STUDY SESSION MEMORANDUM

TO: Mayor and Members of City Council

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DATE: May 25, 2023

SUBJECT: Facilities Master Plan Implementation and Financial Strategy / Alpine Balsam Update

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EXECUTIVE SUMMARY

The city's first Facilities Master Plan (FMP) was accepted by City Council in October 2021. The FMP encompasses a holistic view of the city's entire building portfolio and provides a strategic framework to guide investments that provide environmental sustainability, social responsibility, and financial stewardship in city buildings. The purpose of this study session is to present the Long-Term Financial Strategy (LTFS) to achieve the key initiatives in the Facilities Master Plan (FMP) and deliver services to the community identified in other city Master and Strategic Plans. Focus will be presented on the Alpine-Balsam project and the development of the Western City Campus. **Attachment A** provides an update on the Alpine-Balsam Redevelopment project.

The city's building portfolio is old, with many buildings nearing the end of life and experiencing infrastructure failures. Most buildings do not meet climate commitment goals, nor social values for the community. The city also has too many buildings in poor condition with not enough funding to address the infrastructure and adaptation needs of each building individually. The opportunity exists to be more strategic around the city's real property holdings and invest heavily in some while leveraging the disposal of others to reduce risk in buildings and meet city-wide goals, such as the Climate Action Plan (CAP) and affordable housing goals.

The FMP identified two key initiatives (consolidate services and maintain buildings well) to put buildings on a path to meeting three pillars of good asset management and

achieving six core values across all city facilities. In order to implement the initiatives of the FMP the city will need a long-term financial strategy which is outlined in the memo below. The three key questions for council reflect critical elements of the strategy and are necessary to advance further with funding of specific projects.

KEY ISSUES IDENTIFIED

Building infrastructure is expensive and continued volatility in the construction market with unprecedented escalation has placed greater urgency to advance necessary projects to keep capital costs down. While the costs to build or heavily renovate a building can seem exorbitant, the upfront costs represent only 10% (or even less) of the total cost to own and operate a building over a 50-year life span.

The average age of the city's building portfolio is just under 50 years old and historically building maintenance and infrastructure renewal has been underfunded. In recent years the city has experienced failures in systems causing temporary closures across several facilities while making costly emergency repairs.

Many critical city buildings have hit this inflection point where costs of reactive maintenance and increasing emergency repairs are rapidly escalating. The city will need to make significant investments in city buildings over the next decade. There are two options, both of which require large investment:

1. Continue investing in buildings as they are today – This option implies making like-for-like system replacements, mostly when a system fails, resulting in a continuation of installing gas-fired equipment and is the costliest way to invest in buildings. Making reactive, emergency repairs is 2-4 times more costly than a planned renewal (see graphs on page 5). This path results in the most spending and least progress towards any city-wide goals.
2. Make strategic, large capital investments in new or heavily renovated buildings – This option will reduce the total cost of ownership in the near and long term. Investing in these projects unlocks opportunities to meet city-wide goals and achieve social values such as providing greater equity in service delivery and advancing affordable housing goals.

The FMP presented a holistic and in-depth view of the city's current building portfolio and compared in detail the two options above. The plan also demonstrated how to leverage inefficiency to help fund better buildings. The implementation plan goes further in identifying strategic opportunities surrounding the city's real property holdings that underpins a LTFS.

Following acceptance of the FMP, city staff have continued investigation across the building portfolio to further define the priorities, look for efficiency and opportunity with various solutions and develop a LTFS to fund building infrastructure.

The Key Issues

- The city has too many buildings in poor condition. Without action now, the city will continue to invest in emergency repairs and experience building closures.
- There are numerous competing top priorities across several buildings that support the city's first-responders, buildings that support critical response and at city recreation centers. Appendix D in the FMP shows how buildings rank using Key Performance Indicators (KPI) across all buildings in the portfolio with many "in the red" in marks on resilience, sustainability, experience, functionality, and financial stewardship.
- There is not enough funding to make the repairs, infrastructure renewal and adaptations necessary in buildings to meet the most basic requirements of keeping some buildings operating, much less making progress on the city's CAP.

Consolidation of staff and community services to a new centralized Western City Campus at Alpine-Balsam is a key initiative that staff alongside consultants has significantly advanced since acceptance of the FMP. Implementation of the Alpine-Balsam area plan will result in the largest affordable housing project to date in the city. The project demonstrates both the city-wide goals that can be achieved and details core elements of the LTFS that must be employed to implement a major redevelopment project of this scale.

The LTFS involves two key policy decisions for council consideration:

1. Disposal of other city properties to create social, environmental, and financial value in pursuit of new building projects.
2. Ring-fencing (providing a virtual barrier that segregates these funds from the rest) savings generated through efficiency to be directed towards new building projects and not spread elsewhere across the city's budget to fund unrelated work.

These policy decisions will be further detailed in the Analysis section along with comparison of using a Public-Private Partnership (P3) as an alternate approach to the city's traditional way of self-performing delivery, financing, operating, and maintaining. Staff is also seeking direction from council to further investigate the value of outside relationships, both private and public to advance projects. Investigation includes dialogue with industry participants who may participate in a P3 structure, known as market sounding.

Questions for Council

1. Does the City Council agree with selling properties to fund capital facilities project costs to advance the key initiatives in the FMP (i.e., consolidate services and maintain buildings well)?
2. Does the City Council support ring-fencing captured savings from vacating buildings to finance annual debt service payments and fund on-going operations and maintenance of city buildings?
3. Does the City Council support further investigation of P3's to build, operate and maintain facilities through direct engagement with the private market to perform a market sounding? The council's public support is an important signal to private

investors of a genuine intent to entertain good proposals. This will garner good interest and participation from the markets.

BACKGROUND

The first Facilities Master Plan was accepted by City Council in October 2021. The plan depicted a history of acquiring buildings and properties over time as the city responded to growth in population and programs to support the community. The acquisition of buildings was opportunistic but not always strategic and care for an increasing building portfolio has been reactive rather than proactive. This has led to a current building portfolio of just under 80 buildings, and just under two million square feet. The average age of the building portfolio at the time the FMP was presented was 47 years with most buildings well over 30 years of age – the age when the costs associated with owning and operating buildings begins to escalate significantly.

The FMP is built on a solid foundation of three pillars of good asset management and six guiding principles that more clearly establish specific goals and KPIs with which to measure and compare buildings against each other and larger city-wide goals.

Through this lens of good asset management, the plan takes a holistic and systems approach to evaluating and recommending policies to address city building infrastructure. This view across the whole building portfolio allows for a more equitable comparison of impacts of decisions on specific building replacements, repairs and remodels to achieve city-wide goals, such as affordable housing and climate goals.

The assessment of the current state of the building portfolio showed how the approach to "fixing" buildings results in higher costs and does not address fuel conversions in buildings necessary to meet the CAP. The current approach does not address increasing needs for buildings to support resiliency across the community, nor do many city buildings provide welcoming, inclusive, or equitable places for the community or staff.

This situation has only become more dire in less than 2 years since the FMP was accepted. In this time, the city has experienced multiple building failures leading to temporary closures and costly emergency repairs.

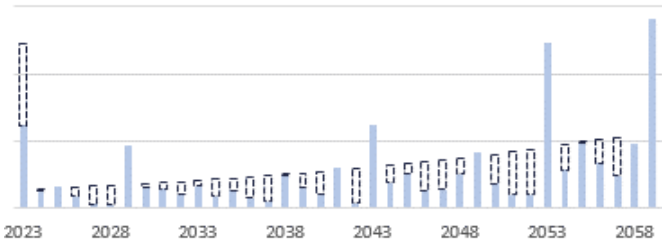
Two key initiatives recommended in the FMP were to strategically guide policy and decision making around city facilities:

<u>The first key initiative is to maintain city buildings well.</u>

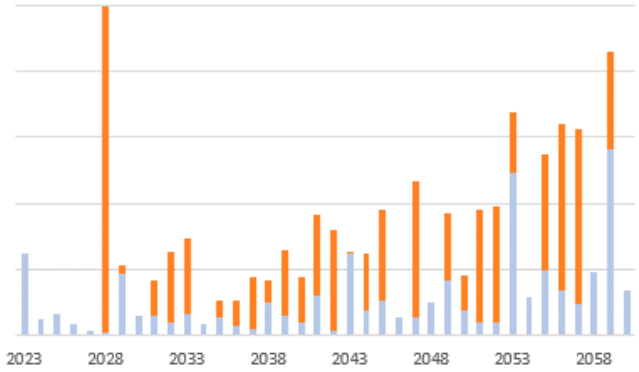
This is the primary objective; to put ***all*** city buildings on a path towards this end where we are effectively and efficiently maintaining good buildings and lowering total cost of

ownership. Good buildings are those that are environmentally sustainable, socially responsible and demonstrate good financial stewardship.

Budget requests in 2024 will be made in alignment with this policy. Recent experiences over the past year have only served to support the importance of the Maintain Well approach to ensure the resiliency of our buildings and lower total costs.



The graph here shows the planned path of funding 2% Current Replacement Value (CRV) in buildings. The dashed areas reflect the current funding gaps that if funded annually would smooth out a planned funding approach to maintaining and renewing buildings. Whereas the blue bars are representative of an ongoing underfunding of capital improvements.

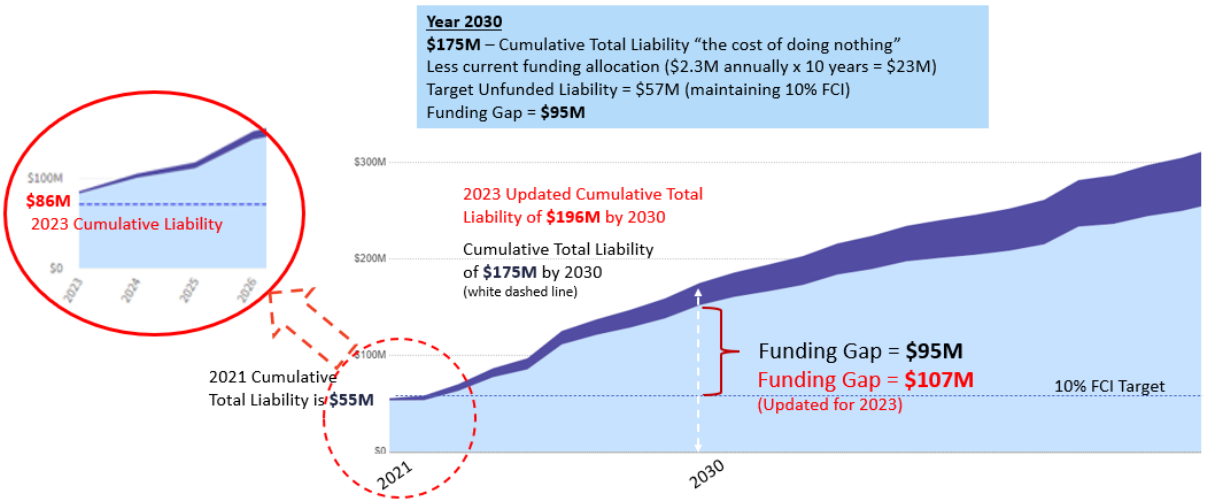


The second graph, in contrast, shows a potential future cost profile if the city does not invest adequately in maintenance. The orange bars show what could happen if underfunding (i.e., the gaps in the first graph) result in 2-4 times increased costs in future years associated with reactive and emergency maintenance and repairs.

The two graphs are based on the buildings that could be vacated through consolidation to the Western City Campus at Alpine-Balsam.

<u>The second key initiative is to consolidate services.</u>
The analysis supporting consolidation in the FMP revealed significant benefits to moving quickly in this direction. One quarter of the building portfolio (about 20 buildings) house uses which provide community services that can be considered for consolidation. At the time the FMP was brought to council for acceptance it was noted: ***By addressing this portion of the building portfolio, the city can cut the unfunded liability in half by 2030 and significantly accelerate progress towards climate commitment goals.***

Since this time, infrastructure replacements and renewal has continued to lag, in large part due to shifting attention to emergency maintenance and repairs in buildings that was not quantified in the FMP but forecasted in the Facility Condition Index (FCI) ratings of buildings. At the time the FMP was presented the CRV for the portfolio was $577M and



Cumulative Unfunded Liability for Portfolio

the Cumulative Total Liability based on the Facility Condition Index was $55M. The value of the portfolio has increased to a CRV of $707M and the Total Liability has also increased to $86M. This does not fully account for the higher-than-average escalation in costs of materials, equipment, and labor to perform the work necessary to reduce the liabilities. **By 2030, the Cumulative Total Unfunded Liability will be $196M, up more than $20M in less than 2 years.**

Since the FMP was presented to council in late 2021, multiple buildings have experienced system failures leading to temporary closures which have displaced staff and reduced services to the public. The city has already exhausted 2023 Major Maintenance Emergency Funds in just the first quarter of this year. Responding to and funding emergencies has diverted resources from planned infrastructure renewal and prevented any progress in migrating city buildings towards a cleaner energy future. To the contrary, having to replace equipment in an emergency eliminates the ability to adapt systems to cleaner energy solutions and requires like-for-like system replacements. This often results in investing and installing gas-fired equipment which would not have occurred if given the time for a more planned approach.

ANALYSIS

Facilities staff have worked alongside their colleagues across departments and with a variety of consultants in architectural design, engineering and capital financial planning and strategy to dive deeper into details of specific projects to conduct more building assessments, compare priorities and identify synergies to implement facilities projects and achieve the goals established in the FMP. Buildings identified as part of

consolidation at Alpine-Balsam, recreation centers and buildings that support first response in the city are among the highest priorities to address in the implementation plan. These projects are in the very early stages of planning and scoping.

The redevelopment at Alpine-Balsam is the largest project, now fully in design with elements preparing for construction in 2024, (shovel ready). This will result in the largest affordable housing project in the city to date, make significant progress towards the climate action plan and is on the path to being a national example of preservation of embodied energy through adaptive reuse in addition to meeting the "consolidate services" key initiative in the FMP. The Alpine-Balsam redevelopment will serve as the example in the analysis of how the LTFS is applied to large capital construction projects. **What is critical to note, is that this is only one of several large capital project investments that must be made within the next few years. It is imperative that the investment strategies not exhaust city capital sources on any one large development, but rather seek to match the best source of city capital to the most appropriate project.**

Costs for Redevelopment

Total costs for redevelopment – the Western City Campus and supporting infrastructure across the entire site but excluding the housing itself is in the range of $140M - $180M.

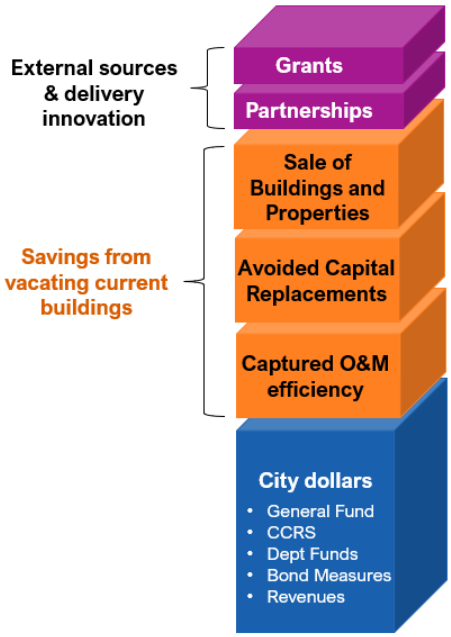
There are many elements that combine to make up this total cost. There is site-wide infrastructure: underground utilities, existing road and right-of-way (ROW) improvements, new streets and pedestrian connections, plazas and landscaping across the site that will serve all future occupants and the surrounding community. There are also new improvements needed to the parking structure to support all the parking requirements of both the city campus and housing except the market-rate housing at the western end. Cost sharing of infrastructure that supports the entire site redevelopment is still being determined between BHP and the city. The sequencing of the building projects will heavily influence how infrastructure to support them will advance and who will take the lead (BHP or the city) on certain elements. These details will become clearer later this year and through the regulatory process.

On the Western City Campus itself, the scope of the total project has grown from the renovation of the Pavilion building to include necessary enhancements to the parking structure and other improvements across the site. The renovation of the Pavilion itself includes an addition to the building to maximize consolidation of staff from other buildings. The upfront capital costs of these improvements are being balanced against and compared to the costs required to maintain existing buildings. The renovation of the Brenton Building is an example of a good return on investment (ROI) already realized at the site through initial capital investment. In less than seven years the initial renovation has paid for itself over leasing space, which the city was pursuing just prior to the purchase of the BCH site. The renovation also converted a very bad energy performing building into a best in class.

New estimates on the project are currently being prepared alongside refinements in process, schedule and scope with BHP to inform 2024 budget requests and more specific projections on construction costs. These specific costs will be presented through the 2024 and 2025 budget process. Direction received by council at this study session will directly influence the final scope of the Western City Campus and allow for development of a specific funding program.

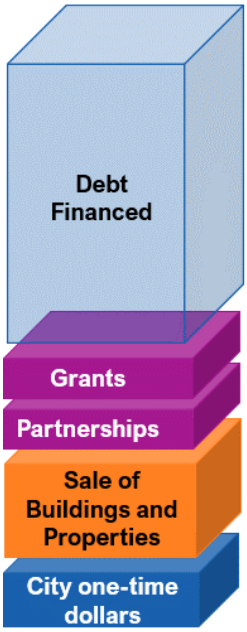
Long-Term Financial Strategy

Buildings are very costly to renovate or build new and even more costly to operate, maintain and periodically refresh and adapt to current needs. A long-term financial strategy is necessary to move forward with implementing the goals of the FMP and transition out of failing buildings into a sustainable future that achieves the city's values.

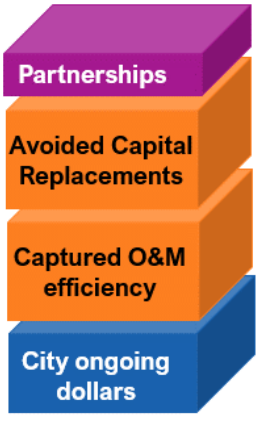


City staff's investigations through the FMP and continued analysis with support from Ernst & Young Infrastructure Advisors (EYIA or EY), the financial consultant engaged to support the FMP implementation, has resulted in a proposed financial strategy for implementing large capital building projects. The strategy relies on stacking "source blocks" of funding on top of existing city capital.

That stacking is applied in two ways, first as funding sources for **Capital Project Costs** and then on-going funding sources for **Annual Debt Service Payments** assuming some part of the initial project cost is debt financed.



Capital Project Cost



Annual Debt Service Payments

This model of layering funding source blocks is applicable to all building projects, but the contribution of a specific source varies depending on the project. **To fund the needs of the city's building portfolio it is essential to maximize the value of each of these sources.**

New building projects provide an opportunity to address climate challenges through inclusion of innovative design and efficient systems. There are an increasing number of grants and other earmarking sources being applied to innovative projects that the city will look to capture. In most cases, these types of funding are sources for the capital project costs – grants provide money for a specific aspect of a project. Likewise, innovation and inclusion of design elements that address equity, inclusion and affordability are also finding new funding opportunities. Staff will seek grant funding opportunities wherever possible to contribute to the capital project and reduce required debt financing.

There are a wide variety of opportunities to be found in partnerships. This can range from the current relationship with BHP to other public relationships that develop, contractually to meet community service needs to public-private partnerships like P3's. Partnerships may provide funding toward either the capital project costs and/or if on-going toward annual debt service payments. Incorporating the value of partnerships in developing and implementing building projects will have a significant impact on what can be achieved to address the risk in the current city building portfolio and accomplish city goals.

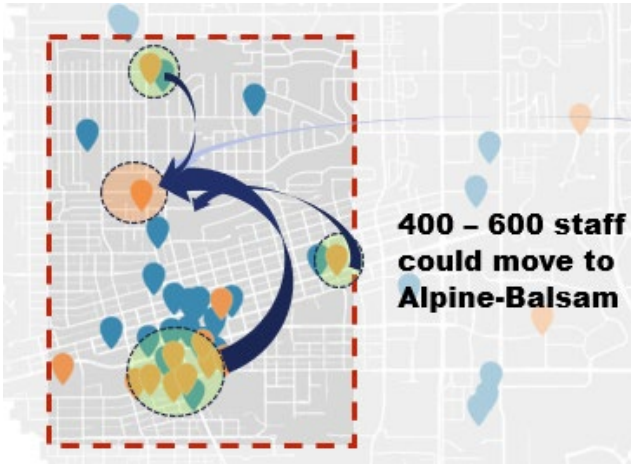
Land and buildings are valuable assets, and it is compelling to want to stock-pile or land bank property, however the value of that approach must be balanced with the cost of maintaining those assets and contributing funding to the capital project. Other considerations include the age and obsolescence of the buildings with the value that can be gained by releasing the asset to the private market to activate space, provide community amenities, contribute to climate goals, and/or support affordable housing in ways the city alone cannot financially afford if it were to hold onto the asset.

Avoided capital replacements and captured operations and maintenance (O&M) savings results in on-going annual savings when poor condition, in-efficient buildings are vacated. These savings can be diverted towards annual debt service payments for a specified period, usually 20-years and once the debt is paid off, the annual savings continue to be fully realized back in the budget. These savings should be "ring-fenced" to be held separately and specifically to fund new building projects and sustain those new assets over their life. These funds are only available if the city sells buildings.

The city's one-time dollars can contribute to a specific building capital project and city ongoing dollars can support annual debt service payments. Sources of these funds come from general revenue sources such as sales tax, property tax and fees or other known one-time sources of revenue such as the repayment to the city for providing library services on behalf of the Library District beginning January 1, 2023 . One-time dollars can be a source of funds for the capital project, but in comparison to the total need across the portfolio they fall short. **A key goal of the Long-Term Financial Strategy supporting building projects is to match the best source of capital funding to the project.** This approach acknowledges some projects are better suited to make use of a particular funding source while others have limited access to specialized sources. Put another way, just because a specific project is eligible to make use of certain funds – say Community, Culture, Resilience, and Safety (CCRS) tax dollars, doesn't mean it should if it also has a high potential in the other source blocks to contribute to the capital project costs first. The goal is to exhaust efficiency and explore all other sources before looking to city one-time dollars for the capital project and ongoing dollars to support debt financing. **The city has numerous building projects across many departments to execute, it is critical to leverage all these components of funding before turning to city's sources prematurely.**

The Alpine-Balsam redevelopment is an example of how this LTFS is applied. The analysis will focus first and primarily on the orange source blocks as they are the areas that key policy decisions must be examined and made so staff can apply decisions regarding them to a detailed budget model for the project.

There are **ten buildings** that could be vacated through consolidation of staff and community services moving to the Western City Campus.



- Two buildings must be deconstructed because they are in the High Hazard Flood Zone.
- Seven buildings are in the Civic Area and by vacating them, can enable other city priorities to proceed.
- One building is leased and by vacating, current lease payments can be directed towards debt service payments.
- Nine buildings are in poor to critical condition as rated on the FCI scale.
- Together, they represent $15.3M in current unfunded liability which is projected to expand to $32.8M by 2030. This expense is not currently budgeted, but presents real risk of failures in building systems. Emergency repairs, as stated, are 2-4 times more costly than

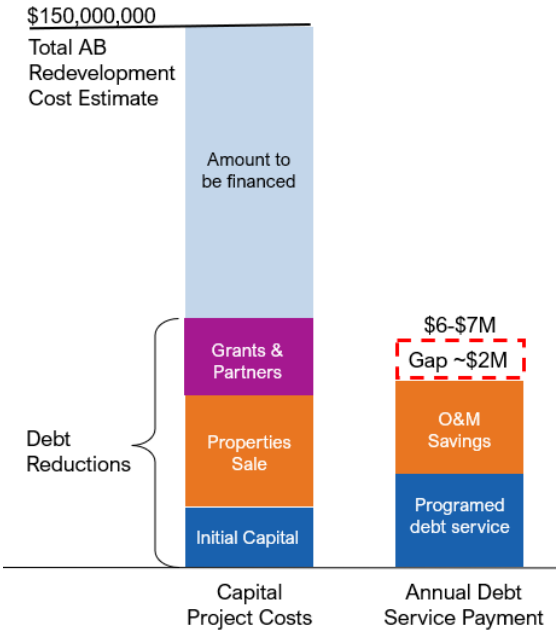
planned infrastructure renewal, so the real cost is likely higher than these numbers reflect.

- All buildings currently use gas-fired equipment and depend on a range of mostly antiquated infrastructure. Vacating would allow for redevelopment (by others) to occur under current energy and building codes.
- Vacating all ten buildings **unlocks $4M-$5M annually** in current budget allocations now directed towards these buildings. This includes current budgeted O&M and major maintenance and lease payments where applicable.
- Six of the properties could be sold for value. Sale revenues from all six combined could be in the **range of $20,000,000 to $40,000,000** depending on how these properties are brought to the market. The value of these properties extends well beyond just monetary value – which is significant alone in advancing projects. Strategically bringing these properties to the market can result in more affordable housing than could be realized without their sale. Inclusionary housing requirements ensure any market-rate housing would produce additional affordable housing and reserve city Affordable Housing Fund resources to purchase larger parcels elsewhere in the city resulting in more affordable units. Additionally, allowing redevelopment significantly increases the likelihood of new projects meeting energy and flood codes to make progress towards the city's climate goals and resiliency. **Disposal of city properties in a planned and strategic manner can achieve Social, Environmental and Financial goals – the three pillars in the FMP.**

The last two bullets are critically impactful to the overall LTFS and are directly related to each other as it relates to providing funds for the capital project cost and freeing up ongoing budget for annual debt service payments.

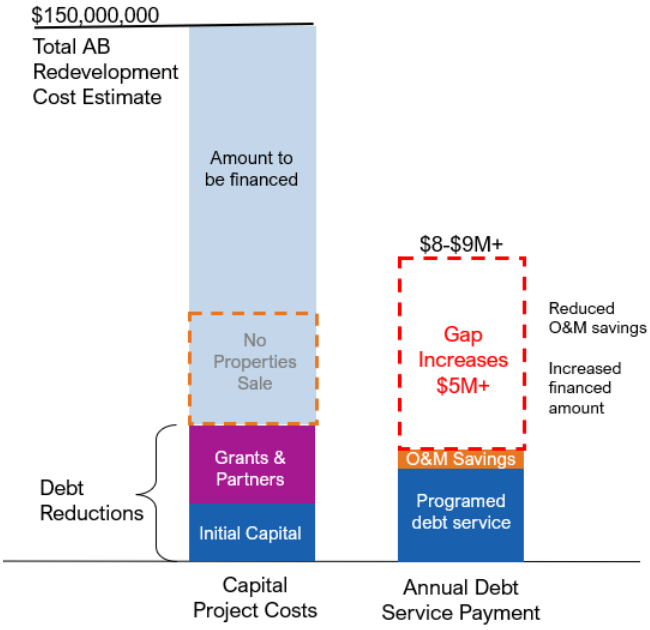
For the purposes of illustration, $150M will be used as a total goal for the Alpine-Balsam redevelopment project (again, exact cost to the city is still being determined).

The first graph shows the scenario when the city sells properties which can be applied to reduce the capital project cost (debt reductions). Vacating the buildings through sale also maximizes the savings from inefficient O&M in these buildings which can be directed towards annual debt service payments until the end of the financing term.



The second graph shows *the double negative impact* of not fully vacating properties. There is the loss of a source of funds to reduce the capital project cost (debt reductions) requiring more of the capital project costs to be financed resulting in larger annual debt service payments AND a loss of on-going savings to be applied toward those larger annual debt service payments.

Furthermore, if the city continues to hold onto properties, they will require capital infrastructure renewal at a minimum to continue to operate and depending on the new use, additional investments would be necessary to convert or adapt the buildings.



The values used in the example here demonstrate order of magnitude impacts and help demonstrate that **it will be cost prohibitive to advance with full or even a significant consolidation of services if value is not extracted from the buildings being vacated by consolidation of services.**

The two key elements that underpin a new LTFS requiring direction from council for staff to continue refining an approach to deliver the key initiatives from the FMP and realize the goals stated in the plan are:

- Selling properties at market value and directing proceeds towards new building projects
- Ring-fence savings from vacating buildings and directing towards new building projects.

The example of Alpine-Balsam is applicable to the other projects that are needed across the building portfolio. When a specific property can no longer support the city use, as is the case with some of our buildings that house first-responders, sale for value is a key factor in advancing the project as is capturing savings from vacating the property. As the city's building portfolio and facilities management planning transforms away from a high-cost reactive approach, breathing life into failing infrastructure towards highly efficient, healthy, resilient, equitable and accessible buildings, opportunities to consolidate services from multiple buildings to fewer exists in many places, not just the large consolidations that were suggested in the FMP for the east and west campus. The concept of "systems thinking" in how services are provided across the community if applied to the buildings we need to support the services can result in a lot more efficiency across the building portfolio. This efficiency, when it captures financial savings, can fund the necessary investments to improve the buildings.

The LTFS to address the renewal of antiquated city buildings requires efficiency to be captured in financial terms. The projects must "support" themselves. The Western City Campus Consolidation Project is one of many city building projects that needs to advance over the next several years to address failing building infrastructure, meet climate targets, sustainability, resilience, equity, and inclusion goals. Strategically balancing market-rate development of current city properties can help fund city priorities and further affordable housing goals.

Partnership Opportunities

Other public organizations find themselves in similar situations as the city, daunted by the costs of building and maintaining building infrastructure. In other areas of Colorado and the country, an increasing number of consortiums, public partnerships and regional relationships are being explored to bolster community services. The Facilities & Fleet Department is supporting other departments in exploring how these types of partnerships can have tangible impact to implement building projects.

Public-Private Partnership (P3) Opportunity

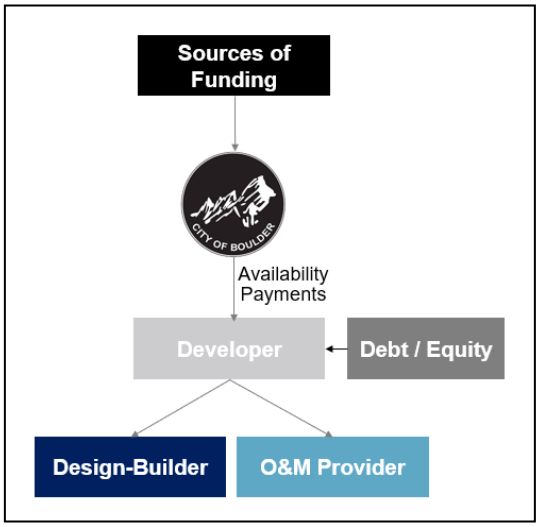
Another avenue that could yield significant impact is to consider a private partner or a P3 relationship. A P3 is a public-private partnership with contractual agreements between a public agency and a private entity that allow for the transfer of design, construction,

financing and operational risk from the city to improve the whole life delivery of capital projects. Staff recommend further exploration of this model as part of the LTFS.

There is value in what the private sector can bring to individual projects, but a much larger potential value when considering a suite or bundle of projects together that the city could not otherwise develop on its own. There are also tradeoffs and risks to balance when considering entering into a P3 arrangement.

What a P3 Relationship could look like:

- Long-term contract (typically 20-30 years+) with private partner with performance-based specifications in exchange for annual availability payments subject to deduction for failure to perform
- Risks and responsibilities are allocated among the owner and private partner under the contract
- Public entity retains a measure of control through contractual levers (e.g., staffing, deployment of capital, major contractual changes, contract termination, etc.)

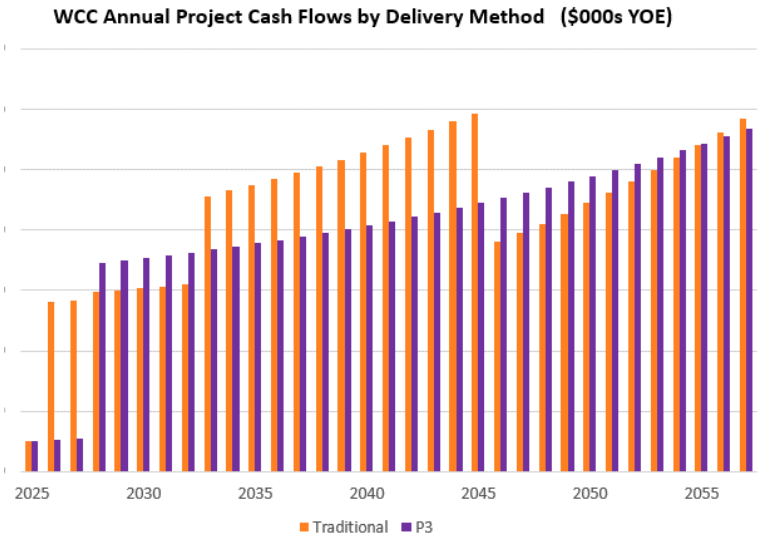


A key consideration is the additional cost associated with a P3. However, when bundling multiple building projects together (such as recreations centers with fire stations and some maintenance buildings) greater value and cost reductions may be achieved by:

- Increase bid competition
- Consolidated city oversight
- Accelerated planning, design, and construction
- Bulk materials purchases and sourcing
- Building achievement of goals through geographic/sector bundles
- Reduced construction mobilization and overhead costs
- Bringing innovation and risk reduction to projects and/or programs
- Reduced design and material costs, which are generally, most effective for similar asset types

Additionally, due to the contractual obligation of the P3 to meet performance measures, buildings are maintained efficiently, planned infrastructure renewal is contractual and pre-determined as contrasted with the city's ability to continue to fund over a long period the required proactive and preventative maintenance and invest appropriately in infrastructure renewal. The chart below demonstrates in the purple bars a slightly higher annual expense or availability payment over the orange bars. The orange bars represent the city self-financing, but in certain years those orange bars are likely to exceed the P3 payment when O&M and capital renewal is not efficiently performed or funded earlier on. Savings expected in self-performance are "clawed back" by fluctuations in annual budgeting and allocations. The higher cost of capital may be a worthwhile tradeoff if the

P3 can (a) offer more flexible, longer-term financing to lower near-term annual cost; and (b) help the city to commit to long-term renewal costs by budgeting appropriately for major maintenance and avoiding catastrophic failures through a contract mechanism.



Key Differences:

- Financing – shorter term, higher annual payments under Traditional
- Major Maintenance – considers a scenario where the city underinvests but pays this cost of deferred maintenance starting in 2033

Note: Construction, O&M costs left equal.

Under preliminary modeling, cash flows for self-perform delivery are more frontloaded due to a shorter 20-year debt term and have the potential for more year-to-year variability (deferred maintenance risk, O&M and construction cost risk).

The chart below compares key benefits and challenges to consider when contrasting the city self-performing versus a P3 relationship.

City Self Performing	P3
Potential benefits: • Maintain total control of asset and decision making • Lower cost of financing if voter authorized debt or Certificates of Participation (COP) are available. • Lower total cost *if* City fully funds and implements preventative O&M over building life	**Potential benefits:** • Upfront selection (and design) based on total cost of ownership versus solely construction costs • Developer has contractual obligation to meet required building performance ("Maintain Well") or be subject to deductions for underperformance • Commitment of ongoing funding of building preventative maintenance spend by city through availability payment • Potential cash flow benefits with longer financing period

City Self Performing	P3
Potential challenges: • Not being able to "Maintain Well" providing adequate staffing and funding • Risk of eliminating ongoing funding of building during economic downturns, changes in leadership, etc. • Other risks are retained including schedule and cost overruns, building performance, staffing and energy use • Potential limits on financing tenor for COPs	**Potential challenges:** • Loss of flexibility around future decisions around ongoing facility renewal • Limits on control of asset • Higher costs of capital for financing

Staff recommends exploring a P3 opportunities further for both individual projects like the WCC, and a larger bundle of projects that have been identified, but are unfunded.

The key steps this involves include:

1. Establish a business case for the P3 option:
    a. Refine detailed project costs estimates
    b. Identify affordability envelope and potential funding and financing sources
    c. Identify project risks and mitigations
    d. Determine overall value to the city
2. Obtain targeted input from potential market participants to refine potential P3 project scope and structure (market sounding)
3. Develop a procurement strategy that can meet city goals and market requirements (e.g., qualifications based on pre-development agreement)

Today, the city is spending money on failing buildings, reacting to system failures that are causing closures and interruptions in services to the community. This is the most expensive way to operate and maintain buildings and diverts funds from other city priorities. Large capital investments are unavoidable. Deploying a thoughtful long-term financial strategy that leverages proceeds from selling certain buildings towards reducing project capital costs and then ring-fencing savings resulting from vacating those buildings to fund on-going annual debt service payments can result in progress towards meeting climate goals, more affordable housing, healthy work environments that support employee retention and moral and better services to the community.

NEXT STEPS

Sale of Properties

Based on council direction at the study session, staff will develop more detailed analysis of property disposals which includes coordination with other planning efforts, timing of property sales, further zoning and regulatory analysis, various development approaches to sales including bundling to maximize value.

Alpine-Balsam and Western City Campus costs and funding refinement
City staff in partnership with BHP will refine construction cost estimates, scope and cost-sharing in preparation for making 2024 and 2025 budget request to implement the project.

Development of the Western City Campus will include engagement with the community over the summer to inform delivery of services, activation of community spaces and to ensure an equitable, welcoming design is achieved.

Develop other city priority projects such as the East Boulder Community Center renovation and energy retrofit.
Staff will refine options for scope and approach to providing services across the recreation centers and a plan for investment and renewal in the centers consistent with community priorities.

Similarly, staff will develop scope, funding and development approach options for other city priority projects.

Partnerships
Based on council direction at the study session, staff will further investigate both public and private partnership opportunities. The key steps identified in the previous section on Public-Private Partnership (P3) Opportunities will be advanced.

ATTACHMENTS

Attachment A – Alpine-Balsam Update
Attachment B – BCH Hospital Steel Recovery & Reuse

Attachment A – Alpine-Balsam and Western City Campus Update

In late 2015 City Council purchased the 8.8 acre Boulder Community Health site with a goal to "shape the redevelopment of an area that has been focused around a major healthcare facility for decades." Following extensive community input in both the vision and area planning processes, a vision for the site emerged along with clear goals and objectives for the redevelopment of the site. The vision and goals were adopted by City Council in fall of 2019 through the Alpine-Balsam Area Plan.

"Alpine-Balsam will be a vibrant multi-generational hub for community life and local government services – a welcoming and inclusive new model for equitable, affordable and sustainable living."

The goals identified in the Area Plan include:

- Vibrant Mixed-Use Neighborhood Center
- Engaging Government – Service Center and Place to Meet
- Places to Call Home – New Affordable and Market Housing
- Easy and Safe Ways to Get Around
- Environmental, Sustainability, & Climate Commitment

In 2021, the city entered into an IGA with Boulder Housing Partners (BHP) to co-develop the site and lead the housing redevelopments. In 2022 the city and BHP formally began design and implementation work to achieve the goals established in the Area Plan.

Hospital Deconstruction

At a Special Meeting of Council on May 16, 2019, the council directed staff to proceed with a "sustainable deconstruction" of the former BCH hospital on the Alpine-Balsam site.

In the first phase of interior deconstruction, numerous items were auctioned for reuse rather than recycling or disposal. As the building exterior and structure proceeded to come down, steel beams and columns were salvaged and are being reused to build the new Fire Station 3 currently under construction just across town. Remaining steel has been organized on site for easy access and reuse on other city and non-city projects. Both the affordable housing projects and WCC will make use of steel from the former hospital. **Attachment B** provides a detailed description of the steel reclamation and reuse process provided by the general contractor.

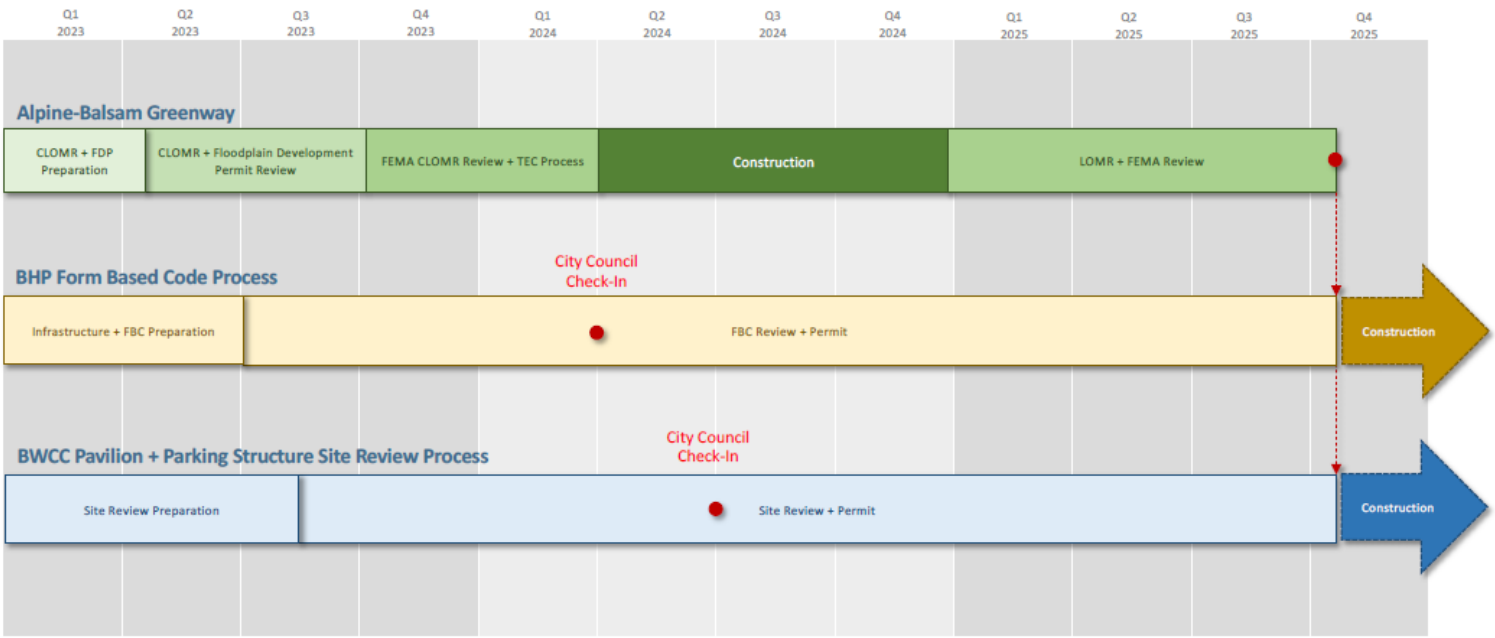
The concrete structure that has come down is being crushed on site and made into structural fill on which the future development will be built. This approach not only preserves and reuses material on site, but also reduces heavy truck traffic in the area and transportation emissions associated with hauling the concrete away and bringing in new soils to fill the whole and grade the site.

Regulatory Path of Project

Form-Based Code (FBC) for the Alpine-Balsam area was adopted in late 2021. Detailed investigation of the regulatory overlays currently in place, in conjunction with design and engineering refinement of the various projects and a better understanding of the required site-wide infrastructure necessary to support the redevelopment, has led to a slightly altered regulatory path than first conceived through the FBC.

The city and BHP have been working collaboratively together to fully discern the regulatory path forward for full development of the site and the processes that the various projects will need to go through for review and permitting. In short, there is an existing PUD that currently governs the entire site bounded by Balsam and Alpine as well as the parking structure to the south on Alpine. That PUD boundary must be adjusted to remove the housing parcels and add the Brenton Building and other lots south of Alpine to advance with platting the individual parcels for housing development while separating and defining the city property that will be developed as

the consolidated campus. Once the PUD is amended, the housing developments will proceed through the newly applied FBC process, and the Western City Campus will need to be brought through a more traditional site review. The flood mitigation required on the northern side of the site along Balsam has recently been submitted for Floodplain Development Permit Review and will then go to FEMA for Conditional Letter of Map Revision Review in anticipation of constructing the flood channel in 2024. This Flood Greenway is the critical path for the project in order to remove the parcels out of the 100-year floodplain. Building permits for any of the subsequent projects cannot be issued until the Letter of Determination is issued from FEMA following construction of the floodway. Below is a diagram of these processes along with timelines showing anticipated dates of construction for the various projects.

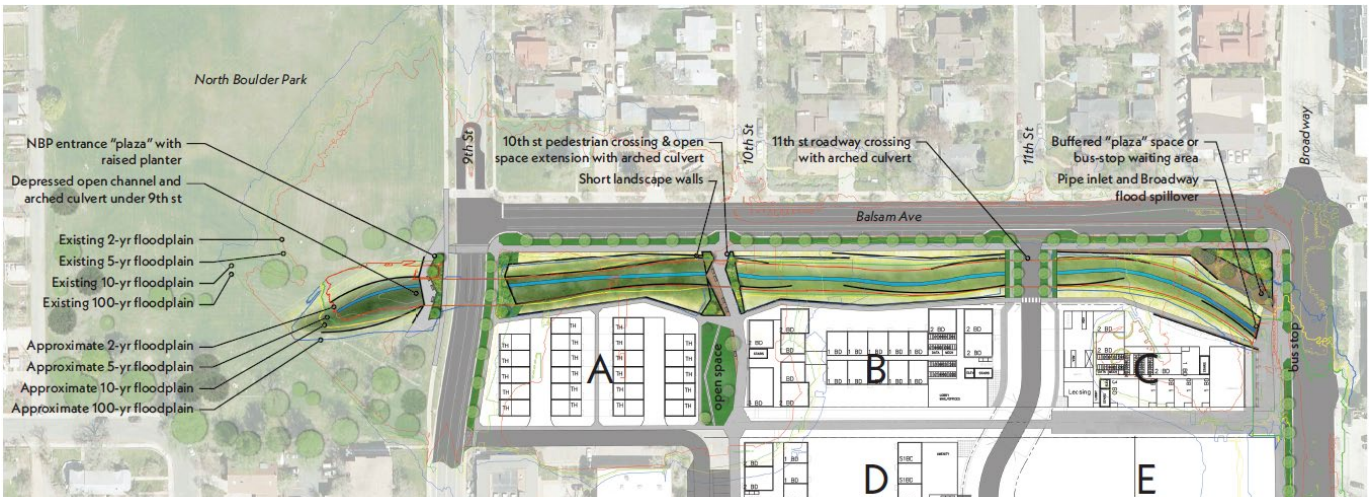


Flood Mitigation & Greenway

The city has been advancing work on the flood mitigation and greenway with Anderson Consultants and Stream Landscape Architecture ahead of other design teams due to the long-lead time associated with FEMA's review and determination on a revised flood map. The 100-year flood plain must be revised before any building permits can be issued. The Floodplain Development Application was made in April to the city's Planning and Development Services Department (P&DS). Following P&DS's review it will go on to FEMA for Conditional Letter of Map Revision (CLOMR) approval.

The flood mitigation / greenway design will provide safety and resilience to the community by removing the proposed housing and critical city infrastructure from the 100-year flood plain. The project has been designed to fully support the Upper Goose Creek System in collaboration with the Utilities Department. Three structured crossings (bridges) – one at the new 11th street for vehicles and pedestrians, one at 10th street per the FBC strictly for pedestrians, and one at the existing road at 9th street – will provide connection between the neighborhoods. The existing

crossing at 9th St. will now be enhanced with improvements to the road, crossings and bike lanes to accommodate water collected in the park to pass under the road rather than overrun the street to get into the channel on the Alpine-Balsam site. A new inlet will be constructed at North Boulder Park to collect stormwater and direct it under 9th Street. This should result in a reduction in localized flooding and "soggy" conditions often experienced at this end of the park.



The aesthetic design of the greenway itself has taken the surrounding community, both existing and new residents, into consideration to create a pleasant and engaging natural experience and connection along Balsam. The greenway itself "will add beauty and improve the human (and pollinator) experience from North Boulder Park to the neighborhood center" as envisioned in the Area Plan. The design includes water quality features and stormwater management per the city's Green Infrastructure best practices that will also support natural habitat.

Easy and Safe Ways to Get Around

Along the greenway at Balsam, new multi-use paths, sidewalk and on-street parking are being included to support the new uses across the site and surrounding area. Street crossings in multiple locations, at 9th & Balsam, at the new 11th street where it intersects with Alpine to the south and Balsam to the north and at locations on Broadway will be enhanced to increase pedestrian safety. Infrastructure to support alternate mobility modes are being designed across the site. This includes a wide range of bike parking elements for short-term, long-term, e-bikes and large bikes. A new paseo running east-west and the extension of 11th Street running north-south – two key elements defined in the FBC - are receiving additional attention as design of the site progresses. The new paseo will create an active pedestrian corridor as it draws people through the site from the enhanced bus stop on Broadway to North Boulder Park. The new 11th street bifurcates the site in the N-S direction and is being designed to prioritize people in this area and slow the minimal traffic anticipated. The existing parking structure will support most of the parking for the buildings on the site except for the market-rate housing at the west edge. The structure will require upgrades and enhancements to support the new uses and demand.

Places to Call Home – New Affordable and Market-Rate Housing

Boulder Housing Partners is advancing the development of two distinct permanently affordable housing projects while entitling two other parcels that will be sold for market rate development. One permanently affordable project with 55 rental units will focus on older adults and the other will have 89 rental units that will not be age restricted - both will serve households earning 60% AMI or less. One other parcel is anticipated to be sold as a fully entitled lot for 22 market rate ownership townhomes. A second lot is still undergoing analysis, but current thinking by city staff is that it would provide between 65-75 market rate ownership condominiums and is exploring the financial investment for a percentage of units that could be restricted as permanently affordable to middle-income households. The final unit count is subject to change through the entitlement process. These communities will be energy efficient, healthy, and built with high quality materials to align with sustainability goals for the site.

Environmental, Sustainability, & Climate Commitment

City staff have been working with ZGF Architects to design the new Western City Campus (WCC) and other site infrastructure at Alpine-Balsam. The design centers around the re-use and expansion of the existing Medical Office Pavilion. The Brenton Building and Parking Structure are the other two adaptively reused buildings that make up the WCC.

The renovations associated with creating the new WCC aim to be zero carbon on site by employing Passivhaus principles, high efficiency systems and smart technology. The garage will be covered with new solar panels, electrified to support EV charging and the team is investigating the value of battery storage on the site. In addition to energy-preserving and conservation measures, the building is also being designed to be water efficient. Another goal is to create a healthy indoor environment that provides fresh air and thermal comfort in the face of larger temperature extremes and poor air quality. One strategy to this end will be to incorporate biophilic design principles such as vegetation and other natural elements throughout the building.

The redevelopment of the Alpine-Balsam site, including the sustainable deconstruction phase is poised to be a national example of best practices for “zero carbon architecture.” The approach to energy conservation, carbon reduction, water efficiency, and healthy building is not only sustainable, but the most resilient way to ensure this government center is fully operational and able to support the community in times of crisis and through chronic stresses.

Engaging Government – Service Center and Place to Meet

Extensive engagement with city leadership and staff has been taking place for many months to fully uncover all the opportunities to provide engaging, resilient, and supportive government at this new location. Community engagement is planned for this summer and into the fall to continue to inform how to make this a welcoming, accessible, safe, productive, and convenient place to access city services and engage in civic discourse.

Specifically, the ideas and considerations currently being explored include:

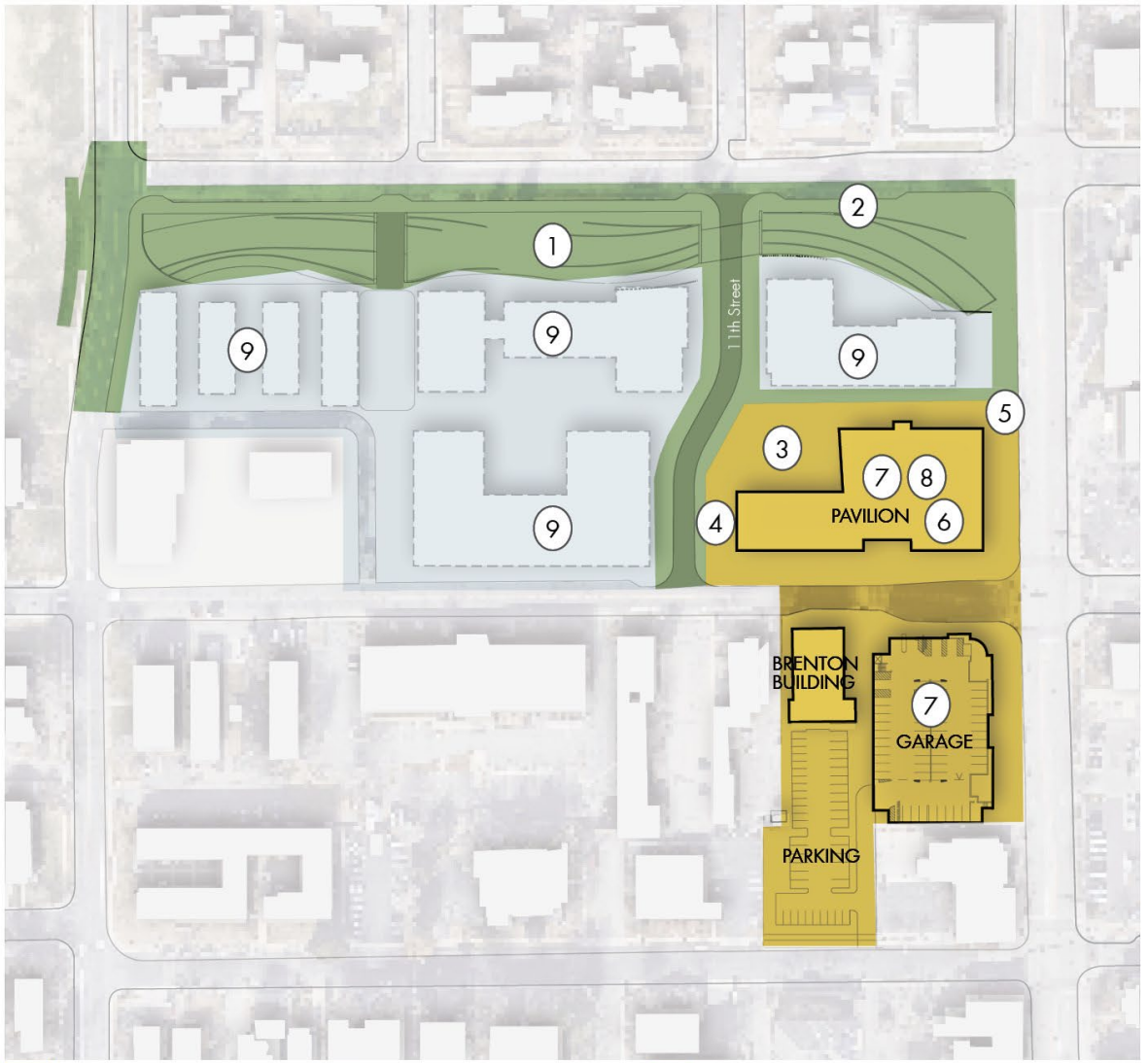
- Finding identity in this place – age, ability, gender, ethnicity, cultural variety, socioeconomic status are all areas being investigated. People who speak to and can represent the diverse perspectives of our community are helping to shape the design and ensure that everyone who comes here feels they belong to this place.

- Providing Equity – this goal takes on so many shapes and angles, going hand in glove with identity. The variety of people who will use this building, their ages, abilities, ethnicity, cultural expressions, gender identity, race are being considered in every design decision to foster equity and inclusion.
- Resilience – With change being the only constant, this project is being created to last 75-100 years. Over that timeframe, changes to climate, technology, and demographics will require flexibility and adaptability so that the facility can respond to those changes with minimal renovations needed. This campus also considers how it supports community resilience during emergencies potentially as a distribution center, offers protection in weather extremes, supports emergency response, ensures equitable access to safety and resources and offers dependability in government in unsure times. Resilience also means being safe, strong, and dependable – features that will be baked into every design
- Access – Centralizing, simplifying, and enhancing services
- Staff health, morale and retention – we are asking and listening to staff who work so hard for this community about what they need to best support the work they do. A huge piece of serving the community well is to attract, support and retain good staff talent. This project can be a beacon to draw staff in, and then foster connection and collaboration once here to better serve our community.

<u>Vibrant Mixed-Use Neighborhood Center</u>

All of these elements described above are being brought together to achieve new vibrancy on this site and benefit the surrounding area.

ACHIEVING THE AREA PLAN GOALS



Vibrant Mixed-Use Neighborhood Center

1. New Greenway
3. A New Civic Plaza

Easy and Safe Ways to Get Around

2. Multi-modal path
4. Bike Parking
5. Enhanced Bus Stop

Engaging Government – Service Center and Place to Meet

3. A New Civic Plaza
6. Consolidation of City Custome Services

Environmental, Sustainability, & Climate Commitment

7. Building Re-use
8. Net Zero Energy Target

Places to Call Home

9. New Affordable and Market Rate Housing

ACHIEVING THE FMP GUIDING PRINCIPLES

ENVIRONMENTAL SUSTAINABILITY

RESILIENT

KPI 1: Flood vulnerability, A greenway channel designed to remove existing and future buildings from the 100-year flood limits.

KPI 4: Community Shelter
Provides public cooling shelter during extreme heat days

KPI 5: "Essential" Building
The Pavilion is identified as a critical building

SUSTAINABLE

KPI 2: : Building Energy Use Intensity (EUI), The BWCC is pursuing net zero energy across the three City-owned buildings

KPI 3: Carbon Footprint
Buildings will have a very low carbon footprint due to material reuse and material selection

KPI 4: Transportations Emissions Reductions
Comprehensive mobility strategies to reduce single-occupant rides and emissions

SOCIAL RESPONSIBILITY

ACCESSIBLE + EQUITABLE

KPI 1: ADA Compliance
The BWCC buildings will be fully accessible and offer equal opportunities for handicapped users

KPI 3: Accessibility
Accessibility to all modes, reducing single occupancy vehicles trips

FINANCIAL STEWARDSHIP

ECONOMICAL

KPI 1: Capital Needs

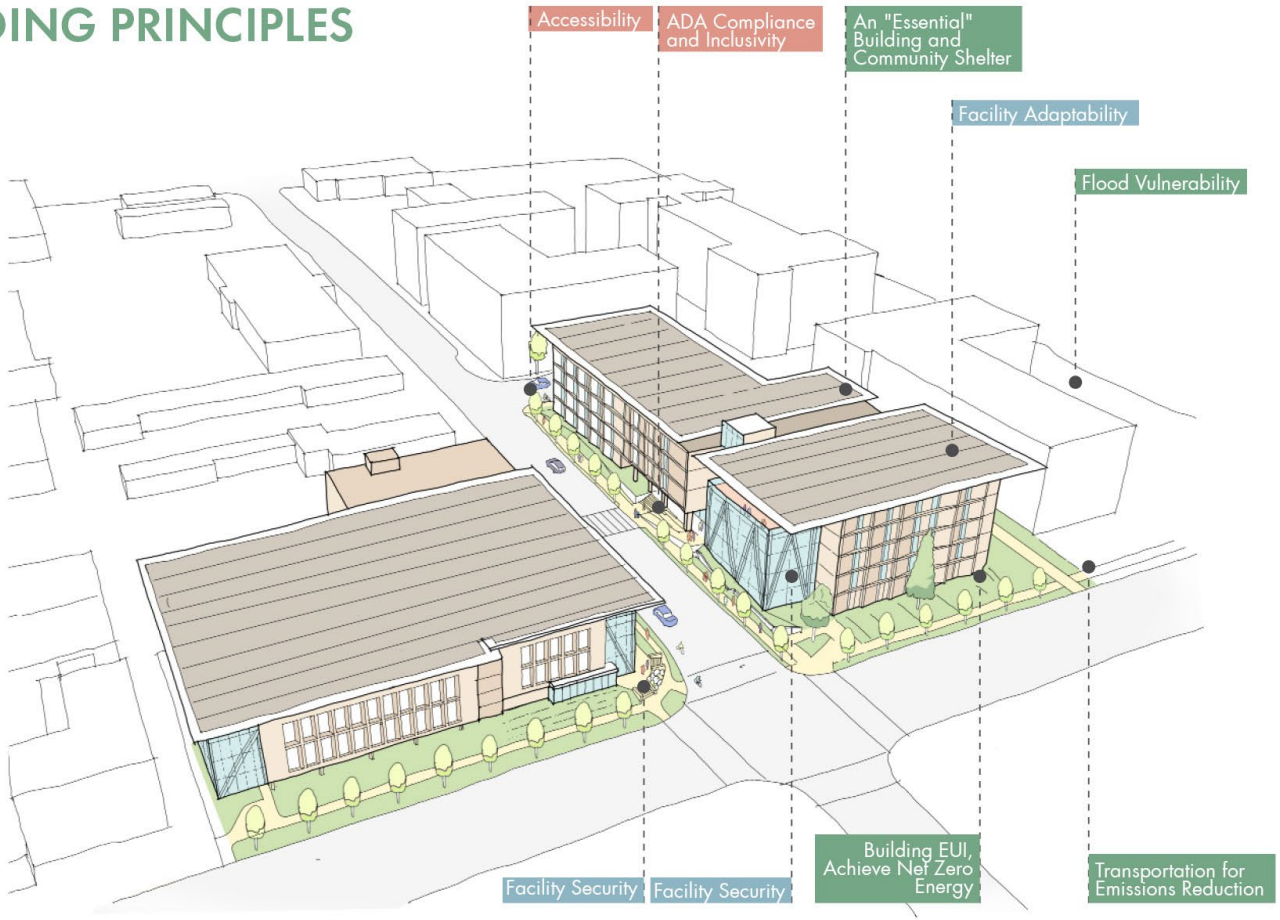
KPI 2: Operating Costs

KPI 3: The Facility Condition Index (FCI)
Building's new systems to be selected and designed to be maintained well

FUNCTIONAL

KPI 2: Facility Adaptability
Office layouts accommodate a changing work-place

KPI 3: Facility Security
Security and hardening of the building based on conversations with safety and security officials



ACHIEVING THE FMP GUIDING PRINCIPLES

ENVIRONMENTAL SUSTAINABILITY

RESILIENT

KPI 2: Wildfire Vulnerability
Materials and landscaping to support fire protection and prevention

SUSTAINABLE

KPI 1: Mechanical, Electrical, and Plumbing (MEP) Deferral Backlog
The BWCC will have up to date MEP systems

SOCIAL RESPONSIBILITY

EXPERIENTIAL

KPI 1: Facility Experience for the Community
A welcoming and safe experience is priority

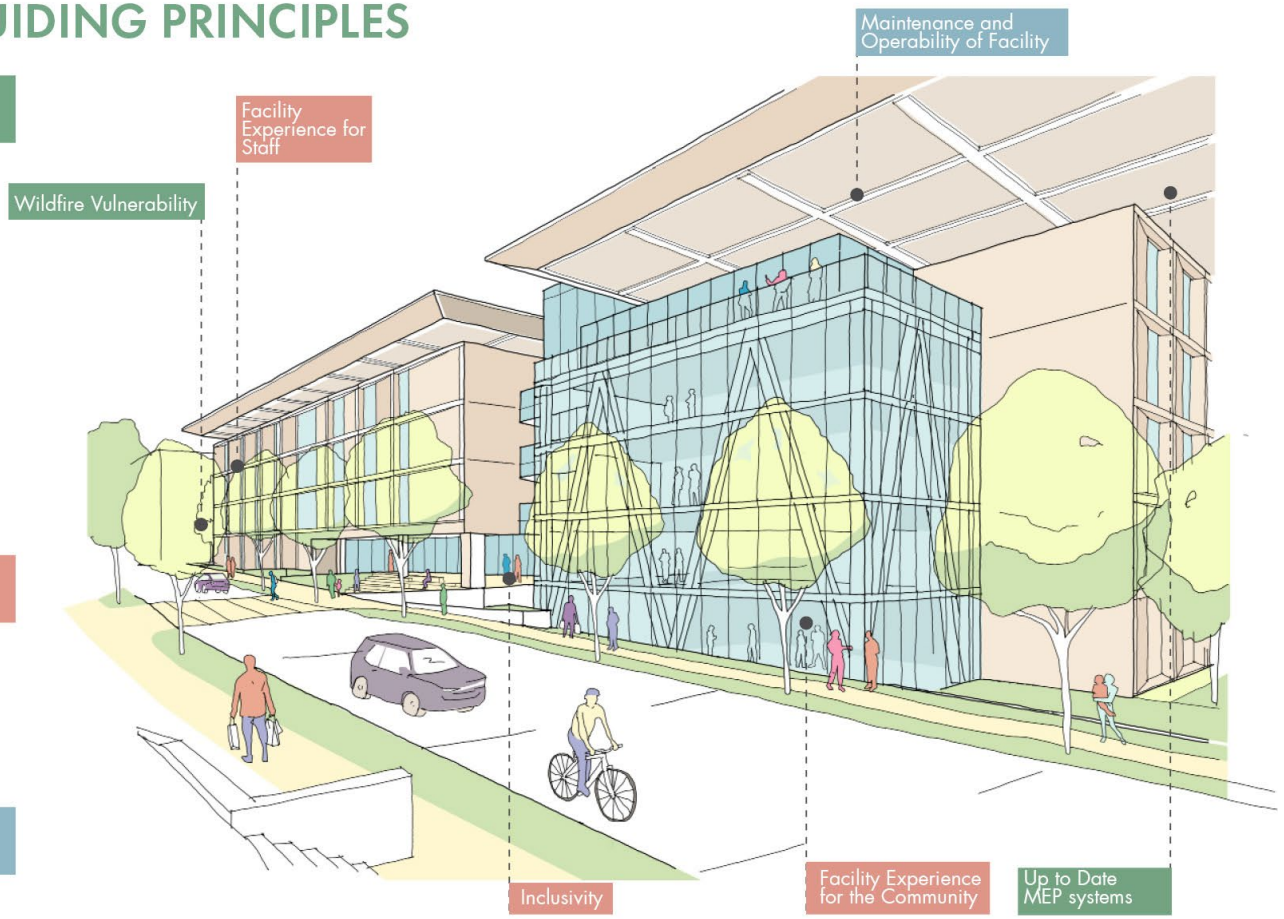
KPI 2: Facility Experience for Staff
A welcoming and safe experience is priority

FINANCIAL STEWARDSHIP

ECONOMICAL

FUNCTIONAL

KPI 1: Maintenance and Operability of Facility
Systems and materials are discussed and approved by operations and maintenance staff



Attachment B - BCH Hospital Steel Reclamation and Reuse Process

Area A Sustainable Deconstruction and Steel Recovery Review

Index

Introduction

The city of Boulder Colorado purchased a parcel of land (an old hospital site) to use the land for future development. Multiple additions to the hospital were added over many years, the last addition circa 1989 which used steel columns and beams as the framework to the structure.

The demolition project would be known as a “sustainable deconstruction” project meaning as much material would be recovered from the site as possible to meet a 75% landfill diversion goal. Although there were many components during the planning process there were two major initiatives we will address in this summary;

1. Sustainable deconstruction of the building
2. Recovery of steel columns and beams for reuse on other city projects

The prep work for the deconstruction of the building consisted of abating all ACM materials, clearing the building of all structures (walls, door frames, flooring, ceilings), electrical (lighting, wire, junction boxes, circuit breakers, transformers, telephone/communication lines) plumbing (water supply lines, drainage) and removal of all items in the mechanical rooms i.e., building infrastructure (air handling units, boilers, furnaces, generators, compressors). This process was known as the Interior Deconstruction process. Once completed, the exposed interior created a shell of the building lending itself to detailed inspection of the structure in order to plan how to deconstruct as well as identify any steel that might be reused.

The team players and roles;

KL&A – Structural Engineers and Builders

CCC – Demolition/Deconstruction contractor

Ameresco – General Contractor

City of Boulder team – owners of the property

Prep work for Steel Recovery

Three categories;

- Steel identification
- Steel cleaning
- Steel recovery

Steel Identification

Utilizing structural drawings, steel beams and columns were identified on three levels of the East side of the building for potential reuse. All beams and columns were assigned a unique alpha-numeric nomenclature which was critical to the team tracking the steel as it went through the process of removal, cleaning and storage. This identification was also tied directly to the Inventory Master and other documentation for tracking purposes.

An industrial grade permanent paint marker was used to apply the identification “Mark” to each piece. The brand name we used was Mighty Marker manufactured by the ARRO-MARK® Company LLC.

The KL&A Inventory Master Spreadsheet was a key document for the team to view on-hand inventory (recovered pieces), track pieces of steel that were shipped, weights, measurements and X-Y coordinates of where to find specific pieces of steel in the parking lot storage area.

Steel Cleaning

When the building addition was erected, all pieces of steel were covered with a spray-on fire retardant. This fire retardant was removed using water while the pieces were still in place. There were multiple passes of applying water to the steel. The first pass was a light spray to pre-soak the fireproofing allowing the water to soak and soften the material. After soaking, a high-pressure hose was used to remove the material which fell to the floor in pieces exposing the steel.

While the beams and columns were still in place, a grinder with wire brush was used to clean a small area of the middle of each piece. This cleaning process was required to apply the identification “Mark” on every piece of steel.

Steel Recovery/Removal

Due to their expertise with working with steel, a crew of iron workers was sub-contracted to cut welds, remove bolted connections and assist the crane operator with the removal of individual pieces. It was clear from the start that because of their experience, there was immediate teamwork, great communication from the ground crew to the iron workers and total safety in place at all times.

Safety

Some uniqueness to this project was not only recovering steel for reuse but preparing it for a local fabricator to process for final use. At the jobsite the workers performing initial cleanup of the steel were provided Kevlar gloves, special fitting hard hats, splash goggles, rain suits and boots. This equipment supported the crew when removing the fireproof material as well as grinding rough edges smooth once the steel was on the ground.

Daily safety meetings were conducted with the entire crew before beginning work for the day and team participation was encouraged to discuss what they observed the day before and how to mitigate any issues raised. Just like on all construction jobs, these daily meetings were documented.

Noise testing was conducted several times to measure the decibel levels at different locations on the site to ensure the crew was not creating more noise than the neighbors should expect from normal traffic conditions. All tests were validated from before-work and during-work and what was discovered was buses, trucks and emergency vehicles created more noise than the crane, fork lifts and man baskets on the jobsite. We can make this determination because the first two noise tests were the baseline from which all follow-up tests were conducted.

Air monitoring (silica air sampling) was also conducted several times to ensure we were not contributing to air pollution and that the water mitigation systems were functioning as planned. While crushing bricks, mortar and concrete water sprays were in use as part of normal crushing operation on the equipment.

Area A Deconstruction/Demolition

Early in the project we decided that all steel bar joists connecting the roof beams would be recycled versus reused mainly due to the labor required to remove them and then clean them. This greatly helped the reclamation process of beams go quickly.

The operators of the heavy equipment commented that taking the “first bite” out of the building was nothing special because of their years of experience and repetition from other projects. Those years of experience and repetition did help the team put their demolition plan together to maximize steel recovery, apply a specific sequence to be followed and especially enforce all safety factors.

During the very early stages of the demolition process the team realigned how they moved steel, concrete and other debris from the first demo area (Area A) to the opposite side of the building where the weigh scales and QA processes were planned. Strictly speaking, it was the lack of usable real estate on the east side of the hospital that drove this decision and ultimately kept the process moving along smoothly. By focusing on one activity at a time (i.e., steel, concrete, recyclable materials, debris) and segregating these materials as they were pulled from the building kept what was destined for reuse, recycle or landfill easy to manage with the limited real estate and use of the equipment.

During the demo process, water was constantly uses to keep dust down and was never sprayed over the operator's cab (operators of the crane, excavator, fork truck and tractors).

During the deconstruction and recovery process a crane would place steel on an elevated base, a fork truck would pick up each piece and transport them to the QA Process area. This helped the small real estate area stay clean and productive at all times.

QA Process

A QA process was integral to the success of managing the entire process. QA was made up of many activities;

- Weighing pieces
- Printing weight tickets
- Adjusting the scales
- Tracking the characteristics of each piece using Cut Sheets
    - Dimensions/thickness
- Cleaning/trimming (preparing each piece for the fabricator)
- Photos documenting each individual piece
- X-Y inventory placement to track where each piece was located in the storage lot
- Safely moving pieces of steel around the lot

A team of workers was assigned to the QA process to perform all of the activities mentioned above.

Concrete blocks were used to raise the steel off the ground for cleaning making this work much easier at waist level. Cleaning the steel was mostly working with grinders to cut sharp protruding tabs and tack welds from the steel.

The actual weighing of individual pieces was done using a fork lift to drop each piece on the scale. This eliminated the original thought of using a trailer and wasting diesel fuel. The scales were connected to a control unit which printed a weight ticket and attached to the Cut Sheet for that piece. After weighing a few pieces early in the process, the fork lift driver had the technique mastered for centering the steel on the scales.

It was during the QA process that Test Sample Coupons were removed and was managed by the team of workers responsible for the cutting and trimming (see next process operation).

Steel Cutting/Trimming

A Coupon is a small piece of steel removed from the larger beam or column to be used as a sample from a specific beam. Coupons were typically 2” x 10” in size.

Using a torch, Coupons cut from specific pieces of steel were sent to a lab for Tensile Testing and/or Chemical Composition Analysis. Coupons cut from pieces of steel for this process were accompanied by a Lab Submittal Form to identify which test was required.

All flange and edge trimming went smoothly using a torch and grinder to smooth the edges for the fabricator to load on to their rollers for final sizing and installation preparation.

Communication between KL&A and CCC (demo contractor) went very well in;

- Identifying issues with pieces such as twists, dents or other anomalies
- Marking of each piece
- Organization of the lot
- General Q&A

Final Thoughts

Not just any demo contractor should do sustainable deconstruction, a contractor with the skillset, resources and engineering talent who understands the “hows” of deconstruction should always be short-listed for these projects. In our case, we identified specific items where the experience and engineering talent were required;

- Build a retaining wall between the deconstructed hospital and the remaining Pavilion
- Leaving a piece of the North 4 story structure to demo at the end of the project using the structure to shield the neighborhood from the construction activities (noise, dust, jobsite traffic activities)
- Sub-contracting the correct teams to assist with the steel recovery and overall deconstruction (iron workers, concrete sub-contractor, surveyors)

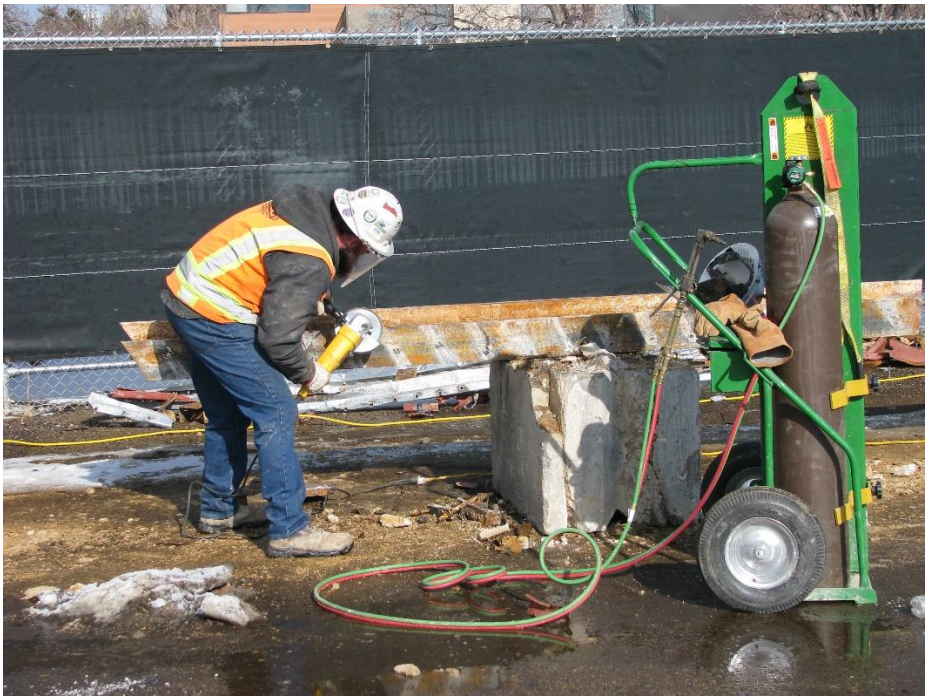
It is also worth mentioning that the steel being removed (from Area A) was a heavy gauge structural steel making it easier for the iron workers to remove and work with. A lighter gauge material is more susceptible to bending and twisting which may have resulted in more damaged pieces which was avoided during this recovery process.

Reference Pictures

Coupon Example

Exposed Ceiling Beams

Grinding and Cleaning



Columns

Process

Storage