

0110

For Reference Only

'DISCOVERY CONSULTATION'

NEEDS & OPTIMIZATION REVIEW / PRE-DESIGN REPORT

December 23, 2016

CLIENT

XXXXXX

PROJECT TYPE

New Single Family Residence + Outbuildings

PROJECT SITE ADDRESS

XXXXX

SUBMITTED BY

Atelier 010110 Architecture + Urbanism Inc.
Lethbridge, Alberta Canada

WORK PROPOSAL

W-PR.001621/COMM.1605

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'Discovery Consultation' - Needs & Options Review / Pre-Design Report

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Client Name

NEW SINGLE FAMILY RESIDENCE + OUTBUILDINGS

Cover Letter

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010110

ONE ONE TEN

Tree-top House
Magrath, Alberta, Canada

For Reference Only



515 Blackfoot Manor West T1K 7X7
Lethbridge Alberta Canada

T +1 587.800.3365
hello@010110.ca

November 25, 2016

Re: New Single Family Residence + Outbuildings

David Spencer Court
Principal Architect

AAA RAIC LEED AP SCUP
M.Arch (Hon.) B.Env.Design

Dear XXXXX:

As principal architect of One One Ten, I am please to submit our 'Discovery Consultation' deliverable as a Pre-Design phase report summarizing our recent work together to define the problem that is to be solved through design.

"A problem well stated is a problem half-solved." ~ Charles Kettering

This document serves as a record of our assessment of your project requirements and is organized to provide a framework of valuable information with preliminary thoughts and a few options to consider during the schematic design phase to help you and your team move forward. We believe your investment will greatly improve the probability of a successful final design and project outcome when completed.

We believe that the best work comes down to strong relationships and our ability to work together with people who value architecture and the emotive aspects of place making when aligned to reach a shared vision and your core functional requirements. We have demonstrated our ongoing commitment to developing synergies in a team environment to best ensure quality architecture, rigorous functional design and exceptional project delivery.

I have very much enjoyed working with you and hope our relationship will continue as you progress toward subsequent stages of design and eventually construction.

Please feel free to contact me should you have any specific questions in regard to this document or to discuss next steps in greater detail.

We thank you in advance for your consideration.

Kind regards,

D. Spencer Court AAA RAIC LEED AP SCUP
Principal Architect

spencer@010110.ca

Think well to the end,
consider the end first. ~ Leonardo da Vinci

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PART 1 - INITIAL PARAMETERS

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PROJECT SUMMARY / SCOPE

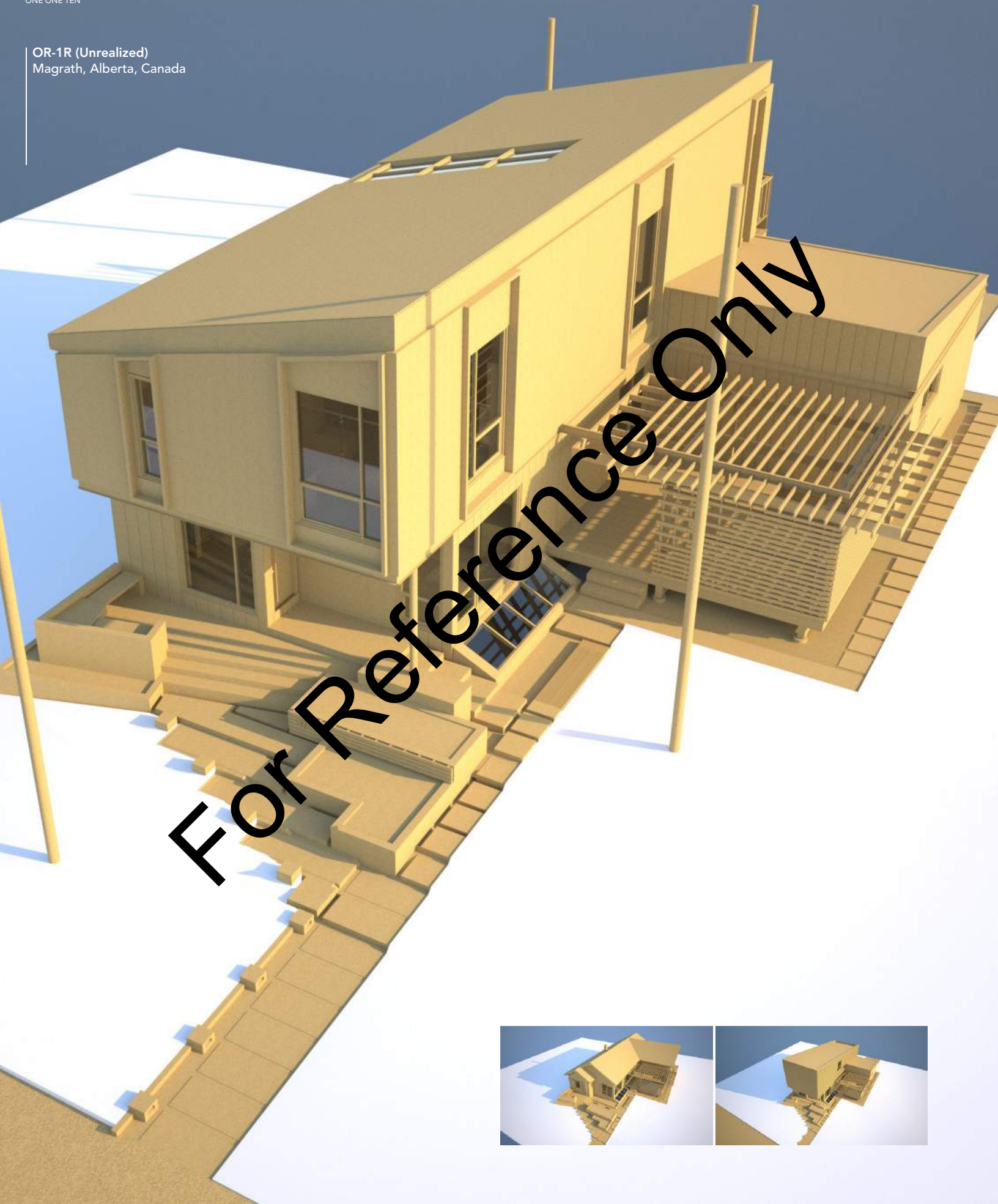
Background Information
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For Reference Only

010110

ONE ONE TEN

OR-1R (Unrealized)
Magrath, Alberta, Canada



If our artistic rhythms - **a result** - are to be significant, our prior meditations - **the cause** - must be so. ~ Louis H. Sullivan

BACKGROUND INFORMATION

SITE ADDRESS

xxx

49.6935° N, 112.8418° W

Elevation: ~910 m (2,985.6 ft)

Solar Altitude: 16.92° (Dec 21) to 63.75° (June 21)

CLIMATE DATA

Ave. Annual Temperature: 5.4 °C

Normal Temperature Range: -13 °C to 26 °C

Mean Annual Relative Humidity: 52% to 74% Ave.

Annual Sunshine: 2,507 hrs

Annual Precipitation: 392 mm

Ave. Annual Snowfall: 112.4 cm (44.3 inches)

Ave. Annual Rainfall: 276.7 mm (10.9 inches) Ave.

Wind Speed: 40km/h (for 16 days of year) Wind

Direction: W, WSW

STAKEHOLDER/CLIENT GROUP

The client and primary stakeholder group consists of a family of six including two parents, making joint project decisions, and four children between the ages of 4 and 15. The family also has a variety of small indoor and outdoor pets including a large dog and tentative future plans to accommodate other animals.

CONTEXT & SITE ATTRIBUTES

The property comprises approximately 15 acres of urban fringe of acreage non-agricultural designation just east of the Lethbridge city limits within the County of Lethbridge. Approximately 8 acres of land to the west are pastured to the neighbour's cows to keep weeds in control.

The site contains an existing two storey dwelling currently in use by the family, several out-buildings (a chicken coop, storage sheds), a recreational dug-out and a mix of berms and open areas. Various deciduous trees line the west side of the entrance road loosely dividing



Gated north property entrance approach and the existing dwelling beyond.
Lethbridge, Alberta

You have to **absorb what you see around you**, what exists on the land, and then use that knowledge along with contemporary thinking to interpret what **you see.** ~ Tadao Ando

the land between grazing pasture and domestic uses. Additional deciduous and coniferous trees punctuate the gravel drive lane which loops in front of the dwelling and returns back to the access road. The site offers various spontaneous forms of use - small projects are envisioned and constructed on the acreage and recreational activities happen during all seasons (swimming in the pond, raising chickens, playing basketball, gardening, building skate board ramps or bike jumps, skating and toboggan behind a truck).

The site is enclosed by a barbwire fence with a large entrance gate at mid point to the north boundary of the property against a gravel road on the west and north sides. An adjacent property owner lies directly south for the length of the property and a narrow shallow irrigation canal runs north-south against the east most perimeter edge. Site services include City potable water and below grade utilities for electricity and natural gas. The above grade pole hydro line runs east-west along the north boundary of the property against the township road. There is an existing on-site septic pond on field and below grade septic tank located north of the existing dwelling.

The site is largely flat, the existing dwelling occupying the prime high point. An analysis of flood-prone areas should be undertaken as part of the site planning exercise with topographical survey information on hand as a resource. The on-site dugout is located in the south-east corner of the property, with its former excavated material to the immediate north.

ZONING

The property is zoned as *Lethbridge Urban Fringe (LUF)* in the County of Lethbridge *Land-Use Bylaw 1404 (2013)*. A *Development Permit*

application will be required and must conform to all minimum criteria requirements set out in the *Land-Use Bylaw*.

GOVERNANCE REQUIREMENTS

Future work must comply with applicable bylaw, safety codes and requirements of the authorities having jurisdiction (AHJ). All work is to be completed in conformance to the *Alberta Building Code (2014)* for Part 9 - Housing and Small Buildings, the *National Energy Code for Buildings (2011)* and the *Land-Use Bylaw* in force for the County of Lethbridge where the property resides.

EMERGENCY SERVICES (FIRE)

The closest emergency fire response station is Firehall No. 3 in south Lethbridge - at most approximately 10 minutes travel time away. Fire access typically dictates road requirements and additional safety measures such as a dedicated cistern on site supplying a sprinklered home.

OTHER DOCUMENTS

No architectural controls or design guidelines currently apply to this property.

A topographical land survey indicating the metes and bounds of the property, all existing services and the location of structures, mature trees and important land features will be necessary for the client to obtain prior to the commencement of design work.

A geotechnical investigation of soil conditions may or may not be required by a structural engineer.

If you have total freedom, then you are in trouble.
 It is much better when you have some obligation,
 some discipline, some rules. ~ Renzo Piano

KEY THEMES, DRIVERS & OBJECTIVES

xxx: "I have no specific style or fixed idea of what I want aesthetically....eclectic, modern, prairie... all are appealing to me but I am most concerned with function at multiple stages of life and the incorporation of land space into plan."

xxxxx: "I am concerned with making a reasonable plan that is both financially responsible as well as intelligent, conducive to a moderate lifestyle, while leaving room for some possible indulgence and beauty."

KEY THEMES

xxxxx has romantic ideas about rural living, having grown up on an acreage. He likes to spend as much time as possible outside in the sun because he spends most hours of the day in a dark room. Light and physical movement are very valuable to him.

The xxxx' often entertain extended family and guests 3 or more times a week, which can number anywhere from 6 to 50 extra people.

PROJECT OBJECTIVES

The key objective of the project is to develop an overall land use plan for property, design a new primary residence with related outbuildings and create a consistent vision to meet client requirements through progressive stages of life over the next 20 to 40 years. Specific consideration includes the necessity, function and aesthetic design of the new residence and defining a scheme that capitalizes on the attributes of the site.

Stakeholder lifestyle generally includes raising an active family for the next 14-15 years and transition planning for an "empty nester" lifestyle with fewer family visits where the home

begins to accommodate the families of their children and grandchildren.

Present activities include all the domestic activities of raising a family - developing a safe home and sanctuary, entertaining, lunching kids as well as facilitating parental and extended family visits.

STAKEHOLDER/CLIENT CONCERNS

Early stakeholder concerns include a degree of uncertainty on the client's part about where and how to plan best use of property, how to design the new residence and go about the building process. The client expressed they feel like a non-expert requiring professional guidance and advice and appreciate the idea of having a 3rd party to offer objectivity and constructive critique to improve the outcome and look forward to discussion that combines ideas and reaches consensus between spouses as well as is a collaborative dialogue between architect/designer and client.

The client expressed a desire to participate in a process that would increase their own initiative to take action and give them a better chance of successfully moving forward with the proper support, resources and motivation. Their aim is to develop an overall plan that will integrate their interests and help to sensibly re-allocate land areas for use and activity as necessary. The client is concerned about efficient use of space and a propensity to minimize labour.

Client observations include insufficient quantities and types of spaces for functional living, both indoor and out, as well as poorly utilized spaces in the existing dwelling. Aesthetic appeal and execution is believed to be poor inside and out and the client wishes to integrate "some style."

My goal is to strip things down, not so that they become inhuman but so that you need just the right amount of words or shape to convey what you need to convey. ~ Maya Lin

At this stage the client feels there are no fixed time lines but they would like to begin working towards a new land use plan and residence as soon as possible.

PROJECT CONSTRAINTS & OPPORTUNITIES

SITE CONDITIONS

General guidelines for residential site planning include orientation to take advantage of solar exposure and deal with the impacts of wind (or create opportunities for controlled natural ventilation); the use and enhancement of natural amenities; provision for views and context; delineation of private and public areas; and due attention to all regulatory requirements.

The site itself is large enough to consider various forms of dwelling, but the site lends itself to single storey building schemes slung across the landscape meeting a fragment of changing light conditions.

In order to comply with the Land-Use Bylaw and current lot zoning, the existing residence will require relocation (only one principal dwelling is permitted). Agreement from the Council of Lethbridge will be sought prior to a Development Permit application to confirm the land use plan or scheme along with tentative time lines to ensure the dwelling can be lived in during the course of construction with a plan to sell the structure and relocate it property ensues shortly thereafter.

It is possible the ideal location to site the new residence may be immediately adjacent to or overlap with the siting of the existing home in order to maintain access, reasonable proximity to existing services and mitigate extraneous or unnecessary costs). These concerns should be

addressed and determined by the overall criteria developed for the land-use plan.

Re-use or demolition of the existing dwelling foundation (or other structures) may become an attribute worth investigating among site planning activities, but phasing will be a key planning activity requiring explanation to the client and potentially the contractor.

Although it was not a primary client concern, establishing priorities for resource conservation in terms of saving energy and conserving water use could be addressed via the building design.

Measures to create a day lit, durable, healthy, low-impact building of longevity were understood as positive design opportunities to be discussed in greater detail during subsequent stages.

Accessibility, as it pertains to potentially changing family needs over time - especially as people age in place - could also be considered during later stages to ensure the new residence can be utilized or easily adapted in the future.

The building program carries many opportunities to align spaces in the greatest habitable formations that define public and private space, protected outdoor space and careful viewpoints - all unfettered from limiting distances to adjacent dwellings or the usual shallow property line setbacks in urban areas.

Seismic design considerations should not be a factor for the design of this project.

PART 2 - PRE-DESIGN ANALYSIS & OPTION OUTCOMES

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PROGRAM & OPTION SKETCHES

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When an architect is asked what his best building is,
he usually answers, **"The next one."** ~ Emilio Ambasz

For Reference Only

From where stems the idea that our streets should look as if they were created by the same client or the same architect? **Diversity**, and not its opposite, is amusing. ~ Günter Behnisch

ARCHITECTURAL SPACE PROGRAM / NEEDS & OPTIONS ANALYSIS

A key component of the *Pre-Design Report* is the development of an *Architectural Space Program*. This program framework seeks to define the “problem” in order to assist a decision-making process, determine a clear scope of work and criteria for a successful solution that are to be solved through activities of design.

Below are ‘blocks’ of net usable space represented categorically in the *Architectural Space Program*. A detailed *Architectural Space Program* summary developed with the client during the consultation process can be found in the appendices.

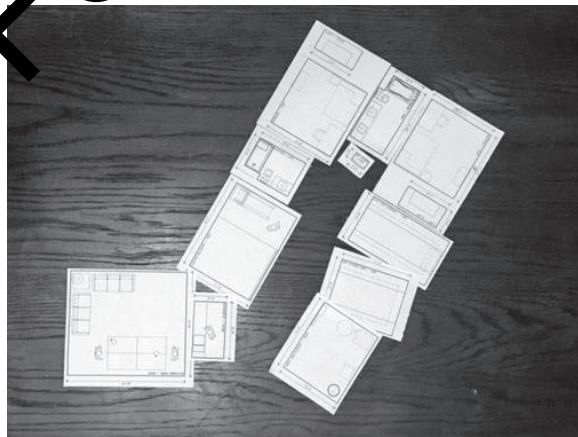
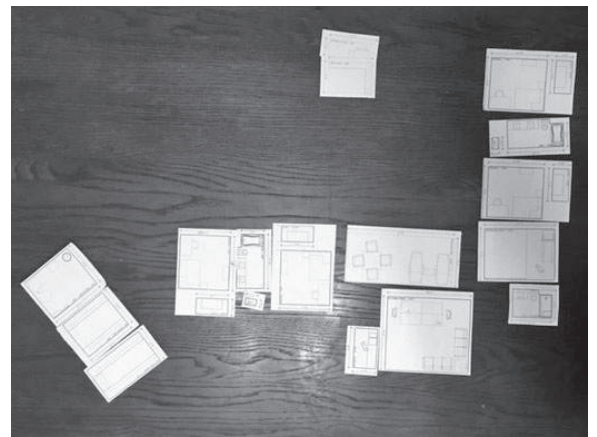
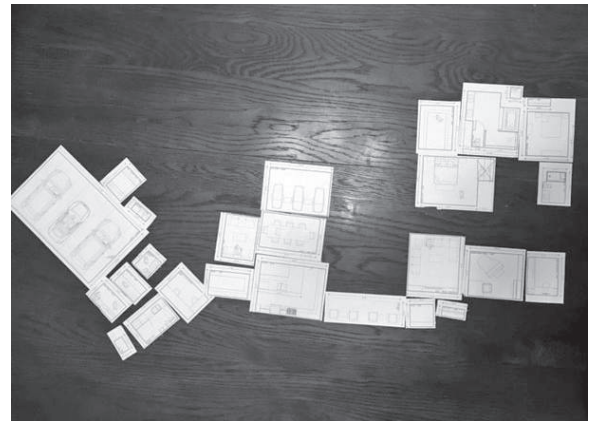
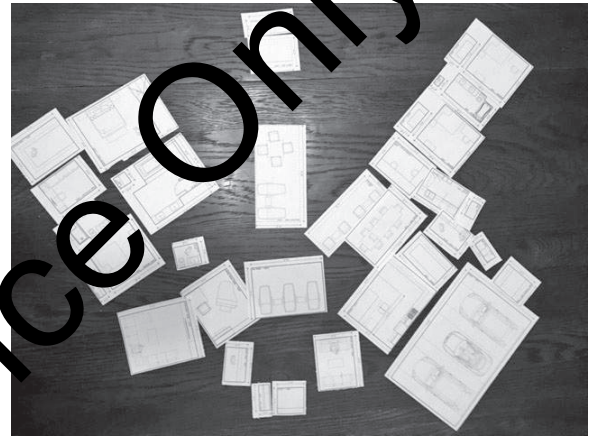
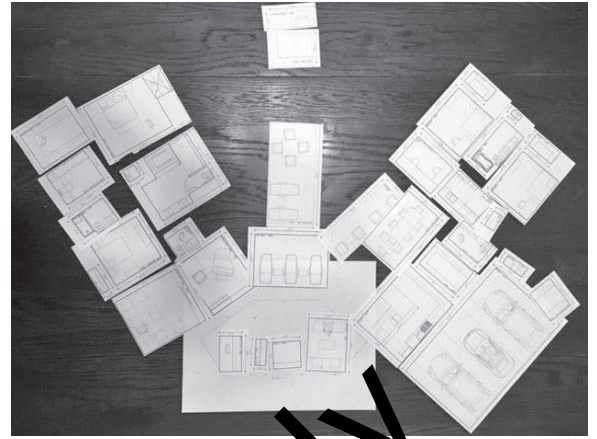


Block components of net usable space represent the sum of program parts later used to develop adjacencies and stacking concepts during a ‘gaming’ workshop.

FUNCTIONAL RELATIONSHIPS**"GAMING" PROGRAM ITERATIONS**

Program components were used as play pieces in a fluid exercise to quickly illicit different functional relationships, combinations and forms between specific program elements. The approach facilitates an opportunity to test initial ideas that prioritize order and spatial hierarchy, define public and private groupings of space and account for support spaces beside related program elements. Each iterative snapshot reveals a new examination of program where the stakeholder can freely discard ideas that do not appear to perform the way they envision. The exercise is an intuitive precursor to design thinking in a fun accessible way and can be easily re-configured without going through the process of sketching floor plan layouts.

The conceptual exercise also forms the basis of a blocking and stacking plan that can be understood as a form generator and in connection to general assumptions about the site that may impact massing or form.



What if building were more like a nest? If it were, it would be made out of local, abundant materials. It would be specific to its site and climate. ... It would be just what it needed to be. ~ Jeanne Gang

EARLY DESIGN THINKING & ASSUMPTIONS

The expansive relatively flat site provides many opportunities for siting new structures. The pragmatic factors influencing this are accessibility from roadways, existing infrastructure (gas, hydro power, city water and septic field locations) and our climate with high annual sunshine and strong winds.

Contextually, prairie areas where the sky stretches broadly tends to illicit building forms that expand laterally across the land in human scale without drawing attention to themselves. These forms carry deep protected overhangs that provide shade or reflect light deeper into structures. Sometimes these structures are punctuated with a single high volume or vertical element (marking an entrance or elevating a view for a common living space).

Materially, dwelling can be imbued with a visual language that is an organic extension of the landscape utilizing materials in a careful palette of earth tones or in the raw, natural execution of less processed building products.

An extension of the landscape to the interior is often facilitated by blurring boundaries of the exterior container or shell - where exterior walls shift past glazing to the interior and a prime axis of circulation ends in a crafted view or point of light. A connection to the sky via clerestory glazing can further create a floating effect for a simple sloping roof structure that can appear to lift and peel back the heavens.

Addressing topography, or introducing subtle changes of the ground surface along points of entry can often heighten a connection to the land.

RELEVANT PRECEDENTS

xxxxx is not really sure how to describe what she likes ... "I love the connection with outdoors and landscape. I would be inclined to more rock, wood, glass and different tone's of wood over steel and cable (not to say I don't like that)... in clothing I would pick a flower print over black and white. I find some designs too industrial and masculine."

xxxxx loves wood and exposed panelling. xxxxx has preferences towards stone and homes that integrate well with the landscape or ground.

xxxxx is looking for something grand in a house but doesn't have a fixed style preference (other than he likes things to look expensive!).

Precedent projects we discussed in addition to others are sourced below:

Los Altos Residence, Los Altos, California
<http://bcj.com/projects/los-altos-residence>

Independence Pass Residence Aspen, Colorado
<http://bcj.com/projects/independence-pass-residence/>

Lily lake, Northeast Pennsylvania
<http://bcj.com/projects/lily-lake-residence/>

Other notable projects include the Halls Ridge & Block Island Residences (BCJ) and D'arcy Jones' Island and Ha-Ha Houses:

<http://www.darcyjones.com/residential/#/island-house>

<http://www.darcyjones.com/in-progress/#/ha-ha-house>

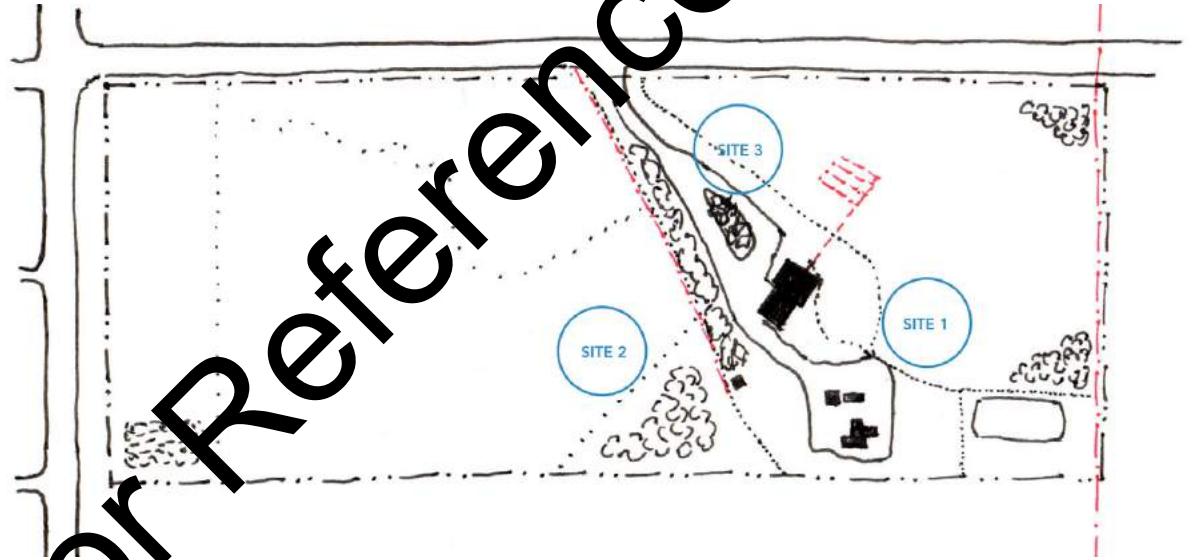
The design of buildings in natural settings, whether urban or rural, must be **responsive to the earth out of which they arise** and the sky against which they are seen. ~ James Polshek

SITE PLANNING

SITING OPTIONS

Considerations for siting a new principal dwelling should address the context of opportunities and constraints unique to the existing property and capitalize on potential design considerations of the dwelling itself.

Three potential areas are indicated in the diagram below and all have various benefits and impacts:



Above, schematic sketch of existing site with proposed siting areas for a new principal dwelling. Below, aerial site photograph capture from Google Maps.

SITE PLANNING APPROACHES

The prairie acreage setting at the fringe of an urban centre offers wide opportunities due to the size and orientation of the property. The current configuration of dwelling, outbuildings and introduced features of tree breaks and pond provide a sound framework to build upon and enhance through careful consideration. There is opportunity to firmly site a contextual dwelling in a poetic way that responds to our landscape with a seemingly endless horizon and varied quality of light.

The configuration of the new home should address wind conditions regardless of planned site wind breaks and create protected wind shadow areas to improve outdoor use by virtue of its form. The existing dwelling and related buildings should be evaluated for adaptation or re-purposing in all options. For example, the dwelling foundation might be re-usable for a new structure.

More prudent factors to consider include the efficiency of remaining adjacent to existing hydro, natural gas services and the septic field system. Low lying areas should be avoided and reasonable distance from the gravel road on the west and north will provide better control of dust and separation from vehicular traffic noise. The long band of trees running diagonally through the east of centre of the site provides some steady wind protection.

SITE PLAN OPTION 1 - \$\$

Consideration for a site deeper into the property affords an ability to continue utilizing the present configuration including back yard landscaping, adjacency to the existing septic field and the convenience of proximity to the recreational amenity of the dug-out and grouping of outbuildings. This location leaves pastured land as an untouched resource and builds upon the existing road configuration and services. It provides an ability to expand with minimal site disturbance.

SITE PLAN OPTION 2 - \$\$\$\$

This option entails a 'restart' utilizing untouched pasture lands to the west to create a new scheme freeing existing areas to be developed as an outbuilding precinct. It is the more costly scenario requiring a new access road entry point from the west end of the property running parallel to the south edge. This site would require a new septic field to the north low lying area where odors under prevailing winds will not conflict. The natural gas line and electricity connection is in close proximity. Future outbuildings are planned to the east re-utilizing the location between house and dug-out area. The new road could be constructed in part by re-purposing existing excavated mounds evident across the site in combination with excavated material from the new dwelling. The exposure offers open views and good south exposure but does so close to neighbouring activities.

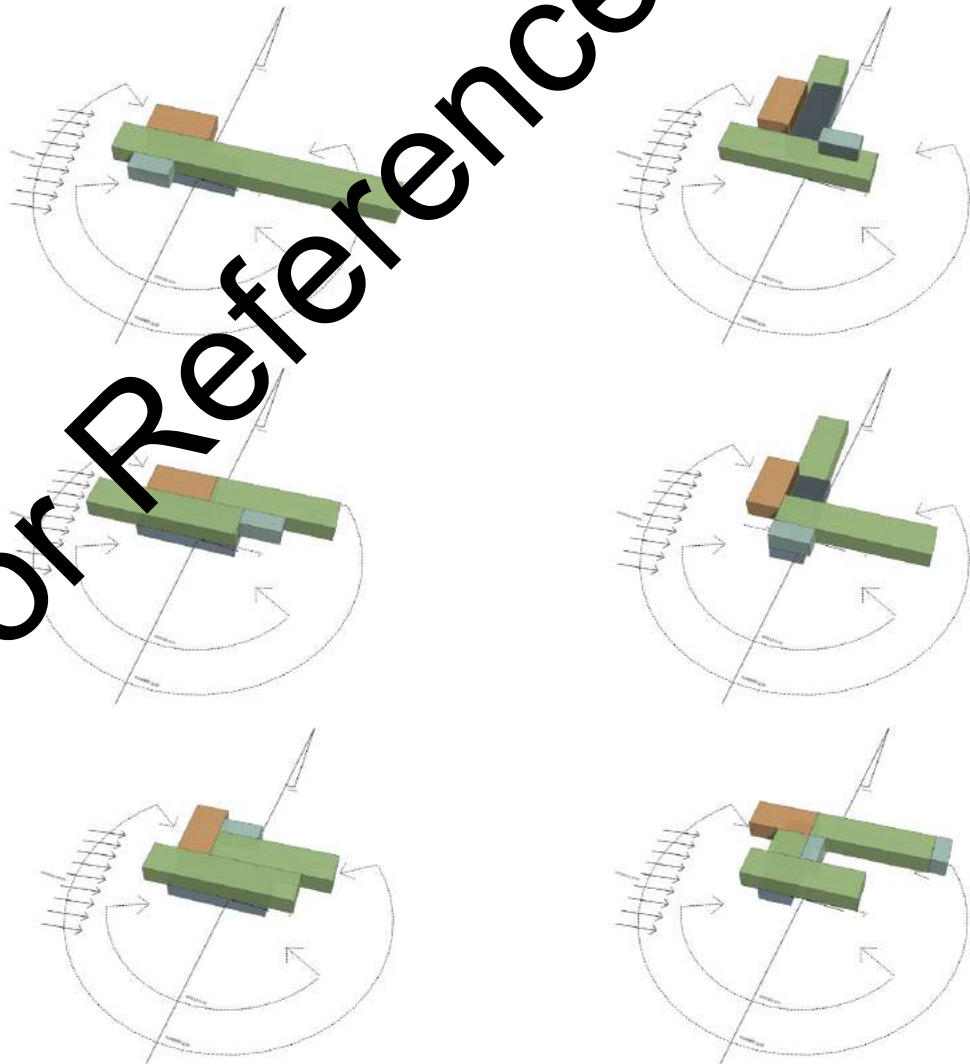
SITE PLAN OPTION 3 - \$\$

Although close to the north road, the concept utilizes the existing road access and predicts a dwelling that extends toward the east with the roadway wrapping around the south west corner. The residence is introduced upon passage through the entry gate prior in hierarchy with other structures. As in option 1, adjacency for tying into the existing septic field and natural gas line is effective albeit at greater distance from the existing outbuilding precinct and dug-out area.

MASSING OPTIONS

EARLY PROGRAM MASSING CONCEPTS

Below are several massing options that correspond to distributed program areas noted as components of main floor, basement, garage support and exterior attached gross areas. The are sited in a simple way that responds to the prevailing wind direction and solar exposures during peak summer and winter solstices.



Legend at top right: Base program volumes include the garage (blue), main floor (green), garage support (brown) and exterior space (teal).

A product often becomes **more useful** if the costs **are lowered** without harming the quality. ~Charles Eames

FEASIBILITY & RISK ANALYSIS

The risks that confront projects have become more unpredictable and potentially catastrophic. By engaging us early in the planning phase, well before design criteria are set, your resiliency to risk has increased. Our work together has identified a general scope and vision for the project with further options or criteria to consider. Subsequent phases will bring greater awareness to unforeseen hazards which will become more evident and prepare you to lower your capital, construction and operating costs; increase resiliency and make smart choices that enable you to overcome future obstacles and realize your specific project vision in a more predictable and purposeful manner.

Risk considerations for design and construction projects typically consist of hazards that affect the financial viability, schedule and personal safety of everyone involved. Headline-grabbing events such as extreme weather and unsafe work conditions are compelling people to take a closer look at their risk assessments and continuity plans as they often extend schedule and cost. You will be able to manage this risk as you participate in a progressive and ordered process with a leading design professional.

SPECIFIC PROJECT RISK FACTORS

Our early assessment of risk factors affecting your project initially pertain to developing and maintaining a realistic budget in tandem with the scope of work and moving forward through project stages on a pre-determined schedule that aligns with your expectations and milestone requirements.

We work pro actively with our clients to help them assess these challenging goals in a

holistic manner that blends seamlessly into the architectural design and construction process.

There are also many site related risks that can be properly addressed in design stages.

PROJECT TIMELINE

SCHEDULE

Sufficient time for the design process to develop under proper consideration is as important as the time devoted to prepare construction documentation and build your project.

It is our opinion that an early construction start in the spring of 2018 is a feasible period of time to progress through the stages of design and construction documentation production and tender the project. A more detailed time line can be reviewed in the coming months with specific milestone dates as a design is developed and specific construction documentation is advanced to coincide with quality control checks and Development and Building Permit submissions to the municipal AHJ.

FUTURE WORK PLAN

A detailed work plan and project development time line framework is described as a series of future project phases that include a summary of tasks to be completed in order to advance the project. This information appears in our fee proposal letter which will follow your receipt of this Pre-Design report.

The architecture we remember is that which **never consoles** or comforts us. ~Peter Eisenman

OPINION OF PROBABLE CONSTRUCTION COST

DIRECT COST OF CONSTRUCTION

In construction, direct costs are directly attributable to the object and comprise the costs of materials, labor, equipment and all directly involved efforts or expenses - mostly by the general contractor and sub trades.

Property cost is usually not factored into these assessments as it must be purchased independently and prior to construction.

INDIRECT COSTS

The endeavor of planning, designing and building a new residence or small building incurs a range of in-direct expenses that facilitate a project's inception, creation and eventual construction. They are often service related expenses toward a project.

Professional architectural design and engineering services are in-direct costs (usually based on the direct costs of construction) and represent the time and expertise required to achieve the project. Other in-direct costs include soft costs of development or building permits, project insurance, GST, reimbursable expenses, and so forth.

Combined, the total direct and in-direct costs create the total project cost.

OPINION ON PROJECT COST & BUDGET

At this early stage, statements of budget cannot be guaranteed as many assumptions are made to accomplish a preliminary analysis. The final outcome is likely to be different as the design process evolves and subsequent decisions are made by clients in an increasingly informed manner and with fewer and fewer assumptions remaining.

Along with the *Architectural Space Program*, appended to this document is an *Opinion of Probable Construction Cost* and a preliminary summary of *Total Project Cost* based on the total program developed and the qualitative assumptions therein based on our discussions.

The noted *Opinion of Probable Construction Cost* is the budget scenario we are currently utilizing in our fee proposal to follow.

PART 3 - NEXT STEPS

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IMPLEMENTATION

Professional Design Services
Engaging a Contractor

For Reference Only

Architecture is the constant fight between man and nature, the fight to overwhelm nature, to possess it. **The first act of architecture is to put a stone on the ground.** That act transforms a condition of nature into a condition of culture; **it's a holy act.** ~ Mario Botta

For Reference Only

We do not create the work. I believe **we**, in fact, are the discoverers. ~Glenn Murcutt

PROFESSIONAL DESIGN SERVICES

WHAT NEXT? THE DESIGN PROCESS

After asking questions, listening and identifying the scope of work as well as opportunities and hindrances during this pre-design consultation, design stages comprise the exercise and activities of problem solving using the information presented in this report. A myriad of issues must eventually be resolved - often when they are at odds with each other - and the design process guides clients through the decision making process effectively. The design process begins with an initial phase called *Schematic Design* where two or three design options are generated in greater detail. After this phase has sufficiently developed, the *Design Development* phase focuses energy on a single option that represents the best direction.

A primary objective of the built environment architects address as design professionals is how to create a powerful synergy between necessity, function and beauty simultaneously while improving quality of life. As this is realized, an architect's continued role is to understand this brief and carefully listen during design phases in order to provide professional consideration for project requirements and respond to opportunities for the site and program as they are influenced issues of climate, context, function, budget, schedule and life safety.

An architect's ethical responsibility is to adhere to all applicable bylaws, codes and standards applicable to the construction of buildings in order to comply with good practice and maintain life safety. As such, it is best practice for architects to maintain supervision of the design process and lead the well coordinated production of construction drawings in order to meet professional standards of construction

and adequately indicate the extent of work to the municipal *Authorities Having Jurisdiction* (AHJ), a general contractor, sub trades and others. The *Construction Documents* (drawings or 'blueprints') should be prepared to a standard of care that both satisfies you, the client, from a design perspective and which adequately communicates the design intent of the project in a constructible way to contractors and trade people. Although the design copyright of your project remains the architect's intellectual property, the constructed building is owned by the client and copies of the 'instruments of service' are furnished as record documents.

Architects are to maintain a reasonable schedule during all project development phases and provide preliminary budgetary information (non-estimated) that is predictive to the extent within the architect's control. Often a contractor or quantity surveyor is utilized to furnish increasingly accurate budget or tender pricing.

The collective education and experience of architects enables them to create a healthy, livable and self-sustaining environment of the highest standard, to the extent required.

Voluntarily, as permissible by the budget, you might consider implementing aspects of environmental design achievable in your locale to enhance the sustainability and operational impact of your project. This is a value added approach to design where new construction and renovations contain opportunities to address energy consumption in terms of the whole building design - envelope, systems, durable finishes, recycled or re-purposed local materials, reduced construction waste or by employing efficient resource or energy saving fixtures and appliances that conserve finite resources and save on operational costs, to name a few.

A construction site is an incredibly instructive place for an architect. I would rather have spent an hour at the St. Peter's building site in Rome than have read all the books written about that church. ~Jorn Utzon

ENGAGING A CONTRACTOR

In the way architects and experienced designers excel most at conceiving projects and interpreting client needs by leading the design process and team to create architecture, contractors are experts at implementing the built work and managing the construction schedule. Together clients with architects, consultants and contractors realize project work.

Normally at the close of the *Design Development* phase or along with a *Development Permit* submission, our approach often invites the participation of a general contractor in order to re-confirm project cost assumptions early in the process before energy is spent on producing construction documentation. The contractor can also more effectively offer constructability advice based on the progressing design and respond to unique issues or constraints of a site, time line or competing influence. Our process for *Construction Documentation* is then better able to adapt key elements of contractor feedback when it is less expensive to address (in advance of finished tender drawings) and more easily keep the project focussed and on budget. The input of the general contractor could be on a consulting basis only or as part of a construction management delivery model where the same contractor is awarded the work prior to tender after a pre-qualification process is performed.

PRE-QUALIFICATION

One One Ten has established a pre-qualification process for general contractors that evaluates a past performance on comparable projects by looking at recently completed work, contacting references, comparing budgets and intended milestones and reviewing bonding and insurance coverage. Other background

information is requested and we can assist to negotiate contractor mark-up on construction services in a way of clients signing a written construction agreement as part of the bidding or tendering process.

PROJECT DELIVERY

There are a number of ways to select a contractor including traditional competitive tendering process (design-bid-build), construction management or design-build. How you contract with a builder coincides with the delivery model.

A traditional form of agreement is a Maximum Fixed Sum contract. Another option to consider is a Cost Plus contract that is more open and transparent and sets an agreed upon contractor mark-up fee to cover the base contract and any changes that occur. Design-Build contracts are a different format as well as Construction Management at Risk (which vary) but have their application on certain higher risk or complex projects.

The most important thing is to follow a standardized process (so all parties participating are familiar with it) and get your agreement in writing. It is best when a professional architect is advocating and providing oversight through construction on your behalf.

The construction drawings form an integral part of that contract and are considered legal documents themselves.

A more detailed discussion on safeguards and steps for hiring a contractor is provided below:

<https://trustedpros.ca/hiring-guide#forms>

APPENDICES

FIRM OVERVIEW

- Practice Summary
- About
- Our Process
- Our Values
- Staying Connected

SUPPLEMENTAL DOCUMENTATION

- Architectural Space Program
- Opinion of Probable Construction Cost / Total Project Cost
- Miscellaneous Sketches & Annotations
- Select Site Photographs

Architecture is bound to situation. And I feel like **the site is a metaphysical link, a poetic link**, to what a building can be. ~ Steven Holl

For Reference Only

Our work is founded on the belief that architecture has a profound and powerful role in the well-being of people, the vitality of places and in shaping our experience of the world.

PRACTICE SUMMARY

NAME

010110 | Architecture + Urbanism (One One Ten)

LEGAL NAME

ATELIER 010110 ARCHITECTURE + URBANISM INC.

OWNERSHIP STRUCTURE

Corporation

HEAD OFFICE ADDRESS

515 Blackfoot Manor West T1K 7X7
Lethbridge, Alberta, Canada
49.6942° N, 112.8328° W
T +1.587.800.3365 NO FAX

EMPLOYEES

Total of 2 core employees supplemented by our collective team, as required.

ABOUT

One One Ten is an emerging force for architecture and urbanism in western Canada founded by architect Spencer Court on the first day of January, 2010. Over the past several years we have evolved as a hybrid core team and diverse network of professionals joining forces as a collective to realize architecture and the built environment in the context of a new paradigm of professional practice. Our moniker name represents the calendar date our atelier was initiated.

Our combined experience crosses various scales of complexity, size and building typology in the professional disciplines of architecture, environmental design, urbanism and planning.

Our work attempts to address emerging challenges of our time in urban places, regional

landscapes and communities. Our design process explores themes of architectural theory and research through forms of collaboration for built and unbuilt work. As a growing collective, our work pursues opportunities to collaborate with experts from mixed disciplines who enable architecture to enrich, re-interpret and create transformative exchanges that realize the potential of each unique project.

Our projects hope to be deliberate and sensitive responses to diverse programmatic aspirations, technical requirements, cultural and social landscapes situated in the public realm of various growth centres in urban, rural and other environments. Our projects are also deliberate responses to diverse cultural and social landscapes situated in the public realm of various contexts.

One One Ten further attempts to address emerging challenges of our time in urban places, regional landscapes and communities.

As a growing specialists of the built environment collaborating with diverse teams of people, our experience crosses various scales of complexity, size and building typology in the professional disciplines of architecture, environmental design, urbanism and planning.

OUR PROCESS

WHY WE PRACTICE

We love human experiences and interactions. Design empowers and enhances the lives of people. We practice architecture to create and develop community. We want to discover and innovate through design.

When collaboration and research inform the design process, we are equipped to create more comprehensive architectural solutions and contribute greater value to the built environment.

OUR WORK BEGINS WITH PEOPLE

What appears evident for project success in architecture is a reliance on people. From our team of experts who thoughtfully interpret ideas from an integrated dialogue with end users, community citizens and clients, architecture requires participation before occupation.

WE COLLABORATE WITH OTHERS

One One Ten's approach is a working model for a diverse design collaborative. This genuine statement reflects our design process and how we interact, engage and integrate our team with other people. We approach each project with a transparent 'hands on' perspective through an intimate design process that encourages fierce thinking, honest questions and tough decisions amongst its participants. In every case, our method always pursues design excellence in architecture and urbanism in order to provide lasting value to communities.

OUR VALUES

ARCHITECTURE MATTERS

We believe architecture is essential to society. Architecture is a reflection of civic vision and the cumulative disposition of society's valuation of good design in the vitality of cities. Architecture is a part of public discourse and should be written about and roundly criticized. Architecture also cannot rightly be divorced from the architect.

We believe the role of architecture is currently shifting in both the profession, industry and societal context through innovative forms of architectural practice moving from a tradition of the architect as 'master builder' to the role of the architect as specialist in the built environment working in collaboration with broader implementation teams.

OUR WORK IS A PART OF PUBLIC DISCOURSE

Our architectural work is dedicated to engaging the public realm to explore the complexity of problems that exist in the world which are mediated through design. This open discourse is realized incrementally through design intervention and impacts the fabric of urban society. As design professionals, it is in this purposeful exchange with people and the built environment that ideas mature into potent architecture and foster exciting new urban or constructed experiences.

WE BELIEVE IN THE POTENTIAL OF CITIES

Each project we engage is a conscious act of making and city building. In all cases, we want to articulate an appropriate but compelling response to context and a convincing and urbane response to density that enriches both the public realm and society's experience of daily urban life.

A good relationship starts with a conversation and continues by being connected and within reach.

STAYING CONNECTED

PRIMARY CONTACT

Client business and other inquiries can be made by contacting principal architect, Spencer Court, by email at spencer@010110.ca or by phone at 1.587.800.3365 x701.

GENERAL INQUIRIES

For all general inquiries please contact us at hello@010110.ca.

SOCIAL MEDIA FEEDS

Connect with us on our preferred social media sites - Twitter, Facebook, LinkedIn and Instagram. Like, follow or subscribe.

Follow us on twitter at [@010110arch](https://twitter.com/010110arch)
Follow us on Instagram at [010110arch](https://www.instagram.com/010110arch).
Like us on [Facebook](https://www.facebook.com/010110arch).
Connect with us on [LinkedIn](https://www.linkedin.com/company/010110arch).

INTERESTED IN REFERRING US?

Obtaining new work opportunities and engaging in the design process sustains our passion for architectural practice. We are always interested in hearing from new clients and are happy to help them develop their vision and move their projects forward.



Old Man River Valley, Lethbridge, Alberta

ARCHITECTURAL SPACE PROGRAM

no.	room / function / line item	location	no. units	unit area nsm	unit area nsf	total net area nsm	total net area nsf
1.0	Private Sleeping / Bathing Areas						
1.1	Master Suite						
1.1.1	Bedroom <i>King size bed, side tables; ability to access ensuite & dressing area outside of bedroom, sound isolation and fireplace</i>	Main	1	19.5	209.9	19.5	209.9
1.1.2	Dressing Area <i>Dual pass through closet c/w ceiling height millwork storage wall, bench seat and make-up station</i>	Main	1	10.0	107.6	10.0	107.6
1.1.3	Master Ensuite <i>Includes stand alone soaker tub with double shower room, dual flush low flow separated water closet, double vanity, millwork storage, skylight & exhaust fan</i>	Main	1	16.4	176.5	16.4	176.5
1.3.3	Make-Up Station <i>Linen, toiletry & towel storage for ensuite bathroom</i>	Main	1	3.2	34.4	3.2	34.4
1.3.4	Linen Supply Closet <i>Linen, toiletry & towel storage for ensuite bathroom</i>	Main	1	0.8	8.6	0.8	8.6
1.2	Bedroom Suites						
1.2.1	Child Bedrooms <i>Grouped with bathrooms, size to accommodate future family visits</i>	Main	4	14.5	156.1	58.0	624.3
1.2.2	Closet Storage Space <i>Closet accessories as required</i>	Main	4	2.3	24.5	9.1	98.2
1.2.3	Guest Bedroom (Guest Wing) <i>Isolated spare room (accom. shift work)</i>	Main	1	14.5	156.1	14.5	156.1
1.2.4	Spare Closet Storage Space (Guest Wing) <i>Closet accessories as required</i>	Main	1	1.1	11.8	1.1	11.8
1.3	Washroom Facilities						
1.3.1	Shared Bathrooms <i>Includes stand alone soaker tub/shower room, dual flush low flow water closet, double vanity and millwork storage & exhaust fan</i>	Bsmt	2	6.3	67.8	12.6	135.6
1.3.2	Spare Bathroom <i>Includes stand alone soaker tub/shower room, dual flush low flow water closet, double vanity and millwork storage & exhaust fan</i>	Bsmt	1	4.3	46.3	4.3	46.3
1.3.3	Linen Supply Closet <i>Linen storage for both bathrooms</i>	Bsmt	1	0.3	3.7	0.3	3.7
Subtotal						149.9 csm	1,613.1 csf
Component Area Factor						1.15	
Component Subtotal						172.3 csm	1,855.0 csf

ARCHITECTURAL SPACE PROGRAM

no.	room / function / line item	location	no. units	unit area msm	unit area nsf	total net area msm	total net area nsf
2.0	Common Living Areas						
2.1	Entrance						
2.1.1	Foyer <i>Visitor arrival / entrance space; convenient seating area</i>	Main	1	5.2	56.0	5.2	56.0
2.1.2	Guest Washroom <i>Half bathroom Incl. dual flush low flow water closet and vanity</i>	Main	1	3.3	35.5	3.3	35.5
2.1.3	Back Entry Foyer / Mud Room <i>Primary arrival / entrance space; convenient seating & storage, shelves, sliding door closure, shoe storage; relates to garage entry and storage areas</i>	Main	1	7.8	84.0	7.8	84.0
2.1.4	Back Foyer Coat Closet <i>Three season gear</i>	Main	1	1.4	15.1	1.4	15.1
2.2	Living / Entertainment						
2.2.1	Sitting Room <i>Comfortable seating for 4-6</i>	Main	1	10.0	107.6	10.0	107.6
2.2.2	Family Room <i>Comfortable lounge seating for 8-10, party room (no TV), future living room grand piano space, back-up space heating (i.e. fireplace - requirements TBD)</i>	Main	1	32.5	349.8	32.5	349.8
2.2.3	Theatre / Media Room <i>Seats 8-10, basement location, sound isolation; can open to rec room; 90"+ screen size (lan p. 10)</i>	Bsmt	0	0.0	344.4	0.0	0.0
2.2.4	Library / Small Music Room <i>Upright piano & violin, reference library (millwork) and a few seats, lockable room</i>	Main	1	15.5	166.8	15.5	166.8
2.2.5	Recreation / Games Room <i>Seating area, foosball, air hockey, table tennis with 2 gaming tables seating 4 each</i>	Bsmt	1	26.6	286.3	26.6	286.3
2.2.6	Kitchenette / Serving Area <i>Dishwasher, sink & high stool wet bar and serving area (popcorn maker)</i>	Bsmt	1	4.0	43.1	4.0	43.1
2.2.7	Sunroom <i>Three season sunroom, openable - sunrise is important & view of east/south east</i>	Main	1	19.0	204.5	19.0	204.5
2.3	Food Preparation, Storage & Dining Areas						
2.3.1	Kitchen <i>Full kitchen with double oven, full-sized fridge, prepped island with millwork bar</i>	Main	1	26.4	284.2	26.4	284.2
2.3.2	Dining Area <i>Capacity for seating 8; expandable into space for dining & seating</i>	Main	1	21.4	230.3	21.4	230.3
2.3.3	Large Walk-in Pantry Closet <i>Second fridge+freezer, long island, food storage with access to cold food storage area</i>	Main	1	6.9	74.3	6.9	74.3
2.4	Workspaces						
2.4.1	Home Office / Den <i>His Space - Work surface with 3 15" displays, printer; darkened room (radiology assessment)</i>	Main	1	10.2	109.8	10.2	109.8
2.4.2	Studio / Craft Room <i>Her Space - Work surface (sewing table), sewing machine, millwork.</i>	Main	1	8.3	89.3	8.3	89.3
2.5	Wellness Area						
2.5.1	Exercise Area <i>Full height mirror (dance), treadmill, stationary bike, weight station, floor mats & dumbbells, audio system, large tv</i>	Bsmt	1	15.3	164.7	15.3	164.7
2.5.2	Shower / Change Room <i>Includes shower room, dual flush low flow water closet, vanity and millwork storage & exhaust fan</i>	Bsmt	1	4.3	46.3	4.3	46.3
Subtotal						218.1 csm	2,347.6 csf
Component Area Factor						1.15	
Component Subtotal						250.8 csm	2,699.7 csf
3.0	Domestic Support Areas						
3.1	Laundry Suite (Upper Floor)						
3.1.1	Laundry / Clothes Prep Area <i>Washer & dryer, folding table & ironing space with view(s); close to bedrooms, pass-through service</i>	Main	1	10.0	107.6	10.0	107.6
3.2	Housekeeping (Mainfloor)						
3.2.1	Small Housekeeping Closet <i>Space for vacuum, broom closet, storage shelves for housekeeping supplies</i>	Main	1	0.3	3.7	0.3	3.7
Subtotal						10.3 csm	111.3 csf
Component Area Factor						1.15	
Component Subtotal						11.9 csm	128.0 csf

ARCHITECTURAL SPACE PROGRAM

no.	room / function / line item	location	no. units	unit area nsm	unit area nsf	total net area nsm	total net area nsf
4.0	Building Service Space						
4.1	Mechanical Area						
4.1.1	Building Systems Room <i>Building systems for heat, ventilation, humidity control, hot potable water, sump pump, network, cable, house e-panel - quiet systems</i>	Bsmt	1	12.3	132.4	12.3	132.4
4.2	General Storage (Basement)						
4.2.1	Storage Room <i>Domestic items, various storage needs, toys & equipment, seasonal decorations</i>	Bsmt	1	9.2	99.0	9.2	99.0
4.2.2	Undeveloped (Remaining Foundation/Basement Area) <i>Placeholder - various storage needs/foundation area</i>	Bsmt	1	14.0	150.7	14.0	150.7
4.3	Food Stores (Basement)						
4.3.1	Cold Food Storage Room <i>Cold storage - perishable & canned supplies and bulk items; fridge / freezer? Walk-in freezer equal to 3 upright freezers?</i>	Bsmt	1	10.4	111.9	10.4	111.9
	Subtotal					45.9 csm	494.1 csf
	Component Area Factor					1.15	
	Component Subtotal					52.8 csm	568.2 csf
5.0	Support Space						
5.1	Garage / Maintenance Areas						
5.1.1	Enclosed Garage <i>Parking for 3 automobiles, small item storage - 2/1 split bay</i>	Grade	1	59.5	640.5	59.5	640.5
5.1.2	Small Bench Area <i>Integrated work area with tool and garden equipment storage</i>	Grade	1	3.7	39.8	3.7	39.8
5.1.3	Storage Area <i>Space for seasonal decorations, bicycles, winter camping gear, etc.</i>	Grade	1	5.9	63.5	5.9	63.5
5.1.4	Dog Pad/Feeding/Grooming <i>Warm sleeping space for 2 dogs</i>	Grade	1	3.2	34.4	3.2	34.4
5.1.5	Garbage/Recycling Area <i>Accommodates recycling bin house</i>	Grade	1	1.3	14.0	1.3	14.0
	Subtotal					73.6 csm	792.2 csf
	Component Area Factor					1.10	
	Component Subtotal					81.0 csm	871.4 csf

ARCHITECTURAL SPACE PROGRAM

no.	room / function / line item	location	no. units	unit area nsm	unit area nsf	total area nsm	total net area nsm	total net area nsf
6.0	Exterior Development							
6.1	Outdoor Spaces							
6.1.1	Deck / Patio - Outdoor Dining (Back) <i>Wind protected, casual seating & dining area, single level indoor/outdoor connection, 40+ people</i>	Exterior	1	22.4	241.1	22.4	241.1	
6.1.2	Outdoor Kitchen (Adjoined to Deck Area) <i>Casual seating with patio table for 4-6</i>	Exterior	1	3.2	34.4	3.2	4	
6.1.3	Breezeway <i>Covered roof over patio or flatwork connection between bldgs</i>	Exterior	0	14.0	150.7	0.0	0.0	
6.1.4	Spa Area <i>Whirlpool spa for 6 people - integrate with landscape/patio</i>	Exterior	0	10.2	109.8	0.0	0.0	
6.2	Detached Accessory Building(s)							
6.2.1	Lap Pool <i>Indoor 7.5'x45'x4' deep lap pool with small seat area</i>	Detached	0	85.6	920.4	0.0	0.0	
6.2.2	Lap Pool Mechanical Room <i>Indoor lap pool mechanical equipment - pump, filter system, heating,</i>	Detached	0	3.7	8	0.0	0.0	
6.2.3	Sauna Room <i>Two level bench, 3-4 perso c/w elec. Heater - no cooling room</i>	Detached	0	4.5	48.4	0.0	0.0	
6.2.4	Gazebo <i>Seating for picnics, 6-12 people</i>	Detached	1	9.2	99.0	9.2	99.0	
6.2.5	Outdoor Pavillion <i>TBD</i>	Detached	1	20.8	223.9	20.8	223.9	
6.2.6	Work / Storage Building <i>Barn/hanger shop for boat w/ Integrated work bench area with tools, equipment & sports items, fishing, space for bicycles, winter tires, camping equip., etc.; include tractor, boat, vehicle storage enclosure</i>	Detached	1	58.0	624.3	58.0	624.3	
6.2.7	Animal Barn <i>Chicken coop; cow and small herd of sheep - up to 20 animals</i>	Detached	1	42.4	456.4	42.4	456.4	
6.2.8	Small Aircraft Hanger <i>Accommodate a Cessna 185 at 46' x 36'</i>	Detached	1	143.0	1539.2	143.0	1,539.2	
6.2.9	Greenhouse / Garden Shed <i>Potted plants, vegetables, herbs - 12' x 20'; garden storage & tools</i>	Detached	1	20.8	223.9	20.8	223.9	
Subtotal						319.8 csm	3,442.3 csf	
Component Area Factor						1.10		
Component Subtotal						351.8 csm	3,786.5 csf	
7.0	General Landscaping (Assumptions)							
7.1	General Landscape							
7.1.1	Driveway / Parking (Allow +/- 40' x 18') <i>Driveway adjacent to residence, island/loop turnaround accommodating min. 6 vehicles; parking lot?</i>	Ground	1	66.0	710.4	66.0	710.4	
7.1.2	Courtyards, Walks & Pathways <i>Flatwork, pavers, paths, retaining walls & features, outdoor pool pad</i>	Ground	1	20.0	215.3	20.0	215.3	
7.1.3	Rain Garden / Trees, Shrubs & Planting Beds <i>Flower beds, rainwater collection and xeris or landscaping</i>	Ground	1	24.0	258.3	24.0	258.3	
7.1.4	Firepit Area <i>Wind protected firepit & seating area (away from house); bermed?</i>	Ground	1	9.2	99.0	9.2	99.0	
7.1.5	Sport Court Surface <i>Volleyball, basketball court surface; half-court size of 50'x47'</i>	Ground	2	218.3	2349.8	436.6	4,699.5	
7.1.6	Green Space (Sod) <i>Low-maintenance, irrigated; most property areas to remain naturalized; future garden plot</i>	Ground	1	46.5	500.5	46.5	500.5	
Subtotal						602.3 csm	6,483.1 csf	
Component Area Factor [NONE]						1.00		
Component Subtotal						602.3 csm	6,483.1 csf	

ARCHITECTURAL SPACE PROGRAM

no.	room / function / line item	location	no. units	unit area nsm	unit area nsf	total net area nsm	total net area nsf
8.0 Space Program Summary							
8.1	1.0 Sleeping Areas					172.3 csm	1,855.0 csf
8.2	2.0 Common Living Areas					250.8 csm	2,699.7 csf
8.3	3.0 Domestic Support Areas					11.9 csm	128.0 csf
8.4	4.0 Building Service Space					52.8 csm	569.2 csf
8.5	5.0 Support Space					81.0 csm	870.1 csf
Subtotal Residence Program (Net Useable Area)						568.8 csm	6,122.4 csf
Building Gross Area Factor						1.13	
Subtotal Building Program (Gross Area)						640.7 bgsm	6,918.3 bgsf
8.6	6.0 Exterior Development (All accessory buildings, patio/deck areas)					351.8 csm	3,786.5 csf
8.7	7.0 General Landscaping (Budget Assumption)					602.3 csm	6,483.1 csf
Subtotal Exterior Program (Net Useable Area)						954.1 csm	10,269.6 csf
Exterior Gross Area Factor						1.10	
Subtotal Exterior Development (Gross Area)						1,049.5 gsm	11,296.6 gsf
Total Development Area (Sections 1.0 thru 7.0)						1,692.2 gsm	18,214.9 gsf
8.8	Area Distribution Breakdown by Location (Gross Area Factor Applied)						
8.8.1	Basement Areas (Bsmt)					128.1 gsm	1378.6 gsf
8.8.2	Main Floor Areas (Main)					351.3 gsm	3781.1 gsf
8.8.3	Exterior Spaces (Exterior)					28.2 gsm	303.1 gsf
8.8.4	Upper Floor Areas (Upper)					0.0 gsm	0.0 gsf
8.8.5	Garage Areas (Grade)					83.2 gsm	895.2 gsf
8.8.6	Accessory Buildings (Detached)					323.6 gsm	3483.4 gsf
8.8.7	General Landscape Areas (Ground)					662.5 gsm	7131.4 gsf
Subtotal						1576.8 bgsm	16,972.8 bgsf

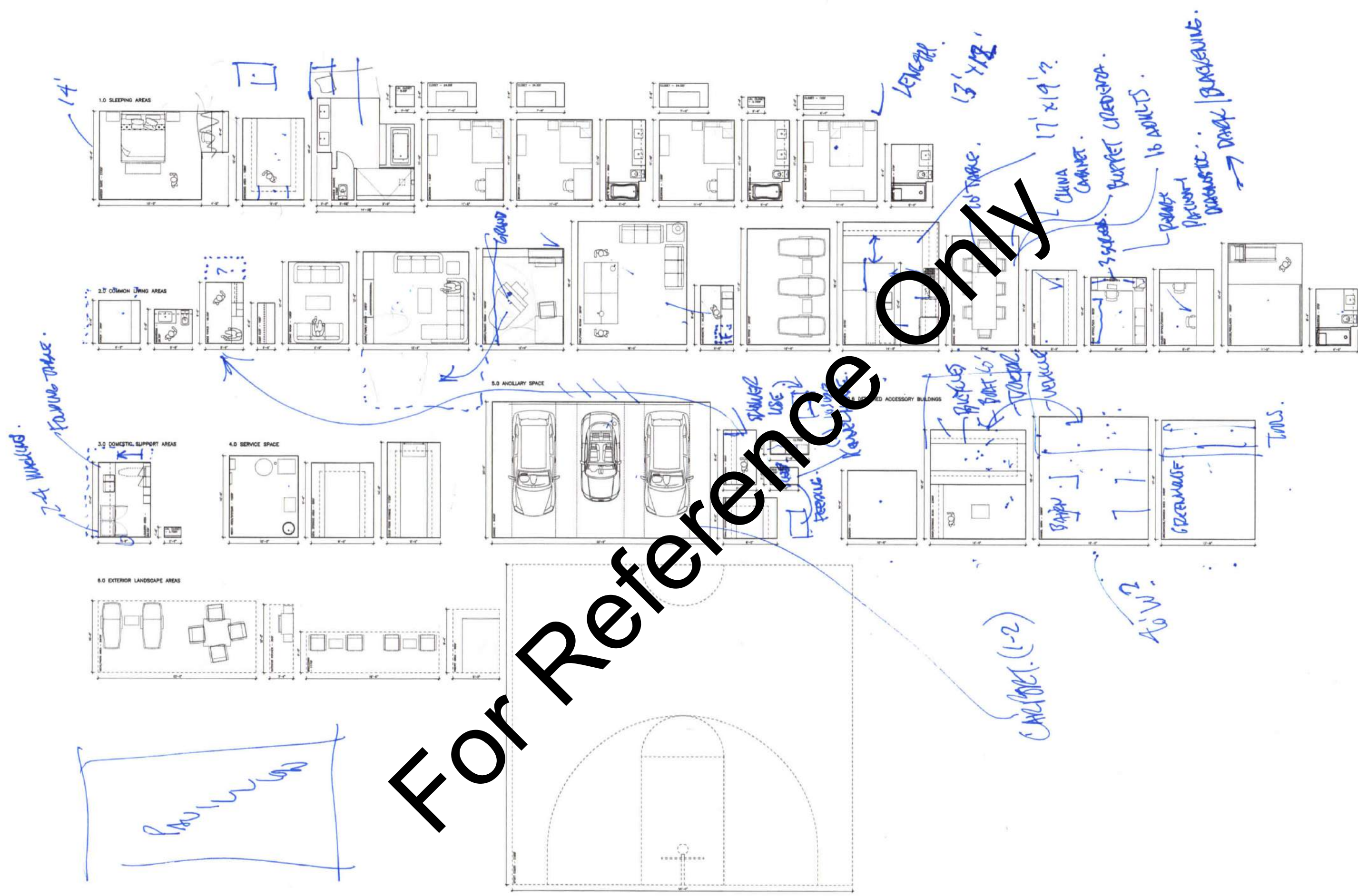
ARCHITECTURAL SPACE PROGRAM

no.	room / function / line item	location	no. units	unit area nsm	unit area nsf	total area nsm	total net area nsf
9.0	Probable Construction Cost (Class D at +/- 20%)						
9.1	Construction Costs (Incl. Contractor Overhead, Profit & General Conditions)						
9.1.1	1.0 Sleeping Areas						\$235
9.1.2	2.0 Common Living Areas						\$260
9.1.3	3.0 Domestic Support Areas						\$10
9.1.4	4.0 Building Service Space						\$14
9.1.5	5.0 Support Space						\$14
9.1.6	6.0 Exterior Development (All accessory buildings, patio/deck areas)						\$14
9.1.7	7.0 General Landscaping (Budget Assumption)						\$14
9.2	Construction Allowance Breakdown						
9.2.1	1.0 Sleeping Areas	Dwelling Areas					\$492,606
9.2.2	2.0 Common Living Areas						\$793,186
9.2.3	3.0 Domestic Support Areas						\$27,480
9.2.4	4.0 Building Service Space						\$123,092
9.2.5	5.0 Support Space						\$142,786
							\$1,579,150
9.2.6	6.0 Exterior Development (All accessory buildings, patio/deck areas)						\$395,692
9.2.7	7.0 General Landscaping (Budget Assumption)						\$99,840
Total Opinion of Probable Construction Cost (1.0 to 7.0)							\$2,074,681
Probable cost does not include furnishings /small equipment, specialty lighting systems, landscaping or soft costs inclusive of design fees, development /building permits or GST which are itemized later.							

For Reference Only

ARCHITECTURAL SPACE PROGRAM

no.	room / function / line item	location	no. units	unit area nsm	unit area nsf	total net area nsm	total net area nsf
10.0	Summary of Probable Project Cost (Class D at +/- 20%)						
10.1	Planning & Design (Fees + Reimbursable Expenses)						
	Architect / Interiors / Structural / Mechanical / Electrical Consulting					Fees	
10.1.1.1	Professional Fees (as % of Construction Cost of sections 1.0 - 5.0 - Residence only)					9.00%	\$142,423
10.1.1.2	Professional Fees (as % of Construction Cost of sections 6.0 - Accessory Bldgs only)					10.00%	\$39,519
10.1.2	Topographic Land Survey					Budget	\$4,500
10.1.3	Geotechnical Investigation					Budget	\$5,000
10.1.4	Asbestos Abatement						NA
10.1.5	Acoustical or Other Specialty Consultant						\$0
10.1.6	Total GST (on professional fees)						\$9,560
10.1.7	Total Estimated Max. Disbursements (at 2% of of professional fees)						\$3,824
						Potential Planning & Design	\$204,576
10.2	Construction (Inclusive of General Conditions)						
	Opinion of Probable Construction Cost						
10.2.1	Construction Program (inclusive of all sections 1.0 to 7.0 above)						\$2,074,681
10.2.2	GST (captured within probable construction cost)				\$167,734.07		
10.2.3	Construction Contingency (to 10% of 10.2.1 above)						\$207,468
						Potential New Construction	\$2,282,149
10.3	Cash Allowances (incl. GST as applicable)						
10.3.1	Relocation of Existing Residence		gsn	gsf		Cost/gsf	Allowances
10.3.2	Fixtures, Furnishings and Equipment (FF&E) (5.0% of sections 1.0 - 7.0 only)		300.0	3229.2		\$4.75	\$15,339
	Appliances			\$47,374			\$78,957
	Furniture + Fixtures			\$19,739			
	Equipment			\$11,844			
10.3.3	Special Building Systems						
10.3.3.1	Electrical Systems						
	Net-metered Photovoltaic Array (Solar) (Power Meter Generation)					TBD	\$0
	Smart Home & Network Specialty Systems					TBD	\$0
10.3.3.2	Mechanical & Plumbing Systems						
	Domestic Cold Water Cistern Storage & Distribution						NA
	Sanitary Waste System (Extension to Holding Tank & Percolation Field)					TBD	\$4,000
	Residential Sprinkling System					TBD	\$8,000
	Ventilation (Fresh Air) Energy Recovery System (ERV)					TBD	\$4,500
10.3.4	Site Development (includes Landscaping)						
10.3.4.1	Prep Utility Ties-ins						
	Portable Water (City of Lethbridge)					TBD	\$4,000
	Sanitary Meter/Line Extension					TBD	\$6,000
	Natural Gas Meter/Line Extension					TBD	\$6,000
10.3.5	Architectural Controls Deposit (To Be Returned)			\$0.00			NA
	Architectural Review Fee & Admin. Charge			\$0.00			NA
10.3.6	Miscellaneous Administrative Expenses (Printing IFC Drawings, etc.)						\$1,000
10.3.7	Development Permit (County of Lethbridge)						\$150
						Total Allowances	\$127,946
	Total Opinion of Probable Project Cost						
	Total of all costs listed in subtotals for sections 10.1 - 10.3						\$2,614,672
	Subtotal Building Program (Gross Area)		38 %				\$6,918 gsf
	Subtotal Exterior Development (Gross Area)		62 %				\$11,297 gsf
	Building Cost/sf (Items 1.0 - 6.0 / Area)						\$228
	Total Construction Cost/sf (Items 1.0 - 7.0 / Full Development Area)						\$125
	Total Project Cost/sf (Incl. Allowances)						\$144
	Total Project Budget (TBD)						\$2,300,000
	Shortfall or Abundance						-\$314,672

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Market at Crossings, Phase 1
(in association with Gibbs Gage Architects)
Lethbridge, Alberta, Canada

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