Faro Solar Complex

Redevelopment Pre-Feasibility

FINAL REPORT

October 28, 2018

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Town of Faro
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TOWN OF FARO

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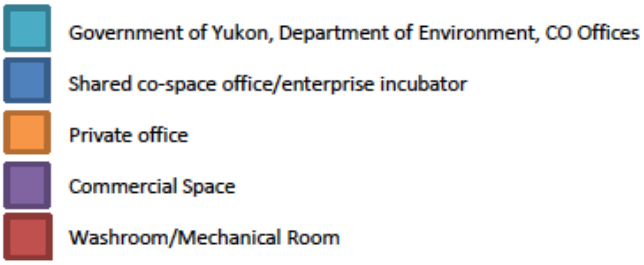
Executive Summary

The Faro Solar Complex building is large (24,451 ft^2) and in poor condition. Its salvage and renovation holds no advantage over new construction in regard to costs, local employment, asset value or life expectancy of the asset. Demolition and replacement with a set of smaller new buildings is the better option with respect to value for public capital, long term operation and maintenance costs, asset value; life expectancy; and flexibility.

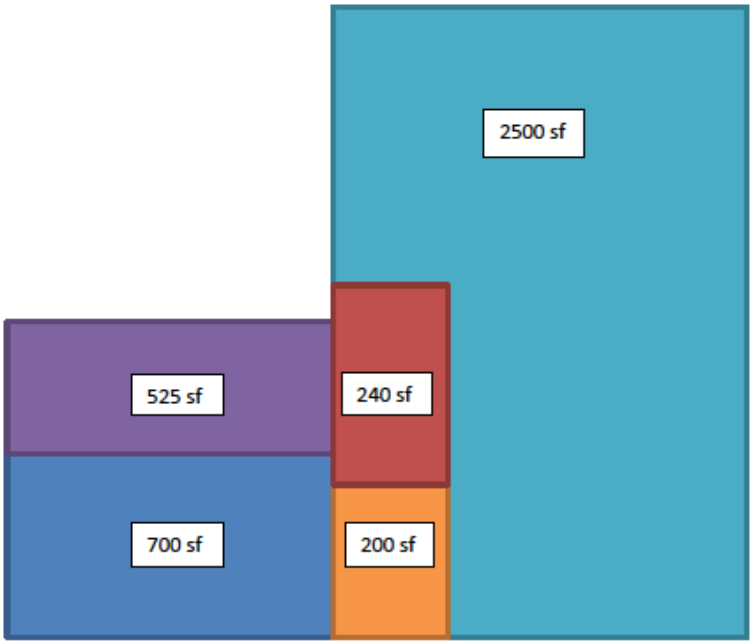
However, given the very high capital cost estimates ($10+ million) for a complete like-for-like demolition and new-build, it was immediately evident that accessing finance for this would be challenging. This is especially true in light of the short-term demand projection that would only occupy up to 20% of the current footprint.

Further, it was supposed that it *may* be easier to access public funding investment in tranches for a rehabilitation. This factor led to a phased redevelopment option, starting with the Phase 1 design description shown at right.



This Phase 1 would occupy 4,465 ft^2 or just 18% of the building. Uses included could be:

- GY Environment (COs) office & shop @ 2,500 ft^2
- Co-space innovation hub for entrepreneurs and visiting professionals @ 700 ft^2
- One commercial space @ 525 ft^2
- One private office space @ 200 ft^2
- Washroom and mechanical space @ 540 ft^2 (including 300 ft^2 required to service Phase 2)



Phase 2 (including a possible store and daycare or more commercial space) could occupy 5,580 ft^2 and a long-term Phase 3 the last 14,406 ft^2.

Private Ownership

The projected capital cost of Phase 1 under a private ownership model is $3.292 million, as shown in the table at right. This includes the significant necessary hazardous materials abatement and other essential structural work that would be required to clean up the remaining Phases 2 & 3 of the building before a private financier would acquire the asset.

Construction	$1,786,000
Hazardous Materials	$806,883
Essential Work on Phase 2&3	$399,720
Professional Services	$299,261
Capital Cost	**$3,291,864**

At this capital cost, even at a (imprudent) 100% occupancy projection and with a full 100% 10-year property tax rebate from the Town, a capital grant of ***$2.895 million*** would still be required relative to a ***private investment of only $250,000***, for that investor to achieve a satisfactory 12% internal rate of return, given the low likelihood of selling the property in 15 years.

Private investment is not a feasible approach to rehabilitation of the Solar Complex.

These were considered unacceptable ratios of public to private investment during a Council planning exercise and the amounts are unlikely to be available through public funding programs, given the final private ownership envisaged. In conclusion, private investment is not a feasible approach to rehabilitation.

Town Ownership

However, under Town ownership it is not necessary for the Town to immediately abate the hazardous materials in the later phases. In this case capital costs would be reduced by $725,000, to $2.566 million as shown in the table at right.

Operating expenses would also be reduced significantly as property taxes and water and sewer utilities would not accrue. Existing Town staff could provide property management and administrative services at negligible cost.

Construction	$1,786,000
Hazardous Materials	$147,345
Essential Work on Phase 2&3	$399,720
Professional Services	$233,317
Capital Cost	**$2,566,382**

So, under the ownership of the Town, or a 100%-owned corporation, this allows for operational break-even of Phase 1 at the low-risk base occupancy level (GY Environment only), with public funding of ***$1.934 million.***

			Phase 1 Net Revenues at Occupancy		
	Funding	Debt	Base	Base + 50%	Full
25% mortgage debt	$1,934,114	$632,228	**$0**	**$9,288**	**$18,576**
20% Mortgage debt	$2,053,097	$513,274	**$9,545**	**$18,833**	**$28,121**
0% mortgage debt	$2,566,372	$0	**$50,372**	**$60,020**	**$69,308**

Next Steps

The phased rehabilitation proposition was assessed solely on the supposition that it *may* be easier to access public funding capital for this approach, and 'do something' to move the community forward. However, given the limited short-term demand case and high public funding required, even this would be very challenging.

Due to the high cost of the hazardous waste material removal and demolition, the building should be viewed as part of the extended environmental liability from mining in the Faro district, rather than as a building asset. This supports the case to Government of Canada for Faro to receive financial assistance with its safe demolition as part of the long-term federal commitment to clean-up of the mine site and revitalization of the region.

IF the Town could receive this assistance, the option of demolition should then be considered more favourably.

The Town will need to engage politically and advocate with the federal department responsible for the mine site clean-up as there are no known open funding programs applicable to this scenario. Alongside such advocacy, to bolster the case, the Town should consider undertaking a site redevelopment planning process that could enable subdivision and construction of new, smaller buildings by private enterprises over time.

1. Introduction

The Town of Faro owns the 'Solar Complex', an approximately 24,451 ft^2 building located just off Campbell Street in the heart of downtown Faro, a community of 405 in central Yukon. Formerly a vibrant mall including a substantial general store, bank, post office, liquor store, multiple retail shops, café and both public and private sector office spaces, it has been largely vacant since 2013 and is now used solely for cold storage, a maintenance workshop and as the community morgue. Built in 1971, it fell into its current poor condition under the last private owners, as reflected in the many previous engineering and other assessments undertaken.

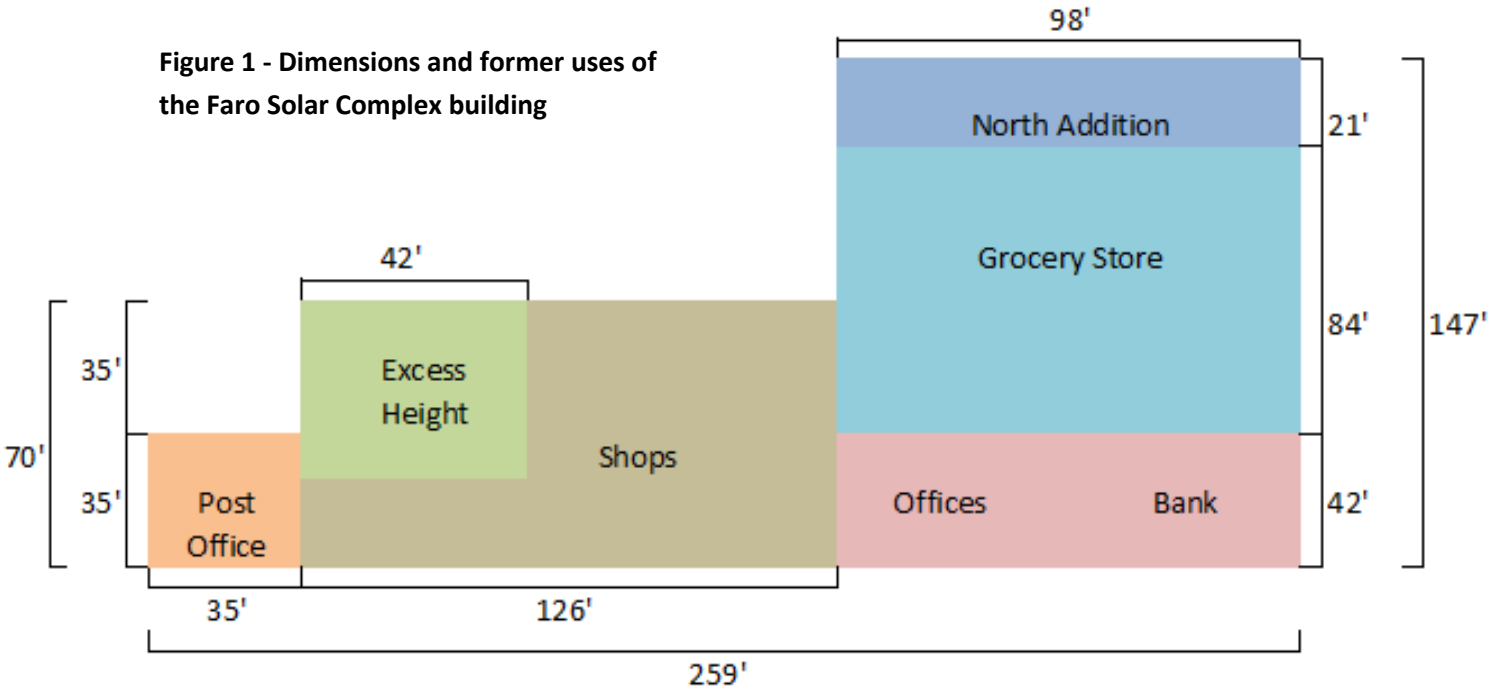
The Town leads a proactive and progressive approach to community renewal to ensure the long-term economic and social prosperity of Faro. Further to the sale of many vacant residential properties and lot subdivision efforts, the Town has turned to the commercial sector and the potential for the Solar Complex to act as the hub of a revitalized central business district.

However, an essential question must be answered – is it feasible to rehabilitate the building to achieve this goal or does a demolition and replacement with a similar or smaller building (or set of buildings) have a better case to meet the market demands and achieve access to the required capital investment?

This is a pre-feasibility assessment only, as the first step in demonstrating any business case for such a significant investment. It includes:

1. A market Need and Demand assessment to determine potential viable tenancies
2. A desktop only building condition assessment
3. A design description of a proposed technically feasible phased development
4. Class D capital cost and operational projections
5. Access to financing and implications for ownership options
6. Considerations for next steps

Figure 1 - Dimensions and former uses of the Faro Solar Complex building



2. Market Demand Analysis

2.1 Key Informants

There is limited formal data for the community – the market demand research relies primarily on key informant interviews with local, territorial and federal government agencies; local businesspeople and entrepreneurs; leaders of regional industrial developments such as the Faro Mine Remediation Project; and the general public at meetings and street-meets. In total, 45 people participated, many of which spoke multiple times.

2.1.1 Demand indicators

- Government of Yukon (GY) Realty has no current outstanding formal space requests for Faro and little history of need and demand in the region
- Only confirmed future demand (upon current lease expiry) is from GY Environment (COs) which needs high quality office and shop space, preferably together, including for a current Ross River position
- 2 GY officials indicated some interest in occasional drop-in 'hot desk' storefront space
- GY visiting social services and other health professionals are adequately provided for in the large Nursing Station facility (e.g. doctor) and Del Van Gorder school (e.g. dentist and counsellor)
- Government of Canada does not foresee placing Faro Remediation Project staff in the community
- Faro mine site contractor (Parsons) does not currently envisage needs as staff will work at the site
- Faro mine site consulting engineers (e.g. BGC) could have interest in live-work spaces
- Only 1 local business person indicated a potential future need for office space
- 1 potential entrepreneur expressed possible interest in a small café/restaurant commercial space
- Artisans market could use a smaller, brighter, warmer space but has no rent capacity
- Current Discovery Store owner not interested and provides no indication of future business plan
- Private enterprise is investing capital into a new convenience store at a different location

In summary, interviews indicate the current Need and Demand for space is weak, with the exception of the COs in the future. In this case, a sole-source long-term (e.g. 10-15 years) GY lease could be possible on a *government-to-government* basis only, with Town of Faro, subject to Management Board level approval.

2.1.2 Community Perspectives

On the whole, little enthusiasm and passion for the rehabilitation of the building was encountered in the community-based interviews. While almost everybody has a story and fond connection to the building and its place at the heart of old Faro, there is a general sense that is in the past and will not return. There is little sentimentality or feeling that it is a historic building that 'must be saved'.

There is a strong awareness of its condition and the financial implications of any rehabilitation. There is significant concern over the risk of the municipality investing funds into such a venture and that this stretches beyond its core mandate. This is interwoven with businesspeople expressing worries about the municipality intervening in the private market place and competing with local investors already offering spaces. Comparisons were drawn to Yukon Housing Corporation that is perceived to artificially depress residential rental rates and investment through its staff housing programs.

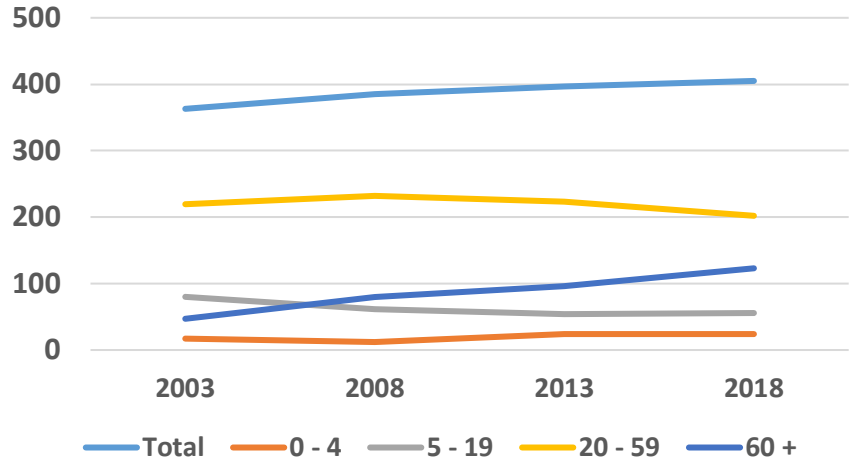
Despite this, there is a consensus that 'something must be done', that the status quo is not acceptable and that there is a case for public action to boost high-quality commercial spaces to foster a culture of entrepreneurism.

2.2 Economic Statistics

2.2.1 Population and Age

The population, now 405, has been remarkably steady since 2002, post-mine closure, with a modest annual increase of 0.7%. As elsewhere in Yukon, it is ageing. The over 60 group has almost tripled while the primary working and business segment (20-60) has declined. The school age numbers are steady over the last 10 years, which is confirmed by enrolment at Del Van Gorder school which is the same as it was in 2003.

Figure 2 - Faro Population by Age

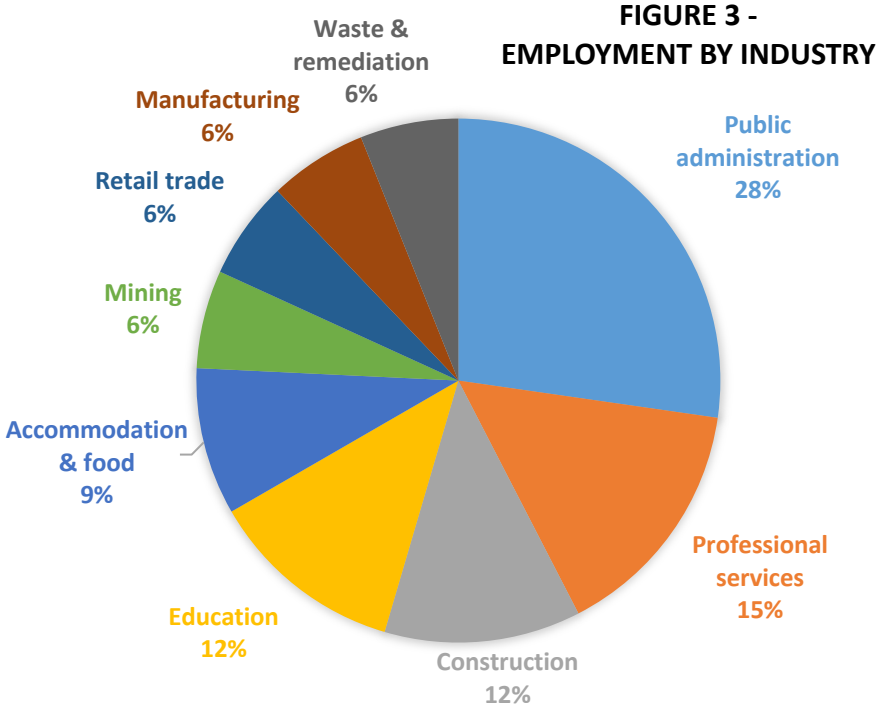


A continuation of this modest increase would raise the population to 442 by 2030. So, while there is a contention and positive hope that regional industrial developments (Faro mine remediation, Kudz Ze Kayh) may stimulate a discrete rise in the population, the natural population projection will not significantly change the commercial space Need and Demand picture from its current 'steady state'.

2.2.2 Employment

There is no official regular unemployment data for Faro. Monthly EI claim numbers are published which show a very consistent number of 30-40 in winter and 10 in summer, dropping to zero in August 2017. The Yukon Business Survey shows steady local business numbers (25-30) and employment from 2009 through to 2015 but a sudden drop in 2017 that may be an anomaly of methodology.

FIGURE 3 - EMPLOYMENT BY INDUSTRY



Employment is led by public administration, followed by professional services, education and construction. Only 10 people work from home, as potential candidates for relocation to commercial offices.

Overall, the community economy has been steady over the medium-term with a seasonal cyclic pattern that may be considered as at or close to full employment in the summer.

2.2.3 Income

Census data shows median 2015 household income of $56,533. The Yukon median is over 30% higher. Median individual after-tax income was $35,072. The more reliable tax filing income data for 2015, shows average individual gross income of $45,456, which implies an after-tax income of approximately $38,600 at a 15% effective tax rate.

From these numbers, the estimated after-tax total annual spending power of residents is $10.8 million.

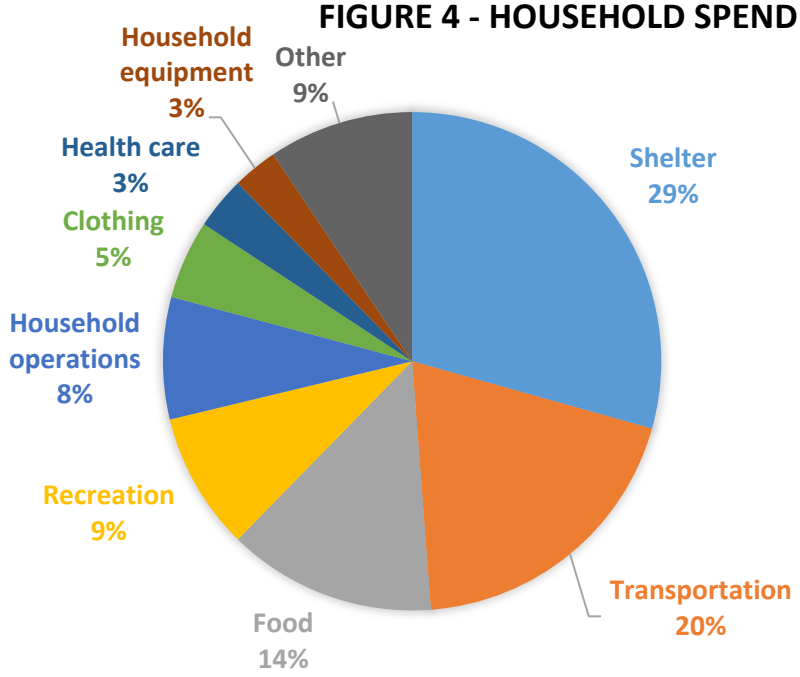
2.2.4 Prices

The Community Spatial Price Index shows Faro prices 20.7% higher than Whitehorse. This is above the 10-year average of 15%. So not only are Faro incomes much lower than the Yukon average, prices paid locally with that lower income are much higher. This must impact volumes purchased per household and encourages households to pursue lower prices in the Whitehorse centre to stretch their lower incomes.

2.2.5 Spending

There is no Faro specific data available. The 2015 Whitehorse household spending survey data is applied to the Faro incomes to provide a best estimate of spending patterns by Faro households.

FIGURE 4 - HOUSEHOLD SPENDING



Food spending is central to the space demand assessment of this pre-feasibility, given the hypothesis that a new grocery/convenience store space may be needed in the future.

Total household food spending is estimated at $1.28 million. Some household operations and personal care spending is also typically directed to such 'general' stores. From adding this, an estimate of the total potential household spending at such a store would be $1.5 million.

There is no Faro-specific survey data on spending 'leakage' outside the community, but surveys have been conducted in Dawson, a reasonably comparable place. There, 22% of such spending takes place outside the community. Applying this ratio to Faro gives a $1.17 million local market estimate of such spending by households only.

Interviews to date indicate that the main commercial purchasers of such goods use outside regular suppliers. Institutions such as are found in Faro are not generally large players in this market. GY Tourism data suggests that visitors spend an average of $15 per day per person on food. Based on an indicated 22 visitors per day from the Interpretive Centre for 100 days and even assuming this could all be spent at a local store, this would only add $33,000 to the potential market. To be generous for the purpose of this assessment, these segments could possibly raise the total market as far as $1.3 million.

2.2.6 Rental Rates

There is no regular formal data for rental rates, commercial or residential, in Faro. Interviews with landlords indicate monthly residential rates in the range of $1,100 for a fully furnished all-inclusive 1-bed suite to $2,000 for a 3-bedroom house. There is a perception that Yukon Housing staff housing programs suppress rental rates and investment. 2016 Census data recorded median household rent of $900 per month with no indication of dwelling size.

Given typical dwelling sizes, for this exercise it may be possible to project an annual residential rental rate of $12/ft^2. This could provide an indicative cap for private sector office space rental rates as the zoning bylaw is quite liberal in allowing home office uses and therefore there is some level of direct competition from such buildings that have vacancies and are in ample supply for renovation.

Government of Yukon indicates typical Whitehorse office leases are in the range of $31-$34/ft^2. Adjusting this by the 20% spatial price index for Faro would indicate a public-sector rate up to $40/ft^2.

2.3 Peer Community Comparisons

The Faro population of 405 places it in the third tier of Yukon communities, below the capital Whitehorse (30,238), Dawson City (2,250), Watson Lake (1,461) and Haines Junction (927). Table 1 below shows that these smaller communities are generally serviced by just 1 general store and up to 1-2 restaurants. There is little other commercial activity, excluding hotels, b&bs, home-based enterprises and industrial services. This is even the case in places well-positioned on the high-traffic tourism highways and Haines Junction has experienced periods without any general store offering.

Simply put, there is no evidence from the Yukon peers that the Faro community should be able to sustain commercial space needs greater than the current level. This provides no guidance to the potential demand for professional/innovation space needs though, as there is no peer data available in these sectors.

Table 1 – Yukon Peer Community Commercial Spaces

	Population	General Stores	Restaurants	Other Commercial
Carmacks	549	1	1-2	1
Mayo	510	1	0-1	0
Old Crow	265	1	0	0
Pelly Crossing	377	1	0	0
Ross River	401	1	1	0
Teslin	519	1	1	0

Other Commercial does not include hotels, b&bs etc., not contemplated for Solar Complex

2.4 Competition and Market Disruption

Several businesspeople and members of the public did raise concerns during the informant interviews that if the Town or other investor were to access public funding to redevelop the Solar Complex and offer commercial and/or institutional spaces for rent, this would constitute unfair competition and disruption to the free marketplace. For instance, there are office spaces vacant and available for rent at this time, although those viewed do not meet the high standards of accessibility and other conditions required for a public government lease space. In addition, a number of the recently sold residential buildings allow mixed-uses on the first floor and it is unknown how many of the investors may be contemplating commercial development of these spaces in their private business plans. The Town will need to consider not just the political and philosophical arguments in this area, but also continue to closely monitor the supply side of commercial spaces for its potential impact on future occupancy rates.

2.5 Space Need and Demand Conclusions

2.5.1 Grocery/Convenience Store

The current Discovery Store measures at approximately 3,500 ft^2. The Bonanza Market store in Dawson that may serve 30% of its market of 2,200 people plus a busy regional commercial sector is also close to 4,000 ft^2. A reference Arctic Co-Op store in Deline, NWT is 4,500 ft^2 to serve the slightly larger population of 472 that Faro could possibly grow to in the foreseeable future with a boost from regional industrial activity. It is reasonable to project a space need of 4,000 ft^2 with room to grow long-term with the community to 5,000 ft^2.

2.5.2 Office Space

1. Government of Yukon Environment (COs) – up to 1,500 ft^2 office for 4 persons including common space, interview rooms, 2 private offices, secure storage, specimen treatment tables, plus 1000 ft^2 shop office & fenced private parking. GY has specific space need guidelines and Environment has previously worked up needs in Dawson that can be used as a case comparison to guide design concepts.
2. Potential (to be validated further) 'hot-desk' space of up to 700 ft^2 for 6 persons including meeting room, coffee spot etc.
3. Potential (to be validated further) two private office spaces up to 300 ft^2 for 2 persons each (@ generous benchmark of 150 ft^2 per person)

2.5.3 Commercial Space

Only one potential interest in a commercial space, a small café/restaurant, was identified. This could be accommodated in as little as 600 ft^2 or less, subject to much more consultation with the entrepreneur. Such a space would need to be readily adaptable to alternative commercial tenants or office space, over time.

2.5.4 Projections

VERY early projections for space needs could be as shown in Table 2. It is immediately evident there will not be sufficient demand to fill the entire 24,451 ft^2 for some considerable time. So irrespective of the cost implications, a phased approach to the rehabilitation and/or demolition of the building is essential.

Table 2 – Early Space Need Projections
(Order of Magnitude only)

	Now	1-5 years	Possible
Government office	2,500	2,500	4000
Private office	600	1,200	1200
Hot desk office	700	700	1200
Store	0	4000	5000
Small commercial	600	600	1200
Total	4,400 ft^2	9,000 ft^2	12,600 ft^2

Note: Government office includes CO shop

These projections were presented solely for the purposes of concluding the following building assessment and developing a phased design description that could facilitate an effective analysis of the financial feasibility of rehabilitation including the likelihood of accessing capital investment. A future full feasibility study including a conceptual design process and more accurate costing would need to revisit these space needs and configurations in more detail with the potential tenants.

3. Building Assessment & Recommendation

A number of previous assessments of the Solar Complex facility have been undertaken since 2003, both before and after it became vacant. At the direction of the Town, no new building inspections were undertaken for this study and this assessment is desktop only, relying upon the accuracy of the previous professional assessments which may not necessarily reflect the current condition of the building. The analysis and recommendations are qualified on this basis and all cost estimates provided should be used with caution in this light.

3.1 Renovation or Replacement

See separate appended report.

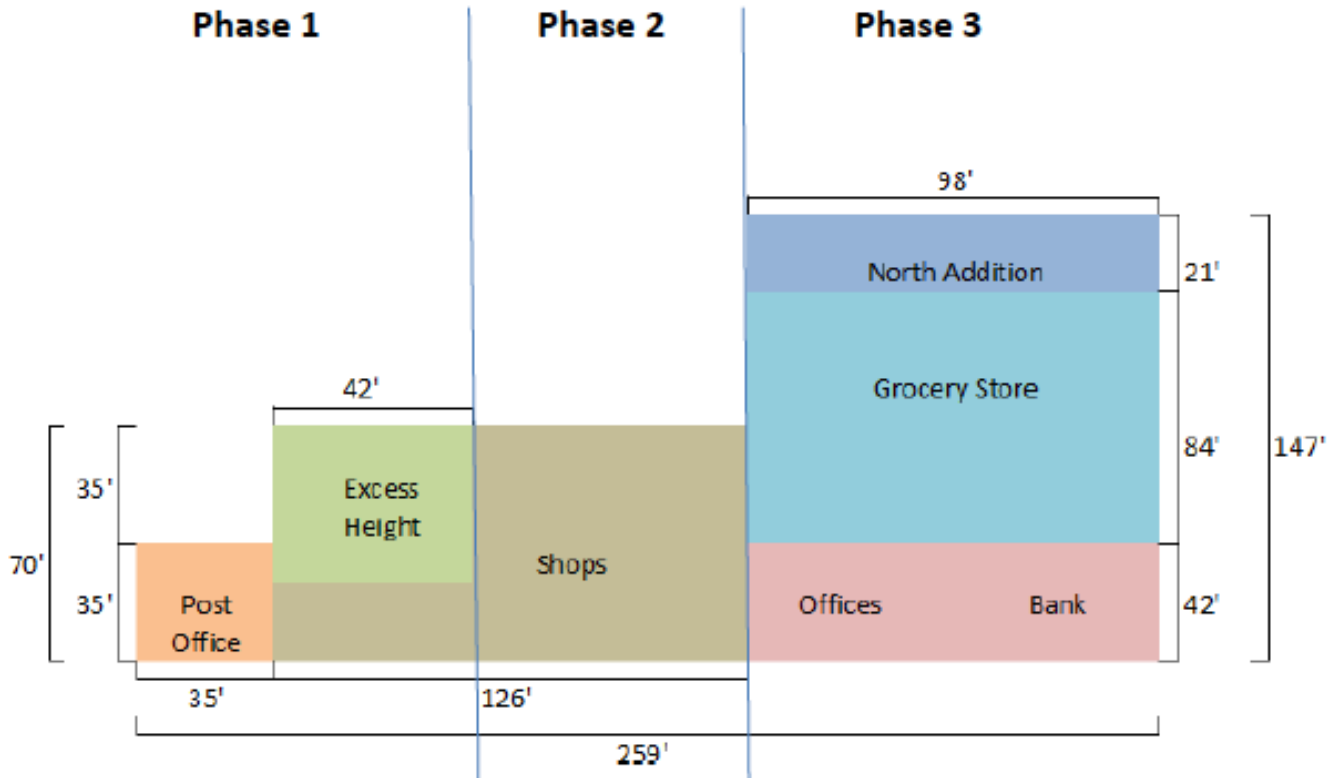
There is no technical advantage to salvage and renovation of the existing Faro Solar Complex in regard to costs, local employment, asset value or life expectancy of the asset, or to a phased approach to the same. In regard to long term operation and maintenance costs; asset value; life expectancy; and flexibility, new construction of a set of smaller buildings is the better option.

However, given the very high capital cost estimates, it is immediately evident that accessing finance for a large-scale one-time demolition and new-builds would be challenging in light of the demand projections. Further, it may be the case that it is easier to access public funding investment in tranches for a rehabilitation than it is for a large-scale one-time demolition and new-builds. So this is an added factor when considering decision-making on the cost-benefit equation of renovation versus demolition and replacement and leads to the hypothesized phased rehabilitation of the following design description.

3.2 Phased Design Description

See separate appended report.

Figure 5 – Phased Approach to Rehabilitation



The configurations of the phases of the design description are detailed in the appended report, and the space allocations summarized in Table 3. The entire washroom and mechanical space required to service both phases would need to be included in phase 1 of work and needs to be fire separated from the remainder.

Table 3 – Design Description Space Summary

	Phase 1	Phase 2	Total
Government office	2,500	0	2,500
Co-space office	700	0	700
Private offices	200	580	780
Small commercial	525	0	525
General store	0	5,000	5,000
Washrooms & mechanical	540	0	540
Total	4,465 ft^2	5,580 ft^2	10,045 ft^2

Note: Government office for Environment includes CO shop

While the capital cost and investment implications of phase 2 must be borne in mind, the initial financial viability assessment of the following sections is focused on phase 1, so only this description is shown below in Figure 6.

3.3 National Building Code

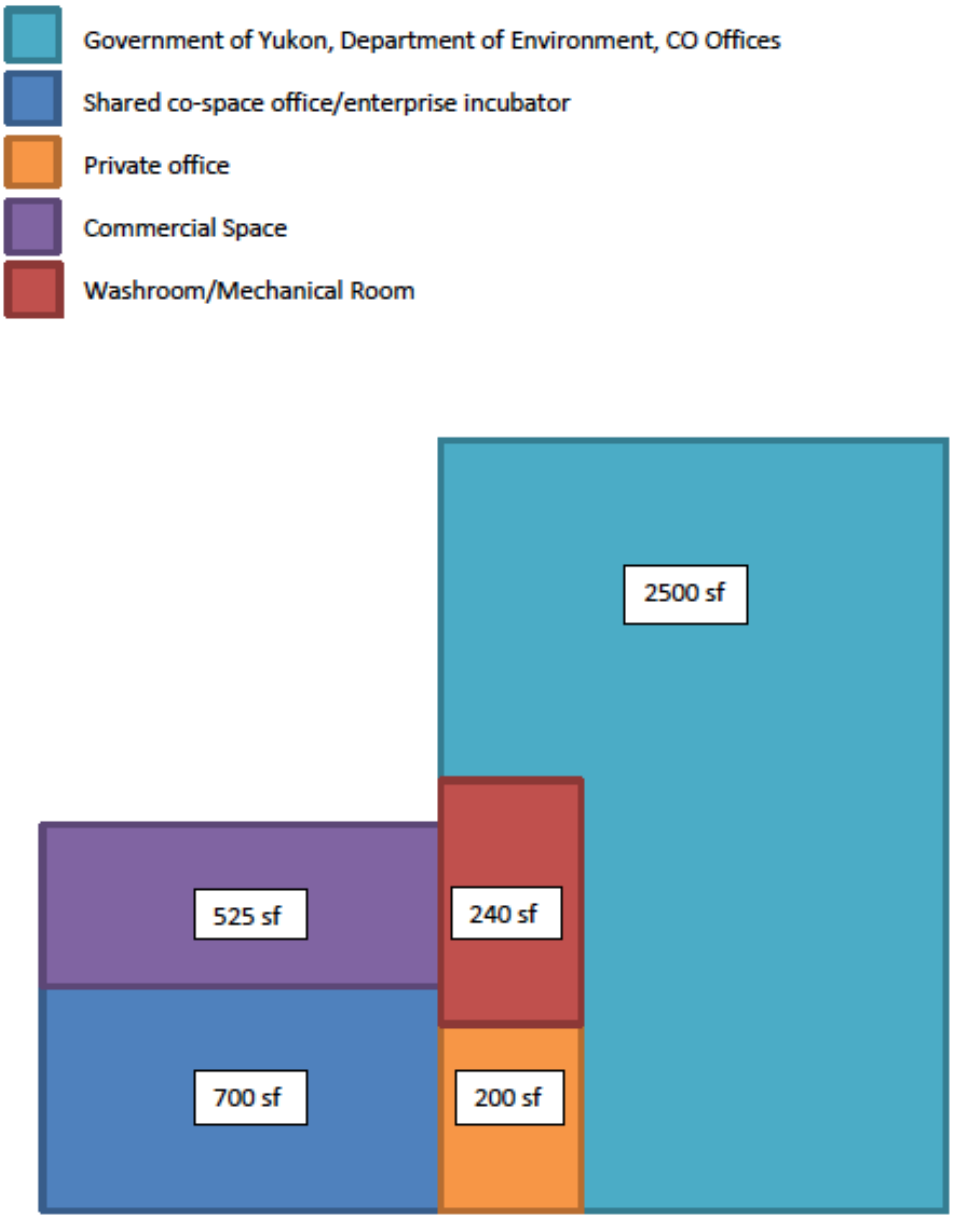
This phased rehabilitation includes commercial and institutional uses as a public building, which applies Part 3 of the building code. All work would require design and inspection sign-off by architect, mechanical, electrical and structural engineers that it meets all the requirements of the latest codes.

In this context, all existing mechanical and electrical systems are viewed to have reached the end of their life expectancy and must be replaced. This forces the hazardous materials within each phase to be removed.

The occupied phase of the building would need to be fire separated from the remainder.

Phased rehabilitation would be technically more challenging.

Figure 6 – Phase 1 Design Description: 4.165 sf + 300 sf Phase 2 = 4.465 sf



4. Operating Revenues and Costs

4.1 Tenant Rent Capacity

4.1.1 Grocery/Convenience Store

Statistics Canada provides data on the typical pro-forma expenses in this sector. Such stores will spend 78% on cost of sales (inventory) and only 3.5% on rent, not including utilities. Even if the entire $1.3 million potential local market were captured by the store, this rent capacity would be $45,500 annually, or only $3,792 per month. This would be up to $12/ft^2 based on 4,000 ft^2. The space at this rate would also need to be energy efficient to cap utility costs at $2,000 per month in total for all electric, heat and telecommunications in a large space with many appliances.

4.1.2 Offices

The current Government of Yukon lease for Environment (COs) is $1,700 per month. This again equates to an annual lease rate as low as $12/ft^2. However, the space is generally regarded to be below the preferred standard. High-quality public-sector office space lease rates from Whitehorse adjusted to Faro would indicate a public tenant rent capacity up to $40/ft^2 (annual), inclusive of all utilities. This would need to be reduced for any lower standard shop space.

For private sector office tenant rent capacity we assume it will be hard to out-price residential rental space at $12/ft^2 (annual), except if public traffic is expected at the office. For these cases, we would double the rate capacity of the tenant to $24/ft^2 (annual), which is consistent with known rates in the comparable place of Dawson, being $682.50 per month for a 300 ft^2 2-person space including heat.

For the hot desk concept, co-space in Whitehorse charges $119/month for workday only access. Increasing this by the 20% spatial price index would raise this to $145/month but inclusive of internet access and all utilities and services.

4.1.3 Commercial

With no other specific commercial uses proposed, or an open market to benchmark to, for the purpose of simplifying this assessment, it will be assumed that other commercial sectors have the same tenant rent capacity per area as the grocery/convenience sector, or up to $12/ft^2. Given the uncertainty for the long-term at this stage, these demands, and spaces may need to be interchangeable anyway.

4.1.4 Assumed Rental Rates

Informed by the above, Table 4 shows the assumed maximum long-term rents that can be sustained by the expected tenants in the building, for the purposes of this assessment.

Rates for start-up entrepreneurs will need to be low in the short-term to meet the economic stimulus goals.

Table 4 – Assumed Rental Rate by Unit Type

	Unit Size	Annual Rent ($/ft^2)	Monthly Rent ($)
Government office	1,500	40	5,000
Government garage/shop	1,000	30	2,500
Co-space office	700	15	900
Private office	200	24	400
Small commercial	525	12	525
General store	5,000	12	5,000

Office rents include heat and utilities, commercial rents do not.

4.2 Gross Revenues

Three occupancy scenarios for phase 1 are put forward:

1. Base occupancy – GY Environment only
2. Base + 50%
3. Full occupancy

Table 5 – Phase 1 Gross Revenue Projections

Occupancy	Base	Base + 50%	Full
Gross Revenues	$90,000	$100,800	$111,600

4.3 Operating Costs

These important financial assumptions are applied to project the operating costs of the redeveloped building:

- Town property taxes at 1.63% mil rate based on an assessment at 50% of construction cost
- Town water and sewer utility rates of $143.16 per unit, per quarter
- Building and liability insurance at 0.5% of construction cost
- Heat at $300 per small office unit, per year, pro-rated to other spaces
- Electric (including hot water) at $625 per small office unit, per year, pro-rated to other spaces
- Snow removal and landscaping at $2,000 total for building
- Maintenance at 4% of rental income plus $5,000 of fixed mechanical costs
- Property management at 6% of rental income
- Administration at 5% of rental income
- Cash funded replacement reserve at 10% of rental income

Table 6 – Phase 1 Operating Cost Projections

Ownership	**Private**	**Town**
Property taxes	$17,332	-
Water and sewer	$2,291	-
Building & liability insurance	$10,633	$10,633
Heat	$5,910	$5,910
Electric Inc. hot water	$3,125	$3,125
Snow removal and landscape	$2,000	$2,000
Maintenance	$8,600	$8,600
Property management	$5,400	-
Administration	$4,500	-
Replacement reserve	$9,000	$9,000
Total Operating Expenses	**$68,791**	**$39,268**

If the building were to be owned by the Town of Faro or a 100%-owned corporation, either for-profit or not-for-profit, operating expenses could be reduced significantly.

Property taxes and water and sewer utilities would not accrue. Existing Town staff could provide property management and administrative services at negligible cost.

4.4 Net Operating Revenues

Under these 6 different scenarios of occupancy and ownership, the net revenues available to service financing and generate a return can be projected.

Table 7 – Phase 1 Net Operating Revenue Projections

Ownership	Private			Town		
Occupancy	Base	Base + 50%	Full	Base	Base + 50%	Full
Net Operating Revenues	$21,209	$32,009	$42,809	$50,732	$61,532	$72,332

5. Capital Investment, Financing and Ownership

5.1 Capital Cost

These important financial assumptions are applied to project the capital costs of phase 1:

- Construction cost at $400/ft^2
- Hazardous materials abatement at $33/ft^2
- Phases 2 & 3 would still require 5% essential interim work at $20/ft^2
- Professional services (architect, engineering and project management) at 10% of cost
- Only the private ownership model would require immediate 100% hazardous materials abatement

Table 8 – Capital Cost Estimates for Phase 1

Ownership	Private		Town	
Phase	1	2 & 3	1	2 & 3
Construction	$1,786,000	-	$1,786,000	-
Hazardous Materials	$147,345	$659,538	$147,345	-
Essential Interim Work	-	$399,720	-	$399,720
Professional Services	$193,335	$105,926	$193,345	$39,972
Sub-Total	$2,126,680	$1,165,184	$2,126,680	$439,692
Capital Cost	**$3,291,864**		**$2,566,372**	

For clarification, note that these are capital cost estimates for ***Phase 1 occupancy only***, including immediate work that must be completed on phases 2 and 3 anyway, such as roof, exterior aesthetics and others.

Total capital cost to include phase 2 would be ***over $5 million***, and for the whole building, ***over $11 million.***

5.2 Private Equity Investment

Table 9 below shows the internal rate of return for six different private investment scenarios for the phase 1 capital project only, generated from a proprietary business feasibility assessment tool. These were analyzed as the focus of a live interactive exercise with Town Council and administration.

- Mortgage debt financing is assumed at 8.00% over a 15-year amortization term.
- Occupancy is assumed at 100% for complete 15-year term

Table 9 – Returns from Phase 1 Private Investment Financing Structures

Investor equity	$3,291,864	$1,000,000	$1,000,000	$250,000	$250,000	$250,000
Mortgage debt	-	$658,373	-	$658,373	$146,939	$335,181
Capital grant assistance	-	$1,633,491	$2,291,864	$2,383,491	$2,894,824	$2,706,683
10-year 100% tax rebate	No	No	No	No	Yes	No
Property sold in 15-years	No	No	No	No	No	Yes
Internal Rate of Return	-20%	N/A	-10%	N/A	12%	12%

So, even at an imprudent 100% occupancy projection and with a full 100% 10-year property tax rebate, a capital grant of ***$2.895 million*** would be required relative to a ***private investment of only $250,000***, for that investor to achieve a satisfactory 12% rate of return, given the low likelihood of selling the property in 15 years.

Even if the investor were prepared to speculate that the property could be sold, and not request the 10-year property tax rebate, the grant would still need to be ***$2.707 million.***

These were considered unacceptable ratios of public to private investment during the Council exercise and are unlikely to be available through funding programs, given the private ownership envisaged. In addition, the private investment case scenarios for phase 2 are even worse and would require a second large round of public investment to be viable, raising the undesirable possibility of Faro once again being left with an underfinanced private owner in control of this prominent asset and location, central to the community's vitality and future.

In conclusion, private investment is not a feasible approach to rehabilitation of the Solar Complex building.

5.3 Town of Faro

Table 10 below shows the net revenues after debt servicing costs for funding/debt and occupancy scenarios for the phase 1 capital project only, under Town ownership. These too were analyzed as the focus of the live interactive exercise with Town Council and administration.

These important financial assumptions are applied to project the capital costs of phase 1:

- Construction cost at $400/ft^2 plus Phase 1 hazardous materials abatement only at $33/ft^2
- Phases 2 & 3 receive 5% essential interim work at $20/ft^2 only
- Mortgage debt financing is assumed at 5.00% over a 20-year amortization term.

Table 10 – Net Revenues from Phase 1 under Town of Faro Ownership

			Net Revenues at Occupancy		
	Funding	Debt	Base	Base + 50%	Full
25% mortgage debt	$1,934,114	$632,228	**$0**	**$9,288**	**$18,576**
20% Mortgage debt	$2,053,097	$513,274	**$9,545**	**$18,833**	**$28,121**
0% mortgage debt	$2,566,372	$0	**$50,372**	**$60,020**	**$69,308**

The complete 10-year pro-forma financial projections for the minimum public funding (25% mortgage) and base occupancy scenario are appended to this report.

5.3.1 Public Funding

Under the ownership of the Town, or a 100%-owned corporation, the lower operational costs provide for break-even, at just the low-risk base occupancy level, with public funding as low as ***$1.934 million.***

At higher funding levels, from either the Town or third-party agency, phase 1 would start to generate significant net revenues, especially if the available spaces do stimulate the intended entrepreneurism and occupancy proves high. In this circumstance, these net revenues would accumulate as a source of equity to finance phase 2 and beyond.

Due to the high cost of hazardous waste material removal and even partial internal demolition, the building could be viewed as part of the extended legacy of financial burdens from mining in Faro, rather than as a building asset. This may support the case to either Government of Yukon or Government of Canada to receive financial assistance with its safe rehabilitation, in addition to the economic development case.

Further, as stated previously, it may be easier to access public funding investment for a rehabilitation than it is for a demolition and new-build. This will need to be considered in decision-making on the cost-benefit equation of renovation versus demolition.

5.3.2 Debt Financing

The *Municipal Act* restricts the Towns' maximum debt load, including that of a subsidiary corporation or even the value of any mortgage guarantees provided, to 3% of its assessed tax base. This equates to approximately $1.12 million at his time. While the Town does not currently have any debt, or typically borrow, the $632,228 mortgage in the base public funding scenario above would use fully 55% of this borrowing room.

The Town will need to carefully consider its policies on debt, and risk management tolerance, before taking on this liability. However, it should be noted that if a secure 10-year or greater lease is in place with Government of Yukon as the base tenant, at the assumed rent this tenant alone provides a debt service coverage ratio of 1.77 (Rent of $7,500/month vs. mortgage payment of $4,228) so the risk is low.

As well, it can be argued that while this model assumes a financial liability, the project provides an offsetting reduction in the liability for demolition and hazardous materials abatement.

5.3.3 Municipal Development Corporation

Under the *Municipal Act,* the Town is a corporation, and can create a separate corporation (or utility) and be the shareholder. Council received a previous presentation in May 2017 that considered the role of a municipal development corporation as an option for the management of Town properties.

The presentation concluded that if the Town foresees an ongoing property development and management role, then a separate corporation makes sense. The separate legal entity would transfer risk and liability to an extent, although any debt would likely require a guarantee from the Town anyway. The main benefit is to transfer governance to a separate board of directors with the passion, skills and experience required to drive such a project to success. Removing the management of such an enterprise from the direct political control of Council can therefore enable better long-term strategic oversight.

The corporation could also even consider selling shares to the public, after time, if significant positive cash flow streams are established to pay dividends. This could be an alternative mechanism to raise the capital required for phase 2 and/or pay down the mortgage debt.

6. Next Steps Considerations

The core goal of this pre-feasibility study was to answer the essential question – to stimulate revitalization of the central business district, is it feasible to rehabilitate the building or does a demolition and replacement with a similar or smaller building (or set of buildings) have a better case to meet the market demands and achieve access to the required capital investment?

Rehabilitation

With a private investment and ownership model for rehabilitation ruled out as not feasible, the Town will first need to determine if there is political will and direction to dedicate resources, both financial and administrative capacity, to further pursuing a rehabilitation approach under Town ownership.

Under Town ownership (or through a municipal development corporation), financial feasibility is only constrained by access to public funding dollars, from federal agencies such as the Canadian Northern Economic Development Agency (CanNor) Strategic Investments in Northern Economic Development (SINED) program, gas tax funds or other such programs that may be offered from time to time.

Initial contact with CanNor indicates that project planning needs to progress further, to provide much more detail and certainty on design, budget and letters of intent from identified potential tenants and their positive socio-economic benefits, before an application for a major capital contribution to the rehabilitation could even be assessed. Access even to further planning funds may be constrained by the tenant uncertainty.

A high level of doubt remains over the capital cost. There is also a body of thought in Faro that a community-driven approach to the renovation coupled with innovative and efficient design could reduce the capital cost from the pricing of the typical large-contractor market place that has been used in this assessment.

Should the Town wish to advance the rehabilitation approach further under its ownership, moving forward to a conceptual design and costing process would provide answers to these matters and inform a full feasibility study. The initial cost projection for such a 'next steps' planning phase, for budgeting purposes only, is:

Architectural & Engineering	$69,600
Tender Project Management	$11,600
Finance & Economic Advice	$10,000
Travel & Expenses	$7,300
Total Cost	**$98,500**

The scope of such a design process could be adjusted to the available budget, if lower. The certainty of any cost estimate realized would reflect this.

The scope of this concept design phase could be composed such that the design can be easily adapted to either the rehabilitation or re-purposed to a new-build scenario on an adjacent vacant site. In this way, the design dollars invested would provide a public return even if, later, the rehabilitation option is not pursued and the alternative of a demolition and small re-build (still under Town ownership) is chosen instead.

Any concept design phase should continue to be properly informed by good business analysis to maximize the socio-economic benefits and minimize the operational risk of the enterprise. This must include a high degree of

Demolition

As noted, there is no technical or capital cost advantage to rehabilitation of the existing building and in regard to long term operation and maintenance costs; asset value; life expectancy; and flexibility, new construction of a set of smaller buildings is the better option.

The phased rehabilitation proposition was assessed solely on the supposition that it *may* be easier to access public funding capital for this approach, and 'do something' to move the community forward. However, given the limited short-term demand case and high costs shown, even this would be very challenging.

Also as noted, due to the high cost of hazardous waste material removal and demolition, the building should be viewed as part of the extended environmental liability from mining in the Faro district, rather than as a building asset. This should support the case to Government of Canada for the Town to receive financial assistance with its safe demolition as part of the long-term federal commitment to clean-up of the mine site.

IF the Town could receive this assistance, the option of demolition should then be considered more favourably.

In this direction, the Town will need to engage politically and advocate with the Government of Canada department responsible for the mine site clean-up as there are no known open funding programs applicable to this scenario.

Alongside such advocacy, the Town should consider undertaking a site redevelopment planning process to determine how this central business district land should be used after demolition, and bolster the case. This could include subdivision into smaller commercial parcels to be offered for public sale and new construction with private business capital. Such investment will be much more viable in smaller amounts and, over time, as market demands grow, enable the replacement of the derelict Solar Complex with a set of new, vibrant enterprises in this important heart of Faro.

Appendices

1. 10-Year Pro-Forma Financial Projections

   (Town of Faro Ownership, 25% Mortgage Financing and Base Occupancy Only)

2. Architect Report: Renovation vs. New Construction
3. Architect Report: Phased Approach to Rehabilitation

Profit and Loss Statement 2021-2030

FY 2021-30	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Sales Revenue										
Rent	90000	92700	95481	98345	101296	104335	107465	110689	114009	117430
Total Sales Revenue	**90000**	**92700**	**95481**	**98345**	**101296**	**104335**	**107465**	**110689**	**114009**	**117430**
Operating Expenses										
Property Taxes										
Water and Sewer										
Building & Liability Insurance	10633	10952	11281	11619	11968	12327	12697	13078	13470	13874
Heat	5910	6087	6270	6458	6652	6851	7057	7269	7487	7711
Electric inc. Hot Water (per unit)	3125	3219	3315	3415	3517	3623	3731	3843	3959	4077
Snow Removal and Landscape	2000	2060	2122	2185	2251	2319	2388	2460	2534	2610
Maintenance	8600	8858	9124	9397	9679	9970	10269	10577	10894	11221
Property Management										
Administration										
Total Operating Expenses	**30268**	**31176**	**32112**	**33075**	**34067**	**35089**	**36142**	**37226**	**38343**	**39493**
Operating Income	**59732**	**61524**	**63369**	**65270**	**67228**	**69245**	**71323**	**73462**	**75666**	**77936**
Interest Incurred	31611	30655	29652	28598	27491	26329	25109	23828	22482	21070
Depreciation and Amortization	102655	98549	94607	90822	87190	83702	80354	77140	74054	71092
Replacement Reserve Transfer	9000	9270	9548	9835	10130	10433	10746	11069	11401	11743
Income Taxes										
Total Expenses	**173535**	**169650**	**165918**	**162330**	**158877**	**155554**	**152351**	**149262**	**146281**	**143398**
Net Profit	**(83535)**	**(76950)**	**(70437)**	**(63984)**	**(57582)**	**(51219)**	**(44886)**	**(38574)**	**(32271)**	**(25969)**

Cash Flow Statement 2021-2030

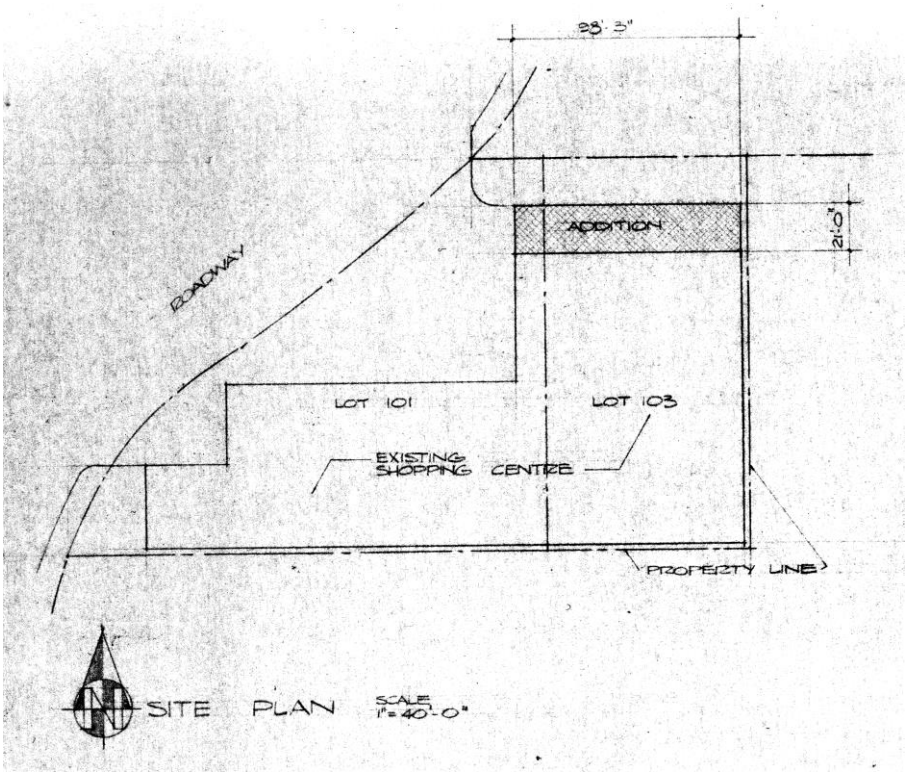
FY 2021-30	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Operations										
Net Profit	(83535)	(76950)	(70437)	(63984)	(57582)	(51219)	(44886)	(38574)	(32271)	(25969)
Depreciation and Amortization	102655	98549	94607	90822	87190	83702	80354	77140	74054	71092
Replacement Reserve Transfer	9000	9270	9548	9835	10130	10433	10746	11069	11401	11743
Change in Accounts Receivable										
Change in Accounts Payable										
Net Cash Flow from Operations	**28120**	**30868**	**33718**	**36673**	**39738**	**42916**	**46214**	**49635**	**53184**	**56866**
Investing and Financing										
Assets Purchased or Sold										
Investments Received										
Change in Short-Term Debt										
Change in Long-Term Debt	(19120)	(20076)	(21080)	(22134)	(23241)	(24403)	(25623)	(26904)	(28249)	(29662)
Net Cash Flow from Investing and Financing	**(19120)**	**(20076)**	**(21080)**	**(22134)**	**(23241)**	**(24403)**	**(25623)**	**(26904)**	**(28249)**	**(29662)**
Cash at Beginning of Period	**0**	**9000**	**19792**	**32430**	**46968**	**63465**	**81979**	**102570**	**125301**	**150235**
Net Change in Cash	**9000**	**10792**	**12638**	**14539**	**16497**	**18514**	**20591**	**22731**	**24935**	**27205**
Cash at End of Period	**9000**	**19792**	**32430**	**46968**	**63465**	**81979**	**102570**	**125301**	**150235**	**177440**

Balance Sheet 2021-2030

As of Period End	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Current Assets										
Cash	9000	19792	32430	46968	63465	81979	102570	125301	150235	177440
Accounts Receivable										
Total Current Assets	9000	19792	32430	46968	63465	81979	102570	125301	150235	177440
Long Term Assets										
Land										
Buildings	2566372	2566372	2566372	2566372	2566372	2566372	2566372	2566372	2566372	2566372
Intangible Assets										
Accumulated Depreciation	(102655)	(201204)	(295810)	(386633)	(473822)	(557524)	(637878)	(715018)	(789072)	(860164)
Total Assets	**2472717**	**2384960**	**2302991**	**2226707**	**2156014**	**2090826**	**2031063**	**1976654**	**1927535**	**1883647**
Current Liabilities										
Accounts Payable										
Short Term Debt										
Total Current Liabilities	0	0	0	0	0	0	0	0	0	0
Long Term Debt	613108	593031	571951	549817	526577	502174	476551	449647	421398	391736
Total Liabilities	**613108**	**593031**	**571951**	**549817**	**526577**	**502174**	**476551**	**449647**	**421398**	**391736**
Paid In Capital	1934144	1934144	1934144	1934144	1934144	1934144	1934144	1934144	1934144	1934144
Earnings	(83535)	(160485)	(230922)	(294907)	(352488)	(403707)	(448593)	(487167)	(519438)	(545407)
Replacement Reserve	9000	18270	27818	37653	47782	58216	68962	80031	91432	103175
Total Owners Equity	**1859609**	**1791928**	**1731039**	**1676890**	**1629438**	**1588652**	**1554512**	**1527007**	**1506137**	**1491911**
Total Liabilities and Equity	**2472717**	**2384960**	**2302991**	**2226707**	**2156014**	**2090826**	**2031063**	**1976654**	**1927535**	**1883647**

Faro Solar Complex

Renovation vs. New Construction



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Whitehorse, YT

July 2018

Background

The Solar Complex in Faro was constructed in 1971 and had a total square foot area of 22,393 sf.

It is a glulam post and beam structure on a concrete slab foundation and it can be assumed that the slab is thickened at all post locations to receive the point loading.

There has been one addition to the Complex on the north side which is similarly on a concrete slab foundation but the structural framing is 2x4 throughout with 2x6 where necessary. The additional square footage is 2,058 sf bringing the total building square footage up to 24,451 sf.

All exterior walls and partitions are 2x4 construction.

Exterior walls are GWB on the interior on 2x4 framing, clad in 1inch rigid insulation, strapping and vinyl cladding on the exterior. The roof has GWB on the underside and is framed out of 2x12 lumber spanning between the beams and bearing walls, ¾ inch fiberboard, 2 inch Styrofoam SM insulation with a mopped tar and gravel exterior roof finish.

The insulation levels are well below today's common building practice for the Yukon Territory with the storefront only being R3, the remaining exterior walls and roof being only R10.

Hazardous Materials-Asbestos

The building has been inspected and tested for asbestos containing materials and the stippled ceiling on the underside of the trusses as well as drywall joint compounds as well as two types of floor tiles throughout and some electrical casings all contain asbestos which means asbestos is found throughout the building and therefore triggers a comprehensive hazardous material demolition safety protocol. It also means that entering the building as-is poses a health hazard and even using it as cold storage now is hazardous to the people going in and out.

Additionally the red exterior siding has led based paint and will need to be removed as per hazardous waste protocol. (See attached Energy North Quote Point 6)from 2015)

Asbestos and hazardous material removal will be the first step in both options, a renovation of the existing as well as in demolition and new construction. A current quote from Energy North for this is attached and comprises a cost of $ 810,000 for the entire building.

That is a cost per square foot of $ 33.13.

YTG Building Inspection Consultation

A consultation with YTG Building Inspection, Inspector Warren Badley, on July 20th, 2018 confirmed that any area to be renovated in the existing complex will need to meet or exceed the current National Building Code requirements. No area of the building may be renovated under the original building code, i.e. any area to be occupied will need to be upgraded to current building code standards. If a partial and phased renovation is envisioned then the renovated areas need to be separated from the remainder of the existing building by way of a continuous fire separation from the slab foundation to the underside of the roof and including the underside of the roof structure surface. i.e. the renovated areas will need to form their own fire compartment and meet all exit, safety and other building code requirements.

Existing Building Systems

All existing mechanical and electrical building systems have reached the end of their life expectancy and are in need of replacement.

Whether Renovation or New Construction, when the building is being used commercially or institutionally as a public building Part 3 of the building code applies which means that for any renovation or new construction YTG Building Inspection will require design and inspection sign-off by an architect, mechanical, electrical and structural engineer. Fees for services by architects and engineers are higher in the case of a renovation than for new construction in relation to a respective construction cost amount, i.e. recommended lump sum percentage fees by professional architectural and engineering associations are higher for renovation than new construction.

Construction Elements with Residual Value

Currently only the existing concrete slab as well as the post and beam structure, some 2x4 wall framing and 2x12 roof framing hold value. Superstructure elements and structural elements will need to be upgraded to meet current structural and seismic requirements as per National Building Code of Canada.

The value of building elements that may be salvaged as per Suncorp Valuations is as follows:

Concrete Slab	$ 181,000
Framing, post and beam and 2x4	$ 117,000
2x12 Roof framing	$ 200,000
Total Value of salvaged material	**$ 498,000**

The value was determined by Suncorp Valuations in 2013 and may be less now. For the purpose of this report leaving the value as quoted, the value per square foot of the existing building is $ 20.36/sf. This figure seems adequate as construction cost per square foot is approximately $ 400/sf in the more

remote communities of the Yukon which coincides with the fact that 5-10 % of new construction would be structural. In this case the salvaged superstructure and slab would be 5% of new construction, the lower end of the figure as they would still need to be upgraded to meet current National Building Code of Canada structural and seismic requirements.

Renovation vs. New Construction

The deciding factors between Renovation vs. New Construction are as follows:

- Phased Approach

- Cost Considerations

- Opportunities for local employment

- Asset value of building asset

- Life expectancy of building asset

- Flexibility

Phased Approach

Both options have the opportunity to be phased or done all at once. The building may be demolished in smaller parts and still have structural integrity, the post and beam structure and existing slab allow for this possibility. Whether Renovation or New Construction; smaller areas of the building may be chosen for either option. When considering areas that lend themselves for a partial demolition/renovation, a structural engineer will have to be consulted. Areas following the superstructure lines, i.e. post and beam structure will in all likelihood determine the extent and area as both, the new as well as the existing will need to remain structurally sound.

Cost Considerations

The first step for both options is identical in that both options will need asbestos and hazardous materials removal by a professional company to safely contain and dispose of the existing asbestos and lead containing construction materials. Asbestos removal is costly and the quoted price per square foot asbestos removed for the Solar Complex in Faro by Energy North was on July 23, 2018 $ 33.13 /sf, which results in a budget of $ 810,000 for asbestos removal of the entire Complex. If the removal is also done in a phased development approach additional costs for mob and de-mob and inefficiencies will arise.

The structural elements of a commercial building hold approximately 5-10 % of its overall construction value. In the case of the Solar Complex that means that 90-95% of the buildings construction value will need to be demolished before renovation may begin. Demolition of an entire building can be done with heavy equipment resulting in a fast cost efficient demolition process. Demolition of a building where superstructure elements and structural elements are being salvaged is a slow, careful process in order

not to compromise the integrity of the structural elements to be salvaged. We can assume that the additional time, labor, smaller equipment used essentially costs as much as the total value of the salvaged material. That means that the $ 498,000 the salvaged material was estimated to be worth which is $ 20.36/sf of the building is also the additional cost to more carefully demolish the building around those to be salvaged elements. So when it comes to the consideration of construction costs, there is no benefit to choose one over the other. They will cost the same.

When it comes to operation and maintenance costs though new construction will be more cost efficient as not only the roof and wall construction will be to current energy efficient standards but also the floor. The current concrete floor is an uninsulated slab on grade and will act as a heat sink, i.e. a lot of the buildings heat will be lost to the cold ground in the fall/winter and spring resulting in much higher annual operation and maintenance costs for the entire life of the building.

Opportunities for local employment

Both options offer opportunities for local employment as the Town of Faro can spell out that local employment opportunities will be considered when evaluating the tenders for demolition and construction.

Asset Value of Building Asset

The Asset Value of the Building Asset is higher in the case of complete demolition and new construction as all elements will be new and to current standards.

Life Expectancy of Building Asset

The life expectancy of the Building asset is higher in the case of complete demolition and new construction.

Flexibility

Design and layout of New Construction is highly flexible and can meet the needs of the Town of Faro in all aspects. Design and layout in the case of a Renovation is limited as the space is already pre-defined by the structure. Ceiling heights, sizes of spaces, building shape is already predetermined and in case of structural point loading on the slab other than the existing superstructure point loads is not allowed for. That means if there are design or layout options requiring structural support in the slab it will require demolition of existing slab and installation of thickened slab in those areas.

Price per square foot high level estimate figures and exercises (Class D Estimates and Opinion of Probable Cost)

Demolition Cost for Option New Construction $ 35/sf

Demolition Cost for Option Renovation $ 55.36/sf

The current cost for demolition of a large structure is approximately $ 35/sf in Yukon's more remote communities if no fee for accepting the construction waste is charged by the respective community (estimated by JTS Cost Consulting). That means that demolition of the Solar Complex can be estimated to cost approximately $ 855,785. This does not include the asbestos removal that has to occur before demolition can begin.

In the case of a renovation option we determined the cost of demolition will have to be increased by $ 20.36/sf, the additional cost to carefully work around the to be salvaged structural elements. Demolition cost in that case is $ 55.36/sf bringing the demolition cost before renovation up to $ 1,353,607.

Asbestos Removal $ 33.13/sf

The cost to remove all asbestos and lead containing materials is quoted with $ 810,000 for the entire complex.

Construction Cost for Commercial/Institutional $400/sf.

The cost of construction or extensive rehabilitation per square foot is the same for both options. At $ 400/sf the Renovation as well as New Construction of a 24,251 sf building will cost approximately $ 9,780,400.

Conclusion

There is no advantage to salvage and renovate the existing Faro Solar Complex in regards to costs, local employment, asset value or life expectancy of asset or to a phased approach. In regards to long term Operation and Maintenance Costs of the Building, Asset Value, Life Expectancy and Flexibility New Construction is the better option.

Due to the high cost of hazardous waste material removal ($ 810,000) and demolition of the Complex ($ 855.785), a total cost of $ 1,665,785, the Faro Solar Complex could be viewed as a financial burden rather than a building asset. Therefore the Town of Faro may be able to make the case to either Government of Yukon or Government of Canada to receive financial assistance with the safe demolition of the Complex since it is located in the commercial core of Downtown Faro and was constructed as part of the support for mining in Faro.

Information provided by Town of Faro

Faro Shopping Centre Energy Study, Sinclair and Associates, Whitehorse, YT, December 2003

Existing Condition Report, Donald W. Flynn Engineer, Whitehorse, YT, October 2009

Appraisal Report by Suncorp Valuations, May 2013

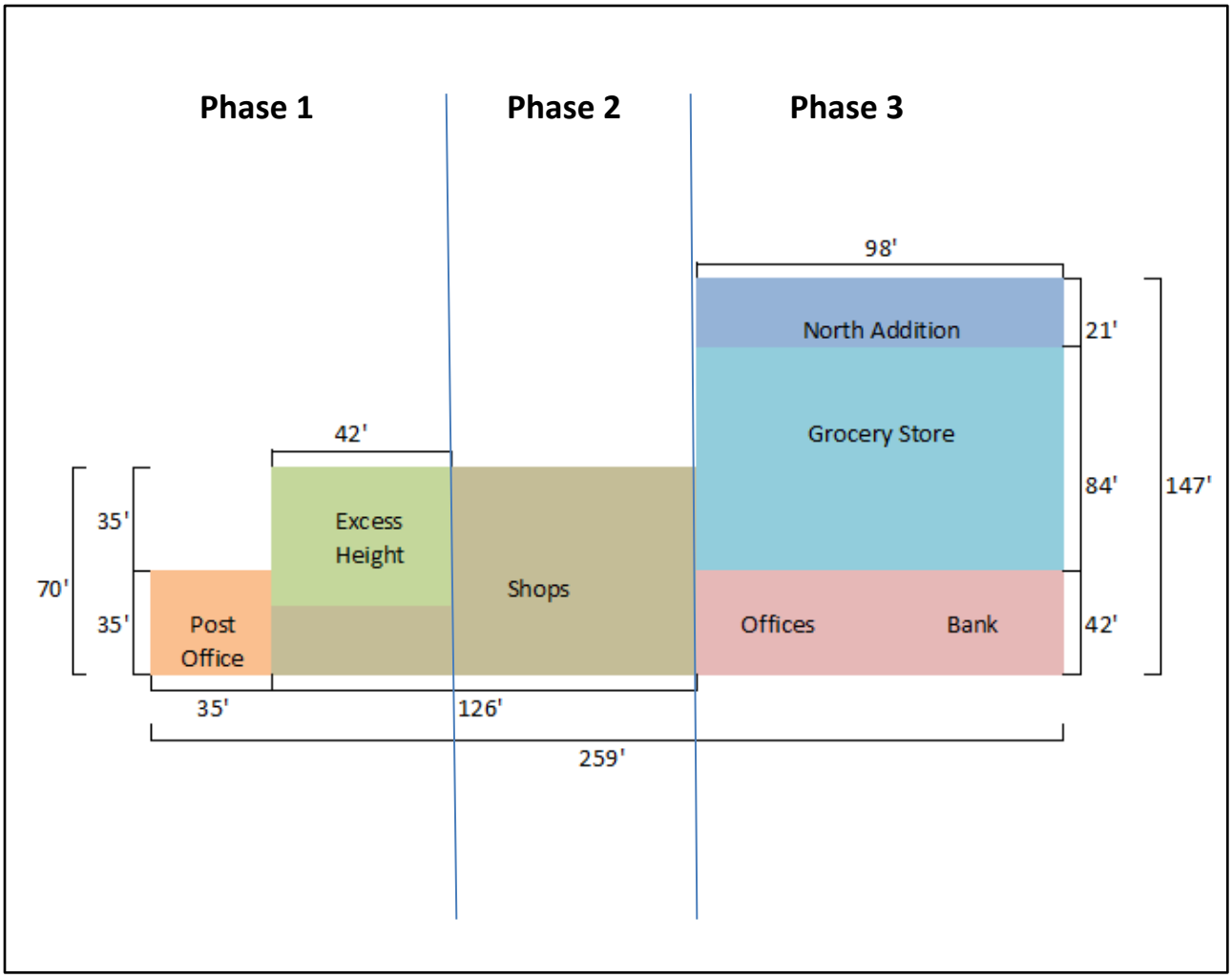
Limited Asbestos Containing Materials Assessment, Associated Environmental Consultants Inc., Whitehorse, YT, March 2017

Schematic Building Plan including overall dimensions, July 2018

Interior and Exterior Building Photos, July 2018

End of Report

Faro Solar Complex - Phased Approach to Rehabilitation



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August 30, 2018

Faro Solar Complex - Phased Approach to a Rehabilitation Option

The Town of Faro has exoressed an interest to look at the possibility of a phased approach to the rehabilitation of the existing Solar Complex.

Please note, this is not an examination of feasibility of renovation vs. new construction as we have already identified, that from an economic perspective as well as an asset value perspective new construction is the recommended option. The phased approach will add to the total cost of construction as all contractors will have to mobilize and demobilize several times including the asbestos remediation contractor.

Following is a description of Scope and Cost of the first two phases based on consultation by Across the River Consulting. Phase 3 may be one phase providing the space will be able to be used in full, otherwise Phase 3 may be split into smaller segments and several sub-phases as required.

Phase 1 – Rehabilitation and Development of Existing Solar Complex

Building Users Phase 1

Four potential building users have been identified through consultation by Across the River Consulting:

1. Government of Yukon, Department of Environment-Conservation Officer (CO) offices

2. Shared 'co-space' office/enterprise incubator

3. One private office space

4. One small commercial space

Space requirements for each use would be as follows:

1. Government of Yukon, Department of Environment-CO offices

- Office space for 4 people (2 closed offices @ 90ft + 2 open @ 70 sf) = 320 sf

- General space (welcome/reception/rest/movement/washroom?) = 440 sf

- Specimen layout space = 110 sf

- Interview room = 90 sf

- Warm storage = 540 sf

- Shop space = 1,000 sf

Total = 2,500 sf spread over different office/shop/warm storage standards

This tenant requires public access from front and rear access to shop from secure gated area. The law enforcement aspect of this service requires some high security standards in certain spaces.

2. Shared 'co-space' office/enterprise incubator

- Open-plan office space = 420 sf

- Meeting room (ideally near to CO space too for co-use) = 280 sf

Total = 700 sf

3. One private office space

- Up to 2 people = 200 sf

Total = 200 sf

4. One small commercial space

- 525 sf

Total = 525 sf

5. Washrooms and Mechanical Space

Washrooms will be shared for all four uses and are centrally located. Mechanical space may also be developed as shown in Phase 2 if required. It would be a central mechanical room that would serve both building parts, Phase 1 and Phase 2. Washroom size and layout will depend on actual number of occupants and public use of building segment to be served. The National Building Code of Canada spells out a clear formula to calculate the number of required washrooms. It is estimated that 240 sf of washroom space will meet the requirements for the spaces as described above for Phase 1.

- 240 sf

-300 sf (located in Phase 2 part of building and needs to be separated by fire separation from remainder of building)

Total = 540 sf

Phase 1 Total = 4,165 sf plus 300 sf of mechanical room space in Phase 2 footprint.

Phase 2 – Rehabilitation and Development of Existing Solar Complex

Building Users Phase 2

Two potential building users have been identified through consultation by Across the River Consulting:

1. General Store

2. One small commercial and/or public office spaces

Space requirements for each use would be as follows:

1. General Store

- 4000 sf start-up

- 1000 sf expansion space

Total = 5,000 sf

2. One small commercial and/or public office spaces

- 580 sf

Total = 580 sf

Phase 2 total = 5,580 sf.

Note, the mechanical room for Phase 2 was already constructed under Phase 1 to serve both building parts.

The total developed and rehabilitated space after both phases of construction is 10,045 sf.

Appendix A and B show the schematic concept option layout for Phase 1 and 2. Development is started from the former post office side of the building and moves from West to East, i.e. Campbell Street towards Del Van Gorder School.

National Building Code of Canada

The National Building Code of Canada requires that the occupied part of a building is separated by a continuous fire separation from any remaining part of the building that is unoccupied. Developing the Faro Solar Complex from west to east creates relatively easy to install fire separations along the structural gridlines. The particular requirements for the fire separation would be determined at design development by the architect in cooperation with Government of Yukon Building Inspection and as per National Building Code of Canada. All renovated areas will need to meet the current building code as well as local bylaws and current industry standards.

Costing

The previous report Faro Solar Complex – Renovation vs. New Construction dated July 2018 prepared by Heath Building Contracting spells out:

Asbestos Removal $ 33.13/sf

The cost to remove all asbestos and lead containing materials is quoted with $ 810,000 for the entire complex.

Construction Cost for Commercial/Institutional $400/sf.

The cost of construction or extensive rehabilitation per square foot is the same for both options. At $400/sf the Renovation as well as New Construction of a 24,251 sf building will cost approximately $9,780,400.

We will neglect for cost estimating purposes that a phased approach will add to the total cost of construction as all contractors will have to mobilize and demobilize several times including the asbestos remediation contractor and will solely use the figures estimated previously. Current cost estimates will be required once the Town of Faro is prepared to proceed with actual design.

Cost of Construction for Phase 1

The budget for construction for Phase 1 including the Mechanical Room located in the Phase 2 footprint at $ 433/sf for 4,465 sf of space is $ 1,933,345.

Cost of Construction for Phase 2

The budget for construction for Phase 2 at $ 433/sf for 5,580 sf of space is $ 2,416,140.

Cost of Construction for Phase 3

The budget for construction for Phase 3 at $ 433/sf for 14,406 sf of space is $ 6,237,798.

At this point Across the River Consulting has not identified a need for space as large as Phase 3 offers. The space may be developed over time and in smaller segments or alternatively a demolition of that space is also an option.

If funds were available ideally the roof over the entire Solar Complex would be renovated to protect the building asset underneath should the Town of Faro decide on proceeding with a phased approach to rehabilitating the existing building.

End of Report

Appendices

Phase 1 – Rehabilitation and Development of Existing Solar Complex

Phase 2 – Rehabilitation and Development of Existing Solar Complex

Phase 1 – Rehabilitation and Development of Existing Solar Complex - 4165 sf

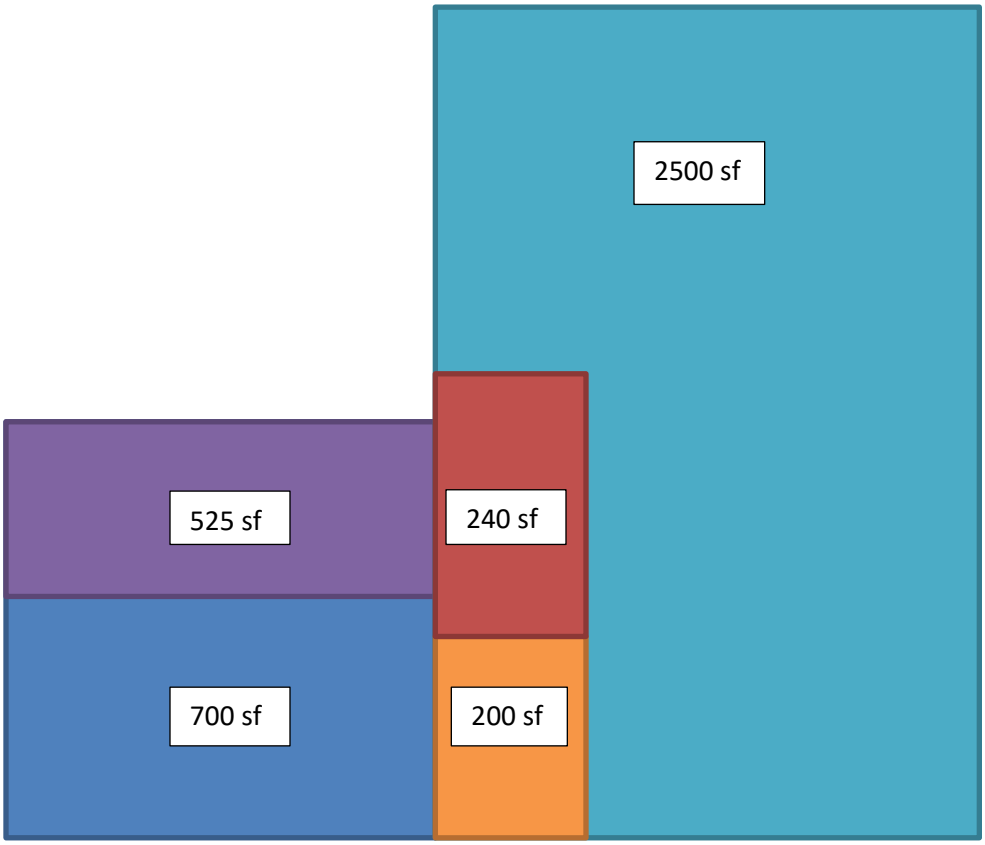
Government of Yukon, Department of Environment, CO Offices

Shared co-space office/enterprise incubator

Private office

Commercial Space

Washroom/Mechanical Room



Phase 2 – Rehabilitation and Development of Existing Solar Complex – 5,880 sf