed and delivered to the highest standard.

For this project, JDa will produce a feasibility study for a new firehall in the District of Metchosin. The proposed building may also incorporate other functional occputants: Emergency Operation Centre, and Residential Housing. The study will also examine a public safety building versus a firehall with an option to embed a District Emergency Operations Centrer. To confirm project direction, work will commence by examining existing parametes, confirming program spaces, and the development of conceptual design options.

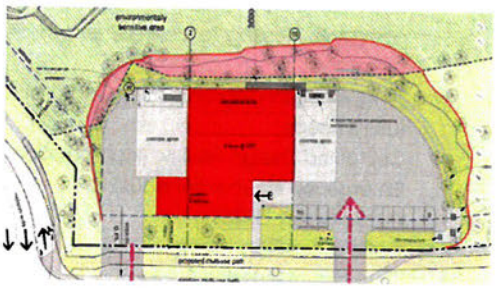
## METHODOLOGY (WORK PLAN)

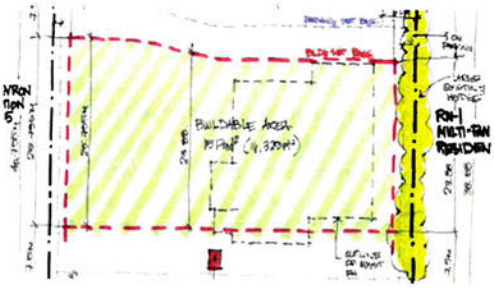
Johnston Davidson Architecture considers the following scope of services basic to a successful project and will commit to providing these services within the guidelines of the fee structure. Our scope of services always includes the following:

- A principal as Project Architect for the entire life of the project, who will have a hands on role in all phases of the project - this role will not be delegated, to a junior or inexperienced staff person.
- Job site visits that exceed industry standard to ensure appropriate progress and contractor coordination.
- Provision of and maintenance of professional liability insurance.
- Immediate and personal attention by experienced senior professionals.
- Demonstrated ability to deliver the project within a given budget and on schedule.
- Compliance assurance with all applicable provincial and local requirements.
- The energy and enthusiasm of a firm whose principals and employees have a vested interest in client satisfaction.

**With over 60+ firehall feasibility study project, JDa is knowledgeable in current industry standard. Ensuring that projects are aligned, and clients are satisfied.**







As part of this response, JDa undertakes to fulfill the following major phases:

## site study

The work described above will be carried out concurrently with identifying, evaluating and testing potential sites against building concepts, considering a number of criteria including site vehicle access, security factors, impact on building footprint, grading and other site features. This phase will also include a review of applicable zoning and planning regulations, traffic patterns and availability of municipal site services. The deliverables are, but not limited to:

- explore current site condition
- to explore intensification of uses for the site
- site anaylsis and environmental consideration

## data collection

During this phase, the goal is understand the City's needs and do prelimanary analysis of current project objectives. The deliverables during this phase are, but not limited to:

- Provide a report demonstrating the industry standards and options which could govern the project to achieve the goals of the District of Metchosin and its user groups (Fire department, EOC, and Housing program)
- Review and discuss around project delivery methods, project schedule, and project delivery
- Staff, stakeholder, and consultant start up meeting and regular project meeting
- Data collection of the exisiting building which JDa find help to explain "why" to the Public during public engagement

## programming

Running together with the data collection, in this phase, the goal would be to provide the following deliverables, but not limited to:

- Develop and confirm civic facilities space program
- Space and Functional program of room by room listing and associated areas to establish a space which compares existing to desired, and serve as a basis for the project
- Programmatic diagrams comparison of current space to future needs
- Colocated Design Review (incorporation of Firehall, Emergency, Residential Housing)
- Public Safety Building
- Conceptual Floor Plans
- Conceptual Massing Design
- Sustainable Options and possibilities to assist with grants and operational savings for the project long term
- A class "D" cost estimate
- Optional:
    - Geotechnical "Desktop" review which will aid in assessing potential ground conditions, which may impact the cost estimate. For example, if historical soil tests identify poor conditions from a structure foundation system, such as stone piles rather than a conventional system, it can be included in the Class "D" cost estimate

## schematic design

In this phase, the goal would be to retest the assumptions and layouts presented under the lens of the Consultant's scope to adjust and refine the project site work.

- Engage stakeholders, as listed in the RFP, to confirm programming needs and building uses for new facility using what was reported in the feasibility study as a base.
- Identify any grant opportunities for design and construction costs
- Confirm any rezoning requirements
- Develop a risk register
- Develop full schematic design report based on updating the previously created Feasibility Study orginally prepared by JDa.
- This would include integrating the Geotechnical and Topographical information provided by the Client
- Deliverables:
    - Schematic Design Report, with the following deliverables:
        - Design approach or philosophy
        - Site data
        - Design area(s) comparison to functional program
        - Design compliance with regulatory requirements
        - Project schedule
        - Risk Register
        - Report or memo summarizing results of stakeholder engagement, zoning requirements, and
        - Grant opportunities
        - Council Presentation

## conceptual floor plans & massing

The conceptual floor plans & massing phase will be built upon the programming space to provide the Client with spatial relationships of the project componenets. The deliverables, but not limited to:

- Initial siting studies analysis the benefits and challenges of each potential site
- assess options for development
- Floor plans, building sections, elevations, wall types, floor types, finish, door, and hardware schedules
- Develop preliminary structural, mechanical, electrical and civil drawings to further inform the details of the project
- Include cut sheets of fixtures and key equipments
- Develop high level conceptual plans for all options combining:
- Firehall
- Emergency Operations Centre
- Residential Housing
- Public Safety Building

- Develop 3D rendering of the preferred concept
- Models – digital modeling would be used at this point to help inform the design. Presentation models are covered as per disbursements.
- Engage District stakeholders as required to confirm design decisions
- Develop project criteria:
  - Floors area for civic, commercial, residential
  - Confirm what equipment from existing civic facilities building will be repurposed in new facility
  - preliminary code analysis
  - Update the risk register
  - Update deliverables based on feedback from the District
  - Prepare and facilitate presentation to Council to provide a project update on design, cost
  - grant opportunities.
- Deliverables:
  - Architectural Report + Drawings
  - Massing studies
  - Conceptual floor plans
  - Preliminary building renderings
  - Staff and Stakeholder Consultations

## implementation planning

This section of the project phase looks at implementing the site study and schematic design, to provide a report. The report would include, but not limited to:

- space program
  - room by room listing and associated area to compare existing to desired spacing
- functional program
  - categorization of the programmatic requirements of the project from general to particular focusing on the spaces listed in the Space Program
  - this will help describe spatial relationships and detailed requirements for each space to inform detailed design
- programmatic diagrams
  - comparison of current space to future needs
- based on the functional program, a conceptual plans will outline spacial relationships of the project components, and then give them a preliminary architectural form
  - include initial siting studies anaylzing the beneifts and challenges of the site
  - assess options for development
- architectural report + drawings covering massing studies, conceptual floor plans and preliminary building rendering and interior concepts

## costing (Cost Consultant)

In this phase, the goal would be to provide the following deliverables, but not limited to:

- Class D Construction Cost Analysis and Estimates is a typical cost estimate that can be expected during this phase - to be confirmed by the Client
- Facilitiy Operating and Maintenance Costs, Recapitalization Costs (Life Cycle) can be provided if this was to be considered
- This estimate will identify contingencies including escalation and local conditions
- The estimate will also identify options related to Sustainability and reuse of materials
- Will run concurrently during the final document review and draft of the Final Report

## final report

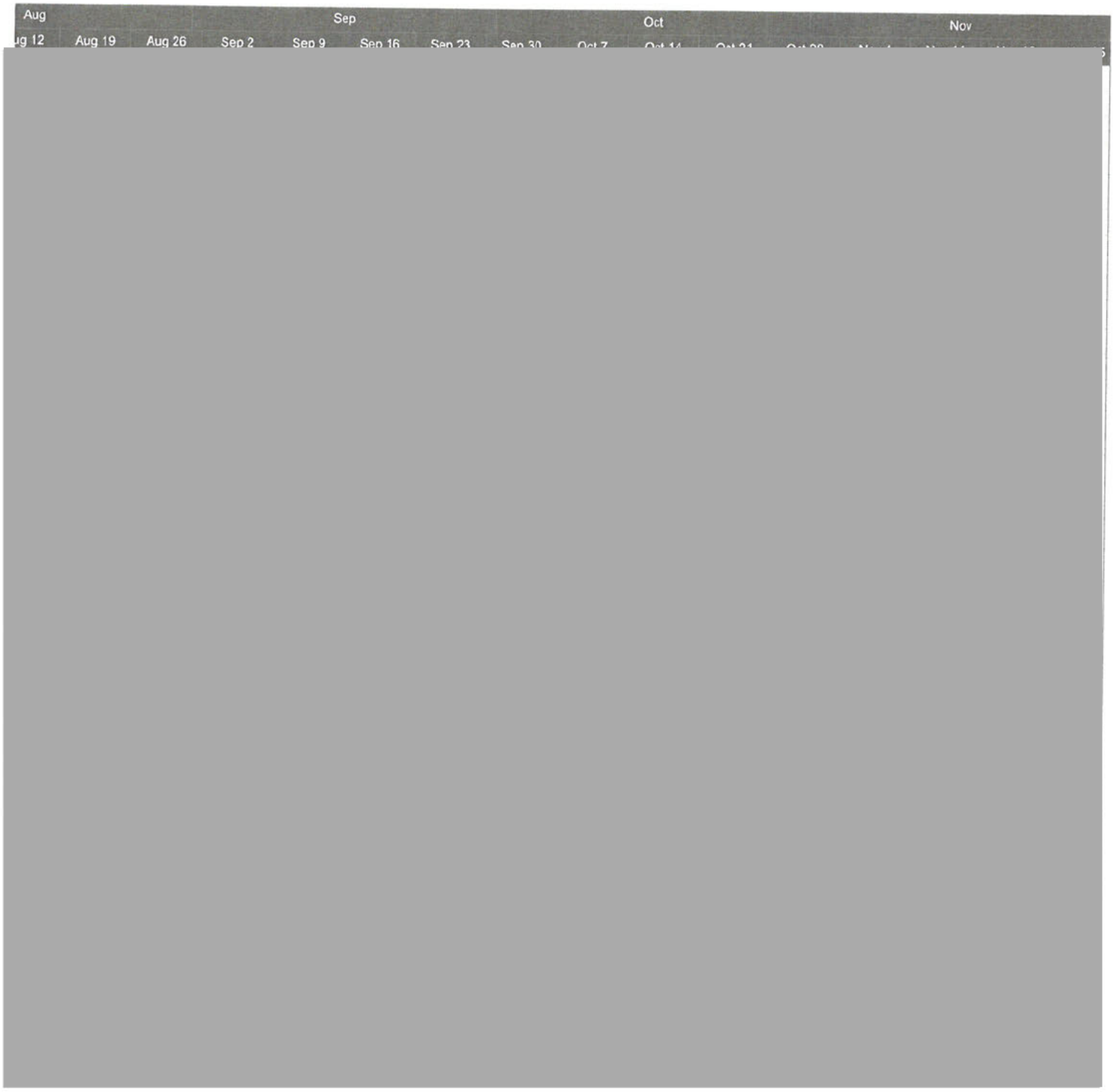
The final report will include the above, and the following, but not limited to:

- Conclusion of the study based on the options + discussion with Stakeholders and Consultants throughout the process. This will include written summaries of each section along with the compilation of the drawings / diagrams produced throughout the study
- Development of a Project Schedule: Discussion with the District to Develop a realistic schedule for the next stages of the project
- 95% draft for review and final report
- Timelines and Project Cash Flow based on Class D Estimate will be written into the report for discussion

# District of Metchosin






Aug
Sep
Oct
Nov
Aug 19
Aug 26
Sep 2
Sep 9
Sep 16
Sep 23

# approach to project & quality management

As detailed throughout this proposal, our approach to Project Management is that of team communication, collaboration, and goal alignment. Clear communication is crucial to all aspects of the project including clearly defined expectations, priorities, and deliverables of the Project Management Team. As leaders on the Project Management team and members of the Senior Management team, JDa's role will be to ensure that all information is communicated at all levels in order for key players to make informed decisions.

The approach to this project will follow an action plan based on the RASCI model at each stage and deliverable of the project. This model will help to provide clear lines of task ownership and responsibilities for the parties involved with the Village of Pemberton project.

**R = Responsible** - owns the task or problem.

**A = Accountable** - approves and signs off on work prior to it becoming effective.

**S = Supportive** - provides resources, additional information and back up to lead personnel.

**C = Consulted** - has the necessary information and capabilities to complete the task/work at hand.

**I = Informed** - is notified of results and decision making, but does not require consulting.

## COMMUNICATION MANAGEMENT

Our team is committed to establishing clear lines of communication at the outset of the project with the client's Project Coordinator as key point of contact with the Prime Consultant. We will also be sure to communicate closely with and listen to the needs of the District of Metchosin, and those involved. These key points of contact are to be maintained throughout the delivery of the project to ensure that occurrences of miscommunication and errors are avoided.

## RISK MANAGEMENT

We believe that risk management begins with our RASCI model. Fundamental to our collaboration as a whole, RASCI brings together key decision makers early on in the process. This allows for effective decision making and the ability to collaboratively discuss project aspirations, expectations, challenges, issues and potential risks.

## QUALITY CONTROL

Quality assurance and control are two imperative yet often undervalued roles of the architect as Prime Consultant. As a team, we take this role very seriously. We have identified a particular methodology that will provide a high level of quality control for the design process. The use of a highly integrated BIM model combined with the RASCI model serves as an excellent ongoing means of stewarding quality control throughout the project life cycle. Coupled with our experienced staff, sound judgment, discipline management techniques, adherence to the highest professional standards of practice, and a commitment to continual improvement, we feel we can provide the District of Metchosin with exceptional value.

## CONSISTENCY + CONTINUITY

As JDa's senior staff work in close concert and are involved in all the firm's projects, quality is managed by the continuity of having the same members of the firm work through all stages of the project. Continuity between our team and the Client facilitates design goals through to the end of construction, even when faced with site conditions which may require adjustments. Our design team believes the cooperative process for design integrates the input from users and Client team members right from the outset.

Additionally, our team's consistent and close contact with every project allows JDa to navigate and anticipate risks throughout the life of the project in a fast paced and efficient manner. Our senior members share a consistent understanding of every project we undertake, thus allowing our staff to anticipate risks prior to their occurrence. Should challenges arise during a project course, our senior staff jump into action to develop cost efficient and timely solutions without the need to navigate various hierarchical levels. JDa prides itself on our agility to address concerns with all of our projects due to our firm's size, senior staff involvement, and quality management structure.

Our record of successful delivery from the design process through to the end of construction can be confirmed through our provided references The systems we employ ensure that design and quality control are met through the key project deliverables, thorough internal reviews, project monitoring by senior staff members, and providing valuable project consistency.

## INTEGRATED DESIGN MANAGEMENT

This subscribes to the team concept of developing design options for a project using the principles of Integrated Design Management in this project. JDa has a comprehensive track record in the program development and design of projects that require stakeholders' involvement and input. The design team will involve all of the major stakeholders in the project: Client group, key users, and support personnel in the process from the very beginning through key design charettes (workshops) to fully test the various design options and to discuss creative ideas from all key players.

## MEETING PROJECT STANDARDS

We believe that in addition to designing through quality and innovation, we provide our clients with the kind of personal service that makes us unique. This degree personal service is achieved by arranging for a minimum of two senior members of the firm to be involved with every project from its conception right through to the substantial completion and commissioning, along with qualified staff backing them up every step of the way.

The systems we employ ensure that design and quality control are met through the key project deliverables through internal reviews, project monitoring by senior staff members, and providing valuable project consistency by ensuring that the same team members are on the project from beginning to end.

## INDUSTRY STANDARDS

With the design experience of over 50 fire halls, JDa has become very familiar with industry standards on topics such as decontamination protocol, gender inclusivity, communication systems, and NFPA travel time standards, which all help ensure that these are integrated seamlessly into this facility. Our familiarity with this information allows our to team spend more time focusing on understanding specific client needs rather than getting up to speed on industry standards.

## APPROACH + DESIGN PROCESS

Our team believes in a cooperative process for design, meaning that we encourage input from client groups throughout the design process. This is why JDa consistently includes the same team members at all meetings, to ensure that there is a seamless understanding and progression from one phase to the next. Our track record is supported by our clients who can attest to our record of excellent delivery from the design process through to the end of construction. The systems we employ as discussed below ensure that design control, internal reviews, quality control, contract administration, monitoring and reporting for the project are met. The following items are a few examples of key components to what makes working with JDa unique:

- Open, approachable and communication - JDa wants to be your partner
- Dedicated Senior Staff - from start to finish
- Team Concept - we believe in teamwork and value client input
- Integrated Design Management - comprehensive design charettes with the client group
- Regular Working Sessions - regular working sessions assist with project momentum
- "Momentum Maintenance" - avoiding schedule slippage is paramount
- Weekly call-in with Project Manager for project health check
- Scheduling meetings well in advance to enable proper attendance
- Diligent meeting minutes - documenting discussion and following up on deliverables
- Constructive email correspondence - assists with documented record keeping
- Schematic Design & Design Development Manuals - milestone documents which encapsulate each phase
- Construction Documentation – working drawings and specifications. Tender Services - Contractor walk-through and addenda as required
- Construction Administration – standardized process based on tight documentation
- Bi-weekly Site Meetings - anticipated to maintain momentum and meet the schedule
- Construction Close-out - Final reviews, Letters of Assurance and Occupancy
- Follow-Up - post construction services

## INNOVATIVE APPROACHES

Our team enjoys finding innovative approaches with all of our projects when possible - whether we approach budgetary concerns, design opportunities, or stakeholder visions, we utilize outside-the-box thinking to develop unique approaches to every one of our projects.

## REGULAR WORKING SESSION

In addition to the design charettes as noted above, the process is backed up by Regular Working Sessions, which are more intimate meetings between smaller groups with the Client team or the Consulting groups. The goals of these sessions are to run through the specifics of each discipline and ensure that detailed design goals are incorporated right through into the working drawings and not lost through construction or value engineering. Once again it is key that we have the same team members throughout this process, something that we as a team are all committed to providing.

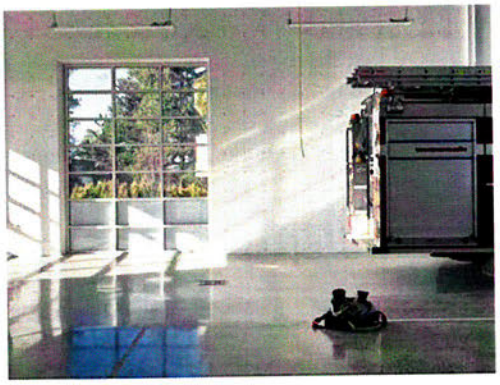
## BIM + REVIT

Building Information Modeling (BIM) are tools such as Revit that allow us to coordinate designs with our Consultant team by sharing building models and integrating the different disciplines together to analyze, troubleshoot and provide immediate feedback. For example, structural models are combined into our architectural models, which quickly identify potential conflicts and the need for specific detailing. Furthermore, during the construction phase building models can be sent to suppliers to construct exact structural members for items like steel fabrications and wood glulams, a process that guarantees precision in the final building structure and the speed of shop drawing production. Mechanical and electrical information can also be adapted and incorporated into our models for coordination of services which gives us a higher level of confidence during our quality assurance reviews.

JDa is a full BIM studio and we have designed our last 15 fire

hall projects using Revit for a total BIM-based design system and for the basis of production for each project. This is both a challenge and an opportunity, especially when using the BIM system as it changes the way in which we coordinate the work between Consultants and the Client.

JDa stays current with the best architectural and design software applications currently available to help design, visualize, detail, document and manage every project in-house from concept to completion. All design staff members have full licenses of Autodesk REVIT, Autodesk Architecture, Sketchup Pro, Enscape and Adobe Creative Cloud. These full suite of graphics programs allow for the immediate production and creation of documents during all phases of a project, also maintaining quality assurance throughout the project scope. Our team believes in the cooperative process for design integrates the input from users and Client team members in the design process right from the outset. The systems we employ ensure that design and quality control are met through the key project deliverables thorough internal reviews, project monitoring by senior staff and providing valuable project consistency by ensuring that the same team members are on the project from beginning to end.







# city's expectations

## CITY'S RESOURCES EXPECTATIONS

We would kindly request for the following resources to be provided by the District of Metchosin:

- City Project Manager:
  - Bi-weekly meetings at approx. 1 hour per meeting
- Fire Chief or Fire Representative
  - Bi-weekly meetings at approx. 1 hour per meeting
- Various City Staff (Planner, Engineering, GIS Mapping)
  - 2 - 3 hours of the life of the project

# challenges & risk associated

## RISK MANAGEMENT

We believe that risk management begins with our RASCI model. Fundamental to our collaboration as a whole, RASCI brings together key decision-makers early on in the process. This allows for effective decision-making and the ability to collaboratively discuss project aspirations, expectations, challenges, issues and potential risks.

## QUALITY CONTROL

Quality assurance and control are two imperative yet often undervalued roles of the architect as Prime Consultant. As a team, we take this role very seriously. We have identified a particular methodology that will provide a high level of quality control for the design process. The use of a highly integrated BIM model combined with the RASCI model serves as an excellent ongoing means of stewarding quality control throughout the project life cycle. Coupled with our experienced staff, sound judgment, discipline management techniques, adherence to the highest professional standards of practice, and a commitment to continual improvement, we feel we can provide the District of Metchosin with exceptional value.

## CONSISTENCY + CONTINUITY

Senior staff work in close concert and are involved in all the firm's projects, quality is managed by the continuity of having the same members of the firm work through all stages of the project. Continuity between our team and the Client facilitates design goals through to the end of construction, even when faced with site conditions which may require adjustments. Our team believes the cooperative process for design integrates the input from users and Client team members right from the outset.

Additionally, our team's consistent and close contact with every project allows us to navigate and anticipate risks throughout the life of the project in a fast-paced and efficient manner. We share a consistent understanding of every project we undertake, thus allowing our staff to anticipate risks prior to their occurrence. Should challenges arise during a project course, our senior staff jump into action to develop cost efficient and timely solutions without the need to navigate various hierarchical levels.

Our record of successful delivery from the feasibility process through to the end of construction can be confirmed through our provided references The systems we employ to ensure that design and quality control are met through the key project deliverables, thorough internal reviews, project monitoring by senior staff members, and providing valuable project consistency.

## RISK REGISTRY

A Risk Registry is a tool that the entire team utilizes to identify potential risk and assign potential costs to manage the overall project budget. The format is a simple, easy to use Smart Sheet (shareable, cloud-based app), that is similar to a spreadsheet, where a matrix of risk items are listed with a cost connected to each item. In addition, there is an importance factor attached to each item which is a variable that helps evaluate the level of risk per item and the associated costs, so it helps fine-tune the pricing dependent on the specific needs of the project.

# experience presenting

## PRESENTATION TO LOCAL GOVERNMENT

We have the experience in presenting to various leves of local government during various stages of a project. We have presented at council meetings, closed council meetings, attended council workshop sessions, and regularly set up meeings with various stakeholders to ensure that all parties involved are fully informed and can ask questions about the project. Our team has the experience to deliver the required services for the District of Metchosin firehall feasibility project. We are confident that we can efficiently and thoroughly complete the work.

Kimberly Johnston is an industry leader and is an expert in Firehall design and delivery projects with over 30 year's experience .

# experience report writing

## FEASIBILITY REPORT EXPERIENCE

JDa has completed many feasibility studies for various local municipalities similar to the District of Metchosin. Provided below is all our firehall feasibility studies that we have delivered over the last five (5) years:

- West Kelowna Firehall Feasibility Study #32, West Kelowna, BC
- Central Saanich Firehall Feasibility Study, Saanich, BC
- Vicotira Firehall Feasibility Study, Victoria, BC
- Tumbler Ridge Firehall Feasibility Study, Tumbler Ridge, BC
- Peachland Public Safety Building, Peachland, BC
- Burnaby Firehall + RCMP Feasibility Study, Burnaby, BC
- Houston Firehall Feasibility Study, Houston, BC
- West Kelowna Firehall #31 Feasibility Study, West Kelowna, BC
- Fernie Firehall Feasibility Study, Fernie, BC
- Nelson Firehall Feasibility Study, Nelson, BC
- Penticton Public Safety Building, Penticton, BC
- Kelowna Glenmore Firehall Feasibility Study, Kelowna, BC
- Township of Langley #4, #7, #8 Firehall Feasibilisty Study, Langley, BC
- Chetwynd Firehall Feasibilisty Study, Chetwynd, BC

In addition to the above firehall feasibility study, below is additional firehall studies that have turned into finish buildings in the last five (5) years:

- Pitt Meadows Firehall + EOC, Pitt Meadows, BC
- Burnaby Firehall #4 + #8, Burnaby, BC
- Tantalus Firehall, Squamish, BC
- Kitimat Public Safety Building, Kitimat, BC
- Brookswood Firehall #5, Langley, BC
- Salt Spring Island Firehall, Salt Spring, BC
- Langley Firehall #5, Langley, BC

# environmental sustainability

## ENVIORNMENTAL MANAGEMENT

JDa views environmental management under the holistic lens of sustainability and "green design". Construction and buildings are currently responsible for **39% of global energy related carbon emissions**: 28% from operational emissions, from energy needed to heat, cool and power them, and the remaining 11% from materials and construction. In order to help offset or mitigate the carbon footprint of buildings, JDa is experienced in the design and delivery of sustainable projects, especially firehalls. One tool to ensure a building is built to a sustainable standard is LEED (Leadership in Energy and Environmental Design). The LEED program is optional and buildings can be designed and constructed to meet certifcation or we implement cost efficient sustainability opportunities without appliying for CaGBC LEED certification - our team is comfortable with green building practices and encourages clients to implement sustainability initiatives within the design of buildings whenever possible.

The following information details our firms ability to work with various green building initiatives as well as our own corporate sustainability practices.

## LEED EXPERIENCE

JDa has completed work on 8 LEED registered projects. Provided below is all our LEED projects registered with the CaGBC and USGBC:

- Nanaimo Fire Station No. 4 - LEED-NC Silver
- Central Saanich Fire Hall No. 1 - LEED-NC Silver
- Ellerslie Fire Station, Edmonton, AB - LEED-NC Gold
- Hamilton Fire Hall, Richmond, BC - LEED-NC Silver
- 9A Mental Health Unit, St. Paul's Hospital, Vancouver, BC - LEED-CI (registered with the USGBC)
- BC CFE in HIV/AIDS Renovation, Vancouver, BC - LEED-NC Gold
- Heritage Valley Fire Station, Edmonton, AB - LEED-NC Gold
- Vancouver FH 5 + Housing LEED-NC Gold.

## LEED BUILDING SUCCESS

Central Saanich Fire Hall No.1 successfully obtained LEED-NC Silver certification in 2015. The design of this fire hall incorporates a central focus on stormwater management using sustainable strategies, such as a large bio-swale and rain water harvesting. An open loop geothermal system reduces the building's energy usage by approximately 70%, which in combination with natural cross-ventilation and natural daylight increases user comfort and durability. Also, attention to Night Sky Compliance has been included by dim lit light fixtures and low-spread lighting. The building also adds daylight harvesting and dimmable switching wherever possible. There is consistent use of low VOC materials, paints and coatings throughout the Hall's and acoustic design principles.

Ellerslie Fire Station and Heritage Valley Fire Station, both designed for the Edmonton Fire Rescue Service, have reached LEED-NC Gold certification. The sustainable goals of the projects all focus on the management of site stormwater, drought tolerant landscaping, reduction of water use, energy efficiency, recycled and regional materials and improved indoor environment for the living quarters of fire personnel. We have four LEED Accredited Professionals on staff, one of whom is Principal Kimberly Johnston. Kim has been involved with presentations and seminars throughout the Lower Mainland on sustainable design.

### INNOVATIVE PRACTICES

JDa has a proud history of implementing a wide range of sustainable practices and designs into many of the projects we have worked on over the years. **Since 2000, every project we have designed has embraced different elements of sustainable and green design** - from sourcing local timber in lumber-based economies from towns across BC, to utilizing solar and hydro energy as a building's primary source of power for up to 72% reduced energy consumption, to creating social spaces that encourage community events and gathering.

### SUSTAINABILITY STRATEGY + ENERGY EFFICIENCY

As a team, we pride ourselves on integrating sustainable design practices into every project we work on, ensuring that green building initiatives are made accessible to all of our clients regardless of budgetary restrictions, location, or timeline. Depending on project goals, client needs, and budget, we offer a wide array of sustainability options that are suitable for each project - from LEED® certification, LEED shadow, BC Step Code requirements, FCM - GMF grant collaboration and the integration of wood design (BC Wood First Initiative).

When a challenge arises regarding environmental impact, our team consistently researches and develops innovative solutions to address green responsibilities throughout the life of a project. We train our staff to regard sustainable design as a priority within a project's core development.

We are also well versed in the importance of energy efficiency and are familiar with the Pan-Canadian Framework on Clean Growth and Climate Change. As an example, the 2015 Qualicum Beach Fire Hall, in which we served as prime consultant, achieved an FCM-GMF grant of $464,467.00 for accomplishing a significant 72% reduction in the energy usage.

## social responsibility

### SOCIAL SUSTAINABILITY FACTORS

JDa has a proud history of implementing a wide range of sustainable practices and designs into many of the projects we have worked on over the years. **Since 2000, every project we have designed has embraced different elements of sustainable and green design** - from sourcing local timber in lumber-based economies from towns across BC, to utilizing solar and geothermal energy as a building's primary source of power for up to 72% reduced energy consumption, to creating social spaces that encourage community events and gathering.

### COMMUNITY SUPPORT

As Principal and Lead Architect Kimberly Johnston is a UBC Athletics alumnus, JDa regularly supports local sports teams including the UBC football and basketball teams. JDa also regularly donates to local non-profit the Vancouver Aquarium to promote Vanaqua's educational outreach efforts in ocean sciences and marine life research and rehabilitation. JDa also supports the local SPCA, the Vancouver Food Bank and Right to Play initiatives.

### DIVERSE WORKFORCE

At JDa we pride ourselves in hiring a diverse group of community to work with us, ranging from recent immigrants, young people, women, and people with disabilities. Our staff member is comprised of more than 50% women, with the majority of the staff members being young people (under the age of 30). Additionally, JDa also hires recent immigrants to bring different experience and culture background to diversify our way of thinking, and to continuously improve our business process.

### LIVING WAGE EMPLOYER

Johnston Davidson Architecture prides itself on achieving a high quality of work / life balance and providing our employees with a salary which meets or exceeds current industry standards. In addition, we have a comprehensive benefit package that includes standard and extend health care services, and also social opportunities such as memberships to local art galleries, BC Ferries excursion passes, ski, snowboard lift tickets and other experiences. With respect to a "living wage", we have reviewed the criteria and can comfirm that we compensate all of our employees to a "living wage" level or better and are in the process of receiving certification for this designation. If necessary, we are open to an audit performed by a third-party to confirm our employee compensation meets the "living wage" target.

# value added services

## SENIOR TEAM FROM START TO FINISIH

At Johnston Davidson Architecture, a senior member of the firm is involved with every project from its conception right through to the substantial completion and commissioning with qualified personable staff backing them up every step of the way. JDa's senior staff work in close concert and are involved in all the firm's projects so that if there is a conflict with current commitments, there will always be a senior team member made available to the client.

**the results of our continuous learning and innovative approaches have led us to produce energy-efficient buildings. Ultimately, this approach to managing project risks will significantly reduce costs at project completion.**

## CHAMPIONS OF WOOD

This team loves designing wood buildings, and we have been doing it for many, many years and have vast experience in designing post-disaster wood firehalls in all types of structural wood systems - conventional stick frame, heavy timber, engineered wood like glulam beams, and mass-timber, (CLT, NLT, LVL and more). Frankly, we've experienced it all and recommend the use of structural wood systems for the following reasons.

- Wood has extremely low carbon emissions as it embodies sequestered carbon during it's life cycle. Between the three main construction materials, concrete has 2-times the amount of carbon emissions compared to wood and steel has 3.5-times the carbon emissions compared to wood.
- Wood is an excellent material for post-disaster design. It's light weight, high ductility and comes in a multitude of configurations and applications. It is an ideal product for seismic design, especially in firehalls.
- Cost. Wood structure is traditionally less expensive to both purchase and install compared to steel or concrete structural systems. The building's structure typically makes up between 20% to 25% of the overall construction cost of the buildng, which provides significant savings for the Owner.

## COLOCATION DESIGN EXPERTISE

JDa has been fortunate to work on many public projects where colocated facilities are integrated into one building where economies with land, common spaces, structural systems, and mechanical and electrical services can be shared to support multiple organizations and maximize public funding. One of the first colocation projects began in 1998 with the Sechelt Justice Building, which is a combined Provincial Courthouse and RCMP detachment. Most recently, JDa completed the Vancouver Firehall No. 5 + Housing project where a 2-storey firehall integrated 4 storeys of affordable housing above. The project is a total of 57,000 sqaure feet, the entire building is built to meet post-disaster structural standards and is certified LEED GOLD-NC.

A list of co-located civic building typography that JDa has done are as shown:

| | |
|---|---|
| Firehall + Housing | • Vancouver Firehall No.5 + YWCA<br>• Tantalus Firehall + Housing<br>• Penticton Public Safety Building Study<br>• Varsity Firehall + Housing (Alberta)<br>• Peachland Firehall multi-colocated feasibility study |
| Firehall + Ambulance | • Kitimat Public Safety Building<br>• East Courtenay Firehall Study<br>• Creston firehall + ambulance<br>• Peachland Firehall multi-colocated feasibility study |
| Firehall + Emergency Operation Centre (EOC) | • Pitt Meadows Firehall + EOC<br>• Boundary Bay + EOC + Training Centre<br>• Maple Ridge Firehall + EOC |
| Municipal Building + another user group | • West Kelowna City Hall + Library<br>• Maple Ridge Firehall + Data Centre Server<br>• Penticton Public Safety Building Study<br>• Sechelth Justice Courthouse + RCMP Detachment<br>• Peachland Firehall multi-colocated feasibility study |

## BUILDING INFORMATION MODELING

Building Information Modeling (BIM) are tools such as REVIT software that allow us to coordinate designs with our consultant team by sharing digital 3D building models and integrating the different disciplines together to analyze, troubleshoot and provide immediate feedback. This process starts with the BIM Project Execution Plan (BIM PEP). This BIM PEP document provides an understanding for the owner, architects, engineers, and contractors on how to deploy building information modeling (BIM) technology and establishes roles and responsibilities of each party, the scope of information to be shared, and the processes of the BIM

software to be followed. At the initial stage of each project, we meet with our consultant team and review the BIM PEP document which ensures our team fully understands the goals of using BIM for each project and which include the following:

- Visualization and communication in 3D
- Ensure construction coordination through the use of 3D modeling of design
- Tagging and scheduling of items
- Coordination of documentation through automated referencing of views, call outs and sheets
- Managing project standards and approach for a cohesive deliverable drawing set
- Allow project teams to collaborate through BIM work sharing capabilities
- Facilitate design coordination through clash coordination

JDa is a fully REVIT based studio and as such we will be completing all design and modeling using REVIT for the Metchosin Firehall Feasibility project. All design and production staff have significant REVIT experience and are therefore able to contribute at any given time on any project. The beauty of our system is that it ensures undisrupted progress in design and documentation which then supports our ability to meet deadlines. In addition, we mandate that our consultant team commit to working in REVIT throughout the life of the project, ensuring a streamlined and coordinated process. Our use of REVIT at the earliest stages of a project permits our clients the ability to visualize options for consideration. We find this to be critical to provide the most appropriate design early which avoids unnecessary revisions.

At JDa we take our use of REVIT one step further by using REVIT BIM 360. This additional software add-on permits the integration of the consultant team's individual REVIT models into a live combined model which can be updated with seamless regularity. For example, this permits our mechanical consultant to build the ducting system in 3D in a live architectural model ensuring conflicts with architectural and structural elements are minimized as work progresses and ultimately produces a product where conflict errors or "clashes" are eliminated. The end result is a documentation product that ensures a smoother construction process with fewer additional costs or impacts on schedule.

## BC BUILDING CODE REQUIREMENTS

Due to our design experience with over 65 fire halls throughout British Columbia and Alberta, JDa is very familiar with the aspects of the BC Building Code and how specific codes can affect fire hall projects at the early stages as this can impact final solutions and choices. This knowledge will ensure that building design solutions will address all potential and current code issues, thereby expediting the design process in order to meet schedule goals effectively. This includes the introduction of the new 2018 Building Code, to which this building will be designed.

## POST DISASTER FIREHALL DESIGN

In order for modern fire halls to have the capability to continue serving communities during a post disaster scenario, it is critical that the building's design can withstand large scale seismic events, mass power outages, tsunamis, and so on. As such, JDa brings an extensive portfolio of knowledge in the requirements for post disaster facilities and understands the impact of those requirements on general fire hall design and cost.

For example, the Boundary Bay Fire Hall, Training Centre and Emergency Operations Centre in Delta, BC is seismically designed to withstand a large scale earthquake. Other examples include the Maple Ridge Fire Hall in Maple Ridge, BC - a fire station facility that will also house the City's back-up data server room as a collocation facility, allowing the City to remain operational in the event of a disaster. Another project, the Tantalus Firehall, in addition to being designed to post disaster requirements, has been designed to accommodate four (4) storeys of future housing on top.

## COST EFFICIENT FIREHALL DESIGN

JDa consistently works on publicly funded projects and is very familiar acting as stewards of public monies to ensure both transparency and value are achieved. JDa has the relevant fire hall experience to recommend a design and construction delivery methods to achieve the budget and schedule goals necessary for this project. For example, we have completed the Logan Lake Fire Hall tendered at just under $300.00/sf, the Qualicum Beach Fire Hall built for $303.00/sf and the Central Saanich Fire Hall at $305/sf.

## PUBLIC USE

Blending public elements into a "private / non-public" space contributes to the development of community buildings in beneficial ways. JDa has successfully implemented outdoor spaces including children's playgrounds, parks and learning centres within several fire hall sites. Integrating public use spaces within a fire hall is also possible with the creation of a wheelchair accessible washroom and secure (card access) door adjacent to a meeting room next to the main entry. This compartment can be employed for multiple uses both internally for firefighters, then "locked-off" for external groups, including general public, HAM radio operators and even an extra bookable room for civic government needs.

The Maple Ridge Firehall was designed beside a publicly accesible park, which includes a children's playground and shared space for the community's activities. Landscaping, and fencing was designed to provide a natural barrier between the two spaces while also ensuring public access to the firehall site was restricted.




# schedule c-2

# schedule c-2 - financial proposal

Section 21 FIPPA

**a. fixed fees**

[redacted]

Total Needs Analysis and Plan Fees $ 39,900.00

**b. estimate of disbursements**

The following is a list of possible project disbursements:

[redacted]

**c. other terms of contract**

[redacted]

Section 21 FIPPA

d. scope related changes

[redacted]

e. hourly rates

[redacted]

JDa

Johnston Davidson Hourly Rates 2024

*Hourly Rates Breakdown*

[redacted]

| ROLE DESCRIPTION | NAME | [redacted] |
|---|---|---|
| ARCHITECT | | |
| PRINCIPAL | Kimberly Johnston | |
| SENIOR ASSOCIATE | John Botelho | |
| INTERN ARCHITECT LEVEL 2 | Cameron Edwards | |
| [redacted] | | |
| Other disbursement: | | |
| Total | [redacted] | $49,900.00 |

Section 21 FIPPA


2 STOREY
FIREHALL



