

# BUSINESS PLAN



Lakeside Wood Products Ltd.



**Prepared by:**

Janice Mathers  
Christy Strocel  
Tristan Sjoden  
Brian Leung

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## Executive Summary

This business plan is a proposal for Lakeside Wood Products Ltd., a potential Canadian public company venturing to obtain market share in the Western North American timber frame homes market with their unique Inside-Out Beams. This business plan highlights the key concepts of the product design and development, as well as explains the fundamental values and organization of Lakeside Wood Products Ltd..

The product is manufactured from small-diameter Douglas-fir trees of approximately 80 years old that have above-average strength and aesthetic properties. Removal of the raw material from Interior Forests, namely the Alex Fraser Research Forest in Williams Lake, British Columbia, is performing an essential ecosystem service by reducing risk of wildfire, creating mule deer winter range, and releasing remaining trees in healthier forests. By performing the service, the product becomes an eco-friendly substitute to other structural products.

Aside from environmental friendliness, the product has dimensional integrity at or above those of other structural products in the market, and a unique aesthetic appeal. An interaction of heartwood and sapwood creates a light/dark design, which is free of defects, and appeals to a timberframe market where visual quality is important.

Lakeside has prepared a financial analysis of the company that shows profits by year 4. Financing will be accrued from investment from the public, and provincial and federal governments. As a contingency, the company will be involved in continuous product development and improvement.

By practicing our manufacturing motto of ***Live Breath Quality***, the company hopes to create a working environment that fosters environmental responsibility



## Lakeside Wood Products Ltd.

and a high degree of employee involvement. Furthermore, quality control will be important in ensuring customer satisfaction.

A marketing strategy that emphasizes the aesthetic quality and structural integrity of the product has been developed, which targets both the end user and the supply chain. The strategy involves personal selling, e-commerce and joint advertising to maximize product exposure.

Lakeside Wood Products Ltd. looks forward to performing further market research to refine marketing strategies, as well as furthering product development. This business plan encapsulates the company's vision for their unique product.



## I. Introduction

Lakeside Wood Products Ltd. is proposing the production of Inside-Out (ISO) beams for marketing to both the Western United States and Western Canada. Using the proxy of the housing market, the market environment for both target markets is favourable for entry for a structural wood product. With an environmentally sound product that appeals to desired construction requirements, Lakeside Wood Products Ltd. can be successful.

The raw material resource is the impetus for the product idea and, thus, the creation of this business plan. Small-diameter Douglas-fir is found to be abundant in the interior forests of British Columbia, and remains underutilized as a wood products material. The source of the material, the Alex Fraser Research Forest, in Williams Lake, BC, has been actively researching the resource. Their research supports much of the ecological information in this plan. Due to adjacent land use changes, forest management practices, especially fire suppression techniques, have contributed to the over-abundance of 80-90 year old Douglas-fir trees, which are suppressed in very dense forests. Fortunately, the trees contain tight-grained, relatively knot-free wood, ideal for structural wood products. Trees can be harvested as part of a commercial thinning regime, which not only provides a raw material resource for this company, but releases the remaining trees in healthier forests to grow larger over time.

The major benefit of commercial thinning in small-diameter timber forests is the benefit to Mule Deer. This species requires a multi-age forest where large diameter trees produce suitable habitats for cover and foraging through the harsh winter months. Little habitat remains at present due to land use patterns. The forest management regime that supports this business plan is concurrent with plans for the creation of Mule Deer Winter Range in the province.



A further benefit is in the reduction of fuel loading. The high density of wood, combined with fire suppression, has led to an amassment of flammable material in the forests, referred to as fuel. By reducing tree density, the risk of wildfire is reduced because some fuel is removed. More importantly, the risk of high intensity wildfire is reduced. A



reduction in fuel loading not only saves timber supply, but also reduces the risk of wildfire crossing the forest-urban interface and causing damage to local communities.

With a promising market outlook, a secure business plan, and an environmentally sound product, Lakeside Wood Products Ltd. can secure significant marketshare. Let the product features speak for themselves because Lakeside's ISO beams are uniquely aesthetic, lighter weight for use, environmentally certifiable and dimensionally stable.

## **II. Lakeside Wood Products Ltd. Company Description**

Lakeside Wood Products Ltd. is a publicly owned company based in Williams Lake, BC. The company management is a team of individuals with education in forest management and wood products manufacturing. Lakeside is committed to becoming a leading producer of wood products whose unique raw material is small-diameter Douglas-fir. This sentiment is embodied in the company's mission and vision for the future:

### *Mission Statement:*

*Lakeside Wood Products Ltd. is an international wood products manufacturer that promotes sustainable forest management in our production of high quality structural timber.*

### *Vision Statement:*

*Lakeside Wood Products Ltd. will continue to practice responsible stewardship of forests while leading the development and innovation in wood products produced from small-diameter trees.*

The company holds a set of values that reflect today's resource management practices in British Columbian forests. Strong environmental policies, echoed by certification initiatives, combined with a commitment to continuous improvement, will find acceptance in the current industry environment. Furthermore, Lakeside is certain that, through sound people management, a strong operation can be constructed. Our values are summarized below:



*Value Statements:*

*Environment focus: We are stewards of our forests.*

*Performance focus: We are focused on quality products, delivered on time.*

*Focus on the Future: Innovation and Development mean long-term success.*

*Customer Focus: The customer can depend on us to put them in a priority position.*

*Employee focus: The success of our company depends on the success of our people.*

*Investor focus: Strong relationships build strong businesses.*

The above statements form the foundation of this company, and will be used to direct management actions and employee training.

Lakeside Wood Products Ltd. will produce ISO beams for use in timber frame homes in Western North America. This venture is the first for Lakeside Wood Products Ltd.. Future initiatives will include both the production of ISO beams for alternate uses, and the production of other wood products from the same raw material resource.

### **III. Industry Analysis**

#### BC and Douglas-fir

British Columbia has a long-term reputation as a producer of dimensionally-stable wood products. Douglas-fir products, particularly, are accepted construction materials in homes world-wide based on the species' aesthetic and strength properties. Demand for the species has been the backbone of the industry since its beginnings in the 1800s.

#### Environmental Concern for wood products

Recent international pressure has created a movement towards raw material supply generated from sustainably managed forests. Specifically, it has caused BC wood products manufacturers to ensure their raw material is generated in forests that have obtained certification from one of the certification systems developed by non-profit, third-party bodies. As such, Lakeside Wood Products will obtain ISO 14001, SFI and FSC certification for their forestry operations. These three certification bodies are



further discussed in later sections. For now it is enough to know that these three are recognized and respected in the markets this plan is targeting.

### Wood Products from Small-diameter Trees

Unlike the BC wood products market, the small-diameter wood products market is virtually non-existent. This unique resource has been discovered as abundant in both Canadian and American managed forests, but the production of wood products has been relatively scarce. In Canada, the main reason that small-diameter products have not been developed is due to the non-existence of manufacturing facilities capable of handling the smaller than usual raw material. In addition, a lack of research and development as to applicable end uses for the material is a further cause for the lack of marketshare. Finally, due to the fact that virtually no producers exist in BC that utilize this resource, a lack of market certainty exists.



Brett Malcolm of Osoyoos, BC, recently developed a structural wood product using the small-diameter resource, and has received acclaim from wood products associations, such as BC Wood<sup>2</sup>. His product is different in design to Lakeside's ISO beams, but similar in product features: straight, strong and lightweight, and the product is also used for framing. His product is currently moving into a further stage of product development in preparation for marketing, and is receiving interest from Canadian and American investors.

A reasonable amount of research and development into the use of small-diameter trees has occurred. Anything from aesthetic home components to highway posts<sup>4</sup> to biomass fuel have been suggested for many different species. The research, however, is never specific to BC's Douglas-fir resource, and is very much concentrated on the small-diameter trees of the United States, where the small-diameter industry is further developed.





## Lakeside Wood Products Ltd.

Significant research into wood products manufacturing has led the industry to a point where machinery exists that has manageability suited to small-diameter trees<sup>3</sup>. This eliminates significant financial burden since research and development can immediately focus on the products, rather than the machines used to make them. Not only is mill equipment available for small-diameter trees, so is suitable harvesting equipment.

### Wood Products Manufacturing in BC

The politics of forestry in BC is having significant impact on the industry. For one, recent changes to forest management practices legislation, namely the Forest and Range Practices Act (FRPA), have shifted the focus of forest management away from paper deliverables to on-the-ground results. In this way, BC forests have improved their forest management.



A further political issue affecting BC wood products is the Softwood Lumber Dispute (SLD) between Canada and the United States. This has caused serious consequences to softwood producers in BC. By creating a value-added product, the high tariffs of the SLD will have a lesser effect on our product.

### Lakeside's ISO beams: Where do they fit in?

Lakeside Wood Products Ltd. is expecting to enter into the production of ISO beams from small-diameter Douglas-fir trees before an industry for products from small-diameter trees is developed. This way, the company hopes to lead the industry in BC.



#### **IV. Markets**

Lakeside's ISO beams will be manufactured and marketed for the Western North American timber frame housing market. This market can be divided into two target markets: the Lower Mainland (British Columbia, Canada) and the Pacific Northwest (includes Washington and Oregon States in the US). A Western market is best suited to this company because the proximity of the market to manufacturing facilities lowers transport costs. With higher harvesting costs than other harvest operations, limiting transportation costs can reduce overall costs<sup>3</sup>. Furthermore, Lakeside's ISO beams appeal to the desires of these expanding communities, including healthier and environmentally conscious living<sup>3</sup>. Our ISO beams will be marketed directly to timber frame homes producers.

##### Market Size

One could consider this product as being marketed to the structural timber market; however, due to the added strength generated from engineering, the product falls into a smaller niche market that appeals to consumers desiring more advanced strength properties in the construction material used in their homes. Using this product means consumers will get a healthier house because the product's strength make homes safer. In addition, Lakeside's ISO beams have aesthetic appeal that contributes to the product's niche market, with a product that is straighter, has no cracks, has increased clearwood content and a unique light/dark pattern created by the visible heartwood/sapwood.

##### Lower Mainland Market

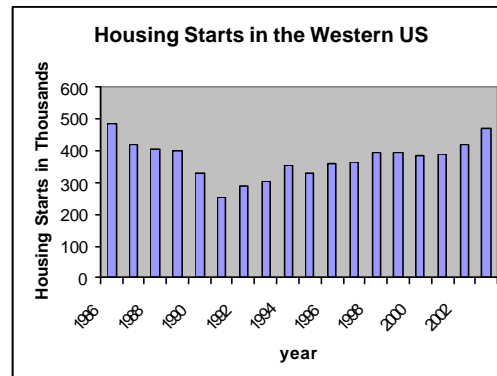
BC Stats, an agency operated by the government of BC, indicates that housing starts in BC are rising<sup>6</sup>. Their website reports an increase in building permits issued<sup>7</sup>, which provides an indication of both new homes and renovation activity in the province. The area of highest occurrence of housing starts and building permits is the Vancouver Census Metropolitan Area, which spans from White Rock to Bowen Island to West Vancouver to Maple Ridge. The growing housing market in BC provides a promising outlook for Lakeside's product.



Housing starts are expected to continue to increase in the Lower Mainland, especially since the 2010 Olympic Games have been approved for Vancouver. Publicity for the Olympic Games will highlight the scenic features of Vancouver and is expected to elicit interest in the housing market. Lakeside's wood products will also have access to the construction market for the games, where an estimated \$680M<sup>8</sup> in construction will be generated, because our products will be FSC certified and within a minimum transport distance, two features that improve the LEED<sup>9</sup> (Leadership in Energy and Environmental Design) rating assigned to Olympic buildings. The LEED rating is an important feature of the 2010 Olympic Games whose major theme is environmental consciousness.

### Pacific Northwest Market

The Pacific Northwest housing market is also showing signs of growth. The US Census Bureau statistics show that housing starts in the Western United States haven't been this high since 1987(see figure beside)<sup>10</sup>. In addition, the region is the second largest housing market in the United States<sup>3</sup>. COIC notes that:



“Experts are forecasting favorable wood product markets in the US as a result of rebounding housing starts and the growth in the repair and remodel industry.”<sup>3</sup>

### Timber Frame Homes

There is a lack of research into market opportunities for timber frame homes for the target markets of this plan. For this reason, simple market research will be performed to decipher the optimal marketing strategies for our product to timber frame manufacturers, and provide some indication of potential market acceptance of our product. This research may involve studies of other companies producing timber



frame home components or consumer focus groups. The company will also look for upcoming survey results from market surveys being conducted by other organizations.

Nonetheless, Lakeside is confident of success based on the fact that several companies produce timber frame homes from Douglas-fir grown in BC<sup>5</sup>. In fact, several companies appear to be rather successful; for instance Pacific Timber Frame, based in Armstrong, BC. In addition, COIC notes that the structural products market in the US is “rapidly-expanding” and is expected to increase 500% by 2010<sup>3</sup>.

### Future Market Considerations

There is potential for Lakeside to expand into other markets as production develops, especially the international market. Major consideration will be given to the European market where areas, such as the United Kingdom, are exhibiting significant growth in the timber frame homes market<sup>11</sup>.

## **V. Competition**

The end product for Lakeside's ISO beams is in timber frame homes. Over 100 businesses and contractors in BC, alone, produce timber frame homes and are potential purchasers of Lakeside's products<sup>14</sup>. By marketing the unique product features of our ISO beams as lighter weight and environmentally-friendly, with aesthetic-uniqueness, we can enter the supply chain of these companies, as well as those that operate in the Pacific Northwest. Our success will be determined by the product features, quality of manufacturing and marketing plan.

Lakeside may encounter difficulties entering the market if costs are too high or if the set price is too high. The advantage that Lakeside already has over other companies is the low stumpage premium paid for wood volume harvested. Most importantly, limiting costs can reduce the price point. The company will be performing continuous improvement on harvesting operations to reduce costs, and will also be exploring means of obtaining funding from the government because the commercial thinning operation is a valuable



ecological service, improving the health of interior forests, reducing fuel-loading and creating mule deer winter range.

Marketing environmental soundness to builders and contractors is difficult when the bottom line gets in the way. To manage for this, Lakeside will be exploring other potential customers in the target markets, including factory-built home producers. Furthermore, by marketing our product to the end user, consumer desire can influence suppliers.

In the future, more competition may arise from businesses introducing similarly aesthetic and light-weight products. At that point, Lakeside will boost marketing. However, at the moment, the competition is low. Lakeside hopes to obtain significant marketshare before this occurs.

## **VI. Potential Wood Products associated with Small-diameter Douglas-fir**

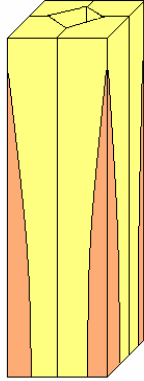
The small-diameter resource is a viable raw material for a multitude of wood products. Some suggest that the strength and durability of the resource makes it ideal for “rustic” Douglas-fir flooring and furniture (chairs, tables, porch furniture, wine racks, and serving), as well as for utility use in post and poles<sup>12</sup>. Others suggest an ideal use is in highway applications due to lower machining requirements<sup>4</sup>. In Finland, small roundwood is suggested as an appropriate use in utility buildings because of high market potential<sup>13</sup>. Furthermore, a recommendation echoed in other literature is the creation of wood/plastic composites for structural beams in order to create smaller beams with similar strength. The point is that many product options exist for this raw material. Lakeside chose ISO beams following their market analysis. The all-natural product has characteristics that suit the construction market for which it will be manufactured and fit the company’s mission, vision and values.



## VII. Marketing Plan

### Product

#### Product type



The initial design of ISO beams is a standard 4x4 beam for use in timber frame housing. However, as production methods evolve, other dimensions are possible subject to the size of the trees supplied to the mill. This product has the potential to diversify and evolve with the needs of the customer. Other opportunities include decorative laminated beams, light standards<sup>15</sup>, park benches and playground equipment. This product could range from a differentiated dimensional lumber product to customized decorative material. Although the initial plan involves one

standardized item, an entire product line could likely emerge.

#### Total Product

Customers will have a guarantee of quality. ISO beams are straight with no cracks because of their inside-out design. These beams also have equal or better strength compared to solid cut lumber<sup>15</sup>. This ensures the safety of the beams, as well as a consistent and reliable aesthetic quality.

The skilled labour required to process logs is available in the operating location. Williams Lake is in the heartland of the primary wood manufacturing industry and has a vast labour pool experienced in wood products processing. This will ensure a fast learning curve and smooth start-up for this company. The management team will also be selected from the primary industry in the region. Since ISO beams will be competing with commodity wood products, the management team will already have knowledge of the industry and will contribute greatly to the strategic and marketing planning of Lakeside Wood Products.



A customer service department will be created to attend to orders, delivery confirmation, and product customization. Customers are take top priority and will be given special attention to ensure that their needs are being met. Warranty for products will be guaranteed for structural integrity and decorative attributes.

### Marketing Risks

ISO beams are a relatively new product. The economic feasibility of production has been documented<sup>15</sup>, but the market acceptability of the product has yet to be fully defined. There are some factors to be considered in our marketing strategy.

The price of ISO beams will be more than standard 4x4 lumber. Although the customer is getting more features such as better quality wood and assured environmental stewardship, it is not certain if these factors will justify a higher price in the minds of the customer. Visual elements such as glue and the void in the middle of the beam may be undesirable to consumers. Production processes will have to minimize the appearance of glue, as well identifying methods to plug the hole with other materials may be beneficial to address the concerns of our customers.

### Distribution

The final ISO beam product will be distributed to local merchants, such as home builders and building product wholesalers, within British Columbia and the Western United States. These transfers will be handled directly by a sales person within Lakeside, specifically, a member of the Customer Service department. Products will be transported by truck under the supervision of Lakeside until arrival at their destination. Transporting the product by road allows for more flexibility in timing and location of deliveries. Lakeside would be able to guarantee efficient delivery to their customers by hiring trucking companies that offer 48 hour or 72 hour delivery service<sup>16</sup>. The B.C. Trucking Association directory will be used to find the most appropriate company to deliver the product.

Packaging will consist of plastic wrap bearing the Lakeside Forest Products logo to protect the appearance of the beams.



## Price

### Fixed Costs

The fixed costs for this operation include location overhead, safety equipment and office supplies. The machinery will be included as a fixed start-up cost and depreciation will be factored in over time. Salaries are considered a present fixed cost. However, as Lakeside grows, more employees may be required or salaries may be increased according to industry standards.

### Variable Costs

Costs that will change over time include raw material costs, primarily timber and glue, which are likely to fluctuate as the market for these products changes. In addition, a budget required for marketing and promotion will also change as the product develops, diversifies and competes with emerging product substitutes. Transportation costs will depend on the distance of the shipment, location of the destination and delivery time.

### Taxes

Lakeside is subject to provincial corporate and small business taxes. Stumpage is also charged on the timber delivered to the mill. When delivering to the United States, border taxes will also have to be included.

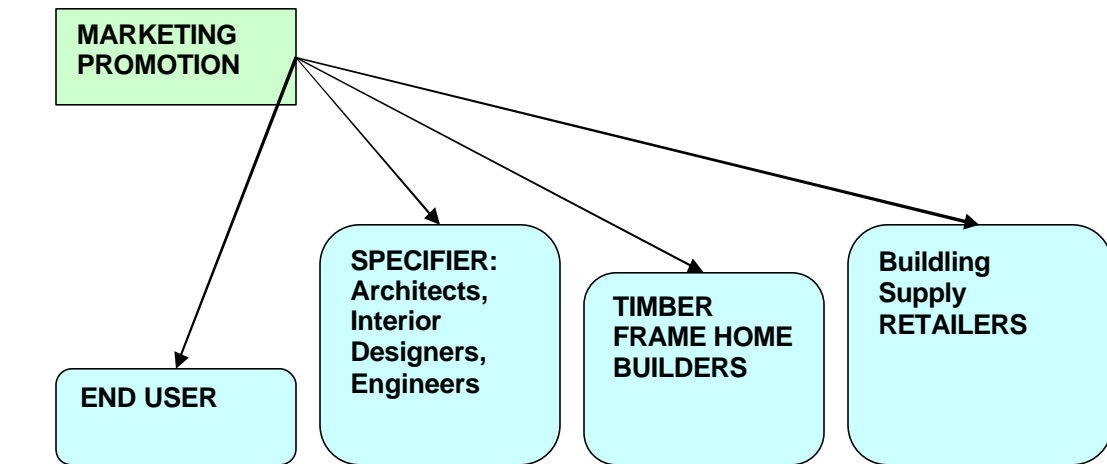
### Profit Margin

The retail value of ISO beams will be based on the costs associated with its production. In order to generate revenue for shareholders, a modest profit margin has been included in the financial analysis. This is a realistic estimate of the returns that shareholders may expect.





## Promotion



### Builders and Retailers

The primary customer for ISO beams will be building contractors and building supply warehouses. Personal selling will be the most effective promotional tool for this situation to build relationships and promote communication. Trade shows are also a great marketing channel, such as the Eastern Oregon Small Diameter Wood Products Fair<sup>17</sup> and the International Builders Show<sup>18</sup>. The 2010 Olympic Games in Vancouver is a major promotional outlet for ISO beams. This product will be eligible for LEEDS certification, an important factor for construction materials for the Games. Introducing our product in time to take advantage of this opportunity will give this product the exposure it needs. This will be the initial step of Lakeside's promotional strategy to ensure that companies that will be potentially using ISO beams are aware of the product, its qualities and uses.

### Specifiers and End Users

Although the principal consumer has been identified as builders and wholesalers, there are other important customers that can provide a push for the use of ISO beams in home construction. Building specifiers such as architects, engineers and interior designers are high priority customers and may be reached through trade shows and advertisements in trade journals and catalogues. Canadian Architect,



Residential Architect Magazine and Interior Design Magazine are just a few places where ISO beam advertisements would be effective.

The end user will also provide an important demand for our products that will encourage builders to include ISO beams in their homes. Advertisements in home and garden magazines, point of purchase displays and including our product in show homes are just some of the ways we can connect with the general public.

Furthermore, Lakeside Wood Products has a unique opportunity to promote our environmental commitment to preserving mule deer winter range habitat. This aspect of our operations can be promoted through publicity in newspapers and television news hours. Partnerships with local environmental groups will undoubtedly improve the public image of wood products and highlight the benefits of our unique product.

### E – Business

The internet provides an effective tool to reach customers. Lakeside will develop its own website to convey our specific product, goals, values and services. This website will allow customers to place orders for standard 4x4 ISO beams and provide contact information to order customized products.

Internet and intranet capabilities are also important for inventory tracking, within business communication and delivery confirmation. A system will be developed for product tracing and customer communication in real time to ensure that all products are accounted for at any given moment. This will decrease inefficiencies and incidences of error to serve our customers better.

Joint advertising strategies will be developed through wood products cooperatives over the internet. Initiatives such as Wood For Good ([www.woodforgood.com](http://www.woodforgood.com)) and the Wood Promotion Network ([www.beconstructive.com](http://www.beconstructive.com)) are two wood products campaigns that will be used. Lakeside's environmentally sustainable operations will be advertised through the Canadian Eco-Lumber Co-op ([www.ecolumber.ca](http://www.ecolumber.ca)).

In all of our promotional activities, ISO beams from the Williams Lake region will be differentiated from its competitors by positive environmentalism, excellent product



quality, good service and a beautiful appearance. A simple but effective message of superior design and environmental stewardship will be incorporated into all marketing initiatives. Market research will be an ongoing activity to ensure that Lakeside Wood Products maintains a competitive advantage and stays current with new markets and product alternatives.

### VIII. Operating plan

#### Strategy

Our manufacturing strategy is to have our plant running at half its' capacity for the first year of production. From there, we intend to ramp up production throughout the next year reaching full capacity before the end of the second year.

Productivity of our labour force will be reinforced through inventing a work environment focused on the quality product. Everyone involved in manufacturing will have a hand in promoting and ensuring quality throughout the plant. Work schedules will be progressive in that all labourers will rotate through different jobs on a monthly basis ensuring everyone has a clear understanding of the total process, and therefore the total quality of the product. **Live Breath Quality** will be our plant's catch phrase.

Management will be enforced in a progressive style in that the organization will be flat allowing access for labourers ideas to management and visa versa. Everyone will have a place in quality and it will be up to management to ensure that quality is being enforced in an efficient manner.

#### Location

Lakeside Wood Products Ltd. is located in Williams Lake, British Columbia. This location benefits our company by being close to our timber supply, and reduces transportation costs to the US market.



Labor force

Listed below are salaries of the workforce at Lakeside Wood Products Ltd.

<b>Position</b>	<b>Annual Salary</b>
General manager	<b>70,000</b>
Marketing	<b>60,000</b>
R&D	<b>60,000</b>
Sales manager	<b>60,000</b>
Production manager	<b>60,000</b>
Debarker operator	<b>45,000</b>
Cut-off saw operator	<b>45,000</b>
Moulder operator(2)	<b>90,000</b>
Quartering saw operator	<b>45,000</b>
Gluing operators(2)	<b>90,000</b>
Kiln operator	<b>45,000</b>
Trim operator	<b>45,000</b>
Skrag mill operator	<b>45,000</b>
Loader Operator	<b>45,000</b>
<b>Total</b>	<b><u>805,000</u></b>

Materials

Raw material will be sourced from the over-stocked Douglas-fir forests of UBC's Alex Fraser Research Forest (AFRF). Forests are managed based on Sustainable Forest Management (SFM) principles, as determined by academic research, certification standards and adaptations from BC forest policy for public forestlands. SFM principles are focused on the sustainable use of forest lands for multiple uses,



including timber production. Maintaining high SFM standards is a major objective for both Lakeside Wood Products Ltd. and UBC AFRF.

As mentioned before, certification from the following systems will be sought:

- International Standard Association – ISO 14001,
- Sustainable Forestry Initiative – SFI, and
- Forest Stewardship Council – FSC



Certification provides confirmation to Lakeside's customers that SFM principles are adhered to in the extraction of the raw material used to create our ISO beams. Furthermore, it provides access to construction opportunities, such as LEED buildings.

More specifically, ISO 14001 induces an Environmental Management System that ensures mediation of risk to the environment, while SFI is a SFM system developed and well-recognized in the United States. Similar to SFI, FSC is well-recognized in the United States and is a requirement for LEED buildings. Combined, the three certification systems provide a framework for SFM that will protect the timber resource, as well as the other land values.

The raw material has higher than average harvesting costs for two reasons:

1. The commercial thinning operation requires increased pre-harvest preparation, and care during extraction activities.
2. Smaller diameter stems means that more handling time and expense is required to harvest the same amount of volume.

The material may be more expensive to harvest, but the stumpage costs are much lower for commercial thinning operations in BC (only \$0.25/m<sup>3</sup>). In addition, there are high volumes of the resource available. Susan LeVan notes that “the volume of



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small wood available to mills and would-be mills is expected to explode over the next few years because of interest in thinning public and private forests in the West to reduce the wildfire.”<sup>1</sup> Susan has been researching small-diameter forests for the last 10 years.

The logs will be transported by trucks from AFRF to Lakeside Wood Products, which is located in the Williams Lake area. Logging cost will be approximately \$50/m<sup>3</sup>.

Logging to Roadside	33/ m <sup>3</sup>
Loading and hauling	12/ m <sup>3</sup>
Layout and Administration	4.75/ m <sup>3</sup>
Stumpage	.25/ m <sup>3</sup>

There is sufficient volume of commercial thinned small diameter Douglas-fir to sustain business over time.

### Production Plans

During the first year of production capacity for the plant will be 50%. We will be running with one shift with a 40 hour work week until the second year where we will ramp up production to bring capacity of the plant to 100%.

Work in process will be accounted for by having the management routinely oversee daily production operations. Namely, stem inventory will be accounted for by scaling incoming trucks.

See Appendix A for a general schematic how ISO beams are produced.

### Long Range Plans



The company's goal is to maintain responsible stewardship of forests and to be the leading supplier of high quality wood products from small diameter trees to the world. This will have to be achieved through an ongoing process of improving operations, technology, and marketing strategies.

### Quality Plan

At Lakeside, the company will be focused on quality and improving quality. Every employee in the plant will be quality specialists. This will encourage the employee to grow with us as we all learn and understand the quality issues at Lakeside. Consideration will be given to the type of employee that we will be hiring and this employee will be one who takes pride in his work and is ready to ensure that he or she is ready to take an initiative in looking for and solving quality issues that can occur in the plant. All employees will be hired working with a rotating schedule through the different machines in the plant so that everyone has a clear understanding of what takes place here and what is needed to get the customer what he or she needs. This will also convey new ideas into our company that will help us improve by getting as full perspective of what can be done through facilitating all of our rational within our company and utilizing every resource that is available.

The main quality issues that our plant will be looking at are to ensure a consistent product. Quality will be a reoccurring theme throughout the plant and everyone involved in the manufacturing process will be part of ensuring that the quality of the product meets the standards set by our customers.

As part of the working schedule, quality checks will be completed throughout the day by employees, and data and info will be collected and signed off by the person who does the check. This will generate in the company a feeling of everyone being essential to producing a quality product, and generate a collective feeling of self worth.

All information will be put in a database and available to higher level management to make inferences on the gains made through quality at Lakeside.



### Supplier Qualification Plan

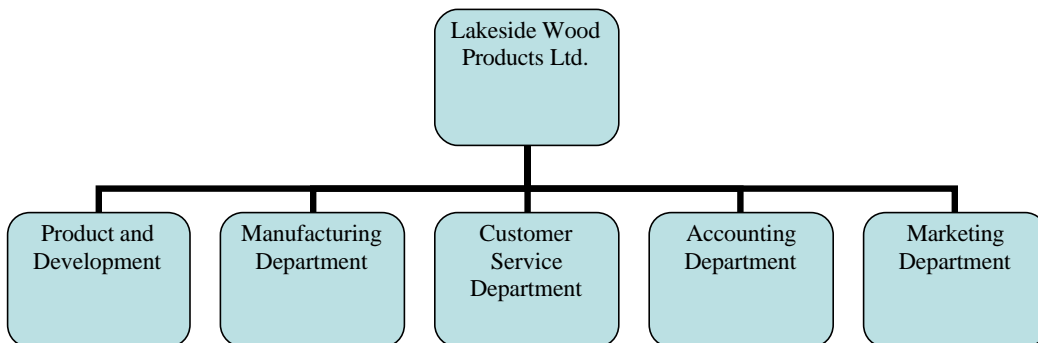
Suppliers will be evaluated in two ways:

1. Quality, Standards, and Performance of product and service
2. Cost

All suppliers will have their products tested by Lakeside to ensure the product will meet the needs of our business. At Lakeside, environmental concerns are on the forefront of our values and we will ensure that products put into our product coming from outside sources will meet environmental regulations and standards and that the outside companies share the same general values of our company to define our position as a company that takes our values seriously, so that our customers can rest assured that the product they are buying is in no way compromised by outside sources.

Lakeside will be continually on the lookout for the price competitive option for all materials supplied to the company (but will not look to break bonds between long term partners) for continual growth to occur benefiting all interests throughout the supply chain.

### **IX. Management Plan**







## Organization

Lakeside Wood Products Ltd. would like to structure the company into a flat organization because this will allow a better communication flow throughout the company. With a flat organization, it will enable the company to increase the efficiency of the decision making process. See the above diagram of our flat organization.

## Employees

This organization believes that empowering employees is a way to continuously improve the company; this gives the employees a greater responsibility and ability to make decisions, which is correlated to motivation and job satisfaction. Lakeside Wood Products Ltd would like to create a friendly, diverse, strong organizational culture environment for individuals to work in. Employees would be committed to the company by showing that they take pride in their work and showing positive behaviour towards the company. Employees are also encouraged to participate in team workshops, which allow the employees to interact with one another to strengthen the employee-to-employee relationship.



## X. Financial Plan

### Capital Requirements

The capital requirements of Lakeside for the first year are below:

Machinery	1,150,000
Working capital 12 months' salary and wages	805,000
Inventory Log cost (800 stems/day)	3,000,000
Adhesives	33,000
Total working capital Miscellaneous	9,000
Utilities and Office Furniture	30,000
	<b>Total 5,027,000</b>

### Financing Plan

Loans and grants will be attained from the federal and/or provincial government and other private sources. Financing will be based on an interest rate of 4.0%.

The company will be owned by four partners each of which has agreed and signed an opportunity agreement contract for ownership and equity requirements of the company. As part of agreements, each partner will be required \$100,000 each in equity. Lakeside welcomes anyone who wants to be a serious partner.

### Return On Investment

There will be an expected Return On Investment (ROI) by year four of operations as seen in the subsection of the Cash Flow statement for year two of operations. See Appendix B and C for Cash Flow Statements.



Balance Sheet

**Assets**

*Current Assets*

Cash	805,000
Inventory	3,033,000
Supplies	9,000

*Fixed Assets*

Machinery	1,150,000
Office equipment	30,000

**Total Assets** **5,027,000**

**Liabilities and Owners' Equity**

Current liabilities	805,000
Long term liabilities	1,150,000
Owners' equity	3,072,000

**Total Liabilities and owners' equity** **5,027,000**

**XI. Contingency Plan**

Lakeside Wood Products Ltd. focuses on the timber frame housing market; however, the company has the option of selling these aesthetically pleasing products to several different markets because these beams have an advantage that is a void in the beam centre. This void can be filled opening the possibility of further unique features. The airspace has insulative properties if making windows. Furthermore, tension rods could be placed throughout the beam to produce structural beams or even electrical wires could be hidden in the beam by placing the wires down the void for use in prefab homes of exterior light posts. Also, these beams will have exceptional treatability for preservatives for the exterior use application and will be great for fence posts, play sets, and park benches.

With all things considered the ability of Lakeside penetrating niche markets that can be developed using this product will depend mainly on our marketing strategy. This product has the versatility to enter markets such as: Post and Beam furniture construction, structural framing, Prefab housing, Log house windows, park benches, fence posts, Light Posts....etc. The features of this product enable endless possibilities for growth.



Lakeside has given much consideration to our management structure and have decided to implement a flat organization with a position for a marketing executive to ensure that niche market penetration continues to grow our company.

## **XII. Conclusion**

Lakeside Wood Products Ltd. is proud to introduce their product design for Inside-Out (ISO) beams for marketing to Western North America. The product is ideal for the timberframe homes market, yet has many possibilities for expansion due to its unique functional and aesthetic features. The financial planning shows an outlook of operating profits by year 4. Through a commitment to an active marketing strategy that not only targets our supply chain, but also the end user, and sound management using a flat organizational strategy, this product will succeed in the marketplace.



**References:**

<sup>1</sup> Conference explores broadening uses for small-diameter trees, Montana Associated Technology Roundtables – September 26<sup>th</sup>, 2003: <http://www.matr.net/article-8187.html>

<sup>2</sup> Innovation and Value-Added Products, Bill Downing CEO, BC Wood: <http://www.bcwood.com/Prod/newsletter/May2003/newsline2-12.html>

<sup>3</sup> COIC, *COPWRR Report Synopsis: Markets and Processing Options for Small Diameter Trees*. July, 2002.

<sup>4</sup> Paun D. and G. Jackson. *Potential for Expanding Small-Diameter Timber Market: Assessing Use of Wood Posts in Highway Applications*. USDA Forest Service General Technical Report FPL-GTR-120

<sup>5</sup> International Log Builder's Association: <http://www.logassociation.org/directory/timberframe.php>

<sup>6</sup> BC Stats website: <http://www.bcstats.gov.bc.ca/data/dd/handout/HSTART.pdf>

<sup>7</sup> BC Stats: <http://www.bcstats.gov.bc.ca/data/dd/handout/BUILD.pdf>

<sup>8</sup> Rob Kozak, Summary of News in WOOD 465 March 2004

<sup>9</sup> LEED website: [http://www.usgbc.org/leed/leed\\_main.asp](http://www.usgbc.org/leed/leed_main.asp)

<sup>10</sup> US Census Bureau: <http://www.census.gov/indicator/www/newresconst.pdf>

<sup>11</sup> Forestry and British Timber, Tonbridge, March 1, 2003: <http://proquest.umi.com/pqdweb?index=4&did=000000302865731&SrchMode=1&sid=4&Fmt=3&VInst=PROD&VType=PQD&RQT=309&VName=PQD&TS=1081974445&clientId=6993>

<sup>12</sup> The Watershed Center: [www.thewatershedcenter.org/programs/sdp.htm](http://www.thewatershedcenter.org/programs/sdp.htm)

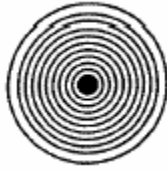


- <sup>13</sup> Round Small Diameter Timber for Construction Market in Finland, FAIR: [www.nf-2000.org/secure/Fair/A1058.htm](http://www.nf-2000.org/secure/Fair/A1058.htm)
- <sup>14</sup> Building BC: <http://www.buildingbc.com/contractors/contractw.html>
- <sup>15</sup> Patterson, D.W., R.A. Kluender and J.E. Granskog. 2002. Economic feasibility of producing inside-out beams from small-diameter logs. *Forest Prod. J.* 52(1): 23-26.
- <sup>16</sup> BC Stats. 1999. British Columbia exports to United States move increasingly by truck. Province of British Columbia, Victoria.  
<http://www.bcstats.gov.bc.ca/pubs/exp/exp9908.pdf> Accessed April 13, 2004.
- <sup>17</sup> Eastern Oregon Small Diameter Wood Products Fair. 2004.  
[www.wallowaresources.org/woodfair/index.htm](http://www.wallowaresources.org/woodfair/index.htm). Accessed 13, 2004.
- <sup>18</sup> International Builders Show. 2004. <http://www.buildersshow.com>. Accessed April 13, 2004.

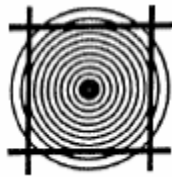


**Appendix A** : Steps in Producing a Beam from Patterson *et al.* (2002)

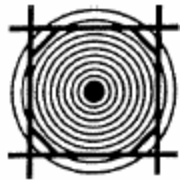
1. Select small diameter log



2. Saw a square cant



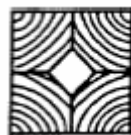
3. Smooth surfaces and remove corners of the cant



4. Quarter the cant



5. Turn the quarters inside out and glue





# Lakeside Wood Products Ltd.

## APPENDIX B: First year of operations at half capacity

Sales Plan	January	February	March	April	May	June	July	August	September	October	November	December
<b>Financial Plan</b>												
<b>Sales</b>	\$0	\$362,833	\$362,833	\$362,833	\$362,833	\$362,833	\$362,833	\$362,833	\$362,833	\$362,833	\$362,833	\$362,833
<b>Cost of Goods Sold</b>												
<b>Materials</b>												
Logs	0	250000	250000	250000	250000	250000	250000	250000	250000	250000	250000	250000
Adhesives	0	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
<b>Direct labour</b>	0	41250	41250	41250	41250	41250	41250	41250	41250	41250	41250	41250
<b>Overhead</b>												
Equipment depreciation (based on 12yrs)	0	7986.1	7986.1	7986.1	7986.1	7986.1	7986.1	7986.1	7986.1	7986.1	7986.1	7986.1
misc supplies	0	500	500	500	500	500	500	500	500	500	500	500
<b>Total cost of goods sold</b>	0	302736.1	302736.1	302736.1	302736.1	302736.1	302736.1	302736.1	302736.1	302736.1	302736.1	302736.1
<b>Gross Profit</b>	\$0	\$60,097	\$60,097.2	\$60,097.2	\$60,097.2	\$60,097.2	\$60,097.2	\$60,097.2	\$60,097.2	\$60,097.2	\$60,097.2	\$60,097.2
<b>selling,administrative,general expense</b>												
salaries	0	25800	25800	25800	25800	25800	25800	25800	25800	25800	25800	25800
travel	0	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
freight	0	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000
office supplies	0	200	200	200	200	200	200	200	200	200	200	200
depreciation	0	100	100	100	100	100	100	100	100	100	100	100
Misc	0	150	150	150	150	150	150	150	150	150	150	150
	0	6450										
total expenses	0	32250	32250	32250	32250	32250	32250	32250	32250	32250	32250	32250
<b>Operating Profit</b>	\$0	\$27,847	\$27,847	\$27,847	\$27,847	\$27,847	\$27,847	\$27,847	\$27,847	\$27,847	\$27,847	\$27,847
<b>Earnings before taxes</b>	\$0	\$27,847	\$27,847	\$27,847	\$27,847	\$27,847	\$27,847	\$27,847	\$27,847	\$27,847	\$27,847	\$27,847
<b>Results of Operations</b>												
EBIT	\$0	\$27,847	\$27,847	\$27,847	\$27,847	\$27,847	\$27,847	\$27,847	\$27,847	\$27,847	\$27,847	\$27,847
Depreciation	7985.11	7986.11	7986.11	7986.11	7986.11	7986.11	7986.11	7986.11	7986.11	7986.11	7986.11	7986.11
cash available	\$7,985	\$35,833	\$35,833	\$35,833	\$35,833	\$35,833	\$35,833	\$35,833	\$35,833	\$35,833	\$35,833	\$35,833
First 200,000 Earnings *	\$4,051.64	\$18,181.82	\$18,181.82	\$18,181.82	\$18,181.82	\$18,181.82	\$18,181.82	\$18,181.82	\$18,181.82	\$18,181.82	\$18,181.82	\$18,181.82
Residual	\$3,933.47	\$17,651.52	\$17,651.52	\$17,651.52	\$17,651.52	\$17,651.52	\$17,651.52	\$17,651.52	\$17,651.52	\$17,651.52	\$17,651.52	\$17,651.52
<b>Income Tax (12%)*</b>	\$486.20	\$2,181.82	\$2,181.82	\$2,181.82	\$2,181.82	\$2,181.82	\$2,181.82	\$2,181.82	\$2,181.82	\$2,181.82	\$2,181.82	\$2,181.82
<b>Income Tax (28%)*</b>	\$1,101.37	\$4,942.43	\$4,942.43	\$4,942.43	\$4,942.43	\$4,942.43	\$4,942.43	\$4,942.43	\$4,942.43	\$4,942.43	\$4,942.43	\$4,942.43
<b>Cash after Tax</b>	\$6,397.54	\$28,709.10	\$28,709.10	\$28,709.10	\$28,709.10	\$28,709.10	\$28,709.10	\$28,709.10	\$28,709.10	\$28,709.10	\$28,709.10	\$28,709.10
<b>Interest</b>	\$154,233.33	\$154,233.33	\$154,233.33	\$154,233.33	\$154,233.33	\$154,233.33	\$154,233.33	\$154,233.33	\$154,233.33	\$154,233.33	\$154,233.33	\$154,233.33
<b>Total cash available</b>	(\$147,835.79)	(\$125,524.24)	(\$125,524.24)	(\$125,524.24)	(\$125,524.24)	(\$125,524.24)	(\$125,524.24)	(\$125,524.24)	(\$125,524.24)	(\$125,524.24)	(\$125,524.24)	(\$125,524.24)
<b>Cumulative Cash</b>	(\$147,835.79)	(\$273,360.03)	(\$398,884.27)	(\$524,408.50)	(\$649,932.74)	(\$775,456.98)	(\$900,981.22)	(\$1,026,505.45)	(\$1,152,029.69)	(\$1,277,553.93)	(\$1,403,078.17)	(\$1,528,602.41)

ROI		Interest Rate	year 1
Annual		0.04	(\$1,691,370.85)
Amount			
Owing @	Annual Amount		
beg. Year	\$4,627,000.00	Owing @	End
		of Year	\$6,318,370.85

\* As part of Small Business Deductions





# Lakeside Wood Products Ltd.

## APPENDIX C: Second year at full capacity

Sales Plan	January	February	March	April	May	June	July	August	September	October	November	December
<b>Financial Plan</b>												
<b>Sales</b>	\$725,667	\$725,667	\$725,667	\$725,667	\$725,667	\$725,667	\$725,667	\$725,667	\$725,667	\$725,667	\$725,667	\$725,667
<b>Cost of Goods Sold</b>												
<b>Materials</b>												
Logs	250000	250000	250000	250000	250000	250000	250000	250000	250000	250000	250000	250000
Adhesives	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
<b>Direct labour</b>	82500	82500	82500	82500	82500	82500	82500	82500	82500	82500	82500	82500
<b>Overhead</b>												
Equipment depreciation (based on 12yrs)	7986.1	7986.1	7986.1	7986.1	7986.1	7986.1	7986.1	7986.1	7986.1	7986.1	7986.1	7986.1
misc supplies	500	500	500	500	500	500	500	500	500	500	500	500
<b>Total cost of goods sold</b>	343986.1	343986.1	343986.1	343986.1	343986.1	343986.1	343986.1	343986.1	343986.1	343986.1	343986.1	343986.1
<b>Gross Profit</b>	\$381,681	\$381,681	\$381,680.6	\$381,680.6	\$381,680.6	\$381,680.6	\$381,680.6	\$381,680.6	\$381,680.6	\$381,680.6	\$381,680.6	\$381,680.6
<b>selling,administrative,general expense</b>												
salaries	25800	25800	25800	25800	25800	25800	25800	25800	25800	25800	25800	25800
travel	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
freight	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000
office supplies	200	200	200	200	200	200	200	200	200	200	200	200
depreciation	100	100	100	100	100	100	100	100	100	100	100	100
Misc	150	150	150	150	150	150	150	150	150	150	150	150
	6450	6450										
total expenses	32250	32250	32250	32250	32250	32250	32250	32250	32250	32250	32250	32250
<b>Operating Profit</b>	\$349,431	\$349,431	\$349,431	\$349,431	\$349,431	\$349,431	\$349,431	\$349,431	\$349,431	\$349,431	\$349,431	\$349,431
<b>Earnings before taxes</b>	\$349,431	\$349,431	\$349,431	\$349,431	\$349,431	\$349,431	\$349,431	\$349,431	\$349,431	\$349,431	\$349,431	\$349,431
<b>Results of Operations</b>												
EBIT	\$349,431	\$349,431	\$349,431	\$349,431	\$349,431	\$349,431	\$349,431	\$349,431	\$349,431	\$349,431	\$349,431	\$349,431
Depreciation	7985.11	7986.11	7986.11	7986.11	7986.11	7986.11	7986.11	7986.11	7986.11	7986.11	7986.11	7986.11
cash available	\$357,416	\$357,417	\$357,417	\$357,417	\$357,417	\$357,417	\$357,417	\$357,417	\$357,417	\$357,417	\$357,417	\$357,417
First 200,000 Earnings*	\$18,181.77	\$18,181.82	\$18,181.82	\$18,181.82	\$18,181.82	\$18,181.82	\$18,181.82	\$18,181.82	\$18,181.82	\$18,181.82	\$18,181.82	\$18,181.82
Residual	\$339,233.90	\$339,234.85	\$339,234.85	\$339,234.85	\$339,234.85	\$339,234.85	\$339,234.85	\$339,234.85	\$339,234.85	\$339,234.85	\$339,234.85	\$339,234.85
<b>Income Tax</b> (12%)*	\$2,181.81	\$2,181.82	\$2,181.82	\$2,181.82	\$2,181.82	\$2,181.82	\$2,181.82	\$2,181.82	\$2,181.82	\$2,181.82	\$2,181.82	\$2,181.82
<b>Income Tax</b> (28%)	\$94,985.49	\$94,985.76	\$94,985.76	\$94,985.76	\$94,985.76	\$94,985.76	\$94,985.76	\$94,985.76	\$94,985.76	\$94,985.76	\$94,985.76	\$94,985.76
<b>Cash after Tax</b>	\$260,248.37	\$260,249.09	\$260,249.09	\$260,249.09	\$260,249.09	\$260,249.09	\$260,249.09	\$260,249.09	\$260,249.09	\$260,249.09	\$260,249.09	\$260,249.09
<b>Interest</b>	\$205,186.73	\$205,186.73	\$205,186.73	\$205,186.73	\$205,186.73	\$205,186.73	\$205,186.73	\$205,186.73	\$205,186.73	\$205,186.73	\$205,186.73	\$205,186.73
<b>Total cash available</b>	\$55,061.63	\$55,062.36	\$55,062.36	\$55,062.36	\$55,062.36	\$55,062.36	\$55,062.36	\$55,062.36	\$55,062.36	\$55,062.36	\$55,062.36	\$55,062.36
<b>Cumulative Cash</b>	\$55,061.63	\$110,123.99	\$165,186.35	\$220,248.71	\$275,311.07	\$330,373.43	\$385,435.79	\$440,498.15	\$495,560.51	\$550,622.87	\$605,685.23	\$660,747.59

	Interest Rate	year 2	year 3	year 4
	0.04	\$2,876,765.04	\$2,991,835.64	\$3,111,509.07
amount owing @ beg.	Annual Amount			
Year	Owing @ End of Year	\$3,278,836.96	\$287,001.32	(\$2,824,507.75)

\* As part of Small Business Deductions



**Lakeside Wood Products Ltd.**

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