

Josephine Community Library Master Plan

Final Report

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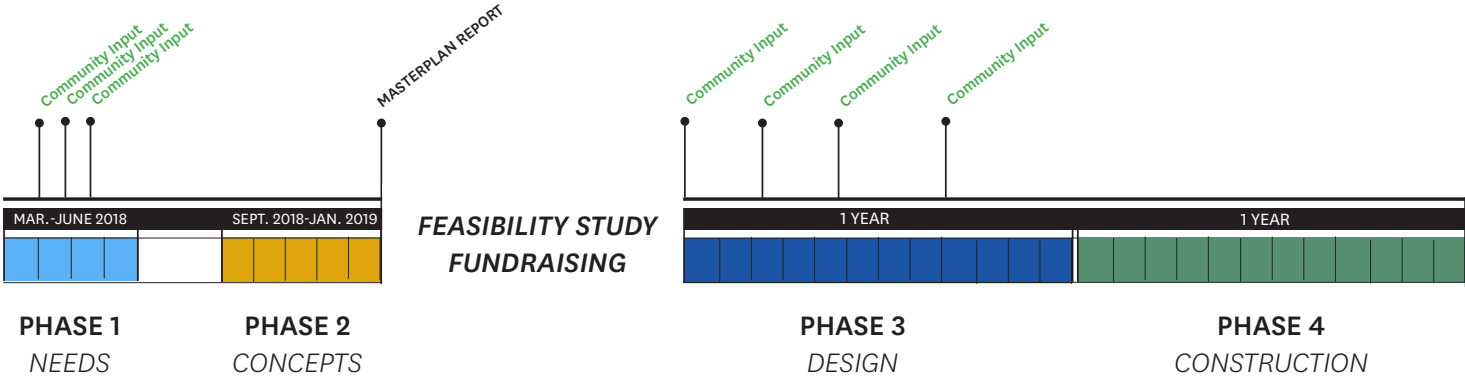
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PROJECT TIMELINE



EXECUTIVE SUMMARY

The Phase 1 report issued by Penny Hummel Consulting in June 2018 provided a service evaluation of the four Josephine Community Libraries, as well as a set of recommendations to improve each of them. This report provided a foundation to support the Phase 2 work which assessed the current condition of the Illinois Valley and Wolf Creek branches, provided concept level designs for three branches and estimated the associated costs of renovation or replacement. This work was completed over five months from September 2018 to January 2019 by a team of consultants led by Hacker Architects who worked closely with the Josephine Community Library Facilities Oversight Task Force.

Building Assessments Summary (Phase 2)

The following outlines the major findings and recommendations from the Wolf Creek and Illinois Valley building assessments. The assessments were conducted based on visual inspection from a field walk performed on September 18th, 2018 by Hacker Architects, PAE mechanical, electrical and plumbing engineers, and ABHT structural engineers.

Wolf Creek Library

Overall: Building is fairly new and remains in good condition. Minimal updates are required.

Key Findings:

- Deck has rot and is in poor condition
- Lights anchored only to the ACT ceiling
- Plumbing and HVAC systems in good functioning condition
- Electrical Panels and distribution in good functioning condition

Recommendations

- Replace deck boards and guardrail
- Anchor lights to Structure in addition to ceiling
- Consider upgrades to LED light fixtures and lower volume water fixtures

Illinois Valley Library

Overall: Requires significant maintenance and some upgrades to be code compliant

Key Findings:

- Accessibility compliance issues with parking lot and front entry and restrooms.
- Roof and paint need maintenance.
- Stacks and lights not seismically anchored and lateral structural system not adequate for current seismic standards.
- HVAC plenum has a ground water issue, and heat pumps need to be replaced.
- Combined storm and sanitary main not functioning.
- Electrical service and distribution panels need to be replaced. Vintage wiring is also present.

Recommendations:

- Replace front sidewalk and alter parking lot. Replace some fixtures and accessories in the restroom.
- Replace roof, repaint wood and CMU walls.
- Seismically brace lights and stacks. Further investigate CMU for lateral stability and replace roof diaphragm.
- Abandon air plenum and replace heat pumps.
- Scope and repair combined storm and sanitary line to street.
- Replace electrical panels and inadequate branch wiring.

Concept Design Summary (Phase 2)

Hacker Architects developed concept level designs for an addition and renovation to the Illinois Valley Library, a complete replacement of the Williams Library, and a new Grants Pass Library. These designs were based on the program needs developed by Penny Hummel in Phase 1.

The Illinois Valley Library Concept design proposes a 5164 square foot library which includes a meeting room addition of 900 sf and complete renovation of the existing building. Multiple safety and code and ADA inadequacies were found in the assessment and have been addressed in the renovated facility making it a code compliant, safe and refreshed environment. The improved facility includes added technology and new furniture, shelving and energy efficient fixtures and mechanical systems. The design also incorporates a reconfiguration of the parking lot as well as a new courtyard and community garden.



Illinois Valley Library Concept : AXONOMETRIC VIEW

The Williams Library Concept design proposes an all-new 5,568 square foot building on the site of the current library. Hacker and the task force met with Williams Elementary School leaders to ensure the library design was coordinated with the school's needs as the library is located on school property. The design takes inspiration for its form and materials from historic wooden buildings in the area. It includes a meeting room that is accessible after hours, a large light filled reading room, a separate childrens' area, teen nook and a study room for four people. In addition to the building, the design proposes 8 new parking spaces, a new entry plaza and a relocated community garden.



Williams Library Concept : EXTERIOR VIEW

The Grants Pass Library Concept design proposes a new 2 story 36,909 square foot building based on the Phase 1 program. Since no specific site has been purchased, the team developed the design on an easily accessible, centrally located downtown city block outside the historic district. It is envisioned to be a main street building that is pedestrian friendly, extroverted to the community and welcoming. By using wood and brick, both local materials, it integrates into its context and embodies the historic lumber industry of the area. The simple repetitive form with honest expression of materials is meant to be cost effective and efficient. The interior provides light filled warm spaces that are flexible for changes in the future. Two first floor and two second level exterior spaces provide secure access to the outdoors and views to the distant mountains. In addition to the building, 77 parking spaces and ample bicycle parking are provided to meet the planning requirements of the facility. It also includes a civic plaza that forms a welcoming entry to the building and a community gathering place for Grants Pass.



Grants Pass Library Concept : EXTERIOR VIEW



Grants Pass Library Concept : INTERIOR VIEW

Cost Estimates Summary (Phase 2)

DCW Cost Consulting developed the following costs for the designs developed for each library.

Illinois Valley Library: Renovation and Addition

Total Area: 5164 sf

Total Construction Cost: 1,340,000 - \$1,500,000 *

(approx. \$265 - \$300/sf)

Furniture Fixtures and Equipment: \$ 250,000 - 280,000

Soft Costs approx. 30%: \$400,000 - 440,000 **

Total Project Cost: \$2,000,000 - \$2,220,000

Williams Library Costs: All new Construction

Total Area: 5568 sf

Total Construction Cost: 2,850,000- \$3,100,000 *

(approx. \$500 - \$550/sf)

Furniture Fixtures and Equipment: \$290,000 - 320,000

Soft Costs approx. 30%: \$850,000 - 900,000

Total Project Cost: \$4,000,000- \$4,320,000

Grants Pass Library: All new construction, Building and Parking lot

Total Building Area: 36,909 sf

Total Construction Cost: 17,200,000 - \$18,700,000 *

(approx. \$465 - \$505/sf)

Furniture Fixtures and Equipment: \$ 1,500,000 - 1,800,000

Soft Costs approx. 30%: \$5,160,000 - 5,600,000

Total Project Cost: \$23,860,000 - \$26,100,000

Grants Pass Library: Public Plaza

Total Construction Cost: \$705,000*

Soft Costs approx. 30%: \$210,000 **

Total Project Cost: \$915,000

*Includes the following:

Design Contingency 10%

Construction Contingency 3%

General Conditions and Requirements 14.5%

Contractor Fee / Overhead 5%

Contractor Bonds and Insurance 1.5%

Escalation to start approx. 10% (April 2021)

** Soft Cost Include, but not limited to

Design Fees

Engineering fees and studies (Ex: Environmental impact, location work, geotechnical etc.)

Permits and Fees- Building Permits, Fire Department review, etc.

Commissioning- Third Party System Commissioning

Jurisdictional costs

Josephine Community Library District Facilities Master Plan (Phase 1 Report)

*Prepared by Penny Hummel Consulting
June 18, 2018 (revised January 30, 2019)*

Executive Summary

After functioning as a nonprofit organization for a decade, the Josephine County library system is now benefitting from the passage of a library district in 2017. Recognizing that the library needs appropriate space—for collections, for people, for programming and for functional operations, the Josephine Community Library District (JCLD) and its support organization, the Josephine County Library Foundation, have established facilities improvement as a top priority. Since serious deficiencies in three of the four Josephine County library facilities compromise the quality and level of service that can be provided, improving the library's facilities is critical to the success of the library system in the future.

Prepared by Penny Hummel Consulting, this Phase 1 report provides a service evaluation of the four Josephine County libraries, as well as a set of recommendations to improve each of them. The goal is to provide a foundation to support the work of the architectural firm chosen for Phase 2 of the process, which will include evaluating the structural needs of existing facilities, estimating costs of renovation or replacement, and assisting in site selection where appropriate.

A summary of the recommendations for each of the four Josephine County libraries is below.

Grants Pass Library

- Replace the existing library with an estimated 36,909 square foot new facility (location to be determined). A detailed program for this new library is included in this report.
- Analyze current use of the Grants Pass collection, with the goal of maximizing return on shelf space.

Illinois Valley Library

- Explore the viability and cost of expanding/renovating the library, with the goal of adding a meeting room and improving the computer/media room.
- Analyze current use of the Illinois Valley collection, with the goal of reducing its overall size to free up space.

- Evaluate the library's mechanical systems (plumbing, lighting, heating and cooling) and roof to identify and prioritize repairs and improvements.
- Evaluate the library's existing safety and security systems and make needed improvements.
- Improve the library's Internet bandwidth and reliability.
- Update furniture and fixtures as is appropriate to the building's mid-century look and feel and explore the viability of minor renovations.

Williams Library

- Replace the existing library with new facility of approximately 5,569 square feet at the current location. A detailed program for this new library is included in this report.
- Analyze current use of the Williams collection, with the goal of maximizing return on shelf space.

Wolf Creek Library

- Analyze current use of the Wolf Creek collection, with the goal of focusing the collection on high-interest materials.
- Evaluate the library's mechanical systems (plumbing, lighting, heating and cooling) and roof to determine if there are maintenance issues that need to be addressed.
- Evaluate the library's existing safety and security systems and make needed improvements.
- Improve the library's Internet bandwidth and reliability, potentially partnering with other community organizations to reduce costs.
- Update furniture and fixtures as is appropriate or a priority for the library system.

Methodology

In January 2018, the Josephine County Library Foundation issued a Scope of Work for Phase I of a Library Facilities Master Plan. The foundation and library selected a proposal from Penny Hummel Consulting for this project, which included the participation of library facilities consultant Penny Hummel and library IT consultant Lance Murty. On March 20, Hummel and Murty met with the library's Facilities Oversight Task Force to discuss initial priorities for the facilities plan. The following themes emerged from this discussion:

- Addressing the outdated and inadequate features of each facility;
- Expanding designated areas and opportunities for programming;
- Increasing opportunities for patrons to gather, study and learn;
- Enhancing volunteer and staff efficiency and effectiveness by improving work areas.

During this March 20 – 21 visit, Hummel and Murty also toured the four facilities and observed operations. Penny Hummel conducted focus groups with library staff from all four libraries, library district and foundation board members and Lance Murty met with the library's IT contractor and library staff. The consultants also facilitated a discussion at a public meeting at the Grants Pass library on March 21. Penny Hummel returned April 25 – 26 to conduct a focus group with library volunteers, facilitate public discussions at the Williams and Illinois Valley libraries, and meet with Cindy Low, a representative of the Grants Pass Friends of the Library. Data from these sessions has informed the evaluation and recommendations below. Notes from these sessions, as well as the results of surveys conducted by JCLD youth services librarian Susan Davis with teens and parents/guardians, are included in the appendix.

Penny Hummel also reviewed a variety of information about the library and its operations, including circulation data, usage statistics and demographic information. Basing this work on best practices in planning public library facilities, she then developed recommendations for each of the four Josephine County libraries and developed a library program incorporating these elements for the two facilities where a new facility is recommended (Grants Pass and Williams). These draft recommendations were presented to Facilities Oversight Task Force on May 29 for their input and additional revisions were subsequently solicited from the library's staff and stakeholders. Lance Murty also developed a written set of recommendations deriving from his assessment of the library's system's IT needs. This report is included in the appendix, and its findings are incorporated into the general recommendations of this report.

Community Information

According to the U.S. Census, the estimated population of Josephine County as of July 2017 is 86,352. It is noteworthy in several ways:

- 26.6% of Josephine County’s residents are estimated to be ages 65 and over, compared to 17.2% in Oregon overall (Source: Population Resource Center, Portland State University)
- Only 17.3% of Josephine County residents have a bachelor’s degree or higher, compared to 31.4% in Oregon and 30.3% in the U.S. (Source: U.S. Census).
- 7.3% of Josephine County residents are Hispanic or Latino, lower than Oregon overall (12.8%) or the U.S. (17.8%) (Source: U.S. Census).

Other U.S. Census data reveals the economic challenges faced by Josephine County residents. At \$37,867, the 2012-16 median household income is lower than that estimated for Oregon (\$53,270) or the U.S. (\$55,322). 18% of county residents (and 20.4% of Grants Pass residents) are estimated to be living in poverty, a higher percentage than Oregon (13.3%) or the U.S. (12.7%). And, although Josephine County has a lower percentage of children aged 0 – 17 than in Oregon (18.7% vs. 21%, according to the Population Resource Center at Portland State University), they are disproportionately affected by socioeconomic factors.

- Over one-third (34.4%) of children are estimated to live in poverty, compared to 20.3% in Oregon. (Source: Children First for Oregon).
- 66.9% of students qualify for free and reduced lunches compared to 49.3% in Oregon. (Source: Children First for Oregon).
- 9% of students in Josephine County are homeless, compared to 3.9% in Oregon overall. (Source: Children First of Oregon).

In this context, Josephine County’s four public libraries function as essential informational and cultural hubs, providing vital services to the county’s high proportion of seniors, as well as needy families and their children.

Overview of Library System

Having survived a significant amount of change in the last decade, Josephine County’s public libraries have evolved into a unique institution that’s unlike any other library system in Oregon. Originally operating as the four parts of a county system, the libraries in Grants Pass, Cave Junction, Williams and Wolf Creek closed in 2007 due to a precipitous drop in county funding. Committed to restoring public library service, community members raised funds and trained volunteers to reopen the libraries, forming the nonprofit Josephine Community Libraries, Inc. From 2009 – 2017, the Josephine County library system survived with donations, fundraising and thousands of donated volunteer hours each year.

In 2017, voters approved a library district serving 39,000 residents in the noncontiguous areas surrounding the four libraries. In this new context, those residing in areas of the county that are not in the library district can purchase a library card for a fee; property owners outside the district can also voluntarily add their property to the district map. The new library district began operations in January 2018. With stable public funding now established, the fundraising

work originally undertaken by the nonprofit JCLI has been assumed by the Josephine County Library Foundation, which has established improving facilities as a top priority. The library system's extensive mobilization of volunteers continues to be its most distinctive feature. In FY 16-17, 326 community members contributed 25,257 hours of volunteer time to staff circulation and help desks, shelf books, process new materials and perform other vital functions—almost 500 hours a week.

As of July 2017, the four Josephine County libraries offer a collection of 160,539 items, including books, DVDs, audio books, music CDs and periodicals. In addition to the print/physical collection, JCLD patrons also have access to a digital collection (including e-books, online resources and downloadable media) totaling 65,428 items.

In 2016 – 17, JCLD had 36,184 active cardholders and circulation totaled 280,174. With the advent of the library district this year, it is expected that some of these measurements (such as number of cardholders) will change, as not all Josephine County residents live within the district and are eligible for a free card. However, given that district funding is supporting significantly increased open hours at each location, it is likely that circulation and number of visits to the library will increase to some extent.

In 2016 – 17, the four libraries in the system welcomed 126,252 visitors—almost 2,500 visits a week in total. These facilities vary in terms of vintage, size, condition and form of ownership. Each one serves a unique community within Josephine County, a situation reinforced by their geographic distance from each other, which ranges from 18 miles (Grants Pass and Wolf Creek) to 51 miles (Illinois Valley and Wolf Creek). These four communities, which include the two incorporated cities in Josephine County (Grants Pass and Cave Junction) as well as two unincorporated areas (Wolf Creek and Williams) embody the rural/small town nature of Josephine County.

Grants Pass Library: Needs Assessment

General Description

Located at 200 NW C Street in Grants Pass, the 15,470 square foot Grants Pass library was originally built in 1959 and features a children's area renovated in 2016. Owned by the county, the facility is currently leased to the library district. This building serves as the system's central library, housing administrative staff for the whole county system.

Prior to this spring, the Grants Pass library was open 24 hours a week, but the passage of the library district last year supported a significant increase in hours. Currently, the library is open 40 hours a week, from 10 am to 7 pm on Tuesday and Thursday, from 10 am – 6 pm on Wednesday and Friday, and from 10 am to 4 pm Saturdays.

In 2016-17, 203,396 items circulated from this library and the number of annual visits was 92,316, or almost 1,800 visitors a week. The bulk of the library system's 300 + volunteers work

at the Grants Pass library, staffing various desks, assisting with processing new materials, shelving and supporting programming and other special projects.

The Grants Pass library serves 37,779 residents of the City of Grants Pass as well as an unidentified number of patrons from the surrounding unincorporated areas. Since the number of unincorporated users isn't identified, this study utilizes the population of Grants Pass to assess the library's current facilities-related services on a per capita basis, with the understanding that measurements indicating a deficiency in current services are even more acute than the numbers suggest, because the population being served goes beyond the city limits.

The unique nature of the Grants Pass library is apparent at the main entrance. Immediately, visitors experience a team of volunteers running the front end of the library's key circulation functions. At one desk, a volunteer signs up new cardholders; at another, volunteers check in materials checking materials in, and at a third desk, volunteers check out materials. Other volunteers can be observed staffing the information desk, assisting in the children's library or shelving. As one of them said, accurately describing the general vibe of the library on a typical day: "There's a warmth. It's us." The library places a high premium on facilitating successful volunteer involvement and paid staff are trained to be proactive in ensuring that volunteers feel supported in the invaluable work that they do.

The liveliness of the entry area, however, also translates into increased noise, which can be challenging for library patrons looking for a more peaceful library experience. In general, the aging facility, which hasn't been comprehensively renovated since it opened in 1959, is worn out, crowded and inefficient.

Collections

According to a collection snapshot taken in the spring of 2018, the Grants Pass library currently holds approximately 101,000 items, including books, DVDs, CDs, books on CD, periodicals and special collections. Reflecting the relatively small materials budget that the library could afford in the last years of county support and in its decade as a nonprofit, many items in the collection are old and worn. In recent years, library staff have been working to weed the collection, and in the years to come they expect to utilize an improved collections budget to replace older materials and fill gaps. The library plans to eliminate its collection of VHS movies and books on cassette in the near future.

Overall, shelving at the Grants Pass library is packed and shelving in the adult fiction and nonfiction areas is particularly full, with 88" stacks each incorporating 6-7 shelves of books. Recently, shelving that was obscuring windows was removed to improve access to natural light in the adult fiction area. To house the collection, the library utilizes the bottom shelf of the book stacks, which is generally not considered a best practice as the bottom shelf is difficult for patrons to see and access. In addition, high shelving creates accessibility issues for older or disabled patrons (or volunteers) who have difficulty reaching the top shelf from a stool. In

some cases (such as DVDs) collection items spill from one room into another due to limited space.

Computers and Technology

The library offers 23 computers for public use, including online catalogs, public internet access computers, a children's learning station and laptops. Patron workstations in the primary computer area are cramped and would benefit from a larger footprint. In 2016-17, the library recorded 13,400 individual Internet sessions on library computers and an additional 25,866 sessions by patrons utilizing Wi-Fi on their own devices, or over 755 sessions a week, an indication that internet access is a very valued and highly used service. To support the public's use of technology, library volunteers staff a technology desk.

Seating and Meeting Room Space

Currently, the library offers approximately 105 patron seats, or 2.8 seats per 1,000 people. This amount of seating is low in comparison with current best practice for a library of its type, which recommends 4 – 6 seats/1,000 people. In addition, much of the library's seating is not the right type of seating. For example, the primary seating in the adult fiction/nonfiction area is at 70" round tables that seat 5 people, an inefficient use of space as library patrons tend to avoid sharing tables. Too few of the library's seating options are adjacent to a power source, which hinders patrons who need to plug in laptops, phones or tablets. Several years ago, the library added a handful of built-in desks with a power source, which have been popular.

Programming and Event Space

With respect to meeting room space, the only space the library currently features is the Ben Bones Room, which seats 60 auditorium style and approximately 20 conference style. However, since this room doubles as the sales area for the Friends of the Library, the two functions often collide with each other. The library also utilizes the main reading area in adult fiction/nonfiction for public events. Although this area can accommodate 80 people, it too is problematic as setting it up for a meeting involves moving numerous cumbersome and heavy 70" circular tables.

The lack of meeting room space in the Grants Pass library limits the library's current ability to offer programming for all ages. Nonetheless, in 2016-17, the library offered 360 programs (primarily storytimes) that attracted 8,983 attendees, a 27.5% increase in participation over the previous year. Additional meeting room space is needed, not only for library programming, but for use by community groups and the library's ongoing community partners (such as early literacy providers). The library currently offers no small enclosed quiet study rooms, which are also desirable.

Designated Program Areas

Children's Library. As noted earlier, the children's area was renovated in 2016 and been a success in general, both operationally and aesthetically. (The library plans to take the new shelving in that area to the new library.) However, the library's limited programming space directly impacts services for this age group. During the school year, the library offers six storytimes a week for pre-K children of various ages, plus additional programming such as the K-9 program, which gives children the opportunity to read to service dogs. Storytimes and other programming are divided between three places: the Ben Bones Room, the seating area next to the entry way, and a small open area adjacent to the picture books.

While the library makes do with what it has, a dedicated storytime/class visits area would be a much-needed improvement. Storytime needs to occur in an area where the public isn't browsing the collection (or the Friends store) to improve the experience of patrons engaged in either activity. In addition, community partners who use the library's space to offer storytimes (such as the Southern Oregon Educational Service District, which offers an autism storytime with trained professional educators) should be offering these programs in a space that better supports families with special needs.

Young Adult Library. Consistent with the general desire of teens to avoid proximity to the children's collection, the young adult library is adjacent to the computer/adult nonfiction area of the library. However, it is hard to find, cramped, and lacking in teen friendly décor.

Friends of the Library. The work of the Friends can be found in several spaces throughout the library. A shelf/display of used books for sale is featured next to the circulation desk, while the full FOL used book store fills the perimeter of the Ben Bones Room and is operated on the honor system. In addition, the Friends utilize a small room in the administrative area to store and sort book donations.

Bathrooms. Limited to two individual bathrooms for the public and one bathroom in the break room, the facility's bathrooms are seriously inadequate. Staff report that the bathroom line is sometimes so long that they decamp to the nearby courthouse to use their facilities.

Staff and Volunteer Areas

As is common with older libraries that have not been renovated to reflect the times, the staff areas of the Grants Pass library incorporate a hodgepodge of existing furniture in spaces that in some cases were not originally designed to house their current functions. Most areas are cramped and uninviting and there is an overall lack of storage. Given the large number of volunteers who keep the library going each day, the staff/volunteer lounge, an area with no natural light, is inadequate with respect to lockers and space for rest/relaxation.

Volunteers expressed some concern about the library from a safety perspective, both in terms of earthquake and fire readiness but also with respect to disruptive library users. They would also like the library to have additional parking capacity.

The large main service desk reflects the “fortress” philosophy no longer considered best practice for service desks in public libraries, and the workflow in the circulation area could be improved. Currently materials waiting to be shelved are lined up on book carts in a public hall because there is no other place to put them.

Judging from the level of community involvement it engenders, the Grants Pass library is obviously well used and beloved by community members. However, it is challenging for patrons, volunteers and staff to navigate and has many structural issues, including an aged infrastructure and a dysfunctional HVAC system. One volunteer summed up the consensus of library stakeholders by saying “It’s not worth renovating.”

Illinois Valley Library: Needs Assessment

General Description

Located at 209 West Palmer in the city of Cave Junction, the 4,264 square foot Illinois Valley branch library is owned by the library district. Originally built in 1959, this facility was expanded in 1976 and features a children’s area renovated in 2017.

Prior to this spring, the Illinois Valley library was open 13 hours a week, but the passage of the library district last year supported a significant increase in hours. Currently, the library is open 25 hours a week, on Wednesdays from 11 am to 6 pm and on Thursday, Friday and Saturdays from 11 am to 5 pm.

In 2016-17, 30,675 items circulated from this library and the number of annual visits was 24,598, or an average of 473 visitors a week.

Built in the same year as the Grants Pass library, this much smaller facility has retained the integrity of its original mid-century design and is beloved for its natural wood ceiling and original globe light fixtures. The Illinois Valley library also features a garden designed and maintained by community members. This library has been particularly strong in building and maintaining strong connections to the local community, to the extent that its branch manager (the one paid staff member at this facility) provides customer service training throughout the library system.

Despite its mid-century charm, the Illinois Valley facility is deficient on multiple levels, many of them resulting from deferred maintenance. The roof leaks and reportedly needs repair. The plumbing doesn’t support access to hot water and may be compromised by root invasion. The HVAC system is inadequate in managing cold, heat and humidity. The vintage globe fixtures provide inadequate light, causing at least one patron to use a flashlight to peruse the shelves.

Collections

According to a collection snapshot taken in the spring of 2018, the Illinois Valley library currently holds approximately 30,530 items, including books, DVDs, CDs, books on CD, periodicals. Reflecting the relatively small materials budget experienced by the library in the last years of county support and in its decade as a nonprofit, many items in the collection are old and worn.

Overall, shelving at the Illinois Valley library is packed and shelving in the adult fiction and nonfiction areas is particularly full, with 88" stacks each incorporating 6-7 shelves of books. To house the collection, the library utilizes the bottom shelf of the book stacks, which is generally not considered a best practice as the bottom shelf is difficult for patrons to see and access. In addition, high shelving creates accessibility issues for older or disabled patrons (or volunteers) who have difficulty reaching the top shelf from a stool.

Computers and Technology

The library offers 10 computers for public use, including one online catalog. Apart from the library's computers, the library in 2016-17 recorded 4,030 sessions by patrons utilizing Wi-Fi on their own devices. Unfortunately, internet use at Illinois Valley is hindered by unreliable and insufficient (DSL) internet service to the area. As a comparison, the Williams library, which is open fewer hours but can access a fiber optic internet connection, logged 1,500 more Wi-Fi sessions during the same time period.

The computer/media room is deficient in numerous ways. Patron computer workstations are cramped and offer limited privacy, and the room itself is dark and chilly.

Seating and Meeting Room Space

Currently, the library offers approximately 46 patron seats, many of which date back to the early 1960s. While the number is adequate, in some cases its deployment is not ideal. For example, some of the tables seat four people which offers less flexibility in layout and patron use. Overstuffed lounge seating does not maximize use of scarce space. The library is very limited in the number of outlets provided in the public areas (and indeed throughout the building), which hinders patrons who need to plug in laptops, phones or tablets.

The library has no meeting room, which severely limits the amount of public programming it can offer beyond storytimes in the children's area. To facilitate a community gathering, tables and chairs are reconfigured in the media/ computer room, which is cold, dark, and lacks outlets and a built-in projector and screen. In 2016-17, the library offered 125 programs, of which 123 were for children, 0 were for teens and 2 were for adults. These attracted 1,381 attendees, a 39% increase in participation over the previous year. The library currently offers no small enclosed quiet study rooms, which would be ideal for patrons wishing for quiet space.

Designated Program Areas

Children's Area. As noted earlier, the children's area was renovated in 2017 and is a wonderful asset to the library, incorporating lively original art and extensive natural light. (However, like the adult section, it is perhaps overfilled with library books and other materials.) During the school year, the library offers two storytimes a week (plus an additional monthly event) as well as weekly gatherings for homeschooling families.

Young Adult Area. With limited space to work with, library staff have carved out a small seating/gathering area for young adults that is adjacent to the YA collection. This is reported to be a success.

Friends of the Library. The Friends operate a used bookstore on the honor system in a small room off the computer/media room, as well as a book cart at the front of the library.

Bathrooms. The library features two small bathrooms; one is ADA accessible, one is not.

Staff and Volunteer Areas

Run by one paid staff member and 22 – 25 volunteers a week, the Illinois Valley library features one cramped service desk for all public functions, which is staffed by two people at a time. The high center shelving in the adult fiction/nonfiction area creates poor sightlines.

As is common with older libraries that have not been renovated, the staff/volunteer areas of the Illinois Valley library incorporate a hodgepodge of existing furniture in spaces that in some cases were not originally designed to house their current functions. There is insufficient storage and these areas, including the staff/ volunteer break room, are cramped and uninviting.

Security is also a serious issue. Given its isolated location, the Illinois Valley branch is vulnerable to uninvited guests. In 2016, vandals broke into the library and created extensive damage; other lesser incidents have also occurred. After people were discovered to be camping and building fires behind the library, a fence was added to reduce access.

In summary, this is a beloved library and community center despite its many limitations. Community members find it warm and welcoming; as one shared, "I've never wanted to hang out at a library before."

Williams Library: Needs Assessment

General Description

Located next to Williams Elementary School at 20695 Williams Highway in the unincorporated area of Williams, the Williams library was created in 1977 from a used manufactured home. The building is owned by the library district but the land that houses it is leased from the Three

Rivers School District, which operates Williams Elementary School nearby. The library also features a community garden.

Prior to this spring, the Williams library was open 12 hours a week, but the passage of the library district last year supported a significant increase in hours. Currently, the library is open 20 hours a week, from 1 pm to 6 pm on Tuesdays, Wednesday and Saturdays from 1 – 6 pm and on Fridays from 11 am to 4 pm.

In 2016-17, 10,175 items circulated from this library and the number of annual visits was 4,182, or just over 80 visitors a week. It is overseen by one branch manager with the help of volunteers.

At 864 square feet, the Williams library is by far the smallest facility in the library system, lacking even a bathroom. Nonetheless, patrons appreciate the opportunities that the library provides them to interact with neighbors and as one said, they consider the library “a huge part of the community.”

Collections

According to a collection snapshot taken in the spring of 2018, the Williams library currently holds approximately 9,015 items, including books, DVDs, CDs, books on CD and periodicals. Reflecting the relatively small materials budget experienced by the library in the last years of county support and in its decade as a nonprofit, many items in the collection are old and worn.

Overall, shelving at the Williams library is packed and shelving in the adult fiction and nonfiction areas is particularly full, with 88” stacks each incorporating 6 -7 shelves of books. To house the collection, the library utilizes the bottom shelf of the book stacks, which is generally not considered a best practice as the bottom shelf is difficult for patrons to see and access. In addition, high shelving creates accessibility issues for older or disabled patrons (or volunteers) who have difficulty reaching the top shelf from a stool.

Service Areas

Computers and Technology. The library offers five computers for public use, including one online catalog. Apart from use of the library’s computers, the library in 2016-17 recorded 5,532 sessions by patrons utilizing Wi-Fi on their own devices, or over 106 sessions a week.

Seating. The current library is primarily a set of book/material stacks with a limited amount of seating patron seats: four toddler seats at a round table, four seats at a four-person table, and two seats within the stacks. Places for patrons to plug in laptops, phones or tables are extremely limited.

Meeting rooms. The library has no meeting room, which severely limits the amount of public programming it can offer beyond storytimes in the children’s area. To facilitate a community

gathering, the toddler table near the picture books is moved and chairs (stored in an outside shed) are utilized. In 2016-17, the library offered 34 programs, of which 32 were for children (including one storytime a week), 0 were for teens and 2 were for adults. These attracted 99 attendees.

Youth areas. As mentioned earlier, the limited space in the Williams library is largely used to shelf books and other circulating materials. Apart from the small toddler table, there is no children’s area, and the young adult area is limited to the collection.

Friends of the Library. The Friends of the Williams library offer used books for sale on a book cart at the front of the library.

Restrooms. As mentioned earlier, the most distinguishing feature of the Williams library is not what it has but what it doesn’t have: running water and a bathroom. Instead, staff, volunteers and patrons utilize a portable toilet adjacent to the building and a large bottle of hand sanitizer when they return. The inadequacy of this situation with respect to quality customer service, adequate support of staff and volunteers, convenience and sanitation is self-explanatory.

Service Desk/Staff Area. The Williams library features one crowded service desk for all functions. The staff area, including a desk for the branch manager and counter, is directly behind the service desk in full view of the public. As mentioned earlier, the library utilizes a small shed outside of the building for needed storage.

In summary, although this is a library that’s valued a great deal by the community it serves, the facility has many more liabilities than assets. As a member of a library stakeholder group said, “There is no question that the Williams library is anything but a scraper.” Given the scarcity of land in the Williams area that is appropriately zoned for a library, and its current desirable location in the heart of Williams, the library district considers its best option to be to rebuild the library at the current location. As the owner of the land beneath the library, the Three Rivers School District is supportive of this option, so discussions are underway to develop a new library in the current location.

Wolf Creek Library: Needs Assessment

General Description

Located next to the Sunny Wolf Charter School at 102 Ruth Avenue in the unincorporated area of Wolf Creek, the 2,594 square foot Wolf Creek library opened in 2002. Owned by the Josephine County Library Foundation, the facility is leased to the library district. The area surrounding the library is one of three areas in Josephine County designated by the Oregon Department of Human Services as a “high poverty hotspot”, i.e., with a poverty rate of 20% or more. (The other two are in Grants Pass.)

Prior to this spring, the Wolf Creek library was open 7 hours a week, but the passage of the library district last year supported a significant increase in hours. Currently, the library is open 15 hours a week, from 1 pm to 6 pm on Wednesday and Saturday and from 11 am to 4 pm on Friday.

In 2016-17, 7,522 items circulated from this library and the number of annual visits was 5,156, or just over 99 visitors a week. Circulation drops significantly in the summer months when the Sunny Wolf Charter School is closed. Three classes from the elementary school visit each week. This library is overseen by one branch manager with assistance from volunteers.

Collections

According to a collection snapshot taken in the spring of 2018, the Wolf Creek library currently holds approximately 12,134 items, including books, DVDs, CDs, books on CD and periodicals. Reflecting the relatively small materials budget experienced by the library in the last years of county support and in its decade as a nonprofit, many items in the collection are old and worn.

Overall, shelving at the Wolf Creek library is full, with some stacks incorporating 6 - 7 shelves of books. To house the collection, the library utilizes the bottom shelf of the book stacks, which is generally not considered a best practice as the bottom shelf is difficult for patrons to see and access. In addition, high shelving creates accessibility issues for older or disabled patrons (or volunteers) who have difficulty reaching the top shelf from a stool.

Service Areas

Computers and Technology. The library offers 7 computers for public use and has one catalog station. Like the Illinois Valley facility, the Wolf Creek branch lacks access to fiber optic Internet access and is dependent upon an unreliable DSL connection.

Seating and Meeting Room Space. Currently, the Wolf Creek library offers approximately 20 patron seats. The library has a meeting room (accessible when the library is closed) that seats 20. In 2016-17, the library offered 48 programs (including class visits from Sunny Wolf Charter School), all of which were for children. Attendance was 2,774. Storytimes are offered once a month, and every Wednesday, the library's meeting room serves as an emergency food box site, with free food shared by the Josephine County Food Bank. Apart from the food bank, the meeting room is not regularly used by other community organizations.

Youth Areas. The library has a seating and play area adjacent to the collection for younger children; service to teenagers is primarily limited to the YA collection.

Friends of the Library. The Friends of the Library sell donated books on a book cart in the building's lobby.

Restrooms. The library offers multi-stall male and female restrooms that are accessible when the library is closed but the meeting room is being used.

Service Desk/Staff Area. The Wolf Creek library features one service desk for all functions. The staff work area is in a room directly behind the service desk.

Like the Illinois Valley branch, the Wolf Creek branch has experienced vandalism in recent years. An increase in visits due to partnerships such as the weekly free food box distribution program has also led to an increase in disruptive behavior. A review of the facility’s security systems, therefore, is in order.

The Wolf Creek facility appears to be in good condition and no information about structural issues or ongoing facilities-related problems emerged from the initial data gathering process. Largely dating from when the library opened in 2002, its furniture and fixtures at the Wolf Creek branch are reasonably consistent but could be updated if that was a library district priority.

Comparative Use and Common Issues for All Facilities

Before considering recommendations for each of the four facilities, it is worthwhile to look at them comparatively. As the chart below indicates, use of the libraries does not entirely correlate to facility size, and facility size does not entirely correlate with size of collection.

	All four libraries	Grants Pass	Illinois Valley	Williams	Wolf Creek
Square feet	23,192	15,470	4,264	864	2,594
Visitors, FY 16 – 17	126,252	92,316	24,598	4,182	5,156
Circulation, FY 16 – 17	251,768	203,396	30,675	10,175	7,522
Items in physical collection (Spring, 2018)	152,504	100,825	30,530	9,015	12,134
Turnover (circulation divided by items in collection, or “how hard the collection is working”)	1.65	2	1	1.1	.62
Annual circulation per square foot	10.8	13.1	7.2	11.8	2.9
Annual visitors per square foot	5.44	5.97	5.77	4.84	1.99

Of specific interest is the comparison of the Wolf Creek and Williams branches. Although the Wolf Creek branch is equal in size to three Williams buildings, the Williams collection is 75% the size of what Wolf Creek offers. However, Wolf Creek circulation is 25% lower and its number of annual visitors is only 23% higher (largely due to three weekly class visits from the elementary school next door).

Of course, there are probable reasons behind some of these statistics. As noted earlier, the Wolf Creek library serves an area with a higher poverty level, which may impact community usage. The Williams library is open more hours than Wolf Creek, which undoubtedly has a positive impact on usage. Also, due to its postage-stamp size, it makes sense that the Williams library has much higher annual circulation and annual visitors per square foot than does Wolf Creek. However, the most interesting comparison between the two is the turnover rate (circulation divided by holdings), which shows the degree to which a collection is actually being used/checked out. (The higher the number, the better the use of the collection.) With a 1.1 turnover rate, Williams is comparable to Illinois Valley (at 1.0) but almost double the turnover rate of Wolf Creek (.62). What this suggests, overall, is the potential desirability of looking closer (by type of material, audience age, etc.) at circulation rates at each library so that the collection for each of them is carefully calibrated to maximize potential use.

While the four library facilities differ in many ways, they are similar in the high density of materials that they have on the floor for patron check out and use: Currently, all four libraries feature:

- High (88”) shelving – featuring 6 – 9 full shelves (depending upon the collection area).
- Materials on the bottom shelf, which is not considered a best practice. Such materials are not only harder for patrons to access, they also tend to be shelved with their spines horizontal to the floor, which damages them.
- Bookshelves filled to the maximum space (vs. 3/4 full, which is best practice for ease of shelving as well as providing a space to merchandize books on each shelf)
- Magazine shelving and other special collection shelving at the stack ends, which add to the overall visual clutter.

Added together, these factors create an environment in each Josephine County public library that is quite dense with books and other materials, but relatively sparse in seating, displays and other potential features for patrons to enjoy. In the 21st century, it has become a truism to say that public libraries have evolved from being just book warehouses to community centers—but to move away from feeling like a book warehouse, public libraries need to think differently about their collections and to focus on *usage* rather than *storage*. In this paradigm, shelf space is precious and must be earned by demonstrated community interest, and ongoing analysis of circulation patterns needs to become a regular part of collection management.

It is typical (and understandable) for libraries with limited resources to be less aggressive in weeding their collections, and to hold onto materials that are in poor condition, out of date or that rarely circulate. Now that the library system is in a better position than it has been in the last decade to replace such materials, **this report recommends that ongoing collection analysis (and subsequent recalibration via materials selection and weeding) be made a top priority, as it will be critical in successfully revitalizing all four Josephine County library facilities.** For different reasons, this is true for each branch of the system:

- Although a new Grants Pass library could theoretically be built to any size, the cost of new construction makes it imperative that space is not built to house materials that do not earn their shelf space through sufficient community use;
- Given that the opportunity to expand the footprint of the Illinois Valley library is limited by the available surrounding land (and the likelihood that such an expansion would focus on adding meeting room space), any interior design changes in the adult and teen areas will require a reduction in overall collection size;
- The Williams library is impacted by both factors mentioned for Grants Pass and Illinois Valley (cost of new construction as well as a limited amount of land), allowing for only a small increase in collection size and creating the imperative to be quite intentional in terms of what is offered there.
- The one library out of the four that does not need extensive change, and is not undersized to meet the needs of its community, is the Wolf Creek branch. However, since it is underused in relationship to the other four facilities, a careful examination of circulation data, with subsequent potential reshaping of the collection could improve its overall usage.

General Philosophy of Service

The Josephine Community Library District should provide residents with services that meet and anticipate their needs, in comfortable facilities that facilitate the delivery of its highest priority services, which have been defined as:

1. Maintain and circulate a curated and balanced collection of catalogued books and other materials selected for a wide range of interests for adults, youth and children in the community.
2. Provide a pleasant experience and convenient space for library users, with trained volunteers and professional staff available for guidance in the acquisition of information.
3. Provide access to the Internet and a variety of digital media with subsequent digital skills training.
4. Provide special programming to encourage children's literacy.
5. Provide adult and teen programs that encourage lifelong learning.

A successful public library today plays multiple roles in the life of the community it serves. First, it provides access to the world of learning, knowledge and human creativity. Access to books and the printed word for all age groups continues to be the primary service expectation of many residents and remains a basic library function. As a corollary, library service to children introduces families to the joy of reading and establishes a foundation for a lifetime of reading. This role has expanded in recent years to include access to creative and informative works in many formats, including digital media and electronic content. Libraries have also become a primary public gateway to online information, offering free access to the Internet, wireless

access and providing guidance in navigating and assessing the wealth of material available through these resources.

Even as the library’s role as a resource for virtual information and literature continues to grow, its traditional role as a community destination and gathering place is also evolving and expanding. The public library now serves as the community’s principal place for solitary reading and study as well as a venue for collaboration and group interaction. Book discussion groups, teen tech nights and family literacy evenings are a few examples of the multitude of educational and social community events that draw significant participation. The library facility can and should offer residents a safe, and comfortable place to be. This can be a sanctuary for solitary reflection, a quiet workspace in which to complete a school assignment or a social space for connecting with peers.

To perform these roles, the library needs appropriate space – for collections, for people, for programming and for functional operations. Unfortunately, serious deficiencies in three of the four Josephine County library facilities compromise the quality and level of service that can be provided. The next section of this report details recommended changes for each location to address this gap. For the two libraries where full replacement is anticipated (Grants Pass and Williams) a detailed program has been developed. For the two libraries with varying degrees of updating/renovation (Illinois Valley and Wolf Creek), a more general set of recommendations is provided.

Grants Pass Library: Recommendations

General Space Recommendations

As described above, the Grants Pass library needs to be comprehensively expanded and improved. Given that the library district does not own this facility as well as the building’s lack of features that would be worth preserving (such as might be found in a historically significant building), there is broad consensus that the solution is to build a new library.

The recommended estimated size of the new library—36,909 square feet—is the sum of the square footage required to fulfill all the programmatic functions expressed by library staff and stakeholders. It is consistent with a very rough estimate derived from multiplying the size of the population to be served 20 years from now (2038) by an estimate of needed square footage per capita.

	2018	2038
Population of Grants Pass	37,779*	47,389**
Best practice: .6 - .8 + sf/capita***	15,470 (.4 sf/capita)	28,433 – 37,911 (.6 - .8 sf/capita)
Recommended estimated size of new Grants Pass library		36,909 square feet

*US Census estimate as of 2016. Does not include unincorporated areas served by the Grants Pass library.

**Assumes current county growth rate (1.2%) estimated by PSU’s Population Research Center will continue for 20 years.

***Best practice recommendations based on work of library facilities planner Kathryn Page.

It is important to note that despite the high level of detail in the Grants Pass library program, the recommended square footage is still an estimate that may significantly change when land is identified, the cost of construction is determined, and the components of the program are translated into an actual layout by the library's selected architect.

Collections

The community needs access to a well-balanced collection in both print and digital media formats. Adequate shelving capacity is needed to support a truly balanced physical collection, so that materials can be shelved and displayed for convenient browsing. Shelving capacity needs to allow shelves to be kept 20% to 25% clear, so that there is readily available shelving space for incoming materials. The various collections of the library need to be shelved in appropriate locations within the overall space, clearly identified and easily found, and at heights appropriate to their target audiences. If they are utilized, the bottom shelves on most shelving units should be angled to allow browsers to easily view book spines.

Currently, while public interest in downloadable books and media continues to be strong, there is increasing evidence that use of digital media is complementing, not replacing, the use of physical resources. Therefore, most public libraries currently plan their future collections assuming future use of both types of resources. Since the Josephine Community Library District expects that its print/physical collection will not grow significantly in the future, this plan assumes a 10% increase in the new facility. To maintain desirable sightlines and aesthetics, this plan recommends a maximum shelf height of 66" for interior of the library and 45" shelving for picture books and other materials for young children.

Computers and Technology

The library's Internet access and early literacy computers are in constant use. While patrons increasingly are bringing in their own devices (laptops, tablets and smartphones) for library use, for many others, library computers are their only way to access the Internet for research, job seeking, and connecting with friends and family.

More are needed to meet public demand and to enable the library to offer this service more effectively. This plan recommends 40 public access computers, including sit-down workstations with Internet access or laptops, online catalogs, and early literacy stations. To accommodate personal devices, the new library should include access to power at every seating area.

Seating and Meeting Room Space

In a library facility, it is as important to provide space for people to use the building, as it is to provide space to house and display the collection. The Grants Pass Library needs to provide seating in a variety of formats: at study tables and lounge chairs, parent/child seats, casual seating for teens, and acoustically shielded study seating. Teens particularly need a designated area with age appropriate furniture. The design of the space should not only send a message

that they are welcome at the library but should also create a buffer, both physical and psychological, between this gregarious age group and other library visitors.

The children's area should offer distinct seating areas for individual school aged children who need to do homework or quietly read. The preschool/family area needs chair seating for toddlers and their parents or caregivers as well as floor space for story times. Adults need both table seating and lounge chairs for quiet reading of books and periodicals as well as concentrated work at a laptop. All seats should be adjacent to electrical power, with outlets located safely out of circulation paths.

Overall, an increase of desk and lounge seating is recommended to allow the library to offer appropriate work/study, collaboration and reading space for the community. 190 seats are recommended (an increase of 85 seats). This seating is divided between lounge chairs and 1, 2 and 4 person tables.

One 15-seat meeting room and one 8-seat meeting room will offer the capacity to host smaller events. Group study capacity is also significantly expanded. The plan includes one 4-seat study rooms as well as three 2-seat study/tutoring rooms.

Programming and Event Space

Programs and events are a basic library service that complements the collection, attracts new users and provides the community with needed information on many topics. Dedicated space within the library is needed to provide an appropriate, accessible venue for these events, with seating to accommodate different groups of people. The primary programming space needs to be flexible and multipurpose, with a flat floor, stacking chairs, media projection equipment, adjustable lighting, access to a kitchen, and table and chair storage.

Given that the library's existing programming space is inadequate to meet current demand, this study recommends a significant expansion of programming capacity. A dividable 200-seat meeting room, with an adjacent new kitchen, will offer the ability to host two 100-person events.

The program also includes programming spaces designated for services to children and youth, including a 30 seat storytime/class visit area and a flexible Teen Collaborative Space that offers 16 seats at 4 tables.

Service Delivery

Desks and work stations appropriate to the 21st century, sited in appropriate proximity to each other and to the daily work of assisting library users, will enhance volunteer and staff capacity to provide excellent customer service.

As it does in the current facility, the library district plans to continue to utilize community volunteers to fulfill many of its core customer service functions, including circulation and information desk support. The district also does not anticipate staffing increases in the future. Given these factors, there is a great need to make all circulation, reference and back of the library functions as efficient as possible. To achieve this, all existing service desks are retained and improved and several new ones (including teen services and technology desks) are added.

The plan also includes expanded public bathrooms (including a family bathroom in the children’s area), two staff restrooms and an expanded staff lounge area with seating and a kitchenette.

Friends of the Library

The Grants Pass Library program includes improved space for all activities conducted by the Friends of the Library, including a dedicated retail space (with a desk for volunteer staffing), and work space for processing donations and storage.

Bookmobile

Although the library district currently does not operate a bookmobile, there is recognition that this would potentially be a welcome addition to its service model due to the many remote areas within Josephine County that are far from a branch yet within the district boundaries. For this reason, space for bookmobile operations and garage has been included in the Grants Pass library program.

Summary of recommendations for new Grants Pass library

	2018	Current best practice	Initial recommendations
Size of physical collection	100,825		111,000 (10% increase)
Public computers	23 computers .6 computers/1000 people	.5 – 1 computers/ 1000 people	40 computers .84 computers/1000 people
Seating	105 (2.8 seats/1000 people)	4 – 6 seats/1000 people	190 (4 seats/1000 people)
Bathrooms	Public: 2 single stall bathrooms Staff/Volunteers: 1 bathroom		Public: Multiple stall bathroom; family bathroom in children’s area Staff/Volunteers: 2 bathrooms
Group study/conference space		24 – 48 seats in 3 – 6 rooms	33 seats: 2-seat rooms (3) 4-seat room (1) 8-seat room (1) 15-seat room (1)

Meeting room space	Ben Bones Room (60 people); main library (80 people)	100 – 200 seats	200 seat room, dividable into two 100-seat rooms
Storytime/Class Visits Area		30 – 60 seats (on floor)	30 seats (on floor)
Teen Collaborative Space			16 seats at four tables

Illinois Valley Library: Recommendations

As noted earlier, Illinois Valley branch is a well-loved community institution with numerous deficiencies. The good news is that these deficiencies can be systematically addressed. Below are initial recommendations to achieve this goal.

Analyze current use of the Illinois Valley collection, with the goal of reducing its overall size to free up space and potentially lower shelving in the adult fiction/nonfiction area.

Although all four libraries feature high shelves full of materials, the situation is most extreme at the Illinois Valley branch, which was described by one library district staff member as “hobbit-like” in reference to the adult fiction/nonfiction area. This area is so full of so many things that, apart from replacing furniture and fixtures, it is difficult to imagine the possibility of more significant improvements. Therefore, carefully evaluating what needs to be in that space should be a priority. Ideally, the shelves in the center of the room would be lowered to 66”, which would improve aesthetics and sightlines—but, of course, reducing the shelving capacity means the collection has to become smaller.

The recently renovated children’s area functions well, with the caveat that it would still be desirable in that area to have fewer materials in the collection and more room to merchandise them (i.e., have shelving with space on the end for face out materials).

Evaluate the library’s mechanical systems (plumbing, lighting, heating and cooling) and roof to identify and prioritize repairs and improvements.

With multiple concerns raised about the physical infrastructure of the building, a thorough evaluation is much needed.

Evaluate the library’s existing safety and security systems and make needed improvements.

With its history of vandalism and unwanted visitors, the facility needs to have the best security possible for the protection of staff, volunteers and library users and the building itself.

Improve the library’s Internet bandwidth and reliability, potentially partnering with other community organizations to reduce costs.

Explore the viability and cost of expanding/renovating the library.

The library's windowless computer/media room, which was added when the library was expanded in the 1970s, has little to recommend it. Since it is adjacent to the library's unused back yard, it would ideally be replaced and expanded to accommodate an improved computer area (with less cramped and more private space for users), better shelving of the media collection, a meeting room (community members expressed interest in one with 25 – 35-person capacity) and if possible, a small study room or two.

The possibility of expanding the library should be explored by the architects selected to implement Phase 2 of the facilities planning process.

Update furniture and fixtures as is appropriate to the building's mid-century look and feel and explore the viability of minor renovations.

Apart from the recommendations listed above, the library's furniture and some of its fixtures could use a refresh. Staff and volunteers would benefit from a more efficient service desk and a staff/volunteer area that is not a mishmash of available desks, tables, etc. but that includes workspaces designed for it.

Williams Library Recommendations

As noted in the evaluation above, the Williams facility has few assets save the community's fondness for the services it offers, and needs to be replaced with a newer and larger building. Given the scarcity of land in the Williams area that is appropriately zoned for a library, and its current desirable location in the heart of Williams, the library district considers its best option to be to rebuild the library at the current location. As the owner of the land beneath the library, the Three Rivers School District is supportive of this option.

The program originally developed for a new Williams Library during the Phase 1 process was 2,791 square feet, which was smaller than desirable due to the limited capacity thought to be possible at that time. Since then, the available square footage has increased, resulting in a larger 5,569 square foot plan for a new Williams Library, which will provide ample seating, meeting room space, and sit down computers.

Collections

The current Williams library features high (88") shelving that is filled to the brim with books, DVDs, books on CD and other materials. To maintain desirable sightlines and aesthetics, this plan recommends a maximum shelf height of 66" for interior of the library and 45" shelving for picture books and other materials for young children. Shelving is calculated on the assumption that shelves are 20% to 25% clear, so that there is readily available shelving space for incoming materials and room to merchandise the collection. (To maximize space, unlike the Grants Pass program, the Williams program assumes books will be shelved on the lowest shelf.) This plan

assumes a 10% increase in the overall size of the Williams collection. As noted above, the limited increase in collection capacity creates an imperative for the library district to be mindful about the materials that are housed in the Williams facility to ensure that all items are earning their shelf space through community use.

Computers and Technology

The library's Internet access and early literacy computers are in constant use. While patrons increasingly are bringing in their own devices (laptops, tablets and smartphones) for library use, for many others, library computers are their only way to access the Internet for research, job seeking, and connecting with friends and family. This program includes 4 online catalogs, 11 public computers (including an early learning station) with additional laptops for library in-house use. To accommodate personal devices, the new library should include access to power at every seating area.

Seating and Programming Areas

The program for the new Williams library includes 61 seats, a significant increase over the 10 seats currently offered. This seating is divided between lounge chairs and 1, 2 and 4 person tables. The program also includes a 30 seat meeting room and a 4 person private study room.

The program includes an enclosed Family Space for young children and their caregivers, as well as a discrete area for teen collections and seating. Materials and computers for school aged children are part of the "open library" main room that also holds the adult collection and general computer area.

Other Areas

The program includes a streamlined public services desk, a work station for the branch manager plus two additional work stations for staff or volunteers and a small work area (including a kitchenette) for volunteers and staff. The Friends of the Library will continue to have the ability to sell used books via a book cart.

Bathrooms for staff, volunteer and patron use are included in the building's gross square footage.

Wolf Creek Library: Recommendations

As noted earlier, the Wolf Creek library is paradoxically in the best condition of any library in the system, but is also the least used. While it is the lowest priority of all four branches in terms of facility needs, there are several ways to improve its use and physical appearance.

Analyze current use of the Wolf Creek collection, with the goal of potentially reducing its overall size and focusing the collection on high-interest materials.

While this report does not recommend replacing the main (high) shelving in the Wolf Creek library, taking a systematic look at what's in the collection will support several objectives, including increasing circulation at this branch, reducing visual clutter and increasing the ability to merchandise materials.

Evaluate the library's mechanical systems (plumbing, lighting, heating and cooling) and roof to determine if there are maintenance issues that need to be addressed.

Although no structural issues were brought up in relationship to the Wolf Creek branch, review of the building should be part of Phase 2 of the facilities planning project.

Evaluate the library's existing safety and security systems and make needed improvements.

With its history of vandalism and unwanted visitors, the facility needs to have the best security possible for the protection of staff, volunteers and library users and the building itself.

Improve the library's Internet bandwidth and reliability, potentially partnering with other community organizations to reduce costs.

Update furniture and fixtures as is appropriate or a priority for the library system.

In general, the furniture and finishings of the Wolf Creek library are still working well, although slightly dated due their 15+ year age. Should the library choose to improve the space, updating these features would be an option.



Mendenhall Valley Library, AK
Hacker Architects

Grants Pass Library (Initial Program)

Total Net Assignable Square Feet:	25,836
Total Gross Square Feet @ 70% Efficiency:	36,909

Code	General Area	Specific Area	SF	In GSF
1.02	Public Areas	Entry Lobby	282	IN GSF
1.04	Public Areas	Circulation Desk	236	
1.06	Public Areas	Check In Desk	164	
1.08	Public Areas	Copy Center	100	
1.10	Public Areas	Friends of the Library Store	375	
1.12	Public Areas	Public Restrooms	-	IN GSF
1.14	Public Areas	Self Checkout and Reserves	110	
1.16	Public Areas	Welcome Desk	100	
Public Areas Total			1,367	
2.02	Adult Services	Adult Fiction	2,511	
2.04	Adult Services	Adult Nonfiction	3,334	
2.08	Adult Services	Graphic Novels	30	
2.10	Adult Services	Large Print Books	330	
2.12	Adult Services	Library of Things	30	
2.14	Adult Services	Local History Collection	200	
2.16	Adult Services	Magazines & Newspapers	511	
2.18	Adult Services	Media	608	
2.20	Adult Services	New Materials	100	
2.22	Adult Services	Public Access Computers	974	
2.24	Adult Services	Quiet Reading	200	
2.26	Adult Services	Reference Collection	850	
2.28	Adult Services	Reference Desk	120	
2.30	Adult Services	Spanish Language Collection	30	
2.32	Adult Services	Technology Desk	100	
Adult Services Total			9,928	
3.02	Youth Services	Children's Area	2,641	
3.06	Youth Services	Family Restrooms	-	IN GSF
3.08	Youth Services	Family Space	1,065	
3.12	Youth Services	Storytime and Class Visits Area	300	
3.16	Youth Services	Teenspace	1,435	
Youth Services Total			5,442	
4.02	Meeting Areas	10-Seat Meeting Room	100	
4.04	Meeting Areas	15-seat Meeting Room	375	
4.06	Meeting Areas	8-Seat Meeting Room	200	
4.12	Meeting Areas	Dividable Meeting Room	2,650	
4.14	Meeting Areas	Group Study/Tutoring Rooms	150	
4.16	Meeting Areas	Kitchen	70	
4.18	Meeting Areas	Meeting Room Storage	186	
Meeting Areas Total			3,731	
5.02	Staff Areas	Administration	256	
5.04	Staff Areas	Adult Services Manager	64	
5.06	Staff Areas	Circulation	453	

Grants Pass Library (Initial Program)

Code	General Area	Specific Area	SF	In GSF
5.08	Staff Areas	Collection Development	300	
5.10	Staff Areas	Copy and Processing Area	70	
5.12	Staff Areas	Custodial Workspace and Supplies	361	
5.14	Staff Areas	Delivery Area	96	
5.16	Staff Areas	Finance Director's Office	100	
5.18	Staff Areas	Friends Workspace	275	
5.20	Staff Areas	Library Director's Office	200	
5.24	Staff Areas	Server Room (Placeholder)	87	
5.26	Staff Areas	Staff/Volunteer Lounge	598	IN GSF
5.28	Staff Areas	Storage	80	
5.32	Staff Areas	Technical Services	1,048	
5.34	Staff Areas	Youth Services	417	
Staff Areas Total			4,405	
6.02	Outreach	Bookmobile (placeholder)	964	
Outreach Total			964	

Grand Total

25,836

Detail Report

Grants Pass Library (Initial Program)

Total Net Assignable Square Feet: 25,836
Total Gross Square Feet @ 70% Efficiency: 36,909

Code	General Area	Specific Area	Description	Qty	Unit	SF/Unit	SF
1.02	Public Areas	Entry Lobby	unassigned square footage	1	space	100	100
1.02	Public Areas	Entry Lobby	floor mats, with minimum 16' walk-off	GSF			IN GSF
1.02	Public Areas	Entry Lobby	community information display unit, wall-	2	units	36	72
1.02	Public Areas	Entry Lobby	flat screen monitor, wall mounted	1	monitor		0
1.02	Public Areas	Entry Lobby	benches, 5' x 2', 2 person	2	bench	13	26
1.02	Public Areas	Entry Lobby	security gates	1	units	24	24
1.02	Public Areas	Entry Lobby	display cases, glass-enclosed, wall	2	case	30	60
1.02	Public Areas	Entry Lobby	donor recognition display, wall-mounted	1	display unit	0	0
Entry Lobby Total							282
1.04	Public Areas	Circulation Desk	queueing space	4	people	6	24
1.04	Public Areas	Circulation Desk	Volunteer counter positions with	3	position	50	150
1.04	Public Areas	Circulation Desk	cash register, behind counter	1	machine	12	12
1.04	Public Areas	Circulation Desk	book trucks	3	trucks	8	24
1.04	Public Areas	Circulation Desk	shelving, wall mounted, behind desk	2	sections	10	20
1.04	Public Areas	Circulation Desk	display of library handouts, built into desk	1	units	6	6
1.04	Public Areas	Circulation Desk	flat screen monitor, wall mounted	1	monitor	0	0
Circulation Desk Total							236
1.06	Public Areas	Check In Desk	Volunteer sit down counter positions with	2	wkstns	50	100
1.06	Public Areas	Check In Desk	book trucks	8	trucks	8	64
Check In Desk Total							164
1.08	Public Areas	Copy Center	copy machines, standard	2	machine	40	80
1.08	Public Areas	Copy Center	debit card dispenser, change machine	1	each	4	4
1.08	Public Areas	Copy Center	storage cabinet with work counter and	1	cabinet	16	16
Copy Center Total							100
1.10	Public Areas	Friends of the Library Store	display shelving, 72" for books and media	30	sections	10	300
1.10	Public Areas	Friends of the Library Store	display tables, freestanding, 2.5 x 2.5	1	table	25	25
1.10	Public Areas	Friends of the Library Store	Desk and cash register	1	wkstns	50	50
Friends of the Library Store Total							375
1.12	Public Areas	Public Restrooms		GSF			IN GSF
Public Restrooms Total							0

Detail Report

Grants Pass Library (Initial Program)

Code	General Area	Specific Area	Description	Qty	Unit	SF/Unit	SF
1.14	Public Areas	Self Checkout and Reserves	express self-checkout stations	2	machine	40	80
1.14	Public Areas	Self Checkout and Reserves	shelving 66" for reserves	3	sections	10	30
Self Checkout and Reserves Total							110
1.16	Public Areas	Welcome Desk	Volunteer workstation	1	position	50	50
1.16	Public Areas	Welcome Desk	patron seating	2	position	25	50
Welcome Desk Total							100
2.02	Adult Services	Adult Fiction	shelving, 66" for adult fiction				2,080
2.02	Adult Services	Adult Fiction	seating, lounge chairs	4	seats	35	140
2.02	Adult Services	Adult Fiction	tables, occasional @lounge chairs	4	table		0
2.02	Adult Services	Adult Fiction	2-place tables, rectangular	8	seats	25	200
2.02	Adult Services	Adult Fiction	online catalog workstation@stack end	1	wkstns	16	16
2.02	Adult Services	Adult Fiction	shelving, 66" mass market paperbacks	3	units	5	65
2.02	Adult Services	Adult Fiction	display unit, 3' x 3'	1	units	10	10
Adult Fiction Total							2,511
2.04	Adult Services	Adult Nonfiction	shelving, 66" for oversized nonfiction				130
2.04	Adult Services	Adult Nonfiction	shelving, 66" for adult nonfiction				2,300
2.04	Adult Services	Adult Nonfiction	shelving, 66" for adult biography				200
2.04	Adult Services	Adult Nonfiction	seating, lounge chairs	4	seats	35	140
2.04	Adult Services	Adult Nonfiction	tables, occasional @lounge chairs	4	table		0
2.04	Adult Services	Adult Nonfiction	2-place tables, rectangular	12	seats	25	300
2.04	Adult Services	Adult Nonfiction	4-place table, rectangular	8	seats	25	200
2.04	Adult Services	Adult Nonfiction	online catalog workstation@stack end	1	wkstns	16	16
2.04	Adult Services	Adult Nonfiction	Map/Atlas stand	1	case	38	38
2.04	Adult Services	Adult Nonfiction	display unit, 3' x 3'	1	units	10	10
Adult Nonfiction Total							3,334
2.08	Adult Services	Graphic Novels	shelving, 66" adult graphic novels				30
Graphic Novels Total							30
2.10	Adult Services	Large Print Books	shelving, 66" for large print books				290
2.10	Adult Services	Large Print Books	benches, 6' x 2', 2 person	2	bench	20	40
Large Print Books Total							330
2.12	Adult Services	Library of Things	shelving 66"	3	sections	10	30

Detail Report

Grants Pass Library (Initial Program)

Code	General Area	Specific Area	Description	Qty	Unit	SF/Unit	SF
Library of Things Total							30
2.14	Adult Services	Local History Collection	shelving, 66", Oregon collection			1	200
Local History Collection Total							200
2.16	Adult Services	Magazines & Newspapers	Adult magazines 66"/5sh slanted w				21
2.16	Adult Services	Magazines & Newspapers	seating, lounge chairs	8	chairs	35	280
2.16	Adult Services	Magazines & Newspapers	tables, occasional @lounge chairs	8	table	0	0
2.16	Adult Services	Magazines & Newspapers	1 place tables	8	seats	25	200
2.16	Adult Services	Magazines & Newspapers	Newspapers Adult Display/Recent Issues	1		10	10
Magazines & Newspapers Total							511
2.18	Adult Services	Media	shelving, 66" for AV media kits (Book +				100
2.18	Adult Services	Media	shelving, 66" for DVDs				120
2.18	Adult Services	Media	shelving for music CDs (utilizing 5 existing				80
2.18	Adult Services	Media	shelving, 66" for audiobooks				260
2.18	Adult Services	Media	benches, 6' x 2', 2 person	2	bench	20	40
2.18	Adult Services	Media	shelving for MP3 book collection	1	units	8	8
Media Total							608
2.20	Adult Services	New Materials	shelving, 66" for new books				30
2.20	Adult Services	New Materials	seating, lounge chairs	2	seats	35	70
2.20	Adult Services	New Materials	tables, occasional @lounge chairs	2	table	0	0
New Materials Total							100
2.22	Adult Services	Public Access Computers	computer workstations	20	wkstns	40	800
2.22	Adult Services	Public Access Computers	adaptive technology computer	1	wkstns	40	40
2.22	Adult Services	Public Access Computers	online catalog workstations	2	wkstns	40	80
2.22	Adult Services	Public Access Computers	networked printer/print release station	1	printer	24	24
2.22	Adult Services	Public Access Computers	scanner	1	scanner	30	30
Public Access Computers Total							974
2.24	Adult Services	Quiet Reading	1-place tables	8	seats	25	200
Quiet Reading Total							200
2.26	Adult Services	Reference Collection	shelving, 66" for reference collection				80
2.26	Adult Services	Reference Collection	2-place tables, rectangular	16	seats	25	400
2.26	Adult Services	Reference Collection	1 place tables	8	seats	25	200

Detail Report

Grants Pass Library (Initial Program)

Code	General Area	Specific Area	Description	Qty	Unit	SF/Unit	SF
2.26	Adult Services	Reference Collection	seating, lounge chairs	2	seats	35	70
2.26	Adult Services	Reference Collection	4-place table, rectangular	4	seats	25	100
Reference Collection Total							850
2.28	Adult Services	Reference Desk	2 person service desk, with computers (one standing, one sit down)	2	wkstns	50	100
2.28	Adult Services	Reference Desk	shelving, wall mounted, behind desk	2	sections	10	20
Reference Desk Total							120
2.30	Adult Services	Spanish Language Collection	shelving, 66" Spanish books and A/V				30
Spanish Language Collection Total							30
2.32	Adult Services	Technology Desk	Volunteer service desk (2 people)	2	wkstns	50	100
Technology Desk Total							100
3.02	Youth Services	Children's Area	shelving, 66" easy readers				80
3.02	Youth Services	Children's Area	shelving, 66" for juvenile fiction				430
3.02	Youth Services	Children's Area	shelving, 66" for juvenile nonfiction				470
3.02	Youth Services	Children's Area	shelving, 66" for juvenile graphic novels				10
3.02	Youth Services	Children's Area	shelving, 66" for juvenile Spanish				20
3.02	Youth Services	Children's Area	shelving, 66" for juvenile DVDs				10
3.02	Youth Services	Children's Area	shelving, 66" for juvenile books on CDs				10
3.02	Youth Services	Children's Area	shelving, 66" for juvenile music CDs				10
3.02	Youth Services	Children's Area	shelving, 66" for juvenile reference				10
3.02	Youth Services	Children's Area	display shelving for juvenile new books				15
3.02	Youth Services	Children's Area	4-place tables, rectangular	8	seats	25	200
3.02	Youth Services	Children's Area	2-place tables, rectangular	16	seats	25	400
3.02	Youth Services	Children's Area	1 place tables	6	seats	25	150
3.02	Youth Services	Children's Area	seating, lounge chairs	8	seats	35	280
3.02	Youth Services	Children's Area	tables, occasional @lounge chairs	8	table	0	0

Detail Report

Grants Pass Library (Initial Program)

Code	General Area	Specific Area	Description	Qty	Unit	SF/Unit	SF
3.02	Youth Services	Children's Area	computer workstations, sitdown	6	wkstns	40	240
3.02	Youth Services	Children's Area	online catalog workstation@stack end	2	wkstns	16	32
3.02	Youth Services	Children's Area	networked printer/print release station	1	printer	24	24
3.02	Youth Services	Children's Area	express self-checkout station	2	machine	40	80
3.02	Youth Services	Children's Area	flat screen monitor, wall mounted	1	monitor	0	0
3.02	Youth Services	Children's Area	display boards, tackable, wall mounted	2	board	0	0
3.02	Youth Services	Children's Area	Juvenile magazines 66"/5sh slanted w				10
3.02	Youth Services	Children's Area	display boards, tackable, wall mounted	2	board	0	0
3.02	Youth Services	Children's Area	Service desk (2 people)	2	wkstns	50	100
3.02	Youth Services	Children's Area	display cases, glass-enclosed, wall	1	case	30	30
3.02	Youth Services	Children's Area	display unit, 3' x 3'	2	units	10	20
3.02	Youth Services	Children's Area	shelving, 66" for library of things	1	sections	10	10
Children's Area Total							2,641
3.06	Youth Services	Family Restrooms	family restrooms		GSF		IN GSF
Family Restrooms Total							0
3.08	Youth Services	Family Space	shelving, 66" for parent resource				10
3.08	Youth Services	Family Space	seating, lounge chairs	6	seats	35	210
3.08	Youth Services	Family Space	4-place toddler table, round	8	seats	20	160
3.08	Youth Services	Family Space	computer workstations, early literacy	2	computers	40	80
3.08	Youth Services	Family Space	space for interactive manipulatives	1	space	20	20
3.08	Youth Services	Family Space	cabinet for puzzle and toy storage	1	cabinet	15	15
3.08	Youth Services	Family Space	shelving, 45" for board books				50
3.08	Youth Services	Family Space	shelving, 45" for picture books				440
3.08	Youth Services	Family Space	stroller parking	10	strollers	6	60
3.08	Youth Services	Family Space	shelving 66" for Early Literacy book bags	2	sections	10	20
Family Space Total							1,065

Detail Report

Grants Pass Library (Initial Program)

Code	General Area	Specific Area	Description	Qty	Unit	SF/Unit	SF
3.12	Youth Services	Storytime and Class Visits Area	carpeted floor for children and parents	30	space	10	300
Storytime and Class Visits Area Total							300
3.16	Youth Services	Teenspace	Collaborative programming space (4 place	16	seats	25	400
3.16	Youth Services	Teenspace	white board, wall-mounted, 2' x 3'				0
3.16	Youth Services	Teenspace	shelving, 66" for teen fiction	1	board		130
3.16	Youth Services	Teenspace	shelving, 66" teen mass market				10
3.16	Youth Services	Teenspace	shelving, 66" for teen graphic novels				40
3.16	Youth Services	Teenspace	display shelving for teen new books				15
3.16	Youth Services	Teenspace	shelving, 66", for teen				70
3.16	Youth Services	Teenspace	shelving, 66", for teen DVDs				10
3.16	Youth Services	Teenspace	shelving, 66", for teen books on CD				10
3.16	Youth Services	Teenspace	2-place tables, rectangular	8	seats	25	200
3.16	Youth Services	Teenspace	casual seating	6	seats	25	150
3.16	Youth Services	Teenspace	computer workstations, sitdown	6	wkstns	40	240
3.16	Youth Services	Teenspace	online catalog workstation@stack end	1	wkstns	16	16
3.16	Youth Services	Teenspace	networked printer/print release station	1	printer	24	24
3.16	Youth Services	Teenspace	Teen magazines, 66"/5 sh slanted, with backfiles below				10
3.16	Youth Services	Teenspace	Service desk (1 person)	1	wkstns	50	50
3.16	Youth Services	Teenspace	display unit, 3' x 3'	1	units	10	10
3.16	Youth Services	Teenspace	1-place tables	2	seats	25	50
Teenspace Total							1,435
4.02	Meeting Areas	Group Study/Tutoring Rooms	2 seats and table	2	seats	25	50
4.02	Meeting Areas	Group Study/Tutoring Rooms	2 seats and table	2	seats	25	50

Detail Report

Grants Pass Library (Initial Program)

Code	General Area	Specific Area	Description	Qty	Unit	SF/Unit	SF
Group Study/Tutoring Rooms Total							100
4.04	Meeting Areas	15-seat Meeting Room	table, conference	1	table	0	0
4.04	Meeting Areas	15-seat Meeting Room	15 seats @ conference table	15	seats	25	375
4.04	Meeting Areas	15-seat Meeting Room	white board, wall-mounted, interactive	1	board	0	0
15-seat Meeting Room Total							375
4.06	Meeting Areas	8-Seat Meeting Room	8-seat meeting room	8	seats	25	200
8-Seat Meeting Room Total							200
4.12	Meeting Areas	Dividable Meeting Room	white board, wall-mounted, interactive	1	board	0	0
4.12	Meeting Areas	Dividable Meeting Room	video/digital projector, ceiling mounted	1	projector	0	0
4.12	Meeting Areas	Dividable Meeting Room	200 person meeting room, dividable in	200	chairs	13	2,600
4.12	Meeting Areas	Dividable Meeting Room	tables, folding, lightweight, 5' x 2'	20	table	0	0
4.12	Meeting Areas	Dividable Meeting Room	podium, moveable	1	podium	0	0
4.12	Meeting Areas	Dividable Meeting Room	projection screen, ceiling mounted	1	screen	0	0
4.12	Meeting Areas	Dividable Meeting Room	supply closet	1	closet	50	50
Dividable Meeting Room Total							2,650
4.14	Meeting Areas	Group Study/Tutoring Rooms	4 seats and table	4	seats	25	100
4.14	Meeting Areas	Group Study/Tutoring Rooms	2 seats and table	2	seats	25	50
Group Study/Tutoring Rooms Total							150
4.16	Meeting Areas	Kitchen	work counter, 8' x 2.5', w double sink,	1	counter	50	50
4.16	Meeting Areas	Kitchen	refridgerator, full size	1	units	20	20
4.16	Meeting Areas	Kitchen	microwave oven, on counter	1	oven	0	0
4.16	Meeting Areas	Kitchen	oven with range-top, under counter	1	oven	0	0
4.16	Meeting Areas	Kitchen	storage cabinets for supplies	1	cabinet		0
Kitchen Total							70
4.18	Meeting Areas	Meeting Room Storage	dollies, mobile, for stacking chairs	12	dollies	8	96
4.18	Meeting Areas	Meeting Room Storage	table trucks for folding tables	4	dollies	10	40
4.18	Meeting Areas	Meeting Room Storage	equipment racks for meeting room AV	1	rack	10	10
4.18	Meeting Areas	Meeting Room Storage	clear space for temporary storage of exhibits, supplies, programming materials	1	space	40	40
Meeting Room Storage Total							186

Detail Report

Grants Pass Library (Initial Program)

Code	General Area	Specific Area	Description	Qty	Unit	SF/Unit	SF
5.02	Staff Areas	Administration	workstations, modular, 8' x 8' (Partnership	4	wkstns	64	256
Administration Total							256
5.04	Staff Areas	Adult Services Manager	workstation, modular, 8' x 8'	1	wkstns	64	64
Adult Services Manager Total							64
5.06	Staff Areas	Circulation	workstations, modular, 8' x 8' (Circulation	1	wkstns	64	64
5.06	Staff Areas	Circulation	mail and delivery sorting counter, 6' x 3'	1	counter	30	30
5.06	Staff Areas	Circulation	trash/recycling containers	1	container	6	6
5.06	Staff Areas	Circulation	shelving, 84" for circ problems and	4	sections	10	40
5.06	Staff Areas	Circulation	lateral file, 3-drawer unit	1	cabinet	15	15
5.06	Staff Areas	Circulation	bulletin board, wall mounted, 6' x 4'	1	board	0	0
5.06	Staff Areas	Circulation	whiteboard, wall mounted, 2' x 3'	1	board	0	0
5.06	Staff Areas	Circulation	clear floor space for temporary storage	1	space	50	50
5.06	Staff Areas	Circulation	supply closet for supplies storage	1	closet	50	50
5.06	Staff Areas	Circulation	Exterior materials return slot/bin	2	return unit	10	20
5.06	Staff Areas	Circulation	Interior materials return slot/bin	2	return unit	10	20
5.06	Staff Areas	Circulation	ILL counter 6' x 3'	1	counter	30	30
5.06	Staff Areas	Circulation	workstations, modular, 8' x 8' (Volunteer Manager, Branch Manager/Public Services	2	wkstns	64	128
Circulation Total							453
5.08	Staff Areas	Collection Development	workstations, modular, 10' x 10'	3	wkstns	100	300
Collection Development Total							300
5.10	Staff Areas	Copy and Processing Area	copy machine, standard	1	machine	40	40
5.10	Staff Areas	Copy and Processing Area	6' x 3' counter with cabinets	1	counter	30	30
Copy and Processing Area Total							70
5.12	Staff Areas	Custodial Workspace and Supplies	desk with computer workstation for	1	wkstns	50	50
5.12	Staff Areas	Custodial Workspace and Supplies	shelving, industrial, 84" for supplies,	8	sections	12	96
5.12	Staff Areas	Custodial Workspace and Supplies	Secure cabinet, 2 door, for secure supplies	2	cabinet	20	40
5.12	Staff Areas	Custodial Workspace and Supplies	clear space for boxed, bulk storage	1	space	100	100
5.12	Staff Areas	Custodial Workspace and Supplies	mop sink, floor mounted w mop storage, wall-mounted	1	space	25	25

Detail Report

Grants Pass Library (Initial Program)

Code	General Area	Specific Area	Description	Qty	Unit	SF/Unit	SF
5.12	Staff Areas	Custodial Workspace and Supplies	space for ladders	1	space	50	50
Custodial Workspace and Supplies Total							361
5.14	Staff Areas	Delivery Area	shelving, industrial, to sort and process	2	sections	15	30
5.14	Staff Areas	Delivery Area	clear floor space for receiving and	1	space	50	50
5.14	Staff Areas	Delivery Area	trash container, large	1	container	6	6
5.14	Staff Areas	Delivery Area	shelving, 84" for temporary storage	1	sections	10	10
Delivery Area Total							96
5.16	Staff Areas	Finance Director's Office	desk, computer workstation, printer + task chair	1	desk	50	50
5.16	Staff Areas	Finance Director's Office	chairs, guest	1	chairs	15	15
5.16	Staff Areas	Finance Director's Office	shelving, 84" wall mounted	2	sections	10	20
5.16	Staff Areas	Finance Director's Office	lateral file, 3-drawer unit	1	cabinet	15	15
Finance Director's Office Total							100
5.18	Staff Areas	Friends Workspace	Desk/workspace with computer	1	desk	40	40
5.18	Staff Areas	Friends Workspace	work tables, 8' x 3', for processing/sorting	2	table	40	80
5.18	Staff Areas	Friends Workspace	book truck parking	10	trucks	6	60
5.18	Staff Areas	Friends Workspace	clear floor space for incoming donations, temporary storage	1	space	75	75
5.18	Staff Areas	Friends Workspace	shelving, 84" for sorting and storage	2	sections	10	20
Friends Workspace Total							275
5.20	Staff Areas	Library Director's Office	desk, computer workstation, printer +	1	desk	50	50
5.20	Staff Areas	Library Director's Office	guest chair	1	chairs	15	15
5.20	Staff Areas	Library Director's Office	table, round 48"	1	table	0	0
5.20	Staff Areas	Library Director's Office	chairs surrounding table	4	chairs	25	100
5.20	Staff Areas	Library Director's Office	shelving, 84" wall mounted	2	sections	10	20
5.20	Staff Areas	Library Director's Office	lateral file, 3-drawer unit	1	cabinet	15	15
Library Director's Office Total							200
5.24	Staff Areas	Server Room (Placeholder)	equipment racks	1	rack	25	25
5.24	Staff Areas	Server Room (Placeholder)	printer on stand	1	printer	12	12

Detail Report

Grants Pass Library (Initial Program)

Code	General Area	Specific Area	Description	Qty	Unit	SF/Unit	SF
5.24	Staff Areas	Server Room (Placeholder)	supply cabinet, 2 door	1	cabinet	20	20
5.24	Staff Areas	Server Room (Placeholder)	telecom equipment and patch panels, wall	1	space	30	30
Server Room (Placeholder) Total							87
5.26	Staff Areas	Staff/Volunteer Lounge	lockers, half height, 6 per stack	8	units	5	40
5.26	Staff Areas	Staff/Volunteer Lounge	coat closet, 6' x 3'	1	closet	30	30
5.26	Staff Areas	Staff/Volunteer Lounge	lounge seats	4	seats	35	140
5.26	Staff Areas	Staff/Volunteer Lounge	seating, 4-place tables	12	seats	25	300
5.26	Staff Areas	Staff/Volunteer Lounge	work counter, 8' x 24" w double sink,	1	counter	40	40
5.26	Staff Areas	Staff/Volunteer Lounge	refrigerator, full size	1	units	20	20
5.26	Staff Areas	Staff/Volunteer Lounge	microwave oven, on counter	1	oven	0	0
5.26	Staff Areas	Staff/Volunteer Lounge	toaster oven, on counter	1	oven	0	0
5.26	Staff Areas	Staff/Volunteer Lounge	dishwasher, full size, in cabinet	1	dishwasher	0	0
5.26	Staff Areas	Staff/Volunteer Lounge	trash/recycling containers	2	units	6	12
5.26	Staff Areas	Staff/Volunteer Lounge	bulletin board, wall mounted, 6' x 4'	1	board	0	0
5.26	Staff Areas	Staff/Volunteer Lounge	vending machine, full size	1	machine	16	16
5.26	Staff Areas	Staff/Volunteer Lounge	Staff/Volunteer restrooms (2)	GSF			IN GSF
Staff/Volunteer Lounge Total							598
5.28	Staff Areas	Storage	shelving, 84" for storage and supplies	8	sections	10	80
Storage Total							80
5.32	Staff Areas	Technical Services	workstations, modular, 10' x 10'	5	wkstns	100	500
5.32	Staff Areas	Technical Services	work tables, 6' x 3'	2	table	40	80
5.32	Staff Areas	Technical Services	mending/processing work counter 8' x	1	counter	40	40
5.32	Staff Areas	Technical Services	cabinet for mending/processing supplies	1	cabinet	20	20
5.32	Staff Areas	Technical Services	shelving, 84" for in-process materials	4	sections	10	40
5.32	Staff Areas	Technical Services	shelving, 84" for discarded and withdrawn	4	sections	10	40
5.32	Staff Areas	Technical Services	book truck parking	20	cart	8	160
5.32	Staff Areas	Technical Services	trash/recycling containers	2	container	6	12
5.32	Staff Areas	Technical Services	copy machine	1	machine	36	36
5.32	Staff Areas	Technical Services	bulletin board, wall mounted, 6' x 4'	1	board	0	0
5.32	Staff Areas	Technical Services	white board, wall-mounted, 2' x 3'	1	board	0	0
5.32	Staff Areas	Technical Services	shelving, 84" for supplies	6	sections	10	60

Detail Report

Grants Pass Library (Initial Program)

Code	General Area	Specific Area	Description	Qty	Unit	SF/Unit	SF
5.32	Staff Areas	Technical Services	counter, 10' x 2' w sinks, cabinets	1	counter	20	20
5.32	Staff Areas	Technical Services	disc repair machine and enclosed	1	space	40	40
Technical Services Total							1,048
5.34	Staff Areas	Youth Services	workstations, modular, 8' x 8' (Children's	1	wkstns	64	64
5.34	Staff Areas	Youth Services	supply closet	1	closet	50	50
5.34	Staff Areas	Youth Services	bulletin board, wall mounted, 6' x 4'	1	board	0	0
5.34	Staff Areas	Youth Services	white board, wall-mounted, 2' x 3'	1	board	0	0
5.34	Staff Areas	Youth Services	work counter, 8' x 2.5', w double sink, commercial grade, dishwasher, cabinets	1	counter	30	30
5.34	Staff Areas	Youth Services	work table, 8' x 3' with flat file storage	1	table	40	40
5.34	Staff Areas	Youth Services	file cabinets	3	cabinet	8	24
5.34	Staff Areas	Youth Services	mobile A/V cart	1	cart	12	12
5.34	Staff Areas	Youth Services	clear space for temporary storage of	1	space	40	40
5.34	Staff Areas	Youth Services	trash container	1	container	6	6
5.34	Staff Areas	Youth Services	printer	1	printer	12	12
5.34	Staff Areas	Youth Services	paper dolly	1	units	25	25
5.34	Staff Areas	Youth Services	workstations, modular, 8' x 8' (Teen	1	wkstns	64	64
5.34	Staff Areas	Youth Services	shelving, 84" for programming materials	4	sections	10	40
5.34	Staff Areas	Youth Services	shelving, 84" for programming collection	1	sections	10	10
Youth Services Total							417
6.02	Outreach	Bookmobile (placeholder)	workstations, modular, 8' x 8' (Bookmobile Coordinator	1	wkstns	64	64
6.02	Outreach	Bookmobile (placeholder)	shelving, 84" for supplies, storage and	10	sections	10	100
6.02	Outreach	Bookmobile (placeholder)	garage (20' x 35')	1	garage	700	700
6.02	Outreach	Bookmobile (placeholder)	processing area	1	space	100	100
Bookmobile (placeholder) Total							964
							0
Grand Total							25,836

Williams Library (Final)

Total Net Assignable Square Feet:

4,455

Total Gross Square Feet @ 80%

5,569

Code	General Area	Specific Area	SF	In GSF
1.06	Public Areas	Entry Lobby	190	
1.10	Public Areas	Service Desk/Reference/Self Checkout	253	
1.12	Public Areas	Public Restrooms	-	IN GSF
1.14	Public Areas	Friends of the Library Sale Area	10	
1.16	Public Areas	Community Information	16	
Public Areas Total			469	
2.10	Adult Services	Adult Circulating Books and Magazines	1,000	
2.14	Adult Services	New Materials and Media	90	
2.16	Adult Services	Public Access Computers	222	
2.20	Adult Services	Reference Collection	10	
Adult Services Total			1,322	
3.02	Youth Services	Family Space	345	
3.04	Youth Services	Children's Area	896	
3.10	Youth Services	Teenspace	275	
Youth Services Total			1,517	
4.02	Meeting Areas	Meeting Room	500	
4.04	Meeting Areas	Study Room	130	
4.08	Meeting Areas	Meeting Room Storage	36	
Meeting Areas Total			666	
5.06	Staff Areas	Staff/Volunteer Lounge	90	
5.12	Staff Areas	Storage	8	
5.14	Staff Areas	Staff & Volunteer Work Area	283	
5.16	Staff Areas	Branch Manager Office	100	
Staff Areas Total			481	
Grand Total			4,455	

Williams Library (Final)

Williams Library (Final)

Total Net Assignable Square Feet: 4,455
 Total Gross Square Feet @ 80% Efficiency: 5,569

Code	General Area	Specific Area	Description	Qty	Unit	SF/Unit	SF
1.06	Public Areas	Entry Lobby	donor recognition display, wall mounted	1	display uni	0	0
1.06	Public Areas	Entry Lobby	unassigned square footage	1	space	190	190
Entry Lobby Total							190
1.10	Public Areas	Service Desk/Reference/Self Checkout	staff/volunteer counter position with computer workstation	2	wkstns	50	100
1.10	Public Areas	Service Desk/Reference/Self Checkout	shelving 66" for reserves	1	sections	10	10
1.10	Public Areas	Service Desk/Reference/Self Checkout	cash register behind desk	1	machine	6	6
1.10	Public Areas	Service Desk/Reference/Self Checkout	book trucks	2	trucks	8	16
1.10	Public Areas	Service Desk/Reference/Self Checkout	shelving 66" for reserves	1	sections	10	10
1.10	Public Areas	Service Desk/Reference/Self Checkout	copy machine, standard	1	machine	25	25
1.10	Public Areas	Service Desk/Reference/Self Checkout	storage cabinet w/work counter + small equipment	1	cabinet	16	16
1.10	Public Areas	Service Desk/Reference/Self Checkout	self checkout machines	2	machine	35	70
Service Desk/Reference/Self Checkout Total							253
1.12	Public Areas	Public Restrooms	Restrooms	GSF			IN GSF
Public Restrooms Total							0
1.14	Public Areas	Friends of the Library Sale Area	used book sale area	1	sections	10	10
Friends of the Library Sale Area Total							10
1.16	Public Areas	Community Information	mounted, with brochure racks, bulletin board and storage below 4' x 4' x 1.25'	1	display uni	16	16
Community Information Total							16
2.10	Adult Services	Adult Circulating Books and Magazines	shelving, 66" for adult fiction, large print				90
2.10	Adult Services	Adult Circulating Books and Magazines	shelving, 66" for oversized nonfiction				10
2.10	Adult Services	Adult Circulating Books and Magazines	shelving, 66" for adult nonfiction				130
2.10	Adult Services	Adult Circulating Books and Magazines	shelving, 66" for adult biography				10
2.10	Adult Services	Adult Circulating Books and Magazines	shelving, 66" adult graphic novels				10
2.10	Adult Services	Adult Circulating Books and Magazines	Adult/teen magazines 66"/5sh slanted w backfiles below				10
2.10	Adult Services	Adult Circulating Books and Magazines	Newspapers Adult Display/Recent Issues	1		10	10
2.10	Adult Services	Adult Circulating Books and Magazines	seating, lounge chairs	8	chairs	35	280
2.10	Adult Services	Adult Circulating Books and Magazines	2 place tables, rectangular	6	seats	25	150

Williams Library (Final)

Williams Library (Final)

Code	General Area	Specific Area	Description	Qty	Unit	SF/Unit	SF
2.10	Adult Services	Adult Circulating Books and Magazines	1 person tables	4	seats	25	100
2.10	Adult Services	Adult Circulating Books and Magazines	4 person table	8	seats	25	200
Adult Circulating Books and Magazines Total							1,000
2.14	Adult Services	New Materials and Media	shelving, 66" for DVDs				30
2.14	Adult Services	New Materials and Media	shelving, 66" for music CDs				10
2.14	Adult Services	New Materials and Media	shelving, 66" for audiobooks				40
2.14	Adult Services	New Materials and Media	shelving, 66" for new books				10
New Materials and Media Total							90
2.16	Adult Services	Public Access Computers	computer workstations, sitdown	6	wkstns	30	180
2.16	Adult Services	Public Access Computers	online catalog @stack end	3	wkstns	6	18
2.16	Adult Services	Public Access Computers	networked printer	1	printer	24	24
Public Access Computers Total							222
2.20	Adult Services	Reference Collection	shelving, 66" for reference collection				10
Reference Collection Total							10
3.02	Youth Services	Family Space	shelving, 45" for board books				10
3.02	Youth Services	Family Space	shelving, 45" for picture books				70
3.02	Youth Services	Family Space	4 person toddler table, round	4	seats	20	80
3.02	Youth Services	Family Space	seating, lounge chairs	4	chairs	35	140
3.02	Youth Services	Family Space	cabinet for puzzle and toy storage	1	cabinet	15	15
3.02	Youth Services	Family Space	early learning station	1	wkstns	30	30
Family Space Total							345
3.04	Youth Services	Children's Area	shelving, 66" easy reader books				10
3.04	Youth Services	Children's Area	shelving, 66" for juvenile graphic novels				10
3.04	Youth Services	Children's Area	shelving, 66" for juvenile media				10
3.04	Youth Services	Children's Area	display shelving for juvenile new books				10
3.04	Youth Services	Children's Area	shelving, 66" for juvenile fiction				70
3.04	Youth Services	Children's Area	shelving, 66" for juvenile nonfiction and biography				70
3.04	Youth Services	Children's Area	Juvenile magazines 66"/5sh slanted w backfiles below				10
3.04	Youth Services	Children's Area	computer workstations, sitdown (low seats)	4	wkstns	30	120
3.04	Youth Services	Children's Area	online catalog @stack end	1	wkstns	6	6
3.04	Youth Services	Children's Area	2 place tables, rectangular	4	seats	25	100
3.04	Youth Services	Children's Area	seating, lounge chairs	8	chairs	35	280

Williams Library (Final)

Williams Library (Final)

Code	General Area	Specific Area	Description	Qty	Unit	SF/Unit	SF
3.04	Youth Services	Children's Area	4 person table	8	seats	25	200
Children's Area Total							896
3.10	Youth Services	Teenspace	shelving, 66" for teen fiction				10
			shelving, 66" teen mass market				
3.10	Youth Services	Teenspace	paperbacks				10
3.10	Youth Services	Teenspace	display shelving for teen new books				10
			shelving, 66", for teen				
3.10	Youth Services	Teenspace	nonfiction/biography/graphic novels				10
3.10	Youth Services	Teenspace	shelving, 66", for teen DVDs, books on CD				10
			Teen magazines, 66"/5 sh slanted, with				
			backfiles below				10
3.10	Youth Services	Teenspace	wall-mounted display boards	2	board		0
3.10	Youth Services	Teenspace	seating, lounge chairs	4	chairs	35	140
3.10	Youth Services	Teenspace	2 place tables, rectangular	2	seats	25	50
3.10	Youth Services	Teenspace	1 person tables	1	seats	25	25
Teenspace Total							275
4.02	Meeting Areas	Meeting Room	30 seat meeting room	30	chairs	15	450
4.02	Meeting Areas	Meeting Room	large screen video monitor, wall-mounted	1	monitor	0	0
4.02	Meeting Areas	Meeting Room	sink and counter	1	kitchenette	50	50
Meeting Room Total							500
4.04	Meeting Areas	Study Room	4 person study room	4	chairs	33	130
Study Room Total							130
4.08	Meeting Areas	Meeting Room Storage	folding tables, lightweight, 5' x 2'	8	table	0	0
4.08	Meeting Areas	Meeting Room Storage	table trucks for folding tables	1	dollies	10	10
4.08	Meeting Areas	Meeting Room Storage	dollies, mobile, for stacking chairs	1	dollies	10	10
4.08	Meeting Areas	Meeting Room Storage	equipment rack	1	rack	10	10
4.08	Meeting Areas	Meeting Room Storage	podium, portable	1	podium	6	6
Meeting Room Storage Total							36
5.06	Staff Areas	Staff/Volunteer Lounge	Table and 2 chairs	2	chairs	25	50
			work counter, 6' x 2', w double sink,				
			undercounter refridgerator, cabinets				
5.06	Staff Areas	Staff/Volunteer Lounge	above and below	1	kitchenette	40	40
5.06	Staff Areas	Staff/Volunteer Lounge	bulletin board, wall mounted	1	board	0	0

Williams Library (Final)

Williams Library (Final)

Code	General Area	Specific Area	Description	Qty	Unit	SF/Unit	SF
Staff/Volunteer Lounge Total							90
5.12	Staff Areas	Staff and Volunteer Work Area	trash and recycling containers	2	container	4	8
Staff and Volunteer Work Area Total							8
5.14	Staff Areas	Staff & Volunteer Work Area	2 modular 8' x 8' workstations	2	wkstns	64	128
5.14	Staff Areas	Staff & Volunteer Work Area	bulletin board, white board, wall mounted	2	board	0	0
5.14	Staff Areas	Staff & Volunteer Work Area	supply cabinet, 2 door	1	cabinet	20	20
5.14	Staff Areas	Staff & Volunteer Work Area	wall safe	1	safe	4	4
5.14	Staff Areas	Staff & Volunteer Work Area	clear space for storage	1	space	50	50
5.14	Staff Areas	Staff & Volunteer Work Area	book trucks	4	trucks	8	32
5.14	Staff Areas	Staff & Volunteer Work Area	trash container, large	1	container	4	4
5.14	Staff Areas	Staff & Volunteer Work Area	shelving, 80" for supplies storage	2	sections	10	20
5.14	Staff Areas	Staff & Volunteer Work Area	mop sink, with mop storage	1	space	25	25
Staff & Volunteer Work Area Total							283
5.16	Staff Areas	Branch Manager Office	work station with computer	1	wkstns	50	50
5.16	Staff Areas	Branch Manager Office	shelving, 84" wall mounted	2	sections	10	20
5.16	Staff Areas	Branch Manager Office	guest chair	1	chairs	15	15
5.16	Staff Areas	Branch Manager Office	lateral file, 3 drawer unit	1	cabinet	15	15
Branch Manager Office Total							100
Grand Total							4,455

Assumes 10 SF/single sided shelf, standard shelving is 3' x 1'

General Area	Specific Area	Materials Count	% on Shelf	Items Shelved	Storage Type	No of Shelves or Items	Items/LF	Sections Needed	Section Type	Description	SF
Adult Services	Adult Circulating Books and Magazines	1,300	70%	910	Shelf	5	7	9	Single Sided	shelving, 66" for adult fiction, large print	90
Adult Services	Adult Circulating Books and Magazines	50	75%	38	Shelf	5	4	1	Single Sided	shelving, 66" for oversized nonfiction	10
Adult Services	Adult Circulating Books and Magazines	2,000	75%	1,500	Shelf	5	8	13	Single Sided	shelving, 66" for adult nonfiction	130
Adult Services	Adult Circulating Books and Magazines	120	75%	90	Shelf	5	8	1	Single Sided	shelving, 66" for adult biography	10
Adult Services	Adult Circulating Books and Magazines	150	70%	105	Shelf	5	10	1	Single Sided	shelving, 66" adult graphic novels	10
Adult Services	Adult Circulating Books and Magazines	20	100%	20	Shelf	5	1	1	Magazines	Adult/teen magazines 66"/5sh slanted w backfiles below	10
Adult Services	Adult Circulating Books and Magazines	4	100%	4	Shelf	16	0.67	0		Newspapers Adult Display/Recent Issues	10
Adult Services	New Materials and Media	900	66%	594	Shelf	5	15	3	Single Sided	shelving, 66" for DVDs	30
Adult Services	New Materials and Media	174	75%	131	Shelf	4	20	1	Single Sided	shelving, 66" for music CDs	10
Adult Services	New Materials and Media	480	66%	317	Shelf	5	6	4	Single Sided	shelving, 66" for audiobooks	40
Adult Services	New Materials and Media	100	50%	50	Shelf	5	5	1	Single Sided	shelving, 66" for new books	10
Adult Services	Reference Collection	100	100%	100	Shelf	5	7	1	Single Sided	shelving, 66" for reference collection	10
Adult Services Total											370
Youth Services	Children's Area	362	70%	253	Shelf	5	15	1	Single Sided	shelving, 66" easy reader books	10
Youth Services	Children's Area	125	70%	88	Shelf	5	10	1	Single Sided	shelving, 66" for juvenile graphic novels	10
Youth Services	Children's Area	200	65%	130	Shelf	5	15	1	Single Sided	shelving, 66" for juvenile media display shelving for juvenile new books	10
Youth Services	Children's Area	100	50%	50	Shelf	5	4	1	Single Sided	shelving, 66" for juvenile fiction	10
Youth Services	Children's Area	1,500	70%	1,050	Shelf	5	10	7	Single Sided	shelving, 66" for juvenile nonfiction and biography	70
Youth Services	Children's Area	1,600	70%	1,120	Shelf	5	10	7	Single Sided	Juvenile magazines 66"/5sh slanted w backfiles below	10
Youth Services	Children's Area	9	100%	9	Shelf	5	1	1	Magazines	shelving, 45" for board books	10
Youth Services	Family Space	172	70%	120	Shelf	3	15	1	Single Sided	shelving, 45" for picture books	70
Youth Services	Family Space	1,300	70%	910	Shelf	3	15	7	Single Sided	shelving, 66" for teen fiction	10
Youth Services	Teenspace	266	66%	176	Shelf	5	10	1	Single Sided	shelving, 66" teen mass market paperbacks	10
Youth Services	Teenspace	157	60%	94	Shelf	5	10	1	Single Sided	display shelving for teen new books	10
Youth Services	Teenspace	100	50%	50	Shelf	5	4	1	Single Sided		10

Williams Library (Final)

Williams Library (Final)

Assumes 10 SF/single sided shelf, standard shelving is 3' x 1'

General Area	Specific Area	Materials Count	% on Shelf	Items Shelved	Storage Type	No of Shelves or Items	Items/LF	Sections Needed	Section Type	Description	SF
Youth Services	Teenspace	163	66%	108	Shelf	5	10	1	Single Sided	shelving, 66", for teen nonfiction/biography/graphic novels	10
Youth Services	Teenspace	200	66%	132	Shelf	5	15	1	Single Sided	shelving, 66", for teen DVDs, books on CD	10
Youth Services	Teenspace	8	100%	8	Shelf	5	1	1	Magazines	Teen magazines, 66"/5 sh slanted, with backfiles below	10
Youth Services Total											331
Grand Total											701

General Area	Specific Area	Description	No of Tables	Qty	Unit	SF/Unit	SF
Adult Services	Adult Circulating Books and Magazines	seating, lounge chairs		8	chairs	35	280
Adult Services	Adult Circulating Books and Magazines	2 place tables, rectangular	3	6	seats	25	150
Adult Services	Adult Circulating Books and Magazines	1 person tables	4	4	seats	25	100
Adult Services	Adult Circulating Books and Magazines	4 person table	2	8	seats	25	200
Adult Services Total				26			730
Meeting Areas	Meeting Room	30 seat meeting room		30	chairs	15	450
Meeting Areas	Study Room	4 person study room	1	4	chairs	33	130
Meeting Areas Total				34			580
Youth Services	Children's Area	2 place tables, rectangular	2	4	seats	25	100
Youth Services	Children's Area	seating, lounge chairs		8	chairs	35	280
Youth Services	Children's Area	4 person table	2	8	seats	25	200
Youth Services	Family Space	4 person toddler table, round	1	4	seats	20	80
Youth Services	Family Space	seating, lounge chairs		4	chairs	35	140
Youth Services	Teenspace	seating, lounge chairs		4	chairs	35	140
Youth Services	Teenspace	2 place tables, rectangular	1	2	seats	25	50
Youth Services	Teenspace	1 person tables	1	1	seats	25	25
Youth Services Total				35			1,015
Grand Total				95			2,325

Code	General Area	Specific Area	Description	Qty	Unit	SF/Unit	SF
1.10	Public Areas	Service Desk/Reference/Self Checkout	self checkout machines	2	machine	35	70
1.10 Total							70
2.16	Adult Services	Public Access Computers	computer workstations, sitdown	6	wkstns	30	180
2.16	Adult Services	Public Access Computers	online catalog @stack end	3	wkstns	6	18
2.16	Adult Services	Public Access Computers	networked printer	1	printer	24	24
2.16 Total							222
3.02	Youth Services	Family Space	early learning station	1	wkstns	30	30
3.02 Total							30
3.04	Youth Services	Children's Area	computer workstations, sitdown (low seats)	4	wkstns	30	120
3.04	Youth Services	Children's Area	online catalog @stack end	1	wkstns	6	6
3.04 Total							126
Grand Total							448

**Josephine Community Library District
Facilities Master Plan (Phase 1 Report)**

*Prepared by Penny Hummel Consulting
June 18, 2018*

Appendix

Technology Needs Assessment
Notes from Focus Groups
Notes from Community Meetings
Teen Survey Results
Parent/Guardian Survey Results

Josephine Community Library District
Needs Assessment – Technology
Lance Murty
June 12, 2018

The IT environment at the Josephine County Library District is remarkably robust considering the library's previous funding challenges, limited technology support and heavy reliance on volunteer staffing. While there are needs for refreshing many parts of the technology environment, and Internet bandwidth and reliability are an issue in Wolf Creek and Illinois Valley, in its current state, the available technology adequately meets the current needs of both the public and staff and is operational.

This report will briefly review the current technology environment, identify key needs and requirements that were gathered from meetings with staff and the public, and finally make a series of recommendations regarding facilities improvements as well as the overall management of technology at the library.

Although some of the recommendations could be accomplished separate from a facilities project, many of the recommended improvements to technology infrastructure, devices, and services can easily be incorporated in new buildings and remodeling projects. While the entire environment needs attention, equipment replacements and program changes can take place in a phased manner, corresponding to where and how extensive the building projects will be, budget, and existing and future library programs.

Because technology is so integral to the library's mission, it's important that updates and changes be planned and prioritized. The library should create a library technology plan during 2018 to prioritize needed changes, establish a budget, and identify possible external funding opportunities. The plan should have an 18 month to 3 year time frame, and will help the library determine which improvements to undertake in what order.

Current Environment:

While the current technology environment is operational and adequate for current needs, the status of some core components and services are noted below, with a few specific areas of concern identified.

- Fiber optic Internet connections at Grants Pass and Williams; DSL at Illinois Valley and Wolf Creek. The DSL circuit at Wolf Creek is reported to be unreliable.
- Data network wiring and electrical capacity are outdated and inadequate in all but the Wolf Creek library. Network routers and switches are serviceable, but near or past end-of-life.
- Public computers (including OPACs) – 23 at Grants Pass, 5 at Williams, 10 at Illinois Valley, 8 at Wolf Creek. All are desktop computers except for 2 laptops in the Grants Pass children's room. The number of public computers appears to be

adequate for now, although automated metrics are lacking, so utilization rates are not completely reliable.

- Public computer system integrity is maintained using Faronics Deep Freeze. However, public computers are not secured in any way exclusive of Deep Freeze and can be modified by patrons. Library staff typically performs system updates with assistance from the external IT vendor. The update process does not appear to be documented and updates are likely applied inconsistently among the library branches.
- An outside sole-proprietor vendor provides IT technical support on a time and materials basis. The vendor primarily provides hardware support for the network, servers, computers and printers. The vendor does not support the ILS and provides minimal software support. The vendor appears to be doing a good job of maintaining the environment and staff reports he works well with them and is responsive to their needs.
- Library uses K9 Web Protection filtering on children’s computers. Adult PACs are not filtered.
- Computers, printers and other technology infrastructure devices are at varying stages of age and life cycle with OPACs reported as being the oldest, followed by staff computers. Devices are mostly adequate and serviceable. No formal inventory of equipment or established replacement cycle exists.
- Library has three (3) Microsoft Windows 2008 Servers in a locked data closet. There is a plan to replace the servers with new servers this calendar year. Status of patching and maintenance is unclear and undocumented. Server operating system software is at least 3 versions past current Microsoft Server OS release.
- The ILS is hosted by the ILS vendor. Library has several staff ILS administrators, including the Public Service Manager and Cataloging Manager. Administrative roles are not explicitly defined.
- Library has very few mobile devices for either staff or public.
- Library sees itself as a technology “late adopter.”
- Library technology environment is largely adequate at this time. There are no major ‘red flags’ or daily operational deficiencies.

Needs and Requirements:

In the course of visiting the Josephine Community Library District, the following needs were discovered through interviews with staff, visits to each facility, from a public meeting, and through other research. Needs identified below are organized by:

1. Needs that reflect and address current issues and programs.
2. Needs that would be part of a new building or remodeled space.
3. Needs that are process or policy oriented.

Current Issues/Programs

- More bandwidth for Wolf Creek and Illinois Valley

Josephine Community Library District
Needs Assessment – Technology
Lance Murty
June 12, 2018

- More reliable data connection for Wolf Creek
- Portable technology for labs, training, other flexible uses (laptops & cart)
- Updated public computers (hardware, operating system and software)
- Replace older staff computers
- Laptops or mobile devices for staff that spend time in the community
- Addition of assistive technology and wheelchair accessible workstation(s)

New building/remodeled spaces

- Library is on the front lines of the digital divide – need more space and devices to teach people how to use technology
- More flexible spaces and power outlets for patrons to use their own devices
- Family oriented space for technology use
- Space for teens, with appropriate technology and possibly gaming devices.
- Video projectors/monitors and audio equipment in meeting spaces
- Technology oriented programs – maker resources, “petting zoo”, labs, classes, etc.

Process and policy

- Document standards for computer purchases to simplify and reduce the cost of on-going support and maintenance; utilize cooperative purchasing agreements where possible
- Establish a simple process to approve projects and establish priorities
- Establish and document maintenance processes, especially those done by volunteers and library staff
- Create and maintain documentation for ILS roles, configuration, practices, and policies
- Regularly test backups and create a simple disaster recovery plan

Recommendations:

The following recommendations are based on the identified issues, needs, research conducted at the library facilities, and knowledge of library technology practices and trends. The recommendations are in two parts – facilities/program and technology management. While many of the recommendations are tied to new or remodeled facilities, many can be implemented independently of a building program.

Technology in facilities (existing and new or remodeled space):

- Illinois Valley and Wolf Creek require more Internet bandwidth and improved Internet reliability. Create a 6-18 month plan and budget to provide better

Internet service to both locations. Partner with other community anchor institutions (schools, town hall, police & fire, healthcare providers) to reduce costs and share support burdens.

- In any new building or remodeled space, install as much new technology as possible. At minimum install new network infrastructure including new network switches, routers and access points. Install current category of network cable (Cat 5e at minimum) throughout the space, with some excess capacity.
- Reduce the number of desktop computers for public and staff and instead use a mix of desktops, laptops, tablets and other mobile devices that will allow for more flexible use of spaces and work surfaces.
- Consider the addition of a few more kids computers or tablets. (AWE, LeapFrog, etc.)
- Provide lots of conveniently located power outlets in public spaces – more than what’s required by code. Consider having seating and power options (regular grounded outlets and USB) similar to what’s found in coffee shops, airports and other high traffic public facilities.
- Provide for flexible use of technology in meeting rooms; lots of power, network connections, strong Wi-Fi, video projection and audio equipment.
- Make use of portable and mobile technology equipment for use in library programs, maker activities, labs, training, etc.
- Use shelf-end adjustable height catalog stations to free up space
- Use multifunction photocopier/printers/scanners for public printing that will reduce space requirements and reduce supplies and maintenance costs.
- Implement a public Wi-Fi printing capability (with or without print management).
- Consider a public computer/printer management system and a secured public computer environment. Use the PAC management system to automate security and patches and updates.

Other Recommendations Regarding Technology:

- Create a 3-year technology plan that covers IT projects and priorities, infrastructure and equipment, software, the ILS, and security and disaster recovery. The plan should also contain detailed information on how and what technology will be employed to support library programs.
- Clearly identify IT within the library budget, and establish an on-going multi-year funding strategy to support IT and IT capital expenses.
- Monitor Internet bandwidth utilization and create a 3 – 5 year plan to increase bandwidth as needed.

- Continue to outsource IT support. Explore possible cooperative support and project collaboration with other entities, including schools and local government. Identify a backup to the current sole proprietor vendor.
- Identify and plan for replacement of network infrastructure. If not replacing as part of a new or remodeled building, replace oldest switches, routers and access points first and establish and budget for an on-going replacement cycle. Partner with other local agencies and schools to take advantage of expertise and possible discounted purchasing.
- Aggressively pursue E-rate funding for the 2019 funding cycle. Partner with local schools and the ESD to gain expertise and share knowledge. Determine and make a plan to address compliance with the Children’s Internet Protection Act (CIPA).
- Consider eliminating library-owned servers and instead utilize a hosted server environment at a co-location facility. Over the long haul, a hosted environment will be less expensive, more reliable and more secure.
- If the library decides to retain its own servers, vigilantly stay up to date on server and security patches, perform a backup/restore test twice per year, monitor firewall logs (with automated alerts) and keep firewall security patches current.
- Create an equipment inventory and replacement cycle strategy and budget.
- Create a software licensing inventory and upgrade strategy and budget. If not already using discounted/free licensing, consider utilizing academic licensing programs, State/local government licensing agreements, and discounted/free licensing programs through groups like TechSoup.
- Leverage cooperative purchasing agreements with other public agencies, local schools and local government whenever possible for purchasing equipment, software and services.
- Have at least two trained ILS administrators. Document and maintain ILS configuration and operational policies. Clearly identify roles, processes and responsibilities. Test ILS backup and recovery at least twice a year.
- Add adaptive technology and software to one public computer per location.
- Consider establishing a corps of technology volunteers who can provide technology expertise, problem solving, and training to both public and staff.



KCLS Renton Highlands Library, WA
Hacker Architects

**Josephine Community Library District
Focus Group Discussions**

LIBRARY STAFF (3/20/18)

Who is using the library? Which parts of the community are the heaviest users?

- Children
- People with kids
- Without computer access
- Majority women
- Seniors
- Boomers
- Larger senior than normal. 25% are over 65. Medical facilities are nearby.
- Low taxes

Who isn't using the library? Which parts are underrepresented?

- Teens
- Middle schoolers
- Men
- Hispanic/Spanish speaking ESL. Supposedly 5% maybe more.
- 20s and 30s—esp. without kids.

What works well in the current library? What will people not want to lose?

- Children's library has flexible space
- Location is great. Not so downtown that there are big parking issues.
- Free parking
- Bookstore.
- It's about the people, not the place.
- Nostalgic attachment—grandparents come with their kids.
- Wi Fi desks with plug ins were increased a few years ago. We could get more of those. The way that they are in the back of the library works well.
- Having check in desk totally separate from circulation.
- Library card sign up is a sit-down bank experience vs. standing up. Nice to have together.

What aspects of the facility get in the way of providing an excellent library experience?

- Cataloging being by the back door doesn't work so well. Needs its own area.
- Isolated teen area
- Lack of Oregon room

- Lack of meeting space.
- No quiet rooms
- Library is a sound tunnel.
- Having bookstore combined with meeting space.
- Floors need to be more even.
- Catalog computers –it would be nice if they were spread out vs. all together.
- Computers at patron workstations are really close together and cramped.
- Lack of space for children’s programs
- A separate storytelling room. We have little kids that run so we need that to be safer. Could be used for other programming. Medford has storytime room is all glass, parents can see in
- Study rooms – 2 people. Probably three of those
- Space that could hold up to 30 people
- 6 – 12-person study room
- Meeting room with 100-person capacity.
- Too much noise interaction at front desk and computers. Good to be separated by space.
- Separate room for the Oregon collection
- Lower shelving.
- Large round tables are heavy and hard to move—we’d like smaller tables and more of them.
- More comfortable furniture and more places for people to sit down.
- Illinois Valley has chairs that work/couches
- Outside of the library: we have removed seating due to vagrancy, drug use, fecal matter, trash, smoking.
- Put an awning over each doorway. Gutters that work.
- We also have problem with the way the collection is divided up. Nonfiction spills over. Snaky.
- There is no flow.
- Magazines
- Ceiling is AWFUL.
- Bathrooms. More than 1 stall. Used to be stalls but was changed to respond to ADA requirements.
- Break room doesn’t have a window.
- Work stations: kind of enough, but there will be some pressure.
- Chris retires—may be replace with 1.5 FTE. We may need a teen librarian, no desk currently. .5
- Business office—adding an extra computer.

Are there services or features that could be reduced in size, or eliminated?

- Analog media will go away
- More storage in kid’s room
- Storage is spread out here and there.
- Bookstore: can it get smaller?
- We’ve been slim on programming and services. What more can we do?

What services or features will be most important to incorporate into a new library?

- We have lots of partners who want to do programs. It would be nice to have the ability for more adult and children’s programming. Designated place for storytime, etc.
- There is a large community demand for space.
- Meeting space with a screen and suitable equipment, conference call opportunities. Kitchenette.
- Spot for library of things.
- Tiered floor seating for storytime area.
- Self-serve holds—but volunteers don’t like the idea.
- Read and return area—paperbacks.... Some are uncatalogued, some are. Mostly donation.
- Teen area: is isolated and attracts nefarious creatures. Needs to be all glass. Included in main part that’s open.
- Makerspace? Collaboration space robot space. Mobile activities, sink.
- We have an effort in the community already underway: city collaborating with community college to create makerspace. Industrial space and welding.
- Sink in both meeting rooms
- Teen space: control noise levels.
- Storytime room: visible but enclosed.
- Medford library storytime area: feels cold. We want a warmer feel.
- What about a space to feature local art here in Grants Pass?
- More display area
- More coordinated bulletin board. Have space for community bulleting
- Fiction collection was reduced to uncover windows. Weeding guideline: Fiction (3 years), Nonfiction (5 years)
- We need a mall room for locked items: rare reference materials. Yearbooks, city directory. Gold mining. The Oregon Collection. Genealogy is in the reference collection. Could make a history room and add genealogy?
- Outside the library—courtyard/room for a gathering space. Retractable fence, so it doesn’t become a campground?
- Sun room or atrium
- New library needs to be twice as big.
- Coffee shop—Dutch bro? Rogue Roasters.
- Loading dock?

What staff workflow changes would you like to see in the new library?

- Children’s area: would be nice if they had a desk where they could concentrate or work. Office to the back with a window?
- It would be nice to have the collection development librarian closer to the info desk where reference librarian is.
- Adding windows in staff area. More lockers. Nice to have more room in break room; right now, only three people can sit at the table.

- We need to be able to hear what is going on to support the volunteers. They want to do the job on their own. Sometimes we need to be listening and step in, without being asked.
- There's no security on the back door—there needs to be somebody there if librarian isn't there.
- A lot of coming and going at back desk....I like volunteer manager being close by.
- Books in the check-in/shelving process are out in the public area-would be better if not.
- When books are in book drop, they fall on the floor. We need a better system.
- Book carts are a nightmare. We need better ones.
- We don't have ILL and it would be nice to have space for that.
- Staff sees itself in service to the volunteers. If a volunteer wants to do that job, and they have experience, we would accommodate Staff do the jobs that nobody wants to do.

What are the top 3 – 5 issues that you consider the most important to address?

- Access to teens—system wide issue
- Seating
- Children's—having a storytime area
- Meeting space/ Programming
- Collection is probably OK—could get a bit smaller. Library of Things could continue to grow. Will be a bit more of a shift towards electronic.
- Books: represents 9 years of limited funding. We would be bursting if we hadn't had limited funding.

What are the strengths and weaknesses of the three branches?

- **Williams:** No bathroom, very tiny, no meeting space, no children's area. 864 square feet, built in 1977. Maybe a bit bigger collection, especially for adults? Bathroom was a talking point during the district election. "LET MY PEOPLE GO." Also needs space for volunteers and storage. Good location. Community garden.
- **Illinois Valley:** Nice aesthetics, beautiful ceilings. 70s globe lights are beloved but lighting is terrible—one patron brings a flashlight so she can see the shelves. Plumbing also an issue. YA section is nice and it's used. Renovated children's area is popular. Collection is bursting at seams, basically right sized. Shelves are high. They moved large print. Big nonfiction base—gardening, mushrooms. Growers. (Same with all the branches).
- **Wolf Creek:** charter school next door uses as their library and make up most of the circulation, which is 2% of total circulation. Facility issues—community doesn't use space. Have you ever seen a teen in there? Small usage: specific users, power users. Lovely bathrooms. Nice workspace. It would be nice if there was a place for volunteers to go. Break room? Collection could be bigger in adult section?

Collection does not float but there is awareness at all branches that you can get materials from other locations. Weekly courier is all volunteer. Weekly count of bags: Williams (3 – 4), Illinois Valley (10 – 12), Wolf Creek (3), Grants Pass (18)

What words describe the new library?

Welcoming
Community asset—inside and how it looks
Flourishing
Flexible
Light
Warm
Busy and buzzing, quiet space but busy overall.
Very social
Community center

There is no senior center here, and this is it.
Importance of Food.
Engaging
Avant garde
Community pride
Asset
Inspiring
Flexible
Transparent

FOUNDATION AND LIBRARY BOARD (3/20/18)

What works well in the current libraries? What will people not want to lose?

- Location. Easy to walk here. Close to downtown.
- Cheap (for now).
- Nice children's library.
- Location is good for other libraries. Williams needs a restroom.
- Children's library at Illinois Valley.
- Wolf Creek—location is central. I like the building. We did a good job.
- Williams: garden in the back. Nice windows. I like that it's portable.

What would you change about the building?

Grants Pass:

- More space
- Meeting room
- Community spaces
- Increased square footage and footage
- Accessibility
- Parking is terrible.
- Deferred maintenance
- Systems are outdated: carpeting, heating, wiring, mechanical.
- Overall layout is outdated and inadequate
- We need a coffee shop
- Ownership
- Selling us to the community/marketing/people who aren't part of the district, have more than just a library: music hall, meeting center, small theater
- Have a building that serves the whole community: Riverfront and downtown. Nice to tie together. New library on north end?

- More natural light
- Good outdoor space
- Efficiency: add a 2nd or 3rd or 4th story and put offices upstairs.
- Better bathrooms!
- Teen library
- Cramped and Inadequate staff space at Grants Pass.
- More meeting room space.
- More delineated space. Kids room is noisy and to have quiet spaces.
- Business productivity space.... computer resources longer periods of tie, printer scanner, telephone, fax.
- Nice to have: secondary businesses like a coffee shop or café.
- Could we plan with city—i.e., if there is a commerce area?
- Now in children’s area—good to expand programs such as robotics, carpentry,
- flexible space. \library of things: expansion of that.
- Commercial kitchen?

Illinois Valley:

- improve energy efficiency, plumbing. Better use of space around the building.

Williams:

- size, bathroom, needs new building.

Wolf Creek

- Landscaping area. Opportunity for outdoor events attached to the events.
- Drainage problem in parking lot. Concrete surfaces outside—gets to be a jungle.

What services or features would you like to see incorporated into a new library?

- Wolf creek: cultural aspects: natural history of area be reflected in library collection. Good way to build partnerships with county parks.
- Williams: bathroom, better shelf space, FOL space. Place where staff can have a space. Storytime area. Children’s section. Garden at Williams is really a reflection of the community. Nice to plan it but work with the community and build it up year after year.
- All should offer community outreach and cultural inclusiveness.
- Teen and young adult programming. Space for that is a little odd.
- It would be great to have multiple multipurpose rooms. Quiet meeting space.
- Meeting room

Are there libraries you have read about or visited that have features that would improve this library?

- Adult fiction. Quiet zone.
- Art displays. 3 dimensional. Mixed into the building itself.

- Signage is by color and icon vs. words but it is a super-efficient way of directing traffic.
- Children's library: they integrated stuff for parent's magazines and materials?
- Storage space.
- Ones I really like are in the center of the community. People aren't there just for the library, it's a community center.
- People don't walk by this facility; it would be better to be somewhere with more foot traffic.
- Thriving downtown. Mix of tourists and local people.
- Dutch brothers bought land and have big plans; will change downtown.
- Salt Lake City –walkway inside the building with stores around it, flower shop, etc. Top is a rooftop garden that they rent out for events.
- Mill Valley CA: grove of redwood trees, creek nearby—tables were made of high quality wood.
- We need a children's branch in Redwood area.
- Moveable shelves in children's area—can be reconfigured to fit.
- Make the spaces as flexible as possible.
- Return slot is convenient for volunteers but needs to be in the lobby. Outside book drops attracted unwanted materials.
- Livermore CA—2nd highest density of PhDs. Library is part of a civic center and provides great service.
- Space for a piano or musical instruments. Performances.

What are the issues that you consider the most important to address?

- Fix Williams first
- For the most bang for the buck, put money where the most use is (Grants Pass)
- Equity and inclusion issue—there may be fewer people using Williams, but we need to serve them well. Maslow's hierarchy of needs. They are at the lowest level.
- Making a decision and moving forward with this business when our lease ends Jan. '21. It needs to be addressed.
- Other two branches are in better shape. Williams is the most neglected. Wolf Creek is good.
- Illinois Valley has security issues—leaks in the roof, plumbing backs up. Deferred maintenance. But we own the building.
- Safety is first
- Access is also important
- Community space is where other things can be done.
- This is a 1959 building and when you redo it, take into consideration next 50 years of technology.
- Makerspace—community college and city are partnering so best not to duplicate. Is Dutch Brothers creating conference center? Churches have space available. Allcare has new building with meeting room space.
- This room (Ben Bones) is overused.
- Children's library partners who provide storytimes for sensory children: now that we are open more hours, how can they still provide programming not while open?

What words describe the new library?

Vibrant	Well planned	Sustainable
Full of life	Water features	Inspiring
Attractive	Coming together places	Accessible
Open	Relevant	Place for volunteers
Inclusive	Energetic	Fun

Place when visitors visit they go MY GOD! In this little town

Other comments:

- Comfortable chairs. We need more seating.
- Great if teens have input.
- Wolf creek: when it offered, 24/7 Wi-Fi access, it was wonderful mix of local benefit and travelers passing through. It attracted a diverse group of people.
- Make the online catalogs more accessible—on shelf ends vs. centralized now.
- Keep up to date.
- Putting in extra conduit for the unknown.
- More plug ins.
- Bar with people who use their laptops.
- Electronic resources: we have them but we need to sell them.
- Conduct a PR campaign for electronic resources, or have them open on workstations so that people can see them.
- I would hope that it would fit with character of Grants Pass, both architecturally and general feel. Pacific Northwest. Bend has a consistent feel.
- It's important to keep the feeling that you're going to see your friend.
- Financial model doesn't function without the volunteers.
- We are self-aware enough to work with our communities. We don't have to be the horn or the drum, we can be a support role. We can do that very well. In all our communities, be a part of the orchestra.
- There is enough financial horsepower in the Williams community to build what we need to build. But engaging them is going to be important.
- Divide between city and county. Feeling like underdogs. A lot of poverty here. We have this divide between wealth and poverty. We experience it as a disconnect between those who have wealth and those who do not.
- People move here to retire, they have no investment in schools.
- We can go to the community to ask what they want, vs. telling them what they need. We'll have more involvement if we collect that information. Make people feel good and not shameful.
- People here are not cheap. Independent thinkers. They need to be encouraged to join the cause.
- There is a strong volunteer culture.
- We have a vocal group of naysayers. Most don't live in the district.
- Scar of trust between county and city and not something that can be healed overnight. Old issues.

- Library has done fantastic job of separating from county government.
- I think there is enough positive energy in Josephine county that naysayers can be ignored. We don't have to spend energy on them.
- We will print B&W instead of color to fit community perception. Overall impression of frugality.
- We've been getting by for so long...we've lost a lot... we need prompts about what possibilities are.
- There's a city housing committee that's working to increase housing stock. I would recommend that we consider putting a couple floors of apartments on top. Housing can pay for library.
- Wolf Creek: Farmer's market is one of the oldest. Having the library relate to that. County Park system. Public access to rogue river. Day use fees. The river is key to people's consciousness of the area.

Josephine Community Library District Public Meetings

GRANTS PASS (3/21/18)

Attendance: 25 people

What do you value most about the Grants Pass Library? What would you not want to lose?

- Opportunity to bring in young children
- Volunteers! We like the noise
- Public computers
- Storytime hours
- Current personnel
- Convenient location
- Partnership with community
- Good natural lighting
- Special displays
- Books

What would you change about the building?

Grants Pass

- Need quiet space
- Parking is an issue
- Shelves are too crowded, narrow aisles
- Separate meeting rooms, including small meeting rooms
- Needs a better teen area
- Space for children's programs that can be closed off, including a sink
- Improved/more bathrooms
- Better electrical and mechanical systems
- Larger meeting room that's not also the FOL bookstore
- Gather input from teens and families
- Add tech classroom
- Better staff space
- Places for tutoring—2 person rooms
- Coffee bar
- Outdoor play space
- New books/materials
- More parking
- Create a green, energy efficient building
- Wiring capacity (adequate crawl space)
- Safe filters on kid's internet computers

- Add Interlibrary loan
- Add stand up workstations of variable height
- Shelf end OPACs
- ADA Accessibility for materials
- Build flexibility for future
- Performance/training space: stage, costumes, PA systems, conference call ability, shades for windows
- Better wayfinding
- Early age programming/learning

Williams

- Needs a bathroom

Illinois Valley

- Poor lighting
- Crowded
- Nice location and lot
- Community owns it—it is shaped by their needs/desires

Wolf Creek

- Nicest and newest library
- Has meeting room
- Pretty building, displays county craftsmanship
- Partnership with school

Are there libraries you have read about or visited that have features that would improve this library?

- Loveland, CO: spaces for groups, children
- Willamette University Law Library: whole wall of windows, brings the outdoors/nature in
- Sutherlin: great meeting rooms
- Lincoln City: glassed in children's area
- Secure outdoor space
- Oregon City: multi-level, open spaces
- Offer lecture series and other learning opportunities at the library

What does the new library look like?

- Single story
- Incorporate local building materials
- Single point of entry for better security
- Close to public transit

- Close to Redwood Elementary School
- Leverage community partners
- Safe place for all kids to come to
- Be in town (downtown)
- Provide opportunities for innovation
- Art gallery
- Reflect frugality
- Help people learn
- Safe place to learn, find what they need
- Hub for tech learning
- Better wayfinding
- Early childhood programming/learning
- Be aware of other city plans
- Place to sell books
- Hunger to improve

ILLINOIS VALLEY (4/26/18)

Attendance: 16 people

What do you value most about this library? What would you not want to lose?

- Friendly
- “Our” library
- Easy to navigate
- Not taken for granted
- I’m new to the community and the library has been a place to meet people.
- Roberta!
- Customer service and friendliness...especially for kids
- Internet—not everyone here can get high speed access.
- You run into people you know.
- Partnerships: spirit of collaboration is palpable
- Welcoming
- Helps us feel connected to the wide world of intelligent thought

What would you change about the building?

- Lighting is too dark, but keep vintage fixtures
- More outlets
- Digital movie screening capacity.
- Climate control
- Gate for children’s area

- Make it bigger!
- A community meeting room with A/V
- Add a seed library: with capacity for storage.
- More educational children's DVDS: what is here is heavily used.
- Flexible space
- More attention to grounds: water lawn.
- Vandals destroyed picnic table, homeless folks have been found camping under the eaves
- More science education for adults.
- Increase support for homeschooling families: up through high school.
- Bigger selection in adult area.
- More space
- Amount of seating is OK, but newer seating would be great.
- Fix piece of sidewalk that sticks up, because it limits handicapped access

Are there libraries you have read about or visited that have features that would improve this library?

- Medford: more classes and groups
- Special spaces: such as a conference room
- Playground up front—give kids something to do.
- Access to music: there is the Illinois Valley Choir. Offer choral music as a service to the local music community. Right now, there is not a lot to choose from.
- Book clubs
- Meeting room, which could be rented in addition to being used by the library.
 - 25 – 35-person capacity. Classroom size.
 - 65 people came to the mushroom program.
 - We recently lost a county building that was used for local meetings. Churches are not used by community groups.
 - Movie nights: 8 – 20 people.
- Tutoring space.

Words that describe the renovated library:

- Comfort
- Dynamic
- Secure
- Welcoming
- Cozy
- Well supplied
- Better software
- I live part time in California and use two libraries there: this one is better organized, friendlier and with excellent staff.
- Humanely move the carpenter bees out of the roof

- Video surveillance? Could be a solution
- Humidity is a problem.
- Homey
- A place for creativity
- Pollinator garden—celebrating the library as a pollinator
- Rural libraries bring richness
- Add crafts and workshops
- “inside is where the heart is.”
- Don’t duplicate programming available from other service providers
- Tiny little sink is a problem; we need hot water
- We love our library
- Open to everyone
- Providing capacity for faxing, email, helping people who are passing through town.
- It’s unfortunate that we have to turn off the Wi-Fi when the library is closed.
- “I’ve never wanted to hang out at a library before.” Library is extremely welcoming
- It’s an important social outlet.
- People interact in complete comfort.
- I’m new to the community and I appreciate the nonfiction collection as it’s helping me to understand the area.

WILLIAMS (4/25/18)

Attendance: 5 people

What do you value most about this library? What would you not want to lose?

- Location near school
- Social aspect: interacting with neighbors, particularly in the winter
- Garden: interaction with garden club
- Well used space
- Accessible
- Huge part of community

What would you change about the building?

- A bathroom!
- Running water!
- A bigger building overall; it’s crowded and “scrunchy.”
- A bigger children’s book section would be great.
- Additional shelving
- More early readers
- More for teens
- A community meeting space

- No issue generally with security
- More new books
- A bigger collection for everybody
- More programming and community engagement
- Places that are quiet
- We have 4 computers—maybe 1 or 2 more?
- Local builders would donate materials and labor

Are there libraries you have read about or visited that have features that would improve this library?

- Oaxaca: had atrium, outdoor shaded area
- More seating
- More places to plug in
- Plants and light are uplifting
- Loan out kids toys
- Loan out tools
- Use natural materials

What words describe the new library?

- Comfortable
- Spacious
- Welcoming
- Includes nooks
- Accessible
- Natural light
- Room to move around
- Office for branch manager
- Volunteers
- Sink
- Fireplace
- Stacks with open space

Teen Survey Report

5/18/18

By: Susan Davis

Target Audience: Teens

What: Phase 1 Planning Survey

Number of Questions: 4

Results

Number of Responses: 3 ☺

Question #1. *Why do you currently use the library? Please select all that apply*

Borrow materials: 3/100%

Hang out in the teen space: 1/33%

Look up information in the databases: 0

Use Library2Go: 0

For homework: 1/33%

I'm a VolunTeen: 2/67%

Spend time with friends: 0

Use the computers: 0

For the WIFI: 0

I don't currently use the library: 0

Other: 0

Takeaway: With so few overall responses it is difficult to gain much insight into this question. These responses were from VolunTEENs so having only 2 out of 3 indicate they are a VolunTEEN is interesting. Also, the 'I don't currently use the library' is not applicable to this group of participants.

Question #2. *If you do not currently use the library, please explain why:*

Not applicable, the participants are all VolunTEENs.

Question #3. What services, programs and/or features would you like the library to offer?
Please feel free to add as much as you like:

- More teen romance books
- Library has adequate features
- More 3rd party sources to educate kids (used YMG as an example)

Takeaway: Like question #1 the lack of responses overall makes it difficult to grasp what the VolunTEEN population is interested in. The participants that responded gave a couple of suggestions: more teen books and bring in more outside groups to do programming.

Question #4: *Please describe your ideal library teen space. Think about the color scheme, the design, the seating, size of the space, the technology, and other features you feel are important to include:*

- Medium sized space
- No overly saturated colors
- A computer for internet use
- Chairs and bean bags that are currently in the teen space
- More technology (? Didn't specify)
- More books
- Current room too small
- More windows
- Color okay

Takeaway: Survey participants indicated a need for a teen room computer, medium sized space, more windows, more books, more technology and no overly saturated colors.

Parent/Guardian Survey Report

5/18/18

By: Susan Davis

Target Audience: Parent/Guardian

What: Phase 1 Planning Survey

Number of Questions: 4

Results

Number of Responses: 14

Question #1. *How does your family use the library? Circle all that apply. If 'other' fill in.*

Attend Storytime's: 12/86%

Borrow materials: 12/86%

Use Library2Go: 4/29%

Participate in special programs such as the Summer Reading Program and Readapalooza:
6/43%

Look up information in databases: 2/14%

Other: 1/7% (person wrote baby rhyme time in the other spot-I conclude that they don't recognize it as a storytime)

Takeaway: Survey participants primary use of the library is for storytime programming and borrowing physical materials. Special programming is moderately attended. The areas that need the most attention is Library2Go and library databases.

Question #2. *What works well about the children's area in the library?*

- Open space
- Toys
- Books
- Separate from adult area
- Activities

Takeaway: Survey participants value the open space in the children's area for activities and play, like that the children's area is separate from the adult area, and appreciate that toys are available. One survey participant acknowledged the importance libraries play in a child's life i.e. develop the love of reading.

Question #3. *What would you change about the children's area in the library?*

- More color/paint on walls
- More board books
- Another AWE computer
- Less clutter
- More space for extra toys
- Move flyers/handouts to a higher location
- Doors
- More Spanish books

Takeaway: Most survey participants answered ‘nothing’ to this question and a few didn’t answer at all. For those remaining participants they expressed an interest in more specific types of materials, another kid friendly computer (awe), more space and/or less clutter, and moving paper materials targeted at adults to a higher location. One participant pointed out the lack of color on the walls and another mentioned ‘doors’- I am assuming they would like them added.

Question #4: *Describe your ideal library children’s area:*

- Place to play and learn
- More hands-on toy tables
- Separated from the adult area
- Offers kid activities
- Friendly staff
- Knowledgeable staff
- Highlight a different author each month
- Welcoming to all children and families
- A fun area for all
- Large enough for more activities
- Add doors
- Comfy seating/another couch

Takeaway: Like question #3 most survey participants either answered nothing or didn’t answer at all. A few stated it was great*. While there were not a lot of responses those that did respond provided some key insights into library services-by expressing a desire for friendly and knowledgeable staff, a space/area that is welcoming to all children/families and asking to feature a different author** each month.

*I don’t believe the question was understood. I was hoping for more of a ‘this is my dream library space’ response.

** I’m currently working with a volunteer on ways to better feature the collection i.e. create themed booklists, book reviews etc. I have noted the author request.



Wolf Creek Library



WOLF CREEK LIBRARY Building Assessment

HACKER

ABHT
STRUCTURAL ENGINEERS

PAE

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- 4) Reference Floor plan

Wolf Creek Branch Library

Wolf Creek, Oregon
Josephine Community Library District

Address: 102 Ruth Ave, Wolf Creek

Year built: 2002

Area: 2594 SF

General

The Wolf Creek Branch Library was originally built in 2002 as a branch library. It is a as a single-story structure over a below grade mechanical room and crawlspace. It sits on a sloped site with primary access and parking in the front of the building off Main St. The building consists of a primary library stack space and reading room. A small staff office, and a community room which doubles as a food bank and has a separate secured entrance.

The assessment is based on visual inspection from a field walk performed on September 18th, 2018. The following people were present:

- Joe Swank, Architect, Hacker
- Ruwan Jayaweera, Mechanical Engineer, PAE
- Adam Koble, Electrical Engineer, PAE
- Christopher Kemp, Structural Engineer, ABHT
- Teresa Stover, JCLD communications specialist
- Paige Gissel, Wolf Creek Branch Manager
- Norma Singer, JCLD Public Services Director
- Sue Cohen, JCLF Board President
- Judy Christensen, JCLF Board Member

The site, exterior, roof, and all interior spaces were accessible and visually inspected. Limited attic space above the suspended ceiling spaces were observed. Staff was available for questions, and able to articulate some ongoing maintenance concerns. Construction drawings dated from 2002 were reviewed in conjunction with the visual inspection of the facility. Note that no Hazardous Material Survey or testing was performed in conjunction with this assessment.

The minimum standard for any recommendations set forth in the following assessment is to identify Code Compliance issues. The Current Governing Code for reference to this assessment is the 2014 Oregon Structural Specialty Code. Renovations and additions to existing buildings do not require all elements to be brought up to current code standards, however any new addition or renovation would need to meet current standards for all new work. Similarly, ORS 447.241 governs that up to 25% of the cost of a renovation can be mandated to improve accessibility if existing conditions are not deemed accessible. The priority for such improvements is as follows starting with the highest priority: Parking, an accessible entrance, an accessible route to alteration or addition, at least (1) accessible

restroom for each sex, or single unisex accessible restroom, accessible telephone, accessible drinking fountain, and finally additional accessible elements such as storage and alarms.

Site and Site Access

The parking area consists of a shared asphalt parking lot that is located off Main Street in Wolf Creek. The lot slopes toward the building with two area drains at the adjacent curb. Anecdotally the lot and area drains do see drainage and flooding issues during heavy rain. There is no striping for the parking lot and consequently no ADA striping or clear zone indicated. ADA parking sign and curb cut for access are present.

As Wolf Creek is unincorporated jurisdiction and parking standards are governed by Josephine country. Based on County standards the quantity of stalls at 11 is currently sufficient.

Primary entrances and site access are all in good condition and appear to meet all accessibility standards. Main entry doors do not have an ADA door actuator for either the primary entry door or the vestibule doors.

The access to the Mechanical space at the rear and below the library is relatively challenging down a planted slope.

Landscaped area is only present at the front edge of library and has several dead and unhealthy plants. Library staff noted the irrigation system having problems and being of a rather unconventional installation (*see Figure 1*)



Figure 1

Recommendations

Minimum recommendation for site access:

The primary building entrance needs to have an ADA door actuator. Additionally, the signed ADA parking space should be striped to accommodate a vehicle and associated clear space adjacent to the curb cut.

Additional enhancements to be considered are as follows:

Replacing landscaping in the front of the building in conjunction with improved irrigation should be considered.

A path for maintenance access should be considered on the east side of the building to the lower mechanical room and condensers.

Building and Restroom Accessibility

The building has 2 restrooms, each with two Water closets and 1 sink each that fully comply with ADA. Drinking fountain is also compliant with current ADA standards. Both restrooms have flat floors, and while do have floor drains in the event of water leak, which according to library staff has occurred in the past, the floors do not slope to the drains resulting in water seeping into the corridor. Clogged toilets also seem to plague staff. (see Figure 2)



Figure 2

Recommendations

Minimum recommendations for accessibility and egress:

Have a plumber investigate source of the clogging toilets. Determine if it is pipe or fixture issue. Repair as appropriate.

Enhanced recommendations for accessibility and egress:

If Restroom flooring were ever to be replaced dropping the framing in this location to accommodate a sloped tile floor to drain is possible. However; this is a significant amount of work and may not be warranted unless doing other significant renovation work.

Building Exterior:

Wolf Creek is a wood framed single story structure over a concrete stem wall foundation. Crawlspace is adequately vented with foundation vents. Grade is also appropriately covered with a 6-mil vapor barrier within the crawlspace. No visible signs of ground water or leakage in the Below Grade Mechanical room. Floor framing is insulated with Batt insulation to R-19.

Above grade walls are hardiplank siding over building paper with R-19 insulation. Hardiplank is in relatively good condition. There are some minor flashings that were not installed over the Louver and (1) window in the rear of the building. No signs of rot were present at those locations.

Windows are vinyl windows with insulated double pane glazing. Operable windows are limited to the staff area at the front of the building.

Roof is asphalt composite shingle roof with continuous ridge vent and soffit venting. Roof Appears to be original roof from 2002 and remains in relatively good shape. 20 years is the lifespan of a typical asphalt composite shingle roof, but this roof looks like it has more than 4 to 5 years of life left based on its condition. There is insulation in the bottom chord of the attic trusses specified at R-19. Gutters and downspouts all looked to be in good condition except for a vandalized downspout by the entrance.

The deck off the rear of the reading room is the one few items in this library that is in poor condition. The deck consists of pressure treated support post and pressure treated decking. Support posts are in good condition, but decking is showing signs of rot, and some severe checking and splitting. Additionally, there are some areas where the siding is cut around the deck and not properly flashed. (see Figure 3)



Figure 3

Minimum recommendations for exterior:

Wolf Creek is in very good condition and the enclosure is built close to modern code energy standards. Currently the deck is not used or functional as the door is alarmed. But decking should be replaced to remove the slinter and or liability of rotten deck boards. Railing can mostly remain but select pickets should be replaced. Supporting structure is in good condition.

Enhanced recommendations for exterior:

The building insulation is currently shy of current energy code standards. There is no code that mandates improvements of existing elements of the enclosure for a renovation, however enhancements may help save on energy use and overall maintenance and operation costs. Current Code standards are for R-30 for attic insulation and floor insulation, where Wolf Creek has R-19 for both of those. Additional batt insulation could be added to both the attic and the floor joists to reach R-30 and improve the building performance. An Energy use analysis may be worthwhile to prior to this investment however to determine the payback for the added insulation. Paint on a Hardiplank exterior can last up to 15 years, and while no visible signs of damage was present the paint is likely at the end of its life for the building. Replacement of damaged downspout is also recommended. Added window head flashing over louver and back window are recommended to do in conjunction with other future exterior improvements when they are required.

Interior Finishes

Interior of Wolf Creek Branch library is in relatively good condition. Finishes consist of Broadloom carpet in reading room and community room. Tile floor in restroom and entry vestibule. Restrooms also have tile wainscot on the walls. Ceiling throughout is a suspended 2x4 acoustic ceiling tile. Only minor damage at a few ceiling tiles and ceiling runners but overall in good condition.

Fridge being used for food bank is located in the storage room adjacent to the community room. It does not have good access and hampers the functionality of the storage room.

Free standing stacks appear to be secured to the floor and those placed against the wall are secured (see Figure 4).



Figure 4

Recommendations:

Minimum recommendations for interiors:

No renovations or modifications are required to the interior to meet code requirements.

Enhanced improvements for interiors:

Review of the stack attachments to the floor and wall and determine if any additional seismic or lateral bracing is necessary.

If hosting food bank is seen as a relatively permanent function for the community room, a or reorganization of shelving and equipment in the storage room for better storage capacity and better refrigerator access should be considered.

ASCE 41-13 Seismic Evaluation Report

Wolf Creek Branch Library
102 Ruth Avenue, Wolf Creek, OR



ABHT Structural Engineers
Main Contact: Chris Kemp
Project No. 17318

October 08, 2018

Prepared for:

Hacker Architects
1615 SE 3rd Ave, Fifth Floor
Portland, Oregon 97214

1.0 INTRODUCTION

ABHT Structural Engineers was retained by Hacker Architects to conduct an ASCE 41-13 seismic evaluation of the Wolf Creek Branch Library located at 102 Ruth Avenue in Wolf Creek, OR.

The evaluation is based on the American Society of Civil Engineers (ASCE) Standard 41-13, *Seismic Evaluation and Retrofit of Existing Buildings*, commonly referred to as ASCE 41-13. The ASCE 41-13 Standard is a published document which has essentially combined the previous ASCE 31-03 (*Seismic Evaluation of Existing Buildings*) and ASCE 41-06 (*Seismic Rehabilitation of Existing Buildings*) into one document. The purpose of ASCE 41-13 is to provide guidance in the review of an existing building's response to a predetermined level of earthquake based on a selected performance level. This evaluation is based on a Life Safety performance level defined by ASCE 41-13.

The following ASCE 41-13 evaluation consists of a Tier 1 evaluation only. Tier 1 is the Screening Phase which consists of completing a series of checklists and in some cases performing Quick Check structural calculations to quickly identify potential deficiencies.

Our evaluation includes a limited walkthrough of the existing building to observe the general physical status of the structure, an evaluation of the building's lateral force resisting system, identification of potential deficiencies based on our physical observations readily available to view, quick check calculations, and recommendations for the required seismic upgrades based on our evaluation. The evaluation was based on information gathered from as-built drawings and information gathered from our site observation.

Observations, analysis, conclusions and recommendations contained in this report reflect our best engineering judgment. Concealed problems with the construction of the building may exist that cannot be revealed through our review. ABHT Structural Engineers in no way guarantees the condition of the existing construction of the building and the building site.

2.0 BUILDING DESCRIPTION

Reference the attached Table 1: Building Information within Appendix B for general building information and building structural information for Wolf Creek Branch Library included within this ASCE 41-13 Evaluation.

3.0 VISUAL OBSERVATION

On September 18, 2018, a representative of ABHT Structural Engineers (Christopher Kemp) walked through the building and reviewed the general condition of the structure and its contents. The primary objectives of the site observation were to evaluate the structure readily exposed to view, to look for signs of distress, settlement, or deterioration, and to become familiar with the building and its construction. No material testing or exploratory demolition occurred during this observation visit to evaluate the existing construction. Our observation revealed the following:

- No significant spalling of the concrete was observed.
- No significant cracks within the concrete foundations and stem walls were observed.
- No significant settlement of foundations was observed.

- It appeared that the gypsum suspended ceiling had adequate lateral bracing.
- Piping in the mechanical room appeared to be adequately braced to the structure.
- Splitting of the deck support posts was observed.

4.0 EVALUATION SUMMARY AND LIST OF DEFICIENCIES

We have performed an ASCE 41-13 Tier 1 Screening Phase of the existing structure. The level of earthquake ground motion was based on the Basic Safety Earthquake-1 (BSE-1). The required checklists per Table 4-7 of the ASCE 41-13 were completed as follows:

- 16.1.2LS: Life Safety Basic Configuration Checklist
- 16.3LS: Life Safety Structural Checklist for Building Types W2: Wood Frames, Commercial and Industrial (for Areas E2/Upper Floor E3)
- 16.17: Nonstructural Checklist

Please reference Appendix A for the completed ASCE 41-13 required checklists and the supporting structural calculations provided with this report. Reference Table 2 in Appendix B for a list of structural deficiencies per the ASCE 41-13 Tier 1 Screening.

5.0 STRUCTURAL RECOMMENDATIONS

Reference the attached Table 3 within Appendix B. Based on the ASCE 41-13 report, structural recommendations were provided within this table for the main structural and non-structural deficiencies.

Appendix A: Checklists and Calculations

Project: _____ Location: _____

Completed by: _____ Date: _____

16.1.2LS LIFE SAFETY BASIC CONFIGURATION CHECKLIST

Low Seismicity

Building System

General

- C NC N/A U LOAD PATH: The structure shall contain a complete, well defined load path, including structural elements and connections, that serves to transfer the inertial forces associated with the mass of all elements of the building to the foundation. (Commentary: Sec. A.2.1.1. Tier 2: Sec. 5.4.1.1)
- C NC N/A U ADJACENT BUILDINGS: The clear distance between the building being evaluated and any adjacent building is greater than 4% of the height of the shorter building. This statement shall not apply for the following building types: W1, W1a, and W2. (Commentary: Sec. A.2.1.2. Tier 2: Sec. 5.4.1.2)
- C NC N/A U MEZZANINES: Interior mezzanine levels are braced independently from the main structure or are anchored to the seismic-force-resisting elements of the main structure. (Commentary: Sec. A.2.1.3. Tier 2: Sec. 5.4.1.3)

Building Configuration

- C NC N/A U WEAK STORY: The sum of the shear strengths of the seismic-force-resisting system in any story in each direction is not less than 80% of the strength in the adjacent story above. (Commentary: Sec. A.2.2.2. Tier 2: Sec. 5.4.2.1)
- C NC N/A U SOFT STORY: The stiffness of the seismic-force-resisting system in any story is not less than 70% of the seismic-force-resisting system stiffness in an adjacent story above or less than 80% of the average seismic-force-resisting system stiffness of the three stories above. (Commentary: Sec. A.2.2.3. Tier 2: Sec. 5.4.2.2)
- C NC N/A U VERTICAL IRREGULARITIES: All vertical elements in the seismic-force-resisting system are continuous to the foundation. (Commentary: Sec. A.2.2.4. Tier 2: Sec. 5.4.2.3)
- C NC N/A U GEOMETRY: There are no changes in the net horizontal dimension of the seismic-force-resisting system of more than 30% in a story relative to adjacent stories, excluding one-story penthouses and mezzanines. (Commentary: Sec. A.2.2.5. Tier 2: Sec. 5.4.2.4)
- C NC N/A U MASS: There is no change in effective mass more than 50% from one story to the next. Light roofs, penthouses, and mezzanines need not be considered. (Commentary: Sec. A.2.2.6. Tier 2: Sec. 5.4.2.5)
- C NC N/A U TORSION: The estimated distance between the story center of mass and the story center of rigidity is less than 20% of the building width in either plan dimension. (Commentary: Sec. A.2.2.7. Tier 2: Sec. 5.4.2.6)

Moderate Seismicity: Complete the Following Items in Addition to the Items for Low Seismicity.

Geologic Site Hazards

- C NC N/A U LIQUEFACTION: Liquefaction-susceptible, saturated, loose granular soils that could jeopardize the building's seismic performance shall not exist in the foundation soils at depths within 50 ft under the building. (Commentary: Sec. A.6.1.1. Tier 2: 5.4.3.1)
- C NC N/A U SLOPE FAILURE: The building site is sufficiently remote from potential earthquake-induced slope failures or rockfalls to be unaffected by such failures or is capable of accommodating any predicted movements without failure. (Commentary: Sec. A.6.1.2. Tier 2: 5.4.3.1)
- C NC N/A U SURFACE FAULT RUPTURE: Surface fault rupture and surface displacement at the building site are not anticipated. (Commentary: Sec. A.6.1.3. Tier 2: 5.4.3.1)

High Seismicity: Complete the Following Items in Addition to the Items for Low and Moderate Seismicity.

Foundation Configuration

- C NC N/A U OVERTURNING: The ratio of the least horizontal dimension of the seismic-force-resisting system at the foundation level to the building height (base/height) is greater than $0.6S_a$. (Commentary: Sec. A.6.2.1. Tier 2: Sec. 5.4.3.3)
- C NC N/A U TIES BETWEEN FOUNDATION ELEMENTS: The foundation has ties adequate to resist seismic forces where footings, piles, and piers are not restrained by beams, slabs, or soils classified as Site Class A, B, or C. (Commentary: Sec. A.6.2.2. Tier 2: Sec. 5.4.3.4)

Project: _____

Location: _____

Completed by: _____

Date: _____

16.3LS LIFE SAFETY STRUCTURAL CHECKLIST FOR BUILDING TYPE W2: WOOD FRAMES, COMMERCIAL AND INDUSTRIAL

Low and Moderate Seismicity

Lateral Seismic-Force-Resisting System

- | | | | | |
|----------------------------------|----|----------------------------------|---|---|
| <input checked="" type="radio"/> | NC | N/A | U | REDUNDANCY: The number of lines of shear walls in each principal direction is greater than or equal to 2. (Commentary: Sec. A.3.2.1.1. Tier 2: Sec. 5.5.1.1) |
| <input checked="" type="radio"/> | NC | N/A | U | SHEAR STRESS CHECK: The shear stress in the shear walls, calculated using the Quick Check procedure of Section 4.5.3.3, is less than the following values (Commentary: Sec. A.3.2.7.1. Tier 2: Sec. 5.5.3.1.1):
Structural panel sheathing 1,000 lb/ft
Diagonal sheathing 700 lb/ft
Straight sheathing 100 lb/ft
All other conditions 100 lb/ft |
| <input type="radio"/> | NC | <input checked="" type="radio"/> | U | STUCCO (EXTERIOR PLASTER) SHEAR WALLS: Multi-story buildings do not rely on exterior stucco walls as the primary seismic-force-resisting system. (Commentary: Sec. A.3.2.7.2. Tier 2: Sec. 5.5.3.6.1) |
| <input type="radio"/> | NC | <input checked="" type="radio"/> | U | GYPSON WALLBOARD OR PLASTER SHEAR WALLS: Interior plaster or gypsum wallboard is not used as shear walls on buildings more than one story high with the exception of the uppermost level of a multi-story building. (Commentary: Sec. A.3.2.7.3. Tier 2: Sec. 5.5.3.6.1) |
| <input checked="" type="radio"/> | NC | N/A | U | NARROW WOOD SHEAR WALLS: Narrow wood shear walls with an aspect ratio greater than 2-to-1 are not used to resist seismic forces. (Commentary: Sec. A.3.2.7.4. Tier 2: Sec. 5.5.3.6.1) |
| <input checked="" type="radio"/> | NC | N/A | U | WALLS CONNECTED THROUGH FLOORS: Shear walls have an interconnection between stories to transfer overturning and shear forces through the floor. (Commentary: Sec. A.3.2.7.5. Tier 2: Sec. 5.5.3.6.2) |
| <input checked="" type="radio"/> | NC | N/A | U | HILLSIDE SITE: For structures that are taller on at least one side by more than one-half story because of a sloping site, all shear walls on the downhill slope have an aspect ratio less than 1-to-1. (Commentary: Sec. A.3.2.7.6. Tier 2: Sec. 5.5.3.6.3) |
| <input checked="" type="radio"/> | NC | N/A | U | CRIPPLE WALLS: Cripple walls below first-floor-level shear walls are braced to the foundation with wood structural panels. (Commentary: Sec. A.3.2.7.7. Tier 2: Sec. 5.5.3.6.4) |
| <input checked="" type="radio"/> | NC | N/A | U | OPENINGS: Walls with openings greater than 80% of the length are braced with wood structural panel shear walls with aspect ratios of not more than 1.5-to-1 or are supported by adjacent construction through positive ties capable of transferring the seismic forces. (Commentary: Sec. A.3.2.7.8. Tier 2: Sec. 5.5.3.6.5) |

Connections

- | | | | | |
|----------------------------------|----|-----|---|---|
| <input checked="" type="radio"/> | NC | N/A | U | WOOD POSTS: There is a positive connection of wood posts to the foundation. (Commentary: Sec. A.5.3.3. Tier 2: Sec. 5.7.3.3) |
| <input checked="" type="radio"/> | NC | N/A | U | WOOD SILLS: All wood sills are bolted to the foundation. (Commentary: Sec. A.5.3.4. Tier 2: Sec. 5.7.3.3) |
| <input checked="" type="radio"/> | NC | N/A | U | GIRDER/COLUMN CONNECTION: There is a positive connection using plates, connection hardware, or straps between the girder and the column support. (Commentary: Sec. A.5.4.1. Tier 2: Sec. 5.7.4.1) |

High Seismicity: Complete the Following Items in Addition to the Items for Low and Moderate Seismicity.

Diaphragms

- C (NC) N/A U DIAPHRAGM CONTINUITY: The diaphragms are not composed of split-level floors and do not have expansion joints. (Commentary: Sec. A.4.1.1. Tier 2: Sec. 5.6.1.1)
- C (NC) N/A U ROOF CHORD CONTINUITY: All chord elements are continuous, regardless of changes in roof elevation. (Commentary: Sec. A.4.1.3. Tier 2: Sec. 5.6.1.1)
- C NC (N/A) U DIAPHRAGM REINFORCEMENT AT OPENINGS: There is reinforcing around all diaphragm openings larger than 50% of the building width in either major plan dimension. (Commentary: Sec. A.4.1.8. Tier 2: Sec. 5.6.1.5)
- C NC (N/A) U STRAIGHT SHEATHING: All straight sheathed diaphragms have aspect ratios less than 2-to-1 in the direction being considered. (Commentary: Sec. A.4.2.1. Tier 2: Sec. 5.6.2)
- (C) NC N/A U SPANS: All wood diaphragms with spans greater than 24 ft consist of wood structural panels or diagonal sheathing. Wood commercial and industrial buildings may have rod-braced systems. (Commentary: Sec. A.4.2.2. Tier 2: Sec. 5.6.2)
- (C) NC N/A U DIAGONALLY SHEATHED AND UNBLOCKED DIAPHRAGMS: All diagonally sheathed or unblocked wood structural panel diaphragms have horizontal spans less than 40 ft and aspect ratios less than or equal to 4-to-1. (Commentary: Sec. A.4.2.3. Tier 2: Sec. 5.6.2)
- (C) NC N/A U OTHER DIAPHRAGMS: The diaphragm does not consist of a system other than wood, metal deck, concrete, or horizontal bracing. (Commentary: Sec. A.4.7.1. Tier 2: Sec. 5.6.5)

Connections

- (C) NC N/A U WOOD SILL BOLTS: Sill bolts are spaced at 6 ft or less, with proper edge and end distance provided for wood and concrete. (Commentary: A.5.3.7. Tier 2: Sec. 5.7.3.3)

)

Project: _____

Location: _____

Completed by: _____

Date: _____

16.17 NONSTRUCTURAL CHECKLIST

Life Safety Systems

- C NC N/A U LS-LMH; PR-LMH. FIRE SUPPRESSION PIPING: Fire suppression piping is anchored and braced in accordance with NFPA-13. (Commentary: Sec. A.7.13.1. Tier 2: Sec. 13.7.4)
- C NC N/A U LS-LMH; PR-LMH. FLEXIBLE COUPLINGS: Fire suppression piping has flexible couplings in accordance with NFPA-13. (Commentary: Sec. A.7.13.2. Tier 2: Sec. 13.7.4)
- C NC N/A U LS-LMH; PR-LMH. EMERGENCY POWER: Equipment used to power or control life safety systems is anchored or braced. (Commentary: Sec. A.7.12.1. Tier 2: Sec. 13.7.7)
- C NC N/A U LS-LMH; PR-LMH. STAIR AND SMOKE DUCTS: Stair pressurization and smoke control ducts are braced and have flexible connections at seismic joints. (Commentary: Sec. A.7.14.1. Tier 2: Sec. 13.7.6)
- C NC N/A U LS-MH; PR-MH. SPRINKLER CEILING CLEARANCE: Penetrations through panelized ceilings for fire suppression devices provide clearances in accordance with NFPA-13. (Commentary: Sec. A.7.13.3. Tier 2: Sec. 13.7.4)
- C NC N/A U LS-not required; PR-LMH. EMERGENCY LIGHTING: Emergency and egress lighting equipment is anchored or braced. (Commentary: Sec. A.7.3.1. Tier 2: Sec. 13.7.9)

Hazardous Materials

- C NC N/A U LS-LMH; PR-LMH. HAZARDOUS MATERIAL EQUIPMENT: Equipment mounted on vibration isolators and containing hazardous material is equipped with restraints or snubbers. (Commentary: Sec. A.7.12.2. Tier 2: 13.7.1)
- C NC N/A U LS-LMH; PR-LMH. HAZARDOUS MATERIAL STORAGE: Breakable containers that hold hazardous material, including gas cylinders, are restrained by latched doors, shelf lips, wires, or other methods. (Commentary: Sec. A.7.15.1. Tier 2: Sec. 13.8.4)
- C NC N/A U LS-MH; PR-MH. HAZARDOUS MATERIAL DISTRIBUTION: Piping or ductwork conveying hazardous materials is braced or otherwise protected from damage that would allow hazardous material release. (Commentary: Sec. A.7.13.4. Tier 2: Sec. 13.7.3 and 13.7.5)
- C NC N/A U LS-MH; PR-MH. SHUT-OFF VALVES: Piping containing hazardous material, including natural gas, has shut-off valves or other devices to limit spills or leaks. (Commentary: Sec. A.7.13.3. Tier 2: Sec. 13.7.3 and 13.7.5)
- C NC N/A U LS-LMH; PR-LMH. FLEXIBLE COUPLINGS: Hazardous material ductwork and piping, including natural gas piping, has flexible couplings. (Commentary: Sec. A.7.15.4, Tier 2: Sec.13.7.3 and 13.7.5)
- C NC N/A U LS-MH; PR-MH. PIPING OR DUCTS CROSSING SEISMIC JOINTS: Piping or ductwork carrying hazardous material that either crosses seismic joints or isolation planes or is connected to independent structures has couplings or other details to accommodate the relative seismic displacements. (Commentary: Sec. A.7.13.6. Tier 2: Sec.13.7.3, 13.7.5, and 13.7.6)

Partitions

- C NC N/A U LS-LMH; PR-LMH. UNREINFORCED MASONRY: Unreinforced masonry or hollow-clay tile partitions are braced at a spacing of at most 10 ft in Low or Moderate Seismicity, or at most 6 ft in High Seismicity. (Commentary: Sec. A.7.1.1. Tier 2: Sec. 13.6.2)
- C NC N/A U LS-LMH; PR-LMH. HEAVY PARTITIONS SUPPORTED BY CEILINGS: The tops of masonry or hollow-clay tile partitions are not laterally supported by an integrated ceiling system. (Commentary: Sec. A.7.2.1. Tier 2: Sec. 13.6.2)
- C NC N/A U LS-MH; PR-MH. DRIFT: Rigid cementitious partitions are detailed to accommodate the following drift ratios: in steel moment frame, concrete moment frame, and wood frame buildings, 0.02; in other buildings, 0.005. (Commentary A.7.1.2 Tier 2: Sec. 13.6.2)

- C NC (N/A) U LS-not required; PR-MH. LIGHT PARTITIONS SUPPORTED BY CEILINGS: The tops of gypsum board partitions are not laterally supported by an integrated ceiling system. (Commentary: Sec. A.7.2.1. Tier 2: Sec. 13.6.2)
- C NC (N/A) U LS-not required; PR-MH. STRUCTURAL SEPARATIONS: Partitions that cross structural separations have seismic or control joints. (Commentary: Sec. A.7.1.3. Tier 2. Sec. 13.6.2)
- C NC (N/A) U LS-not required; PR-MH. TOPS: The tops of ceiling-high framed or panelized partitions have lateral bracing to the structure at a spacing equal to or less than 6 ft. (Commentary: Sec. A.7.1.4. Tier 2. Sec. 13.6.2)

Ceilings

- C NC (N/A) U LS-MH; PR-LMH. SUSPENDED LATH AND PLASTER: Suspended lath and plaster ceilings have attachments that resist seismic forces for every 12 ft² of area. (Commentary: Sec. A.7.2.3. Tier 2: Sec. 13.6.4)
- (C) NC N/A U LS-MH; PR-LMH. SUSPENDED GYPSUM BOARD: Suspended gypsum board ceilings have attachments that resist seismic forces for every 12 ft² of area. (Commentary: Sec. A.7.2.3. Tier 2: Sec. 13.6.4)
- C NC (N/A) U LS-not required; PR-MH. INTEGRATED CEILINGS: Integrated suspended ceilings with continuous areas greater than 144 ft², and ceilings of smaller areas that are not surrounded by restraining partitions, are laterally restrained at a spacing no greater than 12 ft with members attached to the structure above. Each restraint location has a minimum of four diagonal wires and compression struts, or diagonal members capable of resisting compression. (Commentary: Sec. A.7.2.2. Tier 2: Sec. 13.6.4)
- C NC (N/A) U LS-not required; PR-MH. EDGE CLEARANCE: The free edges of integrated suspended ceilings with continuous areas greater than 144 ft² have clearances from the enclosing wall or partition of at least the following: in Moderate Seismicity, 1/2 in.; in High Seismicity, 3/4 in. (Commentary: Sec. A.7.2.4. Tier 2: Sec. 13.6.4)
- C NC (N/A) U LS-not required; PR-MH. CONTINUITY ACROSS STRUCTURE JOINTS: The ceiling system does not cross any seismic joint and is not attached to multiple independent structures. (Commentary: Sec. A.7.2.5. Tier 2: Sec. 13.6.4)
- C NC (N/A) U LS-not required; PR-H. EDGE SUPPORT: The free edges of integrated suspended ceilings with continuous areas greater than 144 ft² are supported by closure angles or channels not less than 2 in. wide. (Commentary: Sec. A.7.2.6. Tier 2: Sec. 13.6.4)
- C NC (N/A) U LS-not required; PR-H. SEISMIC JOINTS: Acoustical tile or lay-in panel ceilings have seismic separation joints such that each continuous portion of the ceiling is no more than 2500 ft² and has a ratio of long-to-short dimension no more than 4-to-1. (Commentary: Sec. A.7.2.7. Tier 2: 13.6.4)

Light Fixtures

- C NC N/A (U) LS-MH; PR-MH. INDEPENDENT SUPPORT: Light fixtures that weigh more per square foot than the ceiling they penetrate are supported independent of the grid ceiling suspension system by a minimum of two wires at diagonally opposite corners of each fixture. (Commentary: Sec. A.7.3.2. Tier 2: Sec. 13.6.4 and 13.7.9)
- C NC (N/A) U LS-not required; PR-H. PENDANT SUPPORTS: Light fixtures on pendant supports are attached at a spacing equal to or less than 6 ft and, if rigidly supported, are free to move with the structure to which they are attached without damaging adjoining components. (Commentary: A.7.3.3. Tier 2: Sec. 13.7.9)
- C NC (N/A) U LS-not required; PR-H. LENS COVERS: Lens covers on light fixtures are attached with safety devices. (Commentary: Sec. A.7.3.4. Tier 2: Sec. 13.7.9)

Cladding and Glazing

- C NC (N/A) U LS-MH; PR-MH. CLADDING ANCHORS: Cladding components weighing more than 10 lb/ft² are mechanically anchored to the structure at a spacing equal to or less than the following: for Life Safety in Moderate Seismicity, 6 ft; for Life Safety in High Seismicity and for Position Retention in any seismicity, 4 ft. (Commentary: Sec. A.7.4.1. Tier 2: Sec. 13.6.1)
- C NC (N/A) U LS-MH; PR-MH. CLADDING ISOLATION: For steel or concrete moment frame buildings, panel connections are detailed to accommodate a story drift ratio of at least the following: for Life Safety in Moderate Seismicity, 0.01; for Life Safety in High Seismicity and for Position Retention in any seismicity, 0.02. (Commentary: Sec. A.7.4.3. Tier 2: Section 13.6.1)

- C NC (N/A) U LS-MH; PR-MH. MULTI-STORY PANELS: For multi-story panels attached at more than one floor level, panel connections are detailed to accommodate a story drift ratio of at least the following: for Life Safety in Moderate Seismicity, 0.01; for Life Safety in High Seismicity and for Position Retention in any seismicity, 0.02. (Commentary: Sec. A.7.4.4. Tier 2: Sec. 13.6.1)
- C NC (N/A) U LS-MH; PR-MH. PANEL CONNECTIONS: Cladding panels are anchored out-of-plane with a minimum number of connections for each wall panel, as follows: for Life Safety in Moderate Seismicity, 2 connections; for Life Safety in High Seismicity and for Position Retention in any seismicity, 4 connections. (Commentary: Sec. A.7.4.5. Tier 2: Sec. 13.6.1.4)
- C NC (N/A) U LS-MH; PR-MH. BEARING CONNECTIONS: Where bearing connections are used, there is a minimum of two bearing connections for each cladding panel. (Commentary: Sec. A.7.4.6. Tier 2: Sec. 13.6.1.4)
- C NC (N/A) U LS-MH; PR-MH. INSERTS: Where concrete cladding components use inserts, the inserts have positive anchorage or are anchored to reinforcing steel. (Commentary: Sec. A.7.4.7. Tier 2: Sec. 13.6.1.4)
- C NC N/A U LS-MH; PR-MH. OVERHEAD GLAZING: Glazing panes of any size in curtain walls and individual interior or exterior panes over 16 ft² in area are laminated annealed or laminated heat-strengthened glass and are detailed to remain in the frame when cracked. (Commentary: Sec. A.7.4.8: Tier 2: Sec. 13.6.1.5)

Masonry Veneer

- C NC (N/A) U LS-LMH; PR-LMH. TIES: Masonry veneer is connected to the backup with corrosion-resistant ties. There is a minimum of one tie for every 2-2/3 ft², and the ties have spacing no greater than the following: for Life Safety in Low or Moderate Seismicity, 36 in.; for Life Safety in High Seismicity and for Position Retention in any seismicity, 24 in. (Commentary: Sec. A.7.5.1. Tier 2: Sec. 13.6.1.2)
- C NC (N/A) U LS-LMH; PR-LMH. SHELF ANGLES: Masonry veneer is supported by shelf angles or other elements at each floor above the ground floor. (Commentary: Sec. A.7.5.2. Tier 2: Sec. 13.6.1.2)
- C NC (N/A) U LS-LMH; PR-LMH. WEAKENED PLANES: Masonry veneer is anchored to the backup adjacent to weakened planes, such as at the locations of flashing. (Commentary: Sec. A.7.5.3. Tier 2: Sec. 13.6.1.2)
- C NC (N/A) U LS-LMH; PR-LMH. UNREINFORCED MASONRY BACKUP: There is no unreinforced masonry backup. (Commentary: Sec. A.7.7.2. Tier 2: Section 13.6.1.1 and 13.6.1.2)
- C NC (N/A) U LS-MH; PR-MH. STUD TRACKS: For veneer with metal stud backup, stud tracks are fastened to the structure at a spacing equal to or less than 24 in. on center. (Commentary: Sec. A.7.6.1. Tier 2: Section 13.6.1.1 and 13.6.1.2)
- C NC (N/A) U LS-MH; PR-MH. ANCHORAGE: For veneer with concrete block or masonry backup, the backup is positively anchored to the structure at a horizontal spacing equal to or less than 4 ft along the floors and roof. (Commentary: Sec. A.7.7.1. Tier 2: Section 13.6.1.1 and 13.6.1.2)
- C NC (N/A) U LS-not required; PR-MH. WEEP HOLES: In veneer anchored to stud walls, the veneer has functioning weep holes and base flashing. (Commentary: Sec. A.7.5.6. Tier 2: Section 13.6.1.2)
- C NC (N/A) U LS-not required; PR-MH. OPENINGS: For veneer with metal stud backup, steel studs frame window and door openings. (Commentary: Sec. A.7.6.2. Tier 2: Sec. 13.6.1.1 and 13.6.1.2)

Parapets, Cornices, Ornamentation, and Appendages

- C NC (N/A) U LS-LMH; PR-LMH. URM PARAPETS OR CORNICES: Laterally unsupported unreinforced masonry parapets or cornices have height-to-thickness ratios no greater than the following: for Life Safety in Low or Moderate Seismicity, 2.5; for Life Safety in High Seismicity and for Position Retention in any seismicity, 1.5. (Commentary: Sec. A.7.8.1. Tier 2: Sec. 13.6.5)
- C NC (N/A) U LS-LMH; PR-LMH. CANOPIES: Canopies at building exits are anchored to the structure at a spacing no greater than the following: for Life Safety in Low or Moderate Seismicity, 10 ft; for Life Safety in High Seismicity and for Position Retention in any seismicity, 6 ft. (Commentary: Sec. A.7.8.2. Tier 2: Sec. 13.6.6)
- C NC (N/A) U LS-MH; PR-LMH. CONCRETE PARAPETS: Concrete parapets with height-to-thickness ratios greater than 2.5 have vertical reinforcement. (Commentary: Sec. A.7.8.3. Tier 2: Sec. 13.6.5)
- C NC (N/A) U LS-MH; PR-LMH. APPENDAGES: Cornices, parapets, signs, and other ornamentation or appendages that extend above the highest point of anchorage to the structure or cantilever from components are reinforced and anchored to the structural system at a spacing equal to or less than 6 ft. This checklist item does not apply to parapets or cornices covered by other checklist items. (Commentary: Sec. A.7.8.4. Tier 2: Sec. 13.6.6)

Masonry Chimneys

- C NC (N/A) U LS-LMH; PR-LMH. URM CHIMNEYS: Unreinforced masonry chimneys extend above the roof surface no more than the following: for Life Safety in Low or Moderate Seismicity, 3 times the least dimension of the chimney; for Life Safety in High Seismicity and for Position Retention in any seismicity, 2 times the least dimension of the chimney. (Commentary: Sec. A.7.9.1. Tier 2: 13.6.7)
- C NC (N/A) U LS-LMH; PR-LMH. ANCHORAGE: Masonry chimneys are anchored at each floor level, at the topmost ceiling level, and at the roof. (Commentary: Sec. A.7.9.2. Tier 2: 13.6.7)

Stairs

- C NC (N/A) U LS-LMH; PR-LMH. STAIR ENCLOSURES: Hollow-clay tile or unreinforced masonry walls around stair enclosures are restrained out-of-plane and have height-to-thickness ratios not greater than the following: for Life Safety in Low or Moderate Seismicity, 15-to-1; for Life Safety in High Seismicity and for Position Retention in any seismicity, 12-to-1. (Commentary: Sec. A.7.10.1. Tier 2: Sec. 13.6.2 and 13.6.8)
- C NC (N/A) U LS-LMH; PR-LMH. STAIR DETAILS: In moment frame structures, the connection between the stairs and the structure does not rely on shallow anchors in concrete. Alternatively, the stair details are capable of accommodating the drift calculated using the Quick Check procedure of Section 4.5.3.1 without including any lateral stiffness contribution from the stairs. (Commentary: Sec. A.7.10.2. Tier 2: 13.6.8)

Contents and Furnishings

- C NC (N/A) U LS-MH; PR-MH. INDUSTRIAL STORAGE RACKS: Industrial storage racks or pallet racks more than 12 ft high meet the requirements of ANSI/MH 16.1 as modified by ASCE 7 Chapter 15. (Commentary: Sec. A.7.11.1. Tier 2: Sec. 13.8.1)
- C NC N/A (U) LS-H; PR-MH. TALL NARROW CONTENTS: Contents more than 6 ft high with a height-to-depth or height-to-width ratio greater than 3-to-1 are anchored to the structure or to each other. (Commentary: Sec. A.7.11.2. Tier 2: Sec. 13.8.2)
- C NC N/A (U) LS-H; PR-H. FALL-PRONE CONTENTS: Equipment, stored items, or other contents weighing more than 20 lb whose center of mass is more than 4 ft above the adjacent floor level are braced or otherwise restrained. (Commentary: Sec. A.7.11.3. Tier 2: Sec. 13.8.2)
- ↳ C NC (N/A) U LS-not required; PR-MH. ACCESS FLOORS: Access floors more than 9 in. high are braced. (Commentary: Sec. A.7.11.4. Tier 2: Sec. 13.8.3)
- C NC (N/A) U LS-not required; PR-MH. EQUIPMENT ON ACCESS FLOORS: Equipment and other contents supported by access floor systems are anchored or braced to the structure independent of the access floor. (Commentary: Sec. A.7.11.5. Tier 2: Sec. 13.7.7 and 13.8.3)
- C NC (N/A) U LS-not required; PR-H. SUSPENDED CONTENTS: Items suspended without lateral bracing are free to swing from or move with the structure from which they are suspended without damaging themselves or adjoining components. (Commentary: A.7.11.6. Tier 2: Sec. 13.8.2)

Mechanical and Electrical Equipment

- C NC N/A (U) LS-H; PR-H. FALL-PRONE EQUIPMENT: Equipment weighing more than 20 lb whose center of mass is more than 4 ft above the adjacent floor level, and which is not in-line equipment, is braced. (Commentary: A.7.12.4. Tier 2: 13.7.1 and 13.7.7)
- C NC N/A (U) LS-H; PR-H. IN-LINE EQUIPMENT: Equipment installed in-line with a duct or piping system, with an operating weight more than 75 lb, is supported and laterally braced independent of the duct or piping system. (Commentary: Sec. A.7.12.5. Tier 2: Sec. 13.7.1)
- C NC N/A (U) LS-H; PR-MH. TALL NARROW EQUIPMENT: Equipment more than 6 ft high with a height-to-depth or height-to-width ratio greater than 3-to-1 is anchored to the floor slab or adjacent structural walls. (Commentary: Sec. A.7.12.6. Tier 2: Sec. 13.7.1 and 13.7.7)
- C NC (N/A) U LS-not required; PR-MH. MECHANICAL DOORS: Mechanically operated doors are detailed to operate at a story drift ratio of 0.01. (Commentary: Sec. A.7.12.7. Tier 2: Sec. 13.6.9)

- C NC (N/A) U LS-not required; PR-H. SUSPENDED EQUIPMENT: Equipment suspended without lateral bracing is free to swing from or move with the structure from which it is suspended without damaging itself or adjoining components. (Commentary: Sec. A.7.12.8. Tier 2: Sec. 13.7.1 and 13.7.7)
- C NC (N/A) U LS-not required; PR-H. VIBRATION ISOLATORS: Equipment mounted on vibration isolators is equipped with horizontal restraints or snubbers and with vertical restraints to resist overturning. (Commentary: Sec. A.7.12.9. Tier 2: Sec. 13.7.1)
- C NC (N/A) U LS-not required; PR-H. HEAVY EQUIPMENT: Floor-supported or platform-supported equipment weighing more than 400 lb is anchored to the structure. (Commentary: Sec. A.7.12.10. Tier 2: 13.7.1 and 13.7.7)
- C NC (N/A) U LS-not required; PR-H. ELECTRICAL EQUIPMENT: Electrical equipment is laterally braced to the structure. (Commentary: Sec. A.7.12.11. Tier 2: 13.7.7)
- C NC (N/A) U LS-not required; PR-H. CONDUIT COUPLINGS: Conduit greater than 2.5 in. trade size that is attached to panels, cabinets, or other equipment and is subject to relative seismic displacement has flexible couplings or connections. (Commentary: Sec. A.7.12.12. Tier 2: 13.7.8)

Piping

- C NC (N/A) U LS-not required; PR-H. FLEXIBLE COUPLINGS: Fluid and gas piping has flexible couplings. (Commentary: Sec. A.7.13.2. Tier 2: Sec. 13.7.3 and 13.7.5)
- C NC (N/A) U LS-not required; PR-H. FLUID AND GAS PIPING: Fluid and gas piping is anchored and braced to the structure to limit spills or leaks. (Commentary: Sec. A.7.13.4. Tier 2: Sec. 13.7.3 and 13.7.5)
- C NC (N/A) U LS-not required; PR-H. C-CLAMPS: One-sided C-clamps that support piping larger than 2.5 in. in diameter are restrained. (Commentary: Sec. A.7.13.5. Tier 2: Sec. 13.7.3 and 13.7.5)
- C NC (N/A) U LS-not required; PR-H. PIPING CROSSING SEISMIC JOINTS: Piping that crosses seismic joints or isolation planes or is connected to independent structures has couplings or other details to accommodate the relative seismic displacements. (Commentary: Sec. A.7.13.6. Tier 2: Sec. 13.7.3 and Sec. 13.7.5)

Ducts

- C NC (N/A) U LS-not required; PR-H. DUCT BRACING: Rectangular ductwork larger than 6 ft² in cross-sectional area and round ducts larger than 28 in. in diameter are braced. The maximum spacing of transverse bracing does not exceed 30 ft. The maximum spacing of longitudinal bracing does not exceed 60 ft. (Commentary: Sec. A.7.14.2. Tier 2: Sec. 13.7.6)
- C NC (N/A) U LS-not required; PR-H. DUCT SUPPORT: Ducts are not supported by piping or electrical conduit. (Commentary: Sec. A.7.14.3. Tier 2: Sec. 13.7.6)
- C NC (N/A) U LS-not required; PR-H. DUCTS CROSSING SEISMIC JOINTS: Ducts that cross seismic joints or isolation planes or are connected to independent structures have couplings or other details to accommodate the relative seismic displacements. (Commentary: Sec. A.7.14.5. Tier 2: Sec. 13.7.6)

Elevators

- C NC (N/A) U LS-H; PR-H. RETAINER GUARDS: Sheaves and drums have cable retainer guards. (Commentary: Sec. A.7.16.1. Tier 2: 13.8.6)
- C NC (N/A) U LS-H; PR-H. RETAINER PLATE: A retainer plate is present at the top and bottom of both car and counterweight. (Commentary: Sec. A.7.16.2. Tier 2: 13.8.6)
- C NC (N/A) U LS-not required; PR-H. ELEVATOR EQUIPMENT: Equipment, piping, and other components that are part of the elevator system are anchored. (Commentary: Sec. A.7.16.3. Tier 2: 13.8.6)
- C NC (N/A) U LS-not required; PR-H. SEISMIC SWITCH: Elevators capable of operating at speeds of 150 ft/min or faster are equipped with seismic switches that meet the requirements of ASME A17.1 or have trigger levels set to 20% of the acceleration of gravity at the base of the structure and 50% of the acceleration of gravity in other locations. (Commentary: Sec. A.7.16.4. Tier 2: 13.8.6)

- C NC (N/A) U LS-not required; PR-H. SHAFT WALLS: Elevator shaft walls are anchored and reinforced to prevent toppling into the shaft during strong shaking. (Commentary: Sec. A.7.16.5. Tier 2: 13.8.6)
- C NC (N/A) U LS-not required; PR-H. COUNTERWEIGHT RAILS: All counterweight rails and divider beams are sized in accordance with ASME A17.1. (Commentary: Sec. A.7.16.6. Tier 2: 13.8.6)
- C NC (N/A) U LS-not required; PR-H. BRACKETS: The brackets that tie the car rails and the counterweight rail to the structure are sized in accordance with ASME A17.1. (Commentary: Sec. A.7.16.7. Tier 2: 13.8.6)
- C NC (N/A) U LS-not required; PR-H. SPREADER BRACKET: Spreader brackets are not used to resist seismic forces. (Commentary: Sec. A.7.16.8. Tier 2: 13.8.6)
- C NC (N/A) U LS-not required; PR-H. GO-SLOW ELEVATORS: The building has a go-slow elevator system. (Commentary: Sec. A.7.16.9. Tier 2: 13.8.6)

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Appendix B: Structural & Non- Structural Deficiencies and Recommendations

TABLE 1: Building Information (Wolf Creek Library)

General Building Information						
Address	Approximate Year Constructed	Stories	Approximate Building Height	Approximate Total Sq. Footage	Information Available	Added Notes
102 Ruth Avenue	2002	1	19'-0" (Varies)	2,600-sf (w/ approx. 200-sf basement area)	1. Drawings dated January 2002	One story wood framed structure with crawl space framing and a small basement area.

Building Structural Information		
Portion of Structure	Description	Added Notes
Foundation	Conventional continuous concrete footings with varying stem wall and top of footing heights.	
Floor and Roof Framing	The roof systems consists of a pre-manufactured gang nail wood truss system with 5/8" plywood sheathing and 2x overframing where occurs. 5 1/8"x12" glulam beams are utilized as roof girders and drag struts at specific locations. The floor system is composed of 11 7/8" TJI/L65 joists at 16" o.c. with 1 1/8" plywood floor sheathing. 4" concrete slab at the basement mechanical room. Interior and exterior wood bearing/sehar walls consist of 2x6 wood studs at 16" o.c with 1/2" plywood sheathing. Hardiplank siding exists at the exterior. Interior crawl space supporting pony walls utilize 2x4 stud walls at 16" o.c.	
Lateral System	Wood framed shear walls with flexible diaphragm. Glulam beams and wood trusses utilized as drag elements.	

TABLE 2: Structural and Non-Structural Deficiencies (Wolf Creek Branch Library)

Structural Issues		
Item #	Description	Added Notes
1. Diaphragm/Roof Chord Continuity	Per the as-built drawings there is discontinuity in the roof diaphragm sheathing at the Ridge Vent. It does not appear that strapping was provided to transfer lateral forces continuously at the discontinuity.	Info obtained from as-built drawings.
2. Potential Anchorage of tall cabinets	Tall cabinets (greater than 6-ft in height including book stacks) may not have been properly anchored to the structure.	
3. Potential Lighting Anchorage	It could not be determined if the larger light fixtures were independently supported to the structure.	
4. Deck Posts and Guardrail Connections	The exterior deck posts have evident splitting and there is a potential of inadequacy of the guardrail connection.	

TABLE 3: Structural and Non-Structural Recommendations (Wolf Creek Branch Library)

Structural Recommendations		
Item #	Recommendations	Added Notes
1. Diaphragm/Roof Chord Continuity	When the building requires the roof to be removed and replaced, we would recommend added continuous light gage strapping on each side of the roof vent on top of the wood blocking.	
2. Potential Anchorage of tall cabinets	Provide anchorage of tall cabinets to the structure where required.	
3. Potential Lighting Anchorage	Anchor lights to the structure (independent of the ceiling) where required.	
4. Deck Posts and Guardrail Connections	In Progress	



Children



Josephine Community Library District Facility Assessment

Wolf Creek Branch

October 4, 2018

pae-engineers.com



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Project Directory

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1.0 Project Description

1.1 General Building Description

The Wolf Creek branch is considering interior renovations to upgrade the facility. The following report is an assessment of the existing mechanical, electrical, and plumbing systems in the building.

Size:	2,594
Number of Floors:	1
Function:	Community Library
Year Built:	2002



2.0 Mechanical Systems

2.1 Control System

DESCRIPTION

A central control system does not exist in the building. Two 7-day programmable thermostats serve each of the HVAC systems.

GENERAL CONDITIONS

The thermostats are in fairly good condition and operating well.

CODE ISSUES

None.

RECOMMENDATIONS

Library staff should review programmed schedule to ensure adequate setback temperatures during unoccupied days and times to save energy. See recommendations for HVAC system.

2.2 HVAC Systems

The building is served by two DX split system fan coil unit heat pumps with ducted air systems. The zones seem to be the east meeting room and entry on the east unit and the stack area, check out, and office on the west unit. This was not confirmed. Both units are located in a basement mechanical room located on the south east of the building.

EAST FAN COIL UNIT

Description

The entry area, restrooms, and meeting room are served by a DX split system heat pump located in the mechanical room. The supply ductwork is routed in the crawl space to floor registers. The return ductwork is in the attic space and connected to two ceiling return grilles, one near the entry and the other in the meeting room. A 12x12 common outside air louver located on the south façade of the mechanical room provides an unknown amount of outdoor air into both units. An air cooled condensing unit is located next to the east wall of the building.

General Conditions

This unit is in good condition with about 10 years of useful life remaining. Staff mentioned that they had no issues with the HVAC system.

The condition of the ductwork was not visible.

Code Issues

There were no evidence of Code issues.



Recommendations

One of the floor registers in the meeting room was covered by a shelving unit. We recommend moving the shelves to allow for better air flow.

WEST FAN COIL UNIT

Description

The stack area, check out, and office are served by a DX split system heat pump located in the mechanical room. The supply ductwork is routed in the attic to ceiling grilles. The return ductwork is in the attic space and connected to two ceiling return grilles in the stack area. A 12x12 common outside air louver located on the south façade of the mechanical room provides an unknow amount of outdoor air into both units. An air cooled condensing unit is located next to the east wall of the building.

General Conditions

This unit is in good condition with about 10 years of useful life remaining. Staff mentioned that they had no issues with the HVAC system.

The condition of the ductwork was not visible.

Code Issues

There were no evidence of Code issues.

Recommendations

We have no recommendations to this unit.

2.3 Exhaust Systems

DESCRIPTION

Bathroom exhaust is handled by two separate ceiling mounted exhaust fans connected to light switches. It is assumed that the fans are connected via ductwork to roof vents.

GENERAL CONDITIONS

The fans are in good condition.

CODE ISSUES

It was not possible to determine of the exhaust quantities meet current Code requirements. However, there did not seem to be any performance issues.

RECOMMENDATIONS

Check the duct connections between the fans and roof discharge.



3.0 Plumbing Systems

3.1 Domestic Water, Storm Drain, Sanitary Sewer

DESCRIPTION

Domestic water is provided to the building via a on-site well pump located at the north east corner of the building.

Domestic hot water is provided by a 30-gallon electric water heater located in the mechanical room.

Sanitary waste piping leaves the building towards the south and is connected to an onsite septic system with drain field.

The storm system is gutters with downspouts connected to below grade storm piping.

A sump pump is located in the mechanical room.

GENERAL CONDITIONS

Building pressure seems adequate and the cold and hot water piping seems to be in good condition. The water heater is in good condition. The hot water recirculation pump is unplugged. This may result in longer wait times for hot water at the sinks, but the staff did not see any issues.

CODE ISSUES

None.

RECOMMENDATIONS

Connect the water heater recirculation pump if necessary to speed up hot water delivery.

3.2 Plumbing Fixtures

DESCRIPTION

The building contains floor mounted, tank style water closets, wall hung lavatories, and a break room sink.

GENERAL CONDITIONS

The plumbing fixtures are in fair condition. The floor in the restrooms do not properly slope to the floor drains.

CODE ISSUES

None.

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RECOMMENDATIONS

Replace with more modern and water saving fixtures during the next major renovation. Adjust the floor slope in the restrooms.



4.0 Fire Protection Systems

4.1 Fire Protection

DESCRIPTION

The building is not protected by an automatic fire sprinkler system. A ~5,000 gallon fire water storage tank is located near the north west corner of the building and is connected to a hydrant.

GENERAL CONDITIONS

Not applicable.

CODE ISSUES

None.

RECOMMENDATIONS

Add an automatic fire sprinkler system during the next major renovation.



5.0 Electrical

5.1 Service and Distribution

DESCRIPTION

The existing electrical system consists of a single metered service, split into two main panels each rated 200A, 120/240VAC, 1-phase, 3-wire, GE gear installed in 2002. Service is delivered with underground secondary service drop from pole-mounted transformer near the property boundary.

Branch circuits to lighting, power and equipment are served directly from the service panels. The overcurrent protection devices in the panels are molded case circuit breakers serving branch loads.

Emergency power source was not observed at the premises.

GENERAL CONDITIONS

The two existing service panels and sub-panels appear to be in good condition and are expected to be approximately halfway through their useful life.

Branch circuiting is concealed at interior spaces and is installed in metallic conduit where exposed in the basement mechanical space.

CODE ISSUES

No known code issues.



RECOMMENDATIONS

Cycle and test existing circuit breakers at each panel and replace malfunctioning breakers as occurring.



6.0 Lighting

6.1 Interior Lighting

DESCRIPTION

Building interior lighting consists of fluorescent and compact fluorescent for interior spaces, and LED wall packs at the exterior. Fixtures are a combination of recessed troffers and compact fluorescent downlights, all with manual wall control via toggle switches. All areas appear to be controlled by manual toggles switches only.

Exterior lighting consists of building-mounted LED wall pack lighting. Controls are via photocell mounted on the building exterior.

Egress lighting is integrated with the exit signage and have local battery backup power.

GENERAL CONDITIONS

The existing interior lighting is beyond the halfway point for useful life. Fluorescent lamp sources are non-efficient compared to available LED fixtures and will present maintenance requirements over the coming years.

Light levels at the main stacks appears to be adequate and fixtures are oriented directly above the central stacks. No exterior lighting is present at parking area.

CODE ISSUES

No known code issues.



October 4, 2018



RECOMMENDATIONS

Provide centralized lighting control system with timed ON/OFF controls for open library/stack areas and exterior lighting, and occupancy sensor controls at small support rooms and restrooms.

Replace building interior lighting with new high-efficiency LED fixtures, for open area 2x4 fixtures and recessed downlighting.

Provide LED pole mounted area lighting near parking area.



7.0 Fire Alarm Systems

DESCRIPTION

The open library area has residential grade smoke alarms installed. No central fire alarm system is present at the building and is not required by code.

CODE ISSUES

No known code issues.



RECOMMENDATIONS

Provide new fire alarm system and control panel, with ceiling smoke detector coverage throughout the library. Include dial-out capability and central monitoring. NOTE: This improvement is not required by code, but was discussed with the staff as a means of early detection capable of automatically notifying first responders and library staff in a smoke/fire detection event.

-end-

Illinois Valley Library



ILLINOIS VALLEY LIBRARY Building Assessment

HACKER

ABHT
STRUCTURAL ENGINEERS

PAE

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Illinois Valley Branch Library

Cave Junction, Oregon
Josephine Community Library District

Address: 209 West Palmer Street, Cave Junction
Year built: 1957 (2117 SF)
Year addition built: 1978 (Additional 2000 SF)
Total Area: 4117 SF

General

The Illinois Valley Branch Library was originally built in 1957 as a branch library as a single-story structure on grade. The library was expanded in 1978 with 3 new additions: an extension of the existing building keeping a similar structure and form; a CMU wing added to the rear of the building, and the conversion of an existing carport into library staff support space.

The assessment is based on visual inspection from a field walk performed on September 18th, 2018. The following people were present:

- Joe Swank, Architect, Hacker
- Ruwan Jayaweera, Mechanical Engineer, PAE
- Adam Koble, Electrical Engineer, PAE
- Christopher Kemp, Structural Engineer, ABHT
- Teresa Stover, JCLD communications specialist
- Doug Whalen, Josephine County Facility Services
- Roberta Lee, Illinois Valley library Branch Manager

The site, exterior, Roof, and all interior spaces were accessible and visually inspected. No under slab plenum spaces were observed. Staff was available for questions, and able to articulate some ongoing maintenance concerns.

Construction drawings associated with the original 1957 structure and the 1978 addition were reviewed in conjunction with the visual inspection of the facility. Note that no Hazardous Material Survey or testing was performed in conjunction with this assessment.

The minimum standard for any recommendations set forth in the following assessment is to identify Code Compliance issues. The Current Governing Code for reference to this assessment is the 2014 Oregon Structural Specialty Code. Renovations and additions to existing buildings do not require all elements to be brought up to current code standards, however any new addition or renovation would need to meet current standards for all new work. Similarly, ORS 447.241 governs that up to 25% of the cost of a renovation can be mandated to improve accessibility if existing conditions are not deemed accessible. The priority for such improvements is as follows starting with the highest priority: Parking, an accessible entrance, an accessible route to alteration or addition, at least (1) accessible restroom for each sex, or single unisex accessible

restroom, accessible telephone, accessible drinking fountain, and finally additional accessible elements such as storage and alarms.

Site and Site Access

Parking consists of 12 total spaces with direct pull directly off Palmer street. Layout results in poor parking efficiency as vehicles back directly into traffic 1 spot is severely hampered by existing Utility Pole in the right of way, resulting in insufficient access if adjacent vehicles are present. There are (2) signed ADA parking spaces; neither of which meet current Accessibility standards per Oregon Structural Specialty Code. All stalls are poorly striped. (see figure 1)



Figure 1

City of Cave Junction requirements do not specifically cover municipal uses as it is subject to City Council review, yet the requirements for a commercial or retail space and or place of business, most similar to a library stipulate a 1 parking stall per 350 SF of building. Libraries in Grants Pass are 1 stall per 500SF for reference. The 12 spaces supplied are compliant with this standard. Current Code allows only 1 space to be ADA compliant for up to 25 parking spaces. Currently neither spot indicated as ADA is compliant.

There is a loading drive on the west end of the library which appears sufficient for the library's current use. Sidewalk frontage is hampered by a continuous curb cut at the parking zone, resulting in a vehicular pedestrian conflict with vehicles backing out directly into the street. Additionally, the primary pedestrian access to the building entrance and adjacent to the book drop is a significant slope and suffers from settlement and cracking issues (see figure 2). Anecdotally library staff struggles with book carts to and from the book drop located at the street.



Figure 2

Building geometry creates a yard in the back of the building that is a security liability for the Library. There are no windows to this area, and no visibility to it from the street or adjacent properties. A fence and additional security measures have been added to discourage improper use of this area.

The site has an existing drinking fountain that has been decommissioned. The irrigation system currently is not functional. High ground water issues and some site flooding occur during heavy rains.

Recommendations

Minimum recommendation for site access:

Maintain a single ADA parking stall adjacent to building access. Remove second non-compliant ADA stall. Add compliant loading clearance adjacent to ADA parking. Relocate bike racks hampering ADA stall loading. Repair cracks and sidewalk settlement issues greater than $\frac{1}{4}$ " from right of way to building entrance. Restripe parking spaces.

Additional enhancements to be considered are as follows:

Remove and replace sidewalk access from book drop to front entrance. Provide new ADA Push button on building power both within interior of library as well as exterior bollard mounted push button. Consider relocating Utility pole with City to improve curb access to parking. An alternative would be to Redesign the entire parking area to provide proper drive aisle and parking layout which would not require the constant curb cut at the street and improve sidewalk access along Palmer street.

Landscape improvements could be considered to improve irrigation system, address the security issues in the rear of the building and remove nonfunctional amenities such as the

drinking fountain. Further investigation is recommended to guide addressing the ground water and sub-drainage for the site. See Building Envelope section for further recommendations related to security in the rear yard of the site.

Building and Restroom Accessibility

The primary entrance is equipped with a battery-operated ADA bollard mounted door operator. Staff has had to physically maintain this as it is battery operated. Aluminum entrance doors also stick at both the exterior door and the interior vestibule door hindering and increasing the wear on the door operators (see figure 3).



Figure 3

Size of the building does require 2 exits. Currently there are 5 exterior doors provided. Of those 5 doors 3 are accessible to public areas. In addition to the primary entry door the other two discharge to small concrete pad, one of which is into the fenced and secured rear yard, and consequently does not provide adequate access to the public way. Second door out of the reading room is adequate as a second exit.

There are (2) single occupancy restrooms that are accessible to the public. There is an additional staff bathroom that is not for public use. Currently the quantity of restrooms is acceptable for the number of building occupants load of 55. An additional occupant load of 74 can be added via a renovation or addition prior to requiring additional restrooms for public use.

Two Public Restrooms appear to meet current size and access requirements. However; toilets, grab bars, and accessories do not meet current accessible heights. Additionally, the sink in both restrooms does not provide proper floor clearance or kneed clearance below the fixture. The single staff restroom does not meet accessible requirements. (See Figure 4)



Figure 4

A new drinking fountain has been installed complete with bottle filler. The fountain as installed meets all ADA requirements; however, the 30" clear floor space required for the drinking fountain appears to be encroached on by periodical rack and adjacent stack. (see Figure 4)

Recommendations

Minimum recommendations for accessibility and egress:

Remove illuminated exit sign from Rear Media room as this door does not discharge into an acceptable exit.

Update Plumbing fixtures, sinks, and grab bar and toilet accessories to meet current accessibility standards and mounting heights.

Narrow or remove furnishings within the 30" clear floor area for the new drinking fountain.

Enhanced recommendations for accessibility and egress:

Address the ADA bollard and Aluminum front entry doors. Investigate if Aluminum doors can be retrofitted to not stick. Hardwire the ADA bollard actuator. New actuators and push button may be additionally required.

Improvements to the exit hardware at the east end of the building to provide free egress without a padlock. A locking exit device with no exterior hardware would provide a more secure condition without impeding egress. Additionally, other exterior door hardware modifications could be made to increase security.

Staff restroom currently is not accessible, in a renovation situation this restroom is not required to be accessible, but nonetheless does not accommodate any staff or employee with a disability. Enlarging restroom and replacing fixtures to current accessibility standards is recommended with any renovation rework of staff area.

Building Exterior:

The original 1957 structure, and its subsequent 1978 renovation are built primarily out of the same exterior cladding materials and will be described in conjunction. The Library consists of a concrete slab on grade with a combination of CMU and 2x4 light wood framing. There is no Vapor barrier under the slab on grade for the existing structure, but there is a vapor barrier for the new locations of slab on grade. CMU walls in the 1978 addition are insulated within the cavity where cavities are not filled with grout. It is unclear if 1957 CMU exterior walls are insulated. Insulation type for the CMU cavities is unknown, yet likely perlite. The assembly carries an approximate insulating value of R-5. The wood framed walls are insulated with 3 ½ inches of fiberglass batt insulation, which carries an approximate R-value of R-11.

Framed walls are clad with 1x6 cedar vertical T and G siding installed over plywood sheathing and 15 lbs. felt for the addition. 1957 framed do not have a felt layer based on the record drawings for the building. The siding showed no visible signs of rot and was in relatively good condition. A significant crack does exist at CMU wall joint between the 1957 structure and 1978 addition. Crack does telegraph from the exterior to the interior, no visible signs of moisture or water damage are associated with the crack. Otherwise CMU walls are in generally good condition. Exterior paint is chipped and flaking, particularly at the wall base. Several electrical conduit penetrations at the south edge of the building are not properly sealed and present an air/moisture infiltration issue (*see figure 5*).



Figure 5

Windows for both structures consist of single pane glass glazed into wood stops for the majority of the north elevation and children's area. Single pane aluminum windows are in the CMU walls. Aluminum operable awning windows are present in reading room and children's area. Most have been screwed shut.

Current Roof is a composite asphalt shingle with gutters at the eaves. The addition to the library in 1978 replaced the original built up roof with a new built up roof with a 1 ½" of insulation. According to Doug Whalen the existing asphalt shingle roof has not been replaced during his 20-year tenure at the county, as he has been employed there since

1998. The new roof was likely overlayed over the existing Built up roof. It is unknown without some selective demolition if additional insulation was added at the time of re-roofing. The roof has leaked and been patched within the last few years and visual inspection would suggest that it is at the end of its functional life. 20 years is the lifespan of a typical asphalt shingle roof. Additionally, the gutter on the south side is bent and does not slope appropriately to downspouts. Several Fascia locations at the SW and SE corners show severe rot. There is a soffit board missing at the east edge of the Media room addition where the meets the existing building. The missing fascia poses an air infiltration and possible pest control issue within the building. There were Rodent Feces evident within the



Figure 6

interior soffit area at the media room. (see Figure 6)

Recommendations

Minimum recommendations for exterior:

Repaint all vertical wood siding to ensure that good condition is maintained. Any testing for lead paint should also be considered prior to any paint preparation or removal. Painting for wood siding should be done approximately every 3-7 years depending on exposure, type of paint etc. CMU walls can go upwards of 15 years without painting again depending on type of paint, exposure etc. Roof Should be wholly replaced, as should gutters and associated rotten Fascia boards. Conduit penetrations should be properly sealed. Missing Fascia board at roof should be properly replaced and sealed to match the west side.

Enhanced recommendations for exterior:

Several enhanced improvements can be made to the exterior, particularly in terms of thermal insulation, energy use, and moisture mitigation. These improvements are best looked at holistically to determine the magnitude and extent of intervention to provide the

best Value. Any major exterior improvements below should be investigated along with an energy model to determine the pay back and to maximize the benefits.

When Roofing is replaced, it may be advantageous. There are also several grants and incentives for many exterior improvements to improve environmental and energy performance, and investigation into these programs can help offset cost and should be considered prior to any major improvements.

When replacing the roof upgrading the insulation to a 6-inch section of rigid insulation to increase the buildings performance.

Replacing all the single pane glazing should be considered. Not only will this improve operable sashes and airflow, but also improve building performance. Insulated double pane glass can additionally assist in alleviating the condensation issues that are currently present within the space in the reading room.

Finally, an entire exterior replacement can be considered. Currently several sections of the building do not have a weather barrier or a true means of keeping water and more importantly water vapor out of the building. The existing walls can be upgraded to a modern rainscreen system by adding a weather barrier, exterior insulation, and additional cladding. This will improve the building's performance substantially if done in conjunction with the roof and window upgrades mentioned above and overall improve the lifespan of the building significantly. An exterior replacement however would be a potentially costly endeavor.

Interior Finishes

The interior finishes consist of exposed CMU walls, wood paneled ceiling and walls where no CMU is present. There are limited areas of dropped Gypsum board ceilings and some areas of adhered acoustic ceiling tile ceiling. Broadloom carpet is present in majority of the library apart from carpet Tile in the children's wing. Broadloom is relatively worn and based on staff anecdotes has not been replaced in quite some time. Additionally it was noted by Library staff that there is VCT tile under. Children's area carpet tile is new and in good shape as is the paint in that wing. When replaced Asbestos abatement was required of the VCT tile at that time. It is wise to assume that a similar abatement would need to occur for VCT tile under broadloom carpet as well.



Figure 7

The stacks themselves were in relatively good condition; however, none of them appear to be secured to the wall or properly secured to the floor. This can pose a significant issue in a seismic event. Media wing consists of almost entirely CMU walls and has very limited acoustically absorptive material.

Restroom finishes consist of painted walls and a Fiber Reinforced Plastic (FRP) wall covering, with a vinyl sheet flooring (*See Figure 7*).

Recommendations:

Minimum recommendations for interiors:

As mentioned in the general section no hazardous material testing was done, and while not visibly apparent the presence of the vinyl flooring and potentially the adhered Acoustic ceiling tile and the possibility of lead paint based on the era of construction would warrant additional testing.

The freestanding stacks and those attached to the wall should all be seismically secured.

Enhanced improvements

The broadloom carpet is likely beyond its functional life and should be replaced.

Restroom Vinyl floor and FRP wall coverings should be replaced particularly if new accessories and fixtures are to be installed to meet accessibility requirements. Paint throughout except for the children's wing is also recommended.

ASCE 41-13 Seismic Evaluation Report

Illinois Valley Branch Library
209 W Palmer St, Cave Junction, OR



ABHT Structural Engineers
Main Contact: Chris Kemp
Project No. 17318

October 08, 2018

Prepared for:

Hacker Architects
1615 SE 3rd Ave, Fifth Floor
Portland, Oregon 97214

1.0 INTRODUCTION

ABHT Structural Engineers was retained by Hacker Architects to conduct an ASCE 41-13 seismic evaluation of the Illinois Valley Branch Library located at 209 W Palmer St in Cave Junction, OR.

The evaluation is based on the American Society of Civil Engineers (ASCE) Standard 41-13, *Seismic Evaluation and Retrofit of Existing Buildings*, commonly referred to as ASCE 41-13. The ASCE 41-13 Standard is a published document which has essentially combined the previous ASCE 31-03 (*Seismic Evaluation of Existing Buildings*) and ASCE 41-06 (*Seismic Rehabilitation of Existing Buildings*) into one document. The purpose of ASCE 41-13 is to provide guidance in the review of an existing building's response to a predetermined level of earthquake based on a selected performance level. This evaluation is based on a Life Safety performance level defined by ASCE 41-13.

The following ASCE 41-13 evaluation consists of a Tier 1 evaluation only. Tier 1 is the Screening Phase which consists of completing a series of checklists and in some cases performing Quick Check structural calculations to quickly identify potential deficiencies.

Our evaluation includes a limited walkthrough of the existing building to observe the general physical status of the structure, an evaluation of the building's lateral force resisting system, identification of potential deficiencies based on our physical observations readily available to view, quick check calculations, and recommendations for the required seismic upgrades based on our evaluation. The evaluation was based on information gathered from as-built drawings and information gathered from our site observation.

Observations, analysis, conclusions and recommendations contained in this report reflect our best engineering judgment. Concealed problems with the construction of the building may exist that cannot be revealed through our review. ABHT Structural Engineers in no way guarantees the condition of the existing construction of the building and the building site.

2.0 BUILDING DESCRIPTION

Reference the attached Table 1: Building Information within Appendix B for general building information and building structural information for Illinois Valley Branch Library included within this ASCE 41-13 Evaluation.

3.0 SEISMIC UPGRADE TRIGGERS

A seismic upgrade of an existing structure (assuming that seismic loads are larger than wind loads) or some of its seismic elements may be triggered by the following:

- 1) Change of Use: If the use or occupancy classification of a structure would reclassify the building to a higher Risk Category, the building will require a global seismic upgrade that meets the requirements of the current building code.
- 2) Addition or Modification of Structure: Any additions to the structure will need to adhere to current seismic code. Any modifications to any existing seismic element will need to be retrofitted/strengthened to current seismic code. However, strengthening of an existing seismic element will not be required if the modification or addition does not increase the demand-to-capacity ratio of the seismic element by more than 10%.

Some examples of seismic upgrade triggers are as follows:

- If an existing Risk Category II building has a change in occupancy which creates mainly Assembly Occupancy space with an overall occupant load of more than 300, this would reclassify the building to a Risk Category III Building. An increase from Risk Category II to Risk Category III, increased the global seismic forces by 25%, and therefore requires a global seismic retrofit as the demand-to-capacity ratio of all seismic elements would increase by more than 10%.
- The addition of a green roof or recladding the structure with a much heavier material. If the green roof or heavier material of recladding is more than 10% of the existing global building weight, a global seismic retrofit would be required as the demand-to-capacity ratio of all seismic elements would be increased by more than 10%.
- A penetration in an existing shear wall (concrete, CMU or wood) would not trigger a global seismic retrofit. However, the wall would require an analysis to determine if the demand-to-capacity ratio of elements of the wall increased by more than 10%. If so, those elements of the wall would have to be seismic strengthened to current seismic code.

In the case of an addition being built adjacent and adjoined to the existing Illinois Valley Library, a seismic analysis would need to be completed to determine the additional loading the new structure may add to the adjacent structure. If through an analysis it was found that portions of the adjacent structure (i.e. CMU wall or walls) had its demand-to-capacity ratio increase by more than 10%, those elements would need to be strengthened to current seismic code including its foundations if necessary.

4.0 VISUAL OBSERVATION

On September 18, 2018, a representative of ABHT Structural Engineers (Christopher Kemp) walked through the building and reviewed the general condition of the structure and its contents. The primary objectives of the site observation were to evaluate the structure readily exposed to view, to look for signs of distress, settlement, or deterioration, and to become familiar with the building and its construction. No material testing or exploratory demolition occurred during this observation visit to evaluate the existing construction. Our observation revealed the following:

- Significant differential settlement between the additions and the original structure was observed.
- Cracking at the exterior CMU was observed at the construction joint between the east addition and original structure.
- While on site it could not be determined if the book stacks were anchored to the CMU wall or concrete slab.
- Some piping and ducts above the mechanical room did not appear to be adequately braced.
- It was observed that in the East Addition there appears to be potential delamination of the glulam beams.

5.0 EVALUATION SUMMARY AND LIST OF DEFICIENCIES

We have performed an ASCE 41-13 Tier 1 Screening Phase of the existing structure. The level of earthquake ground motion was based on the Basic Safety Earthquake-1 (BSE-1). The required checklists per Table 4-7 of the ASCE 41-13 were completed as follows:

- 16.1.2LS: Life Safety Basic Configuration Checklist
- 16.3LS: Life Safety Structural Checklist for Building Types W2: Wood Frames, Commercial and Industrial (for Areas E2/Upper Floor E3)
- 16.15LS: Life Safety Structural Checklist for Building Types RM1: Reinforced Masonry Bearing Walls with Flexible Diaphragms and RM2: Reinforced Masonry Bearing Walls with Stiff Diaphragms.
- 16.17: Nonstructural Checklist

Please reference Appendix A for the completed ASCE 41-13 required checklists and the supporting structural calculations provided with this report.

6.0 STRUCTURAL RECOMMENDATIONS

Reference the attached Table 3 within Appendix B. Based on the ASCE 41-13 report, structural recommendations were provided within this table for the main structural and non-structural deficiencies.

Appendix A: Checklists and Calculations

Project: _____

Location: _____

Completed by: _____

Date: _____

16.1.2LS LIFE SAFETY BASIC CONFIGURATION CHECKLIST

Low Seismicity

Building System

General

- C NC N/A U LOAD PATH: The structure shall contain a complete, well defined load path, including structural elements and connections, that serves to transfer the inertial forces associated with the mass of all elements of the building to the foundation. (Commentary: Sec. A.2.1.1. Tier 2: Sec. 5.4.1.1)
- C NC N/A U ADJACENT BUILDINGS: The clear distance between the building being evaluated and any adjacent building is greater than 4% of the height of the shorter building. This statement shall not apply for the following building types: W1, W1a, and W2. (Commentary: Sec. A.2.1.2. Tier 2: Sec. 5.4.1.2)
- C NC N/A U MEZZANINES: Interior mezzanine levels are braced independently from the main structure or are anchored to the seismic-force-resisting elements of the main structure. (Commentary: Sec. A.2.1.3. Tier 2: Sec. 5.4.1.3)

Building Configuration

- C NC N/A U WEAK STORY: The sum of the shear strengths of the seismic-force-resisting system in any story in each direction is not less than 80% of the strength in the adjacent story above. (Commentary: Sec. A.2.2.2. Tier 2: Sec. 5.4.2.1)
- C NC N/A U SOFT STORY: The stiffness of the seismic-force-resisting system in any story is not less than 70% of the seismic-force-resisting system stiffness in an adjacent story above or less than 80% of the average seismic-force-resisting system stiffness of the three stories above. (Commentary: Sec. A.2.2.3. Tier 2: Sec. 5.4.2.2)
- C NC N/A U VERTICAL IRREGULARITIES: All vertical elements in the seismic-force-resisting system are continuous to the foundation. (Commentary: Sec. A.2.2.4. Tier 2: Sec. 5.4.2.3)
- C NC N/A U GEOMETRY: There are no changes in the net horizontal dimension of the seismic-force-resisting system of more than 30% in a story relative to adjacent stories, excluding one-story penthouses and mezzanines. (Commentary: Sec. A.2.2.5. Tier 2: Sec. 5.4.2.4)
- C NC N/A U MASS: There is no change in effective mass more than 50% from one story to the next. Light roofs, penthouses, and mezzanines need not be considered. (Commentary: Sec. A.2.2.6. Tier 2: Sec. 5.4.2.5)
- C NC N/A U TORSION: The estimated distance between the story center of mass and the story center of rigidity is less than 20% of the building width in either plan dimension. (Commentary: Sec. A.2.2.7. Tier 2: Sec. 5.4.2.6)

Moderate Seismicity: Complete the Following Items in Addition to the Items for Low Seismicity.

Geologic Site Hazards

- C NC N/A U LIQUEFACTION: Liquefaction-susceptible, saturated, loose granular soils that could jeopardize the building's seismic performance shall not exist in the foundation soils at depths within 50 ft under the building. (Commentary: Sec. A.6.1.1. Tier 2: 5.4.3.1)
- C NC N/A U SLOPE FAILURE: The building site is sufficiently remote from potential earthquake-induced slope failures or rockfalls to be unaffected by such failures or is capable of accommodating any predicted movements without failure. (Commentary: Sec. A.6.1.2. Tier 2: 5.4.3.1)
- C NC N/A U SURFACE FAULT RUPTURE: Surface fault rupture and surface displacement at the building site are not anticipated. (Commentary: Sec. A.6.1.3. Tier 2: 5.4.3.1)

High Seismicity: Complete the Following Items in Addition to the Items for Low and Moderate Seismicity.

Foundation Configuration

- C NC N/A U OVERTURNING: The ratio of the least horizontal dimension of the seismic-force-resisting system at the foundation level to the building height (base/height) is greater than $0.6S_a$. (Commentary: Sec. A.6.2.1. Tier 2: Sec. 5.4.3.3)
- C NC N/A U TIES BETWEEN FOUNDATION ELEMENTS: The foundation has ties adequate to resist seismic forces where footings, piles, and piers are not restrained by beams, slabs, or soils classified as Site Class A, B, or C. (Commentary: Sec. A.6.2.2. Tier 2: Sec. 5.4.3.4)

Project: _____

Location: _____

Completed by: _____

Date: _____

16.3LS LIFE SAFETY STRUCTURAL CHECKLIST FOR BUILDING TYPE W2: WOOD FRAMES, COMMERCIAL AND INDUSTRIAL

Low and Moderate Seismicity

Lateral Seismic-Force-Resisting System

- NC N/A U REDUNDANCY: The number of lines of shear walls in each principal direction is greater than or equal to 2. (Commentary: Sec. A.3.2.1.1. Tier 2: Sec. 5.5.1.1)
- NC N/A U SHEAR STRESS CHECK: The shear stress in the shear walls, calculated using the Quick Check procedure of Section 4.5.3.3, is less than the following values (Commentary: Sec. A.3.2.7.1. Tier 2: Sec. 5.5.3.1.1):
- | | |
|----------------------------|-------------|
| Structural panel sheathing | 1,000 lb/ft |
| Diagonal sheathing | 700 lb/ft |
| Straight sheathing | 100 lb/ft |
| All other conditions | 100 lb/ft |
- C NC U STUCCO (EXTERIOR PLASTER) SHEAR WALLS: Multi-story buildings do not rely on exterior stucco walls as the primary seismic-force-resisting system. (Commentary: Sec. A.3.2.7.2. Tier 2: Sec. 5.5.3.6.1)
- C NC U GYPSUM WALLBOARD OR PLASTER SHEAR WALLS: Interior plaster or gypsum wallboard is not used as shear walls on buildings more than one story high with the exception of the uppermost level of a multi-story building. (Commentary: Sec. A.3.2.7.3. Tier 2: Sec. 5.5.3.6.1)
- NC N/A U NARROW WOOD SHEAR WALLS: Narrow wood shear walls with an aspect ratio greater than 2-to-1 are not used to resist seismic forces. (Commentary: Sec. A.3.2.7.4. Tier 2: Sec. 5.5.3.6.1)
- NC N/A U WALLS CONNECTED THROUGH FLOORS: Shear walls have an interconnection between stories to transfer overturning and shear forces through the floor. (Commentary: Sec. A.3.2.7.5. Tier 2: Sec. 5.5.3.6.2)
- C NC U HILLSIDE SITE: For structures that are taller on at least one side by more than one-half story because of a sloping site, all shear walls on the downhill slope have an aspect ratio less than 1-to-1. (Commentary: Sec. A.3.2.7.6. Tier 2: Sec. 5.5.3.6.3)
- C NC U CRIPPLE WALLS: Cripple walls below first-floor-level shear walls are braced to the foundation with wood structural panels. (Commentary: Sec. A.3.2.7.7. Tier 2: Sec. 5.5.3.6.4)
- C NC U OPENINGS: Walls with openings greater than 80% of the length are braced with wood structural panel shear walls with aspect ratios of not more than 1.5-to-1 or are supported by adjacent construction through positive ties capable of transferring the seismic forces. (Commentary: Sec. A.3.2.7.8. Tier 2: Sec. 5.5.3.6.5)

Connections

- NC N/A U WOOD POSTS: There is a positive connection of wood posts to the foundation. (Commentary: Sec. A.5.3.3. Tier 2: Sec. 5.7.3.3)
- NC N/A U WOOD SILLS: All wood sills are bolted to the foundation. (Commentary: Sec. A.5.3.4. Tier 2: Sec. 5.7.3.3)
- NC N/A U GIRDER/COLUMN CONNECTION: There is a positive connection using plates, connection hardware, or straps between the girder and the column support. (Commentary: Sec. A.5.4.1. Tier 2: Sec. 5.7.4.1)

High Seismicity: Complete the Following Items in Addition to the Items for Low and Moderate Seismicity.

Diaphragms

- C NC N/A U DIAPHRAGM CONTINUITY: The diaphragms are not composed of split-level floors and do not have expansion joints. (Commentary: Sec. A.4.1.1. Tier 2: Sec. 5.6.1.1)
- C NC N/A U ROOF CHORD CONTINUITY: All chord elements are continuous, regardless of changes in roof elevation. (Commentary: Sec. A.4.1.3. Tier 2: Sec. 5.6.1.1)
- C NC N/A U DIAPHRAGM REINFORCEMENT AT OPENINGS: There is reinforcing around all diaphragm openings larger than 50% of the building width in either major plan dimension. (Commentary: Sec. A.4.1.8. Tier 2: Sec. 5.6.1.5)
- C NC N/A U STRAIGHT SHEATHING: All straight sheathed diaphragms have aspect ratios less than 2-to-1 in the direction being considered. (Commentary: Sec. A.4.2.1. Tier 2: Sec. 5.6.2)
- C NC N/A U SPANS: All wood diaphragms with spans greater than 24 ft consist of wood structural panels or diagonal sheathing. Wood commercial and industrial buildings may have rod-braced systems. (Commentary: Sec. A.4.2.2. Tier 2: Sec. 5.6.2)
- C NC N/A U DIAGONALLY SHEATHED AND UNBLOCKED DIAPHRAGMS: All diagonally sheathed or unblocked wood structural panel diaphragms have horizontal spans less than 40 ft and aspect ratios less than or equal to 4-to-1. (Commentary: Sec. A.4.2.3. Tier 2: Sec. 5.6.2)
- C NC N/A U OTHER DIAPHRAGMS: The diaphragm does not consist of a system other than wood, metal deck, concrete, or horizontal bracing. (Commentary: Sec. A.4.7.1. Tier 2: Sec. 5.6.5)

Connections

- C NC N/A U WOOD SILL BOLTS: Sill bolts are spaced at 6 ft or less, with proper edge and end distance provided for wood and concrete. (Commentary: A.5.3.7. Tier 2: Sec. 5.7.3.3)

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Project: _____

Location: _____

Completed by: _____

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16.15LS LIFE SAFETY STRUCTURAL CHECKLIST FOR BUILDING TYPES RM1: REINFORCED MASONRY BEARING WALLS WITH FLEXIBLE DIAPHRAGMS AND RM2: REINFORCED MASONRY BEARING WALLS WITH STIFF DIAPHRAGMS

Low and Moderate Seismicity

Seismic-Force-Resisting System

- C NC N/A U REDUNDANCY: The number of lines of shear walls in each principal direction is greater than or equal to 2. (Commentary: Sec. A.3.2.1.1. Tier 2: Sec. 5.5.1.1)
- C NC N/A U SHEAR STRESS CHECK: The shear stress in the reinforced masonry shear walls, calculated using the Quick Check procedure of Section 4.5.3.3, is less than 70 lb/in.². (Commentary: Sec. A.3.2.4.1. Tier 2: Sec. 5.5.3.1.1)
- C NC N/A U REINFORCING STEEL: The total vertical and horizontal reinforcing steel ratio in reinforced masonry walls is greater than 0.002 of the wall with the minimum of 0.0007 in either of the two directions; the spacing of reinforcing steel is less than 48 in., and all vertical bars extend to the top of the walls. (Commentary: Sec. A.3.2.4.2. Tier 2: Sec. 5.5.3.1.3)

Stiff Diaphragms

- C NC N/A U TOPPING SLAB: Precast concrete diaphragm elements are interconnected by a continuous reinforced concrete topping slab. (Commentary: Sec. A.4.5.1. Tier 2: Sec. 5.6.4)

Connections

- C NC N/A U WALL ANCHORAGE: Exterior concrete or masonry walls that are dependent on the diaphragm for lateral support are anchored for out-of-plane forces at each diaphragm level with steel anchors, reinforcing dowels, or straps that are developed into the diaphragm. Connections shall have adequate strength to resist the connection force calculated in the Quick Check procedure of Section 4.5.3.7. (Commentary: Sec. A.5.1.1. Tier 2: Sec. 5.7.1.1)
- C NC N/A U WOOD LEDGERS: The connection between the wall panels and the diaphragm does not induce cross-grain bending or tension in the wood ledgers. (Commentary: Sec. A.5.1.2. Tier 2: Sec. 5.7.1.3)
- C NC N/A U TRANSFER TO SHEAR WALLS: Diaphragms are connected for transfer of seismic forces to the shear walls. (Commentary: Sec. A.5.2.1. Tier 2: Sec. 5.7.2)
- C NC N/A U TOPPING SLAB TO WALLS OR FRAMES: Reinforced concrete topping slabs that interconnect the precast concrete diaphragm elements are doweled for transfer of forces into the shear wall or frame elements. (Commentary: Sec. A.5.2.3. Tier 2: Sec. 5.7.2)
- C NC N/A U FOUNDATION DOWELS: Wall reinforcement is doweled into the foundation. (Commentary: Sec. A.5.3.5. Tier 2: Sec. 5.7.3.4)
- C NC N/A U GIRDER-COLUMN CONNECTION: There is a positive connection using plates, connection hardware, or straps between the girder and the column support. (Commentary: Sec. A.5.4.1. Tier 2: Sec. 5.7.4.1)

High Seismicity: Complete the Following Items in Addition to the Items for Low and Moderate Seismicity.

Stiff Diaphragms

- C NC N/A U OPENINGS AT SHEAR WALLS: Diaphragm openings immediately adjacent to the shear walls are less than 25% of the wall length. (Commentary: Sec. A.4.1.4. Tier 2: Sec. 5.6.1.3)
- C NC N/A U OPENINGS AT EXTERIOR MASONRY SHEAR WALLS: Diaphragm openings immediately adjacent to exterior masonry shear walls are not greater than 8 ft long. (Commentary: Sec. A.4.1.6. Tier 2: Sec. 5.6.1.3)

Flexible Diaphragms

- C NC N/A U CROSS TIES: There are continuous cross ties between diaphragm chords. (Commentary: Sec. A.4.1.2. Tier 2: Sec. 5.6.1.2)
- C NC N/A U OPENINGS AT SHEAR WALLS: Diaphragm openings immediately adjacent to the shear walls are less than 25% of the wall length. (Commentary: Sec. A.4.1.4. Tier 2: Sec. 5.6.1.3)
- C NC N/A U OPENINGS AT EXTERIOR MASONRY SHEAR WALLS: Diaphragm openings immediately adjacent to exterior masonry shear walls are not greater than 8 ft long. (Commentary: Sec. A.4.1.6. Tier 2: Sec. 5.6.1.3)

- C (NC) N/A U STRAIGHT SHEATHING: All straight sheathed diaphragms have aspect ratios less than 2-to-1 in the direction being considered. (Commentary: Sec. A.4.2.1. Tier 2: Sec. 5.6.2)
- C (NC) N/A U SPANS: All wood diaphragms with spans greater than 24 ft consist of wood structural panels or diagonal sheathing. (Commentary: Sec. A.4.2.2. Tier 2: Sec. 5.6.2)
- C NC (N/A) U DIAGONALLY SHEATHED AND UNBLOCKED DIAPHRAGMS: All diagonally sheathed or unblocked wood structural panel diaphragms have horizontal spans less than 40 ft and aspect ratios less than or equal to 4-to-1. (Commentary: Sec. A.4.2.3. Tier 2: Sec. 5.6.2)
- (C) NC N/A U OTHER DIAPHRAGMS: The diaphragm shall not consist of a system other than wood, metal deck, concrete, or horizontal bracing. (Commentary: Sec. A.4.7.1. Tier 2: Sec. 5.6.5)

Connections

- (C) NC N/A U STIFFNESS OF WALL ANCHORS: Anchors of concrete or masonry walls to wood structural elements are installed taut and are stiff enough to limit the relative movement between the wall and the diaphragm to no greater than 1/8 in. before engagement of the anchors. (Commentary: Sec. A.5.1.4. Tier 2: Sec. 5.7.1.2)

Project: _____

Location: _____

Completed by: _____

Date: _____

16.17 NONSTRUCTURAL CHECKLIST

Life Safety Systems

- C NC N/A U LS-LMH; PR-LMH. FIRE SUPPRESSION PIPING: Fire suppression piping is anchored and braced in accordance with NFPA-13. (Commentary: Sec. A.7.13.1. Tier 2: Sec. 13.7.4)
- C NC N/A U LS-LMH; PR-LMH. FLEXIBLE COUPLINGS: Fire suppression piping has flexible couplings in accordance with NFPA-13. (Commentary: Sec. A.7.13.2. Tier 2: Sec. 13.7.4)
- C NC N/A U LS-LMH; PR-LMH. EMERGENCY POWER: Equipment used to power or control life safety systems is anchored or braced. (Commentary: Sec. A.7.12.1. Tier 2: Sec. 13.7.7)
- C NC N/A U LS-LMH; PR-LMH. STAIR AND SMOKE DUCTS: Stair pressurization and smoke control ducts are braced and have flexible connections at seismic joints. (Commentary: Sec. A.7.14.1. Tier 2: Sec. 13.7.6)
- C NC N/A U LS-MH; PR-MH. SPRINKLER CEILING CLEARANCE: Penetrations through panelized ceilings for fire suppression devices provide clearances in accordance with NFPA-13. (Commentary: Sec. A.7.13.3. Tier 2: Sec. 13.7.4)
- C NC N/A U LS-not required; PR-LMH. EMERGENCY LIGHTING: Emergency and egress lighting equipment is anchored or braced. (Commentary: Sec. A.7.3.1. Tier 2: Sec. 13.7.9)

Hazardous Materials

- C NC N/A U LS-LMH; PR-LMH. HAZARDOUS MATERIAL EQUIPMENT: Equipment mounted on vibration isolators and containing hazardous material is equipped with restraints or snubbers. (Commentary: Sec. A.7.12.2. Tier 2: 13.7.1)
- C NC N/A U LS-LMH; PR-LMH. HAZARDOUS MATERIAL STORAGE: Breakable containers that hold hazardous material, including gas cylinders, are restrained by latched doors, shelf lips, wires, or other methods. (Commentary: Sec. A.7.15.1. Tier 2: Sec. 13.8.4)
- C NC N/A U LS-MH; PR-MH. HAZARDOUS MATERIAL DISTRIBUTION: Piping or ductwork conveying hazardous materials is braced or otherwise protected from damage that would allow hazardous material release. (Commentary: Sec. A.7.13.4. Tier 2: Sec. 13.7.3 and 13.7.5)
- C NC N/A U LS-MH; PR-MH. SHUT-OFF VALVES: Piping containing hazardous material, including natural gas, has shut-off valves or other devices to limit spills or leaks. (Commentary: Sec. A.7.13.3. Tier 2: Sec. 13.7.3 and 13.7.5)
- C NC N/A U LS-LMH; PR-LMH. FLEXIBLE COUPLINGS: Hazardous material ductwork and piping, including natural gas piping, has flexible couplings. (Commentary: Sec. A.7.15.4, Tier 2: Sec. 13.7.3 and 13.7.5)
- C NC N/A U LS-MH; PR-MH. PIPING OR DUCTS CROSSING SEISMIC JOINTS: Piping or ductwork carrying hazardous material that either crosses seismic joints or isolation planes or is connected to independent structures has couplings or other details to accommodate the relative seismic displacements. (Commentary: Sec. A.7.13.6. Tier 2: Sec. 13.7.3, 13.7.5, and 13.7.6)

Partitions

- C NC N/A U LS-LMH; PR-LMH. UNREINFORCED MASONRY: Unreinforced masonry or hollow-clay tile partitions are braced at a spacing of at most 10 ft in Low or Moderate Seismicity, or at most 6 ft in High Seismicity. (Commentary: Sec. A.7.1.1. Tier 2: Sec. 13.6.2)
- C NC N/A U LS-LMH; PR-LMH. HEAVY PARTITIONS SUPPORTED BY CEILINGS: The tops of masonry or hollow-clay tile partitions are not laterally supported by an integrated ceiling system. (Commentary: Sec. A.7.2.1. Tier 2: Sec. 13.6.2)
- C NC N/A U LS-MH; PR-MH. DRIFT: Rigid cementitious partitions are detailed to accommodate the following drift ratios: in steel moment frame, concrete moment frame, and wood frame buildings, 0.02; in other buildings, 0.005. (Commentary A.7.1.2 Tier 2: Sec. 13.6.2)

- C NC (N/A) U LS-not required; PR-MH. LIGHT PARTITIONS SUPPORTED BY CEILINGS: The tops of gypsum board partitions are not laterally supported by an integrated ceiling system. (Commentary: Sec. A.7.2.1. Tier 2: Sec. 13.6.2)
- C NC (N/A) U LS-not required; PR-MH. STRUCTURAL SEPARATIONS: Partitions that cross structural separations have seismic or control joints. (Commentary: Sec. A.7.1.3. Tier 2. Sec. 13.6.2)
- C NC (N/A) U LS-not required; PR-MH. TOPS: The tops of ceiling-high framed or panelized partitions have lateral bracing to the structure at a spacing equal to or less than 6 ft. (Commentary: Sec. A.7.1.4. Tier 2. Sec. 13.6.2)

Ceilings

- C NC N/A (U) LS-MH; PR-LMH. SUSPENDED LATH AND PLASTER: Suspended lath and plaster ceilings have attachments that resist seismic forces for every 12 ft² of area. (Commentary: Sec. A.7.2.3. Tier 2: Sec. 13.6.4)
- C NC N/A (U) LS-MH; PR-LMH. SUSPENDED GYPSUM BOARD: Suspended gypsum board ceilings have attachments that resist seismic forces for every 12 ft² of area. (Commentary: Sec. A.7.2.3. Tier 2: Sec. 13.6.4)
- C NC (N/A) U LS-not required; PR-MH. INTEGRATED CEILINGS: Integrated suspended ceilings with continuous areas greater than 144 ft², and ceilings of smaller areas that are not surrounded by restraining partitions, are laterally restrained at a spacing no greater than 12 ft with members attached to the structure above. Each restraint location has a minimum of four diagonal wires and compression struts, or diagonal members capable of resisting compression. (Commentary: Sec. A.7.2.2. Tier 2: Sec. 13.6.4)
- C NC (N/A) U LS-not required; PR-MH. EDGE CLEARANCE: The free edges of integrated suspended ceilings with continuous areas greater than 144 ft² have clearances from the enclosing wall or partition of at least the following: in Moderate Seismicity, 1/2 in.; in High Seismicity, 3/4 in. (Commentary: Sec. A.7.2.4. Tier 2: Sec. 13.6.4)
- C NC (N/A) U LS-not required; PR-MH. CONTINUITY ACROSS STRUCTURE JOINTS: The ceiling system does not cross any seismic joint and is not attached to multiple independent structures. (Commentary: Sec. A.7.2.5. Tier 2: Sec. 13.6.4)
- C NC (N/A) U LS-not required; PR-H. EDGE SUPPORT: The free edges of integrated suspended ceilings with continuous areas greater than 144 ft² are supported by closure angles or channels not less than 2 in. wide. (Commentary: Sec. A.7.2.6. Tier 2: Sec. 13.6.4)
- C NC (N/A) U LS-not required; PR-H. SEISMIC JOINTS: Acoustical tile or lay-in panel ceilings have seismic separation joints such that each continuous portion of the ceiling is no more than 2500 ft² and has a ratio of long-to-short dimension no more than 4-to-1. (Commentary: Sec. A.7.2.7. Tier 2: 13.6.4)

Light Fixtures

- C NC N/A (U) LS-MH; PR-MH. INDEPENDENT SUPPORT: Light fixtures that weigh more per square foot than the ceiling they penetrate are supported independent of the grid ceiling suspension system by a minimum of two wires at diagonally opposite corners of each fixture. (Commentary: Sec. A.7.3.2. Tier 2: Sec. 13.6.4 and 13.7.9)
- C NC (N/A) U LS-not required; PR-H. PENDANT SUPPORTS: Light fixtures on pendant supports are attached at a spacing equal to or less than 6 ft and, if rigidly supported, are free to move with the structure to which they are attached without damaging adjoining components. (Commentary: A.7.3.3. Tier 2: Sec. 13.7.9)
- C NC (N/A) U LS-not required; PR-H. LENS COVERS: Lens covers on light fixtures are attached with safety devices. (Commentary: Sec. A.7.3.4. Tier 2: Sec. 13.7.9)

Cladding and Glazing

- C NC (N/A) U LS-MH; PR-MH. CLADDING ANCHORS: Cladding components weighing more than 10 lb/ft² are mechanically anchored to the structure at a spacing equal to or less than the following: for Life Safety in Moderate Seismicity, 6 ft; for Life Safety in High Seismicity and for Position Retention in any seismicity, 4 ft. (Commentary: Sec. A.7.4.1. Tier 2: Sec. 13.6.1)
- C NC (N/A) U LS-MH; PR-MH. CLADDING ISOLATION: For steel or concrete moment frame buildings, panel connections are detailed to accommodate a story drift ratio of at least the following: for Life Safety in Moderate Seismicity, 0.01; for Life Safety in High Seismicity and for Position Retention in any seismicity, 0.02. (Commentary: Sec. A.7.4.3. Tier 2: Section 13.6.1)

- C NC (N/A) U LS-MH; PR-MH. MULTI-STORY PANELS: For multi-story panels attached at more than one floor level, panel connections are detailed to accommodate a story drift ratio of at least the following: for Life Safety in Moderate Seismicity, 0.01; for Life Safety in High Seismicity and for Position Retention in any seismicity, 0.02. (Commentary: Sec. A.7.4.4. Tier 2: Sec. 13.6.1)
- C NC (N/A) U LS-MH; PR-MH. PANEL CONNECTIONS: Cladding panels are anchored out-of-plane with a minimum number of connections for each wall panel, as follows: for Life Safety in Moderate Seismicity, 2 connections; for Life Safety in High Seismicity and for Position Retention in any seismicity, 4 connections. (Commentary: Sec. A.7.4.5. Tier 2: Sec. 13.6.1.4)
- C NC (N/A) U LS-MH; PR-MH. BEARING CONNECTIONS: Where bearing connections are used, there is a minimum of two bearing connections for each cladding panel. (Commentary: Sec. A.7.4.6. Tier 2: Sec. 13.6.1.4)
- C NC (N/A) U LS-MH; PR-MH. INSERTS: Where concrete cladding components use inserts, the inserts have positive anchorage or are anchored to reinforcing steel. (Commentary: Sec. A.7.4.7. Tier 2: Sec. 13.6.1.4)
- C (NC) N/A U LS-MH; PR-MH. OVERHEAD GLAZING: Glazing panes of any size in curtain walls and individual interior or exterior panes over 16 ft² in area are laminated annealed or laminated heat-strengthened glass and are detailed to remain in the frame when cracked. (Commentary: Sec. A.7.4.8. Tier 2: Sec. 13.6.1.5)

Masonry Veneer

- C NC (N/A) U LS-LMH; PR-LMH. TIES: Masonry veneer is connected to the backup with corrosion-resistant ties. There is a minimum of one tie for every 2-2/3 ft², and the ties have spacing no greater than the following: for Life Safety in Low or Moderate Seismicity, 36 in.; for Life Safety in High Seismicity and for Position Retention in any seismicity, 24 in. (Commentary: Sec. A.7.5.1. Tier 2: Sec. 13.6.1.2)
- C NC (N/A) U LS-LMH; PR-LMH. SHELF ANGLES: Masonry veneer is supported by shelf angles or other elements at each floor above the ground floor. (Commentary: Sec. A.7.5.2. Tier 2: Sec. 13.6.1.2)
- C NC (N/A) U LS-LMH; PR-LMH. WEAKENED PLANES: Masonry veneer is anchored to the backup adjacent to weakened planes, such as at the locations of flashing. (Commentary: Sec. A.7.5.3. Tier 2: Sec. 13.6.1.2)
- C NC (N/A) U LS-LMH; PR-LMH. UNREINFORCED MASONRY BACKUP: There is no unreinforced masonry backup. (Commentary: Sec. A.7.7.2. Tier 2: Section 13.6.1.1 and 13.6.1.2)
- C NC (N/A) U LS-MH; PR-MH. STUD TRACKS: For veneer with metal stud backup, stud tracks are fastened to the structure at a spacing equal to or less than 24 in. on center. (Commentary: Sec. A.7.6.1. Tier 2: Section 13.6.1.1 and 13.6.1.2)
- C NC (N/A) U LS-MH; PR-MH. ANCHORAGE: For veneer with concrete block or masonry backup, the backup is positively anchored to the structure at a horizontal spacing equal to or less than 4 ft along the floors and roof. (Commentary: Sec. A.7.7.1. Tier 2: Section 13.6.1.1 and 13.6.1.2)
- C NC (N/A) U LS-not required; PR-MH. WEEP HOLES: In veneer anchored to stud walls, the veneer has functioning weep holes and base flashing. (Commentary: Sec. A.7.5.6. Tier 2: Section 13.6.1.2)
- C NC (N/A) U LS-not required; PR-MH. OPENINGS: For veneer with metal stud backup, steel studs frame window and door openings. (Commentary: Sec. A.7.6.2. Tier 2: Sec. 13.6.1.1 and 13.6.1.2)

Parapets, Cornices, Ornamentation, and Appendages

- C NC (N/A) U LS-LMH; PR-LMH. URM PARAPETS OR CORNICES: Laterally unsupported unreinforced masonry parapets or cornices have height-to-thickness ratios no greater than the following: for Life Safety in Low or Moderate Seismicity, 2.5; for Life Safety in High Seismicity and for Position Retention in any seismicity, 1.5. (Commentary: Sec. A.7.8.1. Tier 2: Sec. 13.6.5)
- C NC (N/A) U LS-LMH; PR-LMH. CANOPIES: Canopies at building exits are anchored to the structure at a spacing no greater than the following: for Life Safety in Low or Moderate Seismicity, 10 ft; for Life Safety in High Seismicity and for Position Retention in any seismicity, 6 ft. (Commentary: Sec. A.7.8.2. Tier 2: Sec. 13.6.6)
- C NC (N/A) U LS-MH; PR-LMH. CONCRETE PARAPETS: Concrete parapets with height-to-thickness ratios greater than 2.5 have vertical reinforcement. (Commentary: Sec. A.7.8.3. Tier 2: Sec. 13.6.5)
- C NC (N/A) U LS-MH; PR-LMH. APPENDAGES: Cornices, parapets, signs, and other ornamentation or appendages that extend above the highest point of anchorage to the structure or cantilever from components are reinforced and anchored to the structural system at a spacing equal to or less than 6 ft. This checklist item does not apply to parapets or cornices covered by other checklist items. (Commentary: Sec. A.7.8.4. Tier 2: Sec. 13.6.6)

Masonry Chimneys

- C NC (N/A) U LS-LMH; PR-LMH. URM CHIMNEYS: Unreinforced masonry chimneys extend above the roof surface no more than the following: for Life Safety in Low or Moderate Seismicity, 3 times the least dimension of the chimney; for Life Safety in High Seismicity and for Position Retention in any seismicity, 2 times the least dimension of the chimney. (Commentary: Sec. A.7.9.1. Tier 2: 13.6.7)
- C NC (N/A) U LS-LMH; PR-LMH. ANCHORAGE: Masonry chimneys are anchored at each floor level, at the topmost ceiling level, and at the roof. (Commentary: Sec. A.7.9.2. Tier 2: 13.6.7)

Stairs

- C NC (N/A) U LS-LMH; PR-LMH. STAIR ENCLOSURES: Hollow-clay tile or unreinforced masonry walls around stair enclosures are restrained out-of-plane and have height-to-thickness ratios not greater than the following: for Life Safety in Low or Moderate Seismicity, 15-to-1; for Life Safety in High Seismicity and for Position Retention in any seismicity, 12-to-1. (Commentary: Sec. A.7.10.1. Tier 2: Sec. 13.6.2 and 13.6.8)
- C NC (N/A) U LS-LMH; PR-LMH. STAIR DETAILS: In moment frame structures, the connection between the stairs and the structure does not rely on shallow anchors in concrete. Alternatively, the stair details are capable of accommodating the drift calculated using the Quick Check procedure of Section 4.5.3.1 without including any lateral stiffness contribution from the stairs. (Commentary: Sec. A.7.10.2. Tier 2: 13.6.8)

Contents and Furnishings

- C NC (N/A) U LS-MH; PR-MH. INDUSTRIAL STORAGE RACKS: Industrial storage racks or pallet racks more than 12 ft high meet the requirements of ANSI/MH 16.1 as modified by ASCE 7 Chapter 15. (Commentary: Sec. A.7.11.1. Tier 2: Sec. 13.8.1)
- C NC N/A (U) LS-H; PR-MH. TALL NARROW CONTENTS: Contents more than 6 ft high with a height-to-depth or height-to-width ratio greater than 3-to-1 are anchored to the structure or to each other. (Commentary: Sec. A.7.11.2. Tier 2: Sec. 13.8.2)
- C NC N/A (U) LS-H; PR-H. FALL-PRONE CONTENTS: Equipment, stored items, or other contents weighing more than 20 lb whose center of mass is more than 4 ft above the adjacent floor level are braced or otherwise restrained. (Commentary: Sec. A.7.11.3. Tier 2: Sec. 13.8.2)
- C NC (N/A) U LS-not required; PR-MH. ACCESS FLOORS: Access floors more than 9 in. high are braced. (Commentary: Sec. A.7.11.4. Tier 2: Sec. 13.8.3)
- C NC (N/A) U LS-not required; PR-MH. EQUIPMENT ON ACCESS FLOORS: Equipment and other contents supported by access floor systems are anchored or braced to the structure independent of the access floor. (Commentary: Sec. A.7.11.5. Tier 2: Sec. 13.7.7 and 13.8.3)
- C NC (N/A) U LS-not required; PR-H. SUSPENDED CONTENTS: Items suspended without lateral bracing are free to swing from or move with the structure from which they are suspended without damaging themselves or adjoining components. (Commentary: A.7.11.6. Tier 2: Sec. 13.8.2)

Mechanical and Electrical Equipment

- C NC N/A (U) LS-H; PR-H. FALL-PRONE EQUIPMENT: Equipment weighing more than 20 lb whose center of mass is more than 4 ft above the adjacent floor level, and which is not in-line equipment, is braced. (Commentary: A.7.12.4. Tier 2: 13.7.1 and 13.7.7)
- C NC N/A (U) LS-H; PR-H. IN-LINE EQUIPMENT: Equipment installed in-line with a duct or piping system, with an operating weight more than 75 lb, is supported and laterally braced independent of the duct or piping system. (Commentary: Sec. A.7.12.5. Tier 2: Sec. 13.7.1)
- C NC N/A (U) LS-H; PR-MH. TALL NARROW EQUIPMENT: Equipment more than 6 ft high with a height-to-depth or height-to-width ratio greater than 3-to-1 is anchored to the floor slab or adjacent structural walls. (Commentary: Sec. A.7.12.6. Tier 2: Sec. 13.7.1 and 13.7.7)
- C NC (N/A) U LS-not required; PR-MH. MECHANICAL DOORS: Mechanically operated doors are detailed to operate at a story drift ratio of 0.01. (Commentary: Sec. A.7.12.7. Tier 2: Sec. 13.6.9)

- C NC (N/A) U LS-not required; PR-H. SUSPENDED EQUIPMENT: Equipment suspended without lateral bracing is free to swing from or move with the structure from which it is suspended without damaging itself or adjoining components. (Commentary: Sec. A.7.12.8. Tier 2: Sec. 13.7.1 and 13.7.7)
- C NC (N/A) U LS-not required; PR-H. VIBRATION ISOLATORS: Equipment mounted on vibration isolators is equipped with horizontal restraints or snubbers and with vertical restraints to resist overturning. (Commentary: Sec. A.7.12.9. Tier 2: Sec. 13.7.1)
- C NC (N/A) U LS-not required; PR-H. HEAVY EQUIPMENT: Floor-supported or platform-supported equipment weighing more than 400 lb is anchored to the structure. (Commentary: Sec. A.7.12.10. Tier 2: 13.7.1 and 13.7.7)
- C NC (N/A) U LS-not required; PR-H. ELECTRICAL EQUIPMENT: Electrical equipment is laterally braced to the structure. (Commentary: Sec. A.7.12.11. Tier 2: 13.7.7)
- C NC (N/A) U LS-not required; PR-H. CONDUIT COUPLINGS: Conduit greater than 2.5 in. trade size that is attached to panels, cabinets, or other equipment and is subject to relative seismic displacement has flexible couplings or connections. (Commentary: Sec. A.7.12.12. Tier 2: 13.7.8)

Piping

- C NC (N/A) U LS-not required; PR-H. FLEXIBLE COUPLINGS: Fluid and gas piping has flexible couplings. (Commentary: Sec. A.7.13.2. Tier 2: Sec. 13.7.3 and 13.7.5)
- C NC (N/A) U LS-not required; PR-H. FLUID AND GAS PIPING: Fluid and gas piping is anchored and braced to the structure to limit spills or leaks. (Commentary: Sec. A.7.13.4. Tier 2: Sec. 13.7.3 and 13.7.5)
- C NC (N/A) U LS-not required; PR-H. C-CLAMPS: One-sided C-clamps that support piping larger than 2.5 in. in diameter are restrained. (Commentary: Sec. A.7.13.5. Tier 2: Sec. 13.7.3 and 13.7.5)
- C NC (N/A) U LS-not required; PR-H. PIPING CROSSING SEISMIC JOINTS: Piping that crosses seismic joints or isolation planes or is connected to independent structures has couplings or other details to accommodate the relative seismic displacements. (Commentary: Sec. A.7.13.6. Tier 2: Sec. 13.7.3 and Sec. 13.7.5)

Ducts

- C NC (N/A) U LS-not required; PR-H. DUCT BRACING: Rectangular ductwork larger than 6 ft² in cross-sectional area and round ducts larger than 28 in. in diameter are braced. The maximum spacing of transverse bracing does not exceed 30 ft. The maximum spacing of longitudinal bracing does not exceed 60 ft. (Commentary: Sec. A.7.14.2. Tier 2: Sec. 13.7.6)
- C NC (N/A) U LS-not required; PR-H. DUCT SUPPORT: Ducts are not supported by piping or electrical conduit. (Commentary: Sec. A.7.14.3. Tier 2: Sec. 13.7.6)
- C NC (N/A) U LS-not required; PR-H. DUCTS CROSSING SEISMIC JOINTS: Ducts that cross seismic joints or isolation planes or are connected to independent structures have couplings or other details to accommodate the relative seismic displacements. (Commentary: Sec. A.7.14.5. Tier 2: Sec. 13.7.6)

Elevators

- C NC (N/A) U LS-H; PR-H. RETAINER GUARDS: Sheaves and drums have cable retainer guards. (Commentary: Sec. A.7.16.1. Tier 2: 13.8.6)
- C NC (N/A) U LS-H; PR-H. RETAINER PLATE: A retainer plate is present at the top and bottom of both car and counterweight. (Commentary: Sec. A.7.16.2. Tier 2: 13.8.6)
- C NC (N/A) U LS-not required; PR-H. ELEVATOR EQUIPMENT: Equipment, piping, and other components that are part of the elevator system are anchored. (Commentary: Sec. A.7.16.3. Tier 2: 13.8.6)
- C NC (N/A) U LS-not required; PR-H. SEISMIC SWITCH: Elevators capable of operating at speeds of 150 ft/min or faster are equipped with seismic switches that meet the requirements of ASME A17.1 or have trigger levels set to 20% of the acceleration of gravity at the base of the structure and 50% of the acceleration of gravity in other locations. (Commentary: Sec. A.7.16.4. Tier 2: 13.8.6)

- C NC (N/A) U LS-not required; PR-H. SHAFT WALLS: Elevator shaft walls are anchored and reinforced to prevent toppling into the shaft during strong shaking. (Commentary: Sec. A.7.16.5. Tier 2: 13.8.6)
- C NC (N/A) U LS-not required; PR-H. COUNTERWEIGHT RAILS: All counterweight rails and divider beams are sized in accordance with ASME A17.1. (Commentary: Sec. A.7.16.6. Tier 2: 13.8.6)
- C NC (N/A) U LS-not required; PR-H. BRACKETS: The brackets that tie the car rails and the counterweight rail to the structure are sized in accordance with ASME A17.1. (Commentary: Sec. A.7.16.7. Tier 2: 13.8.6)
- C NC (N/A) U LS-not required; PR-H. SPREADER BRACKET: Spreader brackets are not used to resist seismic forces. (Commentary: Sec. A.7.16.8. Tier 2: 13.8.6)
- C NC (N/A) U LS-not required; PR-H. GO-SLOW ELEVATORS: The building has a go-slow elevator system. (Commentary: Sec. A.7.16.9. Tier 2: 13.8.6)

→

Appendix B: Structural & Non- Structural Deficiencies and Recommendations

TABLE 1: Building Information (Illinois Valley Branch Library)

General Building Information						
Address	Approximate Year Constructed	Stories	Approximate Building Height	Approximate Total Sq. Footage	Information Available	Added Notes
209 W Palmer St	1959	1	13'-1 1/2" (Varies)	4,300	1. Drawings dated October 1957 2. Addition Drawings dated 1/30/1978	A South and East addition were added to the original structure around 1978.

Building Structural Information		
Portion of Structure	Description	Added Notes
Foundation	Conventional continuous concrete footings.	Per the drawings it does not appear that the addition foundation and existing foundation were doweled together.
Floor and Roof Framing	The roof systems consists of 3" super laminated cedar T+G striated decking spanning between 5 1/8" pitched glu-lam beams at 12'-0" o.c. The floor system is a 4" thick concrete slab on grade at both the additions and the original building. Exterior walls are typically 8" concrete slab/new CMU walls were doweled to the CMU walls with vertical reinforcement and grout at 4'-0" o.c. At the additions, 2x4 sheathed stud walls are present at the South and East exterior ends of the building.	Per the drawings it does not appear that the addition existing concrete slab/walls.
Lateral System	8" CMU walls reinforced and grouted at 48" o.c. and 2x4 stud walls sheathed with 1/2" plywood at the addition ends.	

TABLE 2: Structural and Non-Structural Deficiencies (Illinois Valley Branch Library)

Structural Issues		
Item #	Description	Added Notes
1. Straight Sheated Roof Diaphragm	The existing roof diaphragm is straight sheated with 3" superlaminated T+G decking with aspect ratios greater than 2-to-1 and spans greater than 24ft.	Info obtained from existing drawings.
2. CMU Reinforcing Steel	The existing 8" and 6" reinforced masonry walls are only reinforced in the horizontal direction at the bond beam locations at the top of the wall.	Info obtained from existing drawings.
3. Unreinforced Masonry Partitions	4" block unreinforced masonry interior partitions exist around the restroom and office area. These walls do not appear to be adequately braced and are not doweled into the existing concrete slab.	Info obtained from existing drawings.
4. Non-laminated Glass Panes	A indentifying marking on the glass panes could not be located on any of the windows in the building.	Info obtained during walkthrough of building.
5. Potential Anchorage of tall cabinets	Tall cabinets (greater than 6-ft in height including book stacks) may not have been properly anchored to the structure.	
6. Potential Lighting Anchorage	It could not be determined if the larger light fixtures were independently supported to the structure.	
7. Glulam Beams	There is potential delamination of the glulam beams at the East Addition.	

TABLE 3: Structural and Non-Structural Recommendations (Illinois Valley Branch Library)

Structural Recommendations		
Item #	Recommendations	Added Notes
1. Straight Sheated Roof Diaphragm	When the structure is to be re-roofed, install plywood sheathing with adequate nailing over the existing 3" superlaminated T+G decking.	
2. CMU Reinforcing Steel	We recommend added investigation of the CMU walls to determine its adequacy.	
3. Unreinforced Masonry Partitions	Our general recommendation is to demo any unreinforced masonry walls and build back the partitions with typical wood stud walls.	
4. Non-laminated Glass Panes	Remove and replace with proper safety glazing (laminated annealed or laminated heat strengthened).	
5. Potential Anchorage of tall cabinets	Provide anchorage of tall cabinets to the structure where required.	
6. Potential Lighting Anchorage	Anchor lights to the structure (independent of the ceiling) where required.	
7. Glulam Beams	We recommend additional investigation to determine if the glulam beams are delaminating or if it is only the surface paint that is splitting.	



Bayview Library, CA
Hacker Architects



Josephine Community Library District Facility Assessment

Illinois Valley Branch

October 4, 2018

pae-engineers.com



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Project Directory

Owner	Josephine Community Library District	
Architect	Hacker 1615 SE 3rd Avenue, 5th Floor Portland, Oregon 97214 503-227-1254	Laura Klinger, AIA Associate Principal
Mechanical and Electrical Engineer	PAE 522 SW 5th Avenue; Suite 1500 Portland, Oregon 97204 503-226-2921	Nick Collins, PE, LEED AP Principal-in-Charge nick.collins@pae-engineers.com
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		Ramona White Senior Project Coordinator ramona.white@pae-engineers.com



1.0 Project Description

1.1 General Building Description

The Illinois Valley branch is considering interior renovations and an addition to upgrade the facility. The following report is an assessment of the existing mechanical, electrical, and plumbing systems in the building.

Size:	4,264
Number of Floors:	1
Function:	Community Library
Year Built:	1959



2.0 Mechanical Systems

2.1 Control System

DESCRIPTION

A central control system does not exist in the building. 7-day programmable thermostats serve each of the HVAC systems.

GENERAL CONDITIONS

The thermostats are in good condition and operating well.

CODE ISSUES

None. Library staff should review programmed schedule to ensure adequate setback temperatures during unoccupied days and times to save energy.

RECOMMENDATIONS

See recommendations for HVAC system.

2.2 HVAC Systems

The building is served by three DX split system fan coil units with ducted air systems.

MAIN FAN COIL UNIT

Description

The central (original) area of the building, which includes the west stack area, check out, break room, offices, and children's area are served by a DX split system, forced air fan coil unit with propane burner located in a closet. The supply ductwork is both overhead in the attic space and below slab on grade. The west stack area and children's area are both served by ductwork located below the slab on grade and serving supply air grilles at the top of the cabinetry under the exterior windows. The return ductwork is in the attic space and connected to two large ceiling return grilles near check out. A 16x16 outside air louver located on the west façade of the building provides an unknown amount of outdoor air into the unit. An air cooled condensing unit is located next to the south-west wall of the building.

General Conditions

This unit is in fair condition with about 5 to 8 years of useful life remaining. The County has been maintaining the HVAC system and it seems to be in good working condition.

The under slab ductwork is reported to fill up with ground water most winters and cause humidity issues in the space. The ductwork condition was not visible during this trip.

Code Issues

There were no evidence of Code issues.



Recommendations

If a major renovation occurs, we recommend replacing this unit with a heat pump similar to the other units in the building to save energy. If possible, abandon the below slab ductwork and serve the main stack area with overhead ductwork or ductwork located above the slab in cabinetry under the windows. Test the airflow and make sure that the outside air flow meets current Code requirements. Scope the under slab ductwork to check condition of the ductwork and to determine if there is biological growth.

EAST FAN COIL UNIT

Description

The east stack area is served by a DX split system heat pump with auxiliary electric heating coil located in a mechanical room on the east end of the building. The supply ductwork is below the slab on grade, serving supply air grilles at the top of the cabinetry along the north wall. A 16x30 sidewall return grille located in the wall between the stack area and the mechanical room brings return air back to the unit. This unit did not seem to have an outside air connection. An air cooled condensing unit is located next to the mechanical room.

General Conditions

This unit is in good condition with about 10-12 years of useful life remaining. The County has been maintaining the HVAC system and it seems to be in good working condition.

The under slab ductwork is reported to fill up with ground water most winters and cause humidity issues in the space. The ductwork condition was not visible during this trip.

Code Issues

The system does not provide outside air into the space. It is possible that the main unit provides adequate outside air quantity for the entire space.

Recommendations

If possible, abandon the below slab ductwork and serve the main stack area with overhead ductwork or ductwork located above the slab in cabinetry under the windows. Add an outside air connection if deemed needed to meet current Code requirements. If outside air is added, the capacity of the unit should be reviewed. Scope the under slab ductwork to check condition of the ductwork and to determine if there is biological growth.

SOUTH FAN COIL UNIT

Description

The south community room area is served by a DX split system heat pump with auxiliary electric heating coil located in a closet on the south side of the building. The supply ductwork is above the ceiling, serving sidewall grilles that are located in a soffit. A low sidewall return grille is located in the wall between the community room and the closet. A small duct is routed up to the roof for outside air. An air cooled condensing unit is located outside of the south wall.



General Conditions

This unit is near the end of its useful life.

Code Issues

There were no evidence of Code issues.

Recommendations

We recommend replacing this unit with a new heat pump and reusing the existing ductwork. Test the airflow and make sure that the outside air flow meets current Code requirements.

2.3 Exhaust Systems

DESCRIPTION

Bathroom exhaust is handled by three separate ceiling mounted exhaust fans connected to the light switch. It is assumed that the fans are connected via ductwork to roof vents.

GENERAL CONDITIONS

The fans are in fair condition.

CODE ISSUES

It was not possible to determine if the exhaust quantities meet current Code requirements. However, there did not seem to be any performance issues.

RECOMMENDATIONS

Replace with similar fans during a major renovation. Check the duct connections between the fans and roof discharge.



3.0 Plumbing Systems

3.1 Domestic Water, Storm Drain, Sanitary Sewer

DESCRIPTION

A domestic water meter is located in the sidewalk to the north of the building. A domestic hot water system exists but has been turned off.

The sanitary waste piping leaves the building towards the north and connects to a main in the street. The storm system is gutters with downspouts connected to below grade storm piping. It is unknown whether the storm and sanitary piping is combined.

A sump pump is located on the east side of the building. It was installed to remove ground water during the winter months.

GENERAL CONDITIONS

Building pressure seems adequate and the cold and hot water piping seems to be in good condition. The water heater is propane fired and in good condition. However, the flue connection has been disconnected.

The sanitary waste piping backs up every winter according to users. Plumbers that have inspected the system have found that tree roots have clogged up the main between the building and the street. The County installed a relief valve around 2012 near the exit of the building to allow backed up waste water to escape from the valve rather than backup into the toilets. The piping from the street to the sidewalk was replaced in 2016.

CODE ISSUES

The water heater flue is disconnected.

RECOMMENDATIONS

Connect the water heater flue and startup the hot water system. Scope the sanitary main from the building and the street and replace as necessary.

October 4, 2018



3.2 Plumbing Fixtures

DESCRIPTION

The building contains floor mounted, tank style water closets, wall hung lavatories, and a break room sink.

GENERAL CONDITIONS

The plumbing fixtures are in fair condition.

CODE ISSUES

None.

RECOMMENDATIONS

Replace with more modern and water saving fixtures during the next major renovation.



4.0 Fire Protection Systems

4.1 Fire Protection Systems

DESCRIPTION

The building is not protected by an automatic fire sprinkler system.

GENERAL CONDITIONS

Not applicable.

CODE ISSUES

None.

RECOMMENDATIONS

Add an automatic fire sprinkler system during the next major renovation.



5.0 Electrical

5.1 Service and Distribution

DESCRIPTION

The existing electrical system consists of a single metered service, 225A, 120/240VAC, 1-phase, 3-wire, Cutler-Hammer gear installed in 1978. Service is delivered with underground secondary service drop from pole-mounted transformer near the street. Distribution on the service distributes to sub-panels and to exit lighting, and is in excess of six main disconnects as allowed by code. The service panel is in fair-to-poor condition and is expected to near the end of its useful life.

The sub-panels (load centers) within the building which are fed from the metered service equipment appears to be the same installation era as the service equipment, and a mix of manufacturers between Cutler-Hammer and Square D. The overcurrent protection devices in the panels are molded case circuit breakers serving branch lighting and power loads. These panels are in fair condition and are near the end of useful life.

Emergency power source was not observed at the premises.



GENERAL CONDITIONS

The service panel and sub-panels appear to have been installed in the same era as the 1978 wing addition. The service panel and is in fair-to-poor condition and is expected to near the end of its useful life. The existing sub-panels are in slightly better condition, but are also near the end of their useful life.

Branch circuiting is a combination of wiring in conduit, and older vintage paper sheath cabling in the attic and walls. Surface raceway is installed in the computer lab area, and convenience power is lacking within the open stack areas.



CODE ISSUES

The service panel and exterior sub-panel doors are bolted shut with non-factory hardware that is field-installed, which allows the circuit breakers to be accessible only with the use of tools.

The building was observed without an emergency power source, including no source for egress lighting and exit signs.

RECOMMENDATIONS

Metered Service and sub-panels: Replace all existing distribution equipment and sub-panels in kind with new equipment. Test (Megger) feeder conductors from service distribution to panelboards.

Replace aged wiring systems (such as vintage cloth or paper sheath wiring) where architectural improvements expose concealed wiring systems.

Add emergency source for egress lighting, where required (see Lighting section below).

Add receptacle branch circuits and convenience power duplex receptacles at select open stack areas and support areas within the building.

Replace power surface raceway at the computer lab area with combination power/data surface raceway on each wall of the space. Provide additional convenience power receptacles along walls without the computers.



6.0 Lighting

6.1 Interior Lighting

DESCRIPTION

Building interior lighting consists of incandescent lighting with LED retrofit lamps in the open areas including stacks, children's area, and computer lab. Fixtures are a combination of ceiling mounted drum lights and pendant globes, all with manual wall control via toggle switches. Support spaces throughout the remainder of the building are a combination of incandescent and fluorescent lighting sources with manual wall controls. All areas appear to be controlled by manual toggles switches only.

Exterior lighting consists of building-mounted lighting which includes a mix of incandescent and compact fluorescent lighting. Controls appear to be manual switch.

Egress lighting and exit signs appears to be sourced by the main normal power service, with no battery pack egress lights or exit signs installed.



GENERAL CONDITIONS

The existing lighting is aged and at the end of its life. Lamp sources are non-efficient and out of date, and several fixtures are in poor condition, some with significant lens damage or no lens on the fixture.

Light levels at the main stacks is visibly low. No exterior lighting is present at walkways or parking.



CODE ISSUES

Egress lighting and exit signs appears to be sourced by the main normal power service, with no battery pack egress lights or exit signs installed.

RECOMMENDATIONS

Add local emergency battery packs or micro-inverter as source for egress lighting during utility outage, where required along the egress paths. Incorporate integral battery pack drivers where light fixtures are replaced with new.

Provide centralized lighting control system with timed ON/OFF controls for open library/stack areas and exterior lighting, and occupancy sensor controls at small support rooms and restrooms.

Replace building lighting with new high-efficiency LED fixtures at interior and to replace wall mounted exterior fixtures. Include custom globe style to match existing pendants at the open library areas. Include additional fixtures or specialty lighting at the tall stacks where low light levels are present.

Provide new lighting bollards along exterior paths around building and near parking area.



7.0 Fire Alarm Systems

DESCRIPTION

The open library area has residential grade smoke alarms installed. No central fire alarm system is present at the building and is not required by code.

CODE ISSUES

No known code issues.



RECOMMENDATIONS

Provide new fire alarm system and control panel, with ceiling smoke detector coverage throughout the library. Include dial-out capability and central monitoring. NOTE: This improvement is not required by code but was discussed with the staff as a means of early detection capable of automatically notifying first responders and library staff in a smoke/fire detection event.

-end-

ILLINOIS VALLEY LIBRARY
Design Concepts



INTERIOR VIEW - LOOKING TOWARDS NEW COURTYARD

EXISTING BUILDING



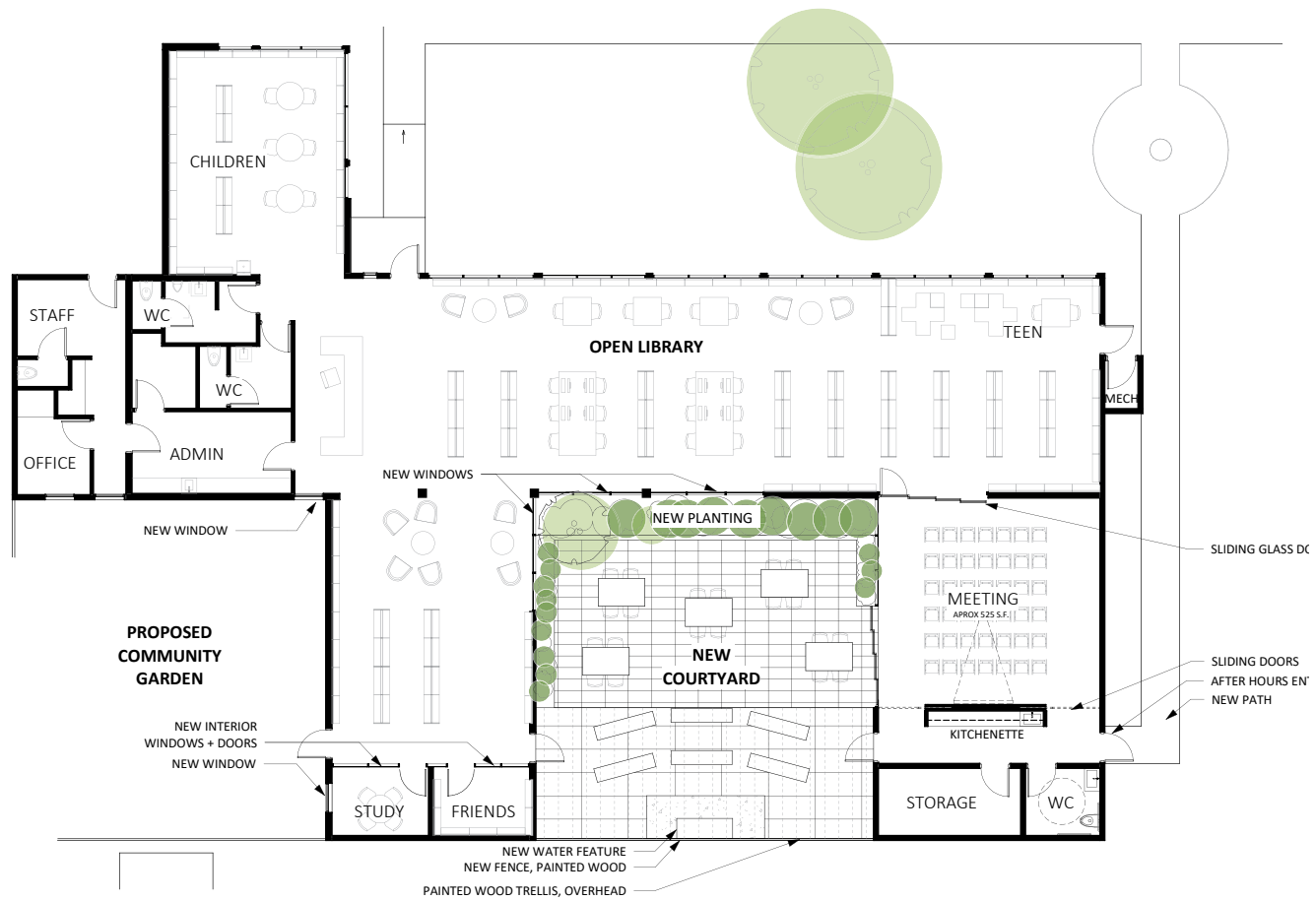
WHAT'S WORKING

- Good oversight of interior spaces
- Beautiful light filled Mid Century reading room and Children's room
- Bathrooms and Administration area are adequately sized

WHAT'S NOT WORKING

- Little to no oversight of rear exterior areas leading to security issues.
- Parking Lot required backing up into the street
- Computer/Media room has no natural light or views
- Children's are works, but is small
- Shelving in main space is high and seismically un-secure
- Service/Administration needs organization

NEW BUILDING



GROSS SQUARE FOOTAGE

EXISTING SQUARE FOOTAGE: 4,264 SF

ADDITION SQUARE FOOTAGE: 900 SF

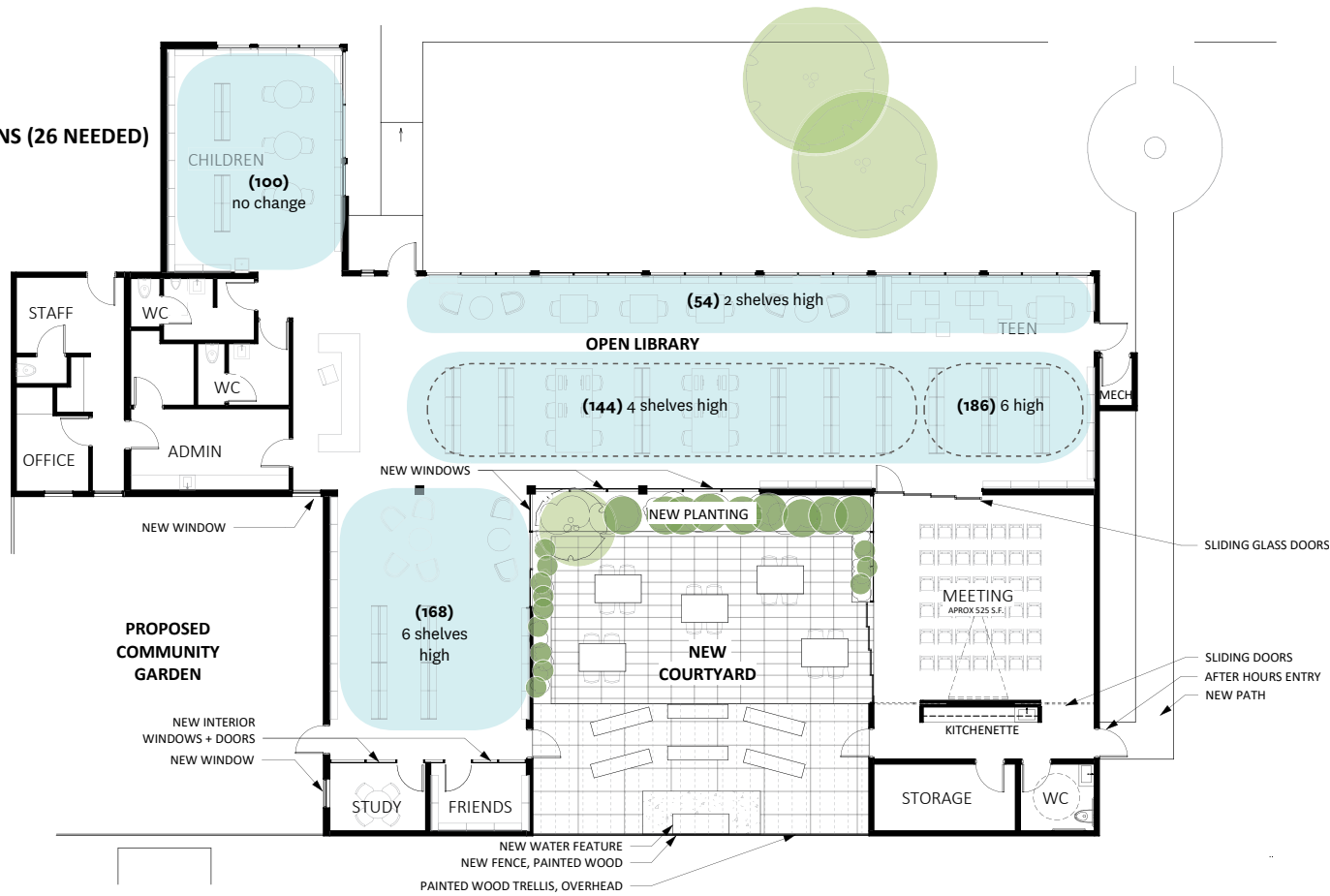
TOTAL BUILDING + ADDITION: 5,164 SF

NEW BUILDING: STACK COUNTS

STACK COUNTS

TARGET: 578

ACTUAL: 552 SECTIONS (26 NEEDED)



TARGET STACK COUNTS

PER SHELVING REPORT:

ADULT: 542 UNITS

TEEN: 36 UNITS

CHILDRENS: 100 UNITS (EXISTING, ACCEPTABLE AS IS)

TOTAL: 578 UNITS

PROPOSED STACK COUNTS:

TOTAL 552 SECTIONS

AXONOMETRIC VIEWS





INTERIOR VIEWS



INTERIOR VIEW - STANDING AT ENTRY



INTERIOR VIEW - LOOKING TOWARDS NEW COURTYARD

ILLINOIS VALLEY Cost Estimate

Josephine Community Library District Illinois Valley



Prepared for:

HACKER

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Josephine Community Library District Illinois Valley

Scope of Work

Scope of Work and Cost Basis

The scope of work includes the development of a Master plan level concept cost plan for the renovation and addition to the Illinois Valley Library in Josephine County, Oregon. The cost plan for the library is based upon concept drawings dated November 20, 2018, narrative information and discussions with Hacker.

The costs for this study are developed from the assumptions and clarifications listed below.

Assumptions and Clarifications

The projects will be constructed separately for one another.
FF&E including Library shelving is included as an additional additive to the project
Regular business hours in an unoccupied building
This cost report provides current market rates for labor and materials.

Soft Costs

Soft costs are included in the cost plan at the Summary Level. These cost are typically paid for by the owner and are in addition to the Contractor's costs.

These costs include:

- A/E fees- Architect and consultants under the Architects Contract.
- Engineering fees and studies - Other project specific consultants not under the Architect's contract (Ex: Environmental impact, location work, etc.)
- Permits and Fees- Includes MUP, building permits, Fire Department review, etc.
- Commissioning- Third Party System Commissioning
- Jurisdictional costs

In this exercise the Markups are at 30%.

In preparing the cost model multiple sources were used. The source information includes a current perspective on codes, technology, energy conservation, local general and sub construction markets and labor agreements, material costs and availability and labor efficiencies.

Procurement: The project planned delivery method is Design,bid,build.

Schedule: The project assumed start date is Q1 2021.

Josephine Community Library District
Illinois Valley

Baseline Cost Model Summary

		Illinois Valley	
		TOTAL SF	5,070
COMPONENT COST SUMMARY		\$ / SF	Cost - \$
Demolition for Renovation		\$ 9.53	\$ 48,338
1. Foundations		\$ 4.06	\$ 20,560
2. Vertical Structure		\$ 3.77	\$ 19,096
3. Floor and Roof Structure		\$ 5.89	\$ 29,876
4. External Cladding		\$ 16.91	\$ 85,756
5. Roofing and Waterproofing		\$ 18.81	\$ 95,361
SHELL		\$ 58.97	\$ 298,988
6. Interior Partitions		\$ 7.47	\$ 37,889
7. Interior Finishes		\$ 21.99	\$ 111,502
INTERIORS		\$ 29.47	\$ 149,391
8. Equipment and Specialties		\$ 10.11	\$ 51,275
9. Vertical Transportation		\$ -	\$ -
EQUIPMENT & VERT. TRANS		\$ 10.11	\$ 51,275
10. Plumbing		\$ 4.65	\$ 23,569
11. HVAC		\$ 10.82	\$ 54,846
12. Electrical		\$ 33.11	\$ 167,852
13. Fire Protection		\$ -	\$ -
MECHANICAL AND ELECTRICAL		\$ 48.57	\$ 246,267
BUILDING 1 - 13 - DIRECT COST		\$ 147.12	\$ 745,921
Site Preparation		\$ 15.18	\$ 76,980
Site Improvements		\$ 22.34	\$ 113,245
Site Utilities		\$ 5.62	\$ 28,500
SITEWORK- DIRECT COST		\$ 43.14	\$ 218,725
BUILDING AND SITE- DIRECT COST		\$ 190.27	\$ 964,646
Contingency -Design	10%	\$ 96,465	\$ 1,061,111
Contingency- Construction	3%	\$ 28,939	\$ 1,090,050
General Conditions and Requirements	14.5%	\$ 158,057	\$ 1,248,107
Fee- OH&P	5%	\$ 62,405	\$ 1,310,513
Bonds and Insurance	1.50%	\$ 18,722	\$ 1,329,234
Escalation to Start (April 2021)	9.7%	\$ 129,202	\$ 1,458,436
Project Mark up Costs		\$ 493,790	
TOTAL CONSTRUCTION COST - Q1 - 2021		\$ 287.66	\$ 1,458,436
Soft Cost (see breakdown pg 2)	30%	\$ 86.30	\$ 437,531
FF&E Costs (furniture and shelving)		\$ 55.73	\$ 282,563
TOTAL PROJECT COST		\$ 429.43	\$ 2,177,193

Josephine Community Library District
Illinois Valley

Program Areas

BUILDING

Illinois Valley	5,070	SF
Open library	2,790	SF
Children's	490	SF
Restrooms	170	SF
Admin/staff/office	535	SF
Study/Friends	195	SF
 Addition		
Meeting	555	SF
Kitchenette	145	SF
Storage	120	SF
Restroom	70	SF

SITWORK

Illinois Valley	10,821	SF
Courtyard	1,362	SF
New Planting	1,410	SF
Community Garden	1,203	SF
Sidewalks	1,497	SF
Parking- New	1,591	SF
Parking- Existing	3,329	SF
ROW curb	429	SF

Josephine Community Library District
Illinois Valley

Illinois Valley

<i>Item Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
Total Library Area	5,070	SF		
<u>Demolition for Renovation</u>				
Demolition				
Open library				
Demolition - Ext. wall addition +windows	1,372	SF	8.00	10,976
Demolition - interior partitions	308	SF	4.00	1,232
Demolition - casework and shelving	5,070	SF	1.00	5,070
Demolition - Restrooms fixtures	5	EA	30.00	150
Demolition - Exhaust fans	2	EA	850.00	1,700
Demolition - existing flooring except at specified areas	3,690	SF	0.72	2,657
Demolition- Saw cut floor, electrical wiring	68	LF	26.00	1,768
Demolition- Saw cut floor, expose plenum	48	LF	26.00	1,248
Excavate, place drain rock and underdrain	11	CY	90.00	960
Demolition- Ceilings for structural mods	480	SF	3.80	1,824
Demolition- For new windows (7 LOC)	105	SF	33.00	3,465
Demolition - ceiling tile and gyp ceilings	3,690	SF	1.00	3,690
Demolition - Lighting	3,690	SF	2.30	8,487
Demolition- Roofing, fascia and G&D	5,058	SF	0.75	3,793
Temporary protection	5,070	SF	0.26	1,318
Haul Debris				<i>INCL</i>
	5,070	SF	9.53	48,338
<u>1. Foundations</u>				
New Continuous footings w/curb	32	CY	530.00	16,960
Drill and Grout Rebar to existing foundation	12	LOC	300.00	3,600
	3,690	SF	5.57	20,560
<u>2. Vertical Structure</u>				
Exterior wall framing, insulated	1,080	SF	14.40	15,552
Framing for sliding walls and glazing	529	SF	6.70	3,544
	5,070	SF	3.77	19,096

<i>Item Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
3. Floor and Roof Structure				
Structural support at glazed Sliding door	20	LF	55.00	1,100
Infill concrete slab at plemun+electrical encasement	290	SF	14.00	4,060
New 4" SOG	890	SF	12.90	11,481
Roofing interior framing	1,095	SF	12.09	13,235
	5,070	SF	5.89	29,876
4. Exterior Cladding				
New windows	30	SF	60.00	1,800
Glazed walls	488	SF	78.00	38,064
Sliding Glazed wall	80	SF	277.00	22,160
Wall repair at new windows	48	SF	40.00	1,920
New exterior cladding at addition	825	SF	16.50	13,613
Complete exterior painting	3,333	SF	1.80	5,999
New exterior door hardware	4	EA	550.00	2,200
	5,070	SF		85,756
5. Roofing, Waterproofing & Skylights				
Insulated roof system -complete	5,058	SF	17.67	89,371
Fascia, Gutter and downspouts	402	LF	14.90	5,990
	5,070	SF	18.81	95,361
6. Interior Partitions, Doors & Glazing				
Partitions incl. acoustic and fire rated applications				
Interior partitions, 2x stud and gyp.	528	SF	16.50	8,712
Repair surrounding wall areas	6,743	SF	1.00	6,743
Window walls and borrowed lights				
Interior sliding door	64	SF	121.00	7,744
Interior sliding doors at kitchenette	2	EA	2,100.00	4,200
Relites	27	SF	70.00	1,890
Interior doors and frames				
Wood door, Flush	4	EA	1,880.00	7,520
Hollow metal door	1	EA	1,080.00	1,080
	5,070	SF	7.47	37,889
7. Floor, Wall & Ceiling Finishes				
Floors				
Repair floors as required	5,070	SF	8.00	40,560
Carpet flooring, incl. base	3,991	SF	7.00	27,937
Cork/rubber flooring, incl. base	535	SF	9.25	4,949
Tile flooring, incl. base -Restrooms	256	SF	14.00	3,584
Tile flooring, incl. base -Kitchenette	147	SF	15.00	2,205

<i>Item Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
Walls				
Paint walls throughout	7,920	SF	1.15	9,108
Tile, at restroom wet wall to 4'	540	SF	16.00	8,640
Backsplash at kitchen	26	SF	22.00	561
Ceilings				
Restroom - Gyp	69	SF	12.00	828
Storage- Gyp	122	SF	8.00	976
Paint wood beam	1,161	LF	4.50	5,225
Ceiling to match existing- Addition	700	SF	9.90	6,930
	5,070	SF	21.99	111,502

8. Function Equipment & Specialties

Equipment and Fittings				
Casework- Circulation deck	22	LF	850.00	18,700
New Library Shelving- Seismically braced				<i>By others</i>
Restroom fit out, - Single	3	EA	1,850.00	5,550
Kitchenette- upper and lowers	13	LF	925.00	12,025
Appliances	1	LS	10,000.00	10,000
Signage and Wayfinding	1	LS	5,000.00	5,000
	5,070	SF	10.11	51,275

9. Stairs & Vertical Transportation

Not required				<i>NIC</i>
	5,070	SF		0

10. Plumbing Systems

Route domestic water to fixtures	176	LF	35.00	6,160
Route sanitary piping and venting to fixtures	138	LF	44.00	6,072
Insulation	88	LF	4.00	352
Plumbing fixtures:	9	Fx		
Toilet	3	EA	1,450.00	4,350
Urinal	1	EA	1,210.00	1,210
Lavs wall hung	4	EA	1,050.00	4,200
Hand Sinks	1	EA	1,225.00	1,225
Water heating				<i>Existing</i>
	5,070	SF	4.65	23,569

11. Heating, Ventilation & Air Conditioning

Heat generation & chilling				
Trade light demo and cleaning	1	LS	6,000.00	6,000
Heat pumps/ Demo and replace	3	EA	6,800.00	20,400
New ductwork	2,738	LBs	8.50	23,271
Adjust existing ductwork	1	LS	2,500.00	2,500
Diffuser and grilles	5	EA	85.00	425

<i>Item Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
Testing and balancing	18	HRs	125.00	2,250
	5,070	SF	10.82	54,846

12. Electrical Lighting, Power & Communication

Main service and distribution				
Trade demolition, wiring	488	LF	3.30	1,610
New meter and sub panels	1	LS	20,000	20,000
New electrical wiring and conduit	5,070	SF	14.00	70,980
Lighting				
New lighting LED- retrofit	5,070	SF	5.00	25,350
Controls	5,070	SF	2.00	10,140
Conduit, J-Boxes and wiring	1,200	LF	12.00	14,400
User convenience power				
Receptacles	22	EA	450.00	9,900
A/V in meeting	1	EA	5,000.00	5,000
Telephone & communication				
Voice data ports, USB chargers -revisions	13	EA	550.00	6,971
Alarm & security				
Fire alarm system -extension	3	EA	500.00	1,500
Other				
Allow for commissioning assist & documentation of sustainability measures	16	HR	125.00	2,000
	5,070	SF	33.11	167,852

13. Fire Protection Systems

Fire protection				
Not required				
	0	SF		

Josephine Community Library District

Illinois Valley

Illinois Valley Sitework

<i>Item Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
<u>G1010 Site Clearing</u>				
Construction fence	725	LF	9.00	6,525
Construction gate	1	EA	1,500.00	1,500
Site protection	10,821	SF	0.50	5,411
Dust Control	2	MO	550.00	1,100
Street cleaning	2	MO	550.00	1,100
Concrete washout	1	EA	1,200.00	1,200
Arborist	1	LS	2,000.00	2,000
Tree removal	3	EA	700.00	2,100
Tree protection	1	LS	1,500.00	1,500
Lay out	1	LS	2,500.00	2,500
	10,821	SF	2.30	24,936
<u>G1020 Site Demolition and Relocations</u>				
Demo - Sidewalk	612	SF	2.50	1,530
Demo- Wheel stop and signage reinstall	22	EA	35.00	770
Demo - Concrete paving, includes saw-cut	429	SF	12.00	5,148
Demo- Landscaping, clear and grub	6,712	SF	2.50	16,780
Demo- Scarify remaining asphalt	3,329	SF	0.80	2,663
	10,821	SF	2.49	26,891
<u>G1030 Site Earthwork</u>				
Compact for new sidewalks and parking	1,497	SF	1.00	1,497
Excavate for new addition	376	CY	24.00	9,027
Prep for planting areas, courtyard, community garden	2,565	SF	2.00	5,130
Base aggregates				
Parking lot - 6" depth (added area)	29	CY	45.00	1,326
Concrete pedestrian paving - 6" depth	28	CY	45.00	1,248
Concrete pad at addition	33	CY	46.00	1,516
Site grading and contouring	10,821	SF	0.50	5,411
Utility trenching				NIC
	10,821	SF	2.32	25,154
<u>G1040 Hazardous Waste Remediation</u>				
By owner, no work anticipated				NIC

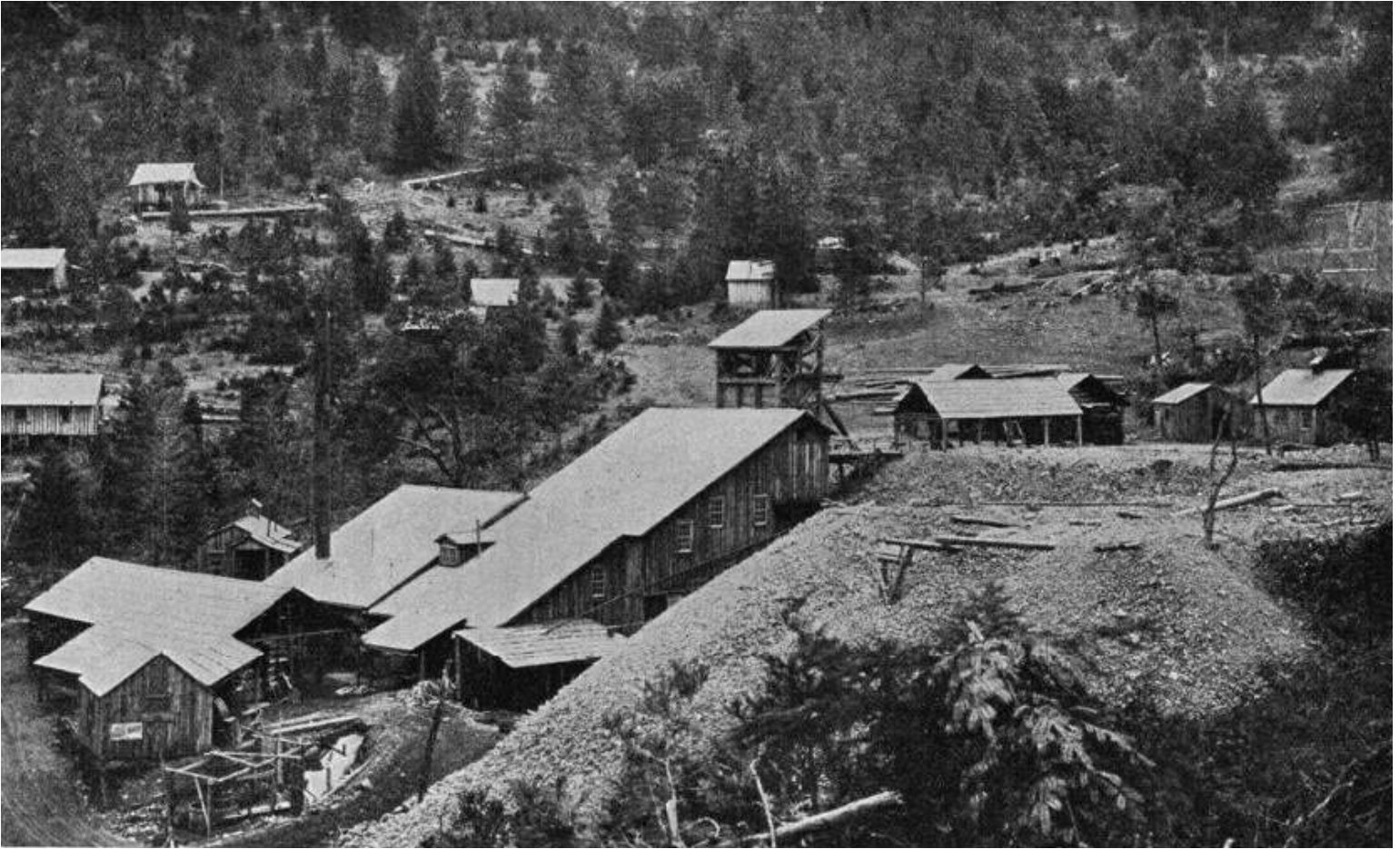
<i>Item Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
G10 Site Preparation	10,821	SF	7.11	76,980
<u>G2010 Roadways</u>				
No work anticipated				NIC
<u>G2020 Parking Lots</u>				
Parking Lot, HMA Asphalt				
Asphalt - standard	1,591	SF	5.50	8,751
Asphalt overlay	3,329	SF	2.90	9,654
Concrete curb - mountable		LF	35.00	-
Striping	294	LF	1.66	488
Wheel stops				<i>Use existing</i>
ADA Signage- Reinstall existing	1	EA	100.00	100
	10,821	SF	1.76	18,993
<u>G2030 Pedestrian Paving</u>				
Concrete sidewalk on-site	1,497	SF	9.50	14,222
ADA ramps and detection pads	2	EA	600.00	1,200
Courtyard pavers system	1,362	SF	16.50	22,473
	10,821	SF	3.50	37,895
<u>G2040 Site Development</u>				
Bike Rack- Replace existing	1	EA	100.00	100
Trellis	36	LF	55.00	1,980
Fence- Courtyard	36	LF	24.00	864
Fence- Community Garden	70	LF	20.00	1,400
Water feature	1	ALW	7,000.00	7,000
Community garden boxes	16	EA	350.00	5,600
Outdoor furnishings	1	LS	10,000.00	10,000
	10,821	SF	2.49	26,944
<u>G2050 Landscaping</u>				
Landscape Planting and Restoration	1,410	SF		
Topsoil - 12" depth	52	CY	50.00	2,611
Mulch, 2" depth	9	CY	55.00	488
Trees On-site				

<i>Item Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
2" cal	10	EA	350.00	3,500
Shrubs - 2 to 5 gallon	353	EA	28.00	9,870
Groundcover - 1 gallon	353	EA	10.50	3,701
Pruning and restoration of existing plantings	1,500	SF	4.00	6,000
Planting irrigation, new and existing adjustments	1,410	SF	2.30	3,243
	10,821	SF	2.72	29,414
Site Development	10,821	SF	10.47	113,245
<u>G3010 Water Supply</u>				
Domestic Water Service				
Water line to fountain	120	LF	80.00	9,600
	10,821	SF	0.89	9,600
<u>G3020 Sanitary Sewer</u>				
Work in progress - No work anticipated				NIC
<u>G3030 Storm Sewer</u>				
Piping to planters	200	LF	18.00	3,600
	10,821	SF	0.33	3,600
<u>G3040 Heating Distribution</u>				
No work anticipated				NIC
<u>G3050 Cooling Distribution</u>				
No work anticipated				NIC
<u>G3060 Fuel Distribution</u>				
Relocate fuel tank	1	EA	1,500.00	1,500
	10,821	SF	0.14	1,500
<u>G4010 Electrical Distribution</u>				
No Work Anticipated				- NIC -
<u>G4020 Site Lighting</u>				
Bollard lighting	10	EA	1,080.00	10,800
Exterior building lighting	4	EA	750.00	3,000
	10,821	SF	1.28	13,800
<u>G4030 Site Communications & Security</u>				
By Owner				NIC
Site Utilities	10,821	SF	2.63	28,500

Williams Library

WILLIAMS LIBRARY

Design Concepts/Inspiration



Local Roof Forms - Greenback Mine and Stamp Mills c.1909

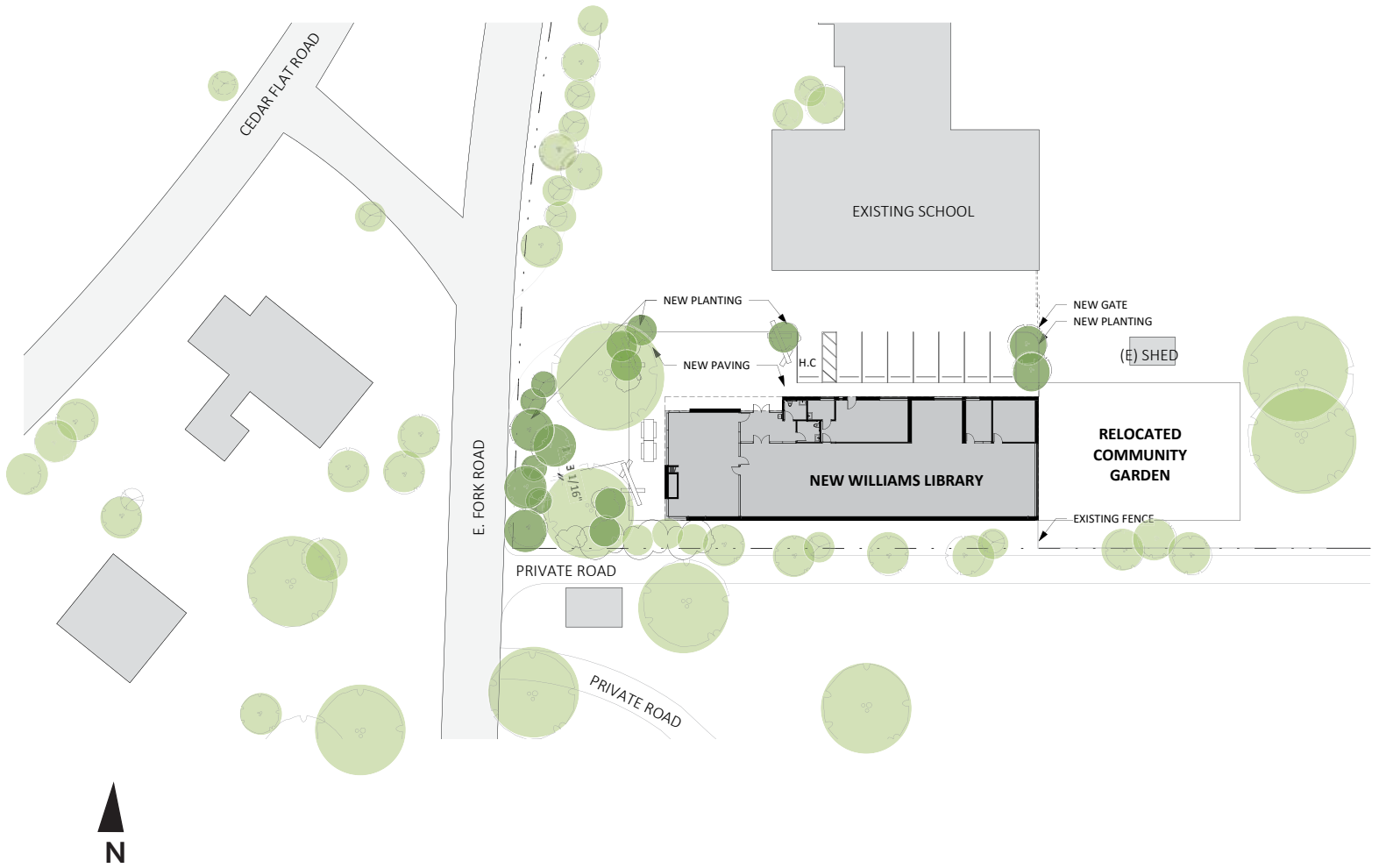


c. 1900s

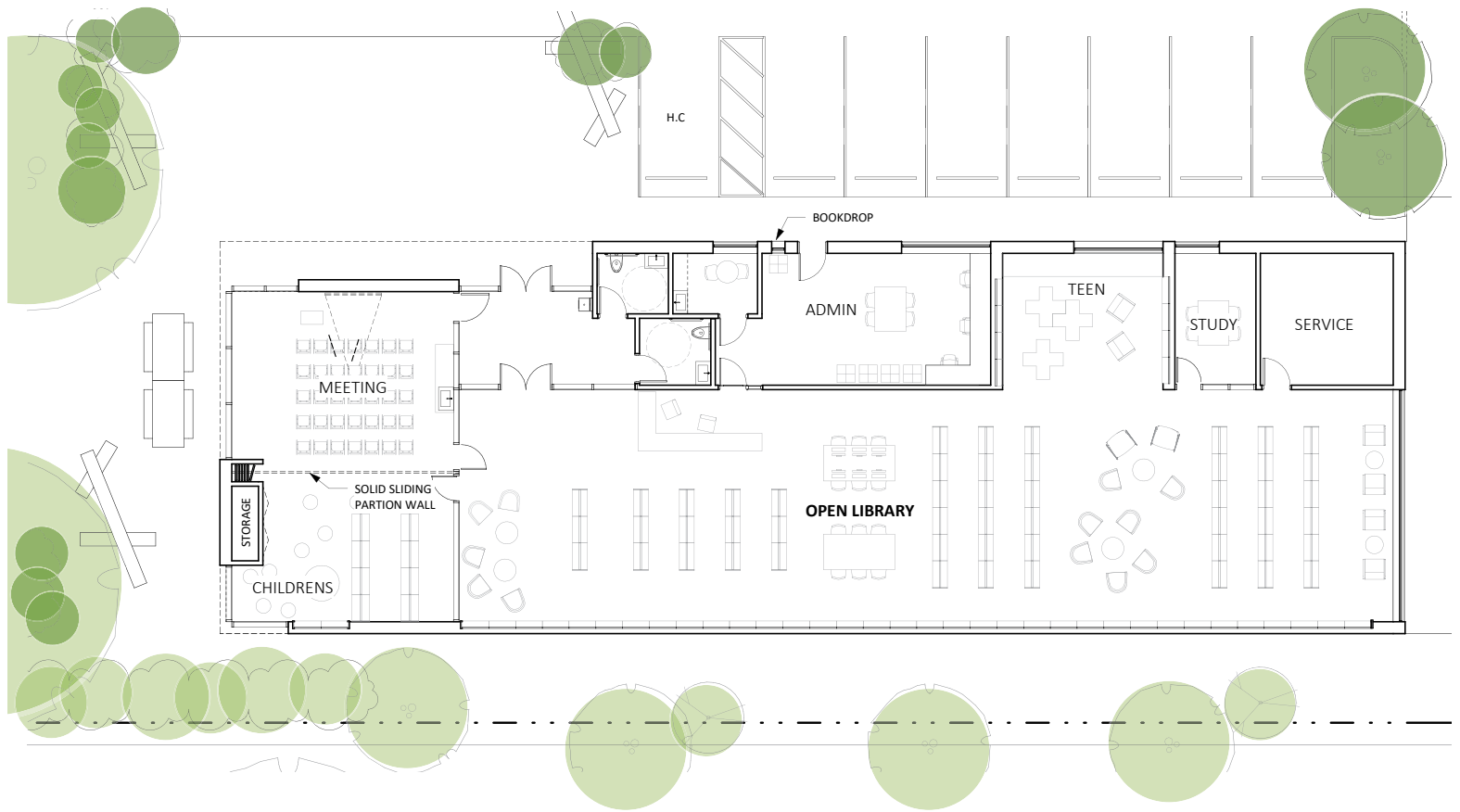


Humble Building Materials

SITE PLAN



FLOOR PLAN



EXTERIOR VIEWS



EXTERIOR VIEW

EXTERIOR VIEW



EXTERIOR VIEW

INTERIOR VIEW



INTERIOR VIEW - STANDING AT ENTRY

WILLIAMS LIBRARY
Cost Estimate

Josephine Community Library District Williams Branch



Prepared for:

HACKER

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Josephine Community Library District

Williams Branch

Scope of Work

Scope of Work and Cost Basis

The scope of work includes the development of a Master plan level concept cost plan for the new construction of the Williams Library in Josephine County, Oregon. The cost plan for the library is based upon concept drawings dated November 20, 2018, narrative information and discussions with Hacker.

The costs for this study are developed from the assumptions and clarifications listed below.

Assumptions and Clarifications

The projects will be constructed separately for one another.
FF&E including Library shelving is included as an additional additive to the project
Regular business hours in an unoccupied building
This cost report provides current market rates for labor and materials.

Soft Costs

Soft costs are included in the cost plan at the Summary Level. These cost are typically paid for by the owner and are in addition to the Contractor's costs.

These costs include:

- A/E fees- Architect and consultants under the Architects Contract.
- Engineering fees and studies - Other project specific consultants not under the Architect's contract (Ex: Environmental impact, location work, etc.)
- Permits and Fees- Includes MUP, building permits, Fire Department review, etc.
- Commissioning- Third Party System Commissioning
- Jurisdictional costs

In this exercise the Markups are at 30%.

In preparing the cost model multiple sources were used. The source information includes a current perspective on codes, technology, energy conservation, local general and sub construction markets and labor agreements, material costs and availability and labor efficiencies.

Procurement: The project planned delivery method is Design,bid,build.

Schedule: The project assumed start date is Q1 2021.

Josephine Community Library District
Williams Branch

Baseline Cost Model Summary

		Williams Branch	
		TOTAL SF	5,568
COMPONENT COST SUMMARY		\$ / SF	Cost - \$
Demolition for Renovation			
1. Foundations		\$ 6.60	\$ 36,722
2. Vertical Structure		\$ 51.67	\$ 287,708
3. Floor and Roof Structure		\$ 27.84	\$ 155,038
4. External Cladding		\$ 59.45	\$ 331,001
5. Roofing and Waterproofing		\$ 23.92	\$ 133,170
SHELL		\$ 169.48	\$ 943,639
6. Interior Partitions		\$ 34.65	\$ 192,925
7. Interior Finishes		\$ 30.01	\$ 167,103
INTERIORS		\$ 64.66	\$ 360,028
8. Equipment and Specialties		\$ 12.24	\$ 68,170
9. Vertical Transportation		\$ -	\$ -
EQUIPMENT & VERT. TRANS		\$ 12.24	\$ 68,170
10. Plumbing		\$ 6.32	\$ 35,166
11. HVAC		\$ 12.96	\$ 72,148
12. Electrical		\$ 50.87	\$ 283,255
13. Fire Protection		\$ -	\$ -
MECHANICAL AND ELECTRICAL		\$ 70.15	\$ 390,569
BUILDING 1 - 13 - DIRECT COST		\$ 316.52	\$ 1,762,406
Site Preparation		\$ 26.45	\$ 147,253
Site Improvements		\$ 16.95	\$ 94,373
Site Utilities		\$ 5.39	\$ 30,000
SITEWORK- DIRECT COST		\$ 48.78	\$ 271,626
BUILDING AND SITE- DIRECT COST		\$ 365.31	\$ 2,034,033
Contingency -Design	10%	\$ 203,403	\$ 2,237,436
Contingency- Construction	3%	\$ 61,021	\$ 2,298,457
General Conditions and Requirements	14.5%	\$ 333,276	\$ 2,631,733
Fee- OH&P	5%	\$ 131,587	\$ 2,763,320
Bonds and Insurance	1.50%	\$ 39,476	\$ 2,802,796
Escalation to Start (April 2021)	9.7%	\$ 272,432	\$ 3,075,227
Project Mark up Costs		\$ 1,041,195	
TOTAL CONSTRUCTION COST - Q1 - 2021		\$ 552.30	\$ 3,075,227
Soft Cost (see breakdown pg 2)	30%	\$ 165.69	\$ 922,568
FF&E Costs (furniture and shelving)		\$ 57.02	\$ 317,486
TOTAL PROJECT COST		\$ 775.01	\$ 4,315,282

Josephine Community Library District Williams Branch

Program Areas

BUILDING

Williams Branch	5,568	SF
Open library	2,888	SF
Meeting	529	SF
Children's	450	SF
Vestibule	218	SF
Restrooms	140	SF
Breakroom	84	SF
Admin	482	SF
Teen	345	SF
Study	162	SF
Service	270	SF

SITWORK

Williams Branch Sitework	16,192	SF
Building footprint	5,568	SF
New paving	3,195	SF
Planting area	2,491	SF
Community Garden	3,559	SF
Parking- Existing	1,379	SF

Josephine Community Library District
Williams Branch

Williams Branch

<i>Item Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
Total Library Area	5,568	SF		
<u>1. Foundations</u>				
Continuous Footing	52	CY	530.00	27,442
Spread Footing	6	EA	1,500.00	9,280
	5,568	SF	6.60	36,722
<u>2. Vertical Structure</u>				
Metal stud exterior wall framing, insulated	5,850	SF	18.20	106,470
Structural steel framing	29	TN	6,200	181,238
	5,568	SF	51.67	287,708
<u>3. Floor and Roof Structure</u>				
New 4" SOG	5,568	SF	12.90	71,827
Roof metal joists framing	6,849	SF	12.15	83,211
	5,568	SF	27.84	155,038
<u>4. Exterior Cladding</u>				
Exterior Glazing	1,872	SF	110.00	205,920
Rainscreen system complete	3,978	SF	28.60	113,771
New Entry doors and ADA hardware	2	EA	3,220.00	6,440
Exterior egress door	1	PR	2,890.00	2,890
Exterior egress door	1	EA	1,980.00	1,980
	5,568	SF		331,001
<u>5. Roofing, Waterproofing & Skylights</u>				
Insulated roof system -complete	6,849	SF	18.60	127,385
Gutter and downspouts	325	LF	17.80	5,785
	5,568	SF	23.92	133,170

<i>Item Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
6. Interior Partitions, Doors & Glazing				
Partitions incl. acoustic and fire rated applications				
Interior partitions, 2x stud and gyp. (includes rated walls)	3,724	SF	16.50	61,446
Interior to exterior wall	2,763	SF	7.50	20,719
Folding partition	1	EA	20,000.00	20,000
Window walls and borrowed lights				
Interior glazed wall and door system	672	SF	110.00	73,920
Relites	64	SF	70.00	4,480
Interior doors and frames				
Wood doors, flush	6	EA	1,880.00	11,280
Hollow metal door	1	EA	1,080.00	1,080
	5,568	SF	34.65	192,925

7. Floor, Wall & Ceiling Finishes

Floors				
Carpet flooring, incl. base 70%	3,508	SF	7.00	24,553
Polished Concrete 30%	866	SF	8.00	6,931
Cork/rubber flooring, incl. base	566	SF	9.50	5,377
Tile flooring, incl. base -Restrooms	140	SF	14.50	2,030
Walk off mat	218	SF	32.00	6,976
Sealed concrete - Service	270	SF	1.80	486
Base- Wood	531	LF	12.80	6,790
Base- Rubber	260	LF	4.25	1,105
Walls				
Paint walls throughout	9,466	SF	1.15	10,886
Tile, at restroom wet wall to 4'	504	SF	16.00	8,064
Ceilings				
Restroom - Gyp	140	SF	12.00	1,680
Service- Gyp	270	SF	8.00	2,160
ACT ceiling- Admin, study	728	LF	4.50	3,276
Wood slat ceiling, w/duct liner backing	4,592	SF	18.90	86,789
	5,568	SF	30.01	167,103

8. Function Equipment & Specialties

Equipment and Fittings				
Casework- Admin	20	LF	550.00	11,000
Casework- Public	26	LF	790.00	20,540
Casework- Circulation Desk	21	LF	850.00	17,850
New Library Shelving- Seismically braced				<i>By others</i>
Restroom fit out, - Single	2	EA	1,850.00	3,700
Breakroom- upper and lowers	12	LF	650.00	7,800
Appliances				<i>NIC</i>

<i>Item Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
Corner guards	12	EA	190.00	2,280
Signage and Wayfinding	1	LS	5,000.00	5,000
	5,568	SF	12.24	68,170

9. Stairs & Vertical Transportation

Not required				<i>NIC</i>
	5,568	SF		0

10. Plumbing Systems

Route domestic water to fixtures	264	LF	35.00	9,240
Route sanitary piping and venting to fixtures	192	LF	44.00	8,448
Insulation	132	LF	4.00	528
Plumbing fixtures:	6	Fx		
Toilets	2	EA	1,450.00	2,900
Lavs wall hung	2	EA	1,050.00	2,100
Hand Sinks	2	EA	1,225.00	2,450
Water heating	1	LS	9,500.00	9,500
	5,568	SF	6.32	35,166

11. Heating, Ventilation & Air Conditioning

Heat generation & chilling				
VRV ductless system- complete	5,568	SF	11.00	61,248
Zone control	4	EA	2,100.00	8,400
Testing and balancing	20	HRs	125.00	2,500
	5,568	SF	12.96	72,148

12. Electrical Lighting, Power & Communication

Main service and distribution				
Primary Service- By Franchise				<i>NIC</i>
Primary Feeders - By Franchise				<i>NIC</i>
Primary feeders, trenching, conduit and pull wire	150	LF	70.00	10,500
Main Switchboard	1	LS	18,500.00	18,500
Distribution panels	2	EA	8,000	16,000
New electrical wiring and conduit	5,568	SF	12.60	70,157
Lighting				
New lighting LED	5,568	SF	10.00	55,680
Controls	5,568	SF	2.50	13,920
Conduit, J-Boxes and wiring	1,620	LF	12.00	19,440
User convenience power				
Receptacles	62	EA	450.00	27,840
A/V in meeting	1	EA	8,000.00	8,000

<i>Item Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
Telephone & communication				
Voice data ports, USB chargers -revisions	46	EA	550.00	25,520
Alarm & security				
Fire alarm system	5,568	SF	2.55	14,198
Other				
Allow for commissioning assist & documentation of sustainability measures	28	HR	125.00	3,500
	5,568	SF	50.87	283,255

13. Fire Protection Systems

Fire protection
Not required

	0	SF		
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Josephine Community Library District
Williams Branch

Williams Branch Sitework

<i>Item Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
<u>G1010 Site Clearing</u>				
Construction fence	1,050	LF	9.00	9,450
Construction gate	1	EA	1,500.00	1,500
Site protection	16,192	SF	0.50	8,096
Dust Control	8	MO	550.00	4,400
Street cleaning	4	MO	550.00	2,200
Arborist	1	LS	2,000.00	2,000
Tree removal	3	EA	700.00	2,100
Tree protection	1	LS	1,500.00	1,500
Lay out	1	LS	2,500.00	2,500
	16,192	SF	2.08	33,746
<u>G1020 Site Demolition and Relocations</u>				
Demo - Existing building incl. electrical	2,500	SF	6.00	15,000
Demo - Community Garden	1,200	SF	3.00	3,600
Demo- Landscaping, clear and grub	16,192	SF	2.50	40,480
	16,192	SF	3.65	59,080
<u>G1030 Site Earthwork</u>				
Compact for new paving	3,195	SF	1.00	3,195
Excavate for new Building	516	CY	24.00	12,373
Prep for planting areas and new community	6,050	SF	2.00	12,100
Base aggregates				
Concrete pedestrian paving - 6" depth	59	CY	45.00	2,663
Site grading and contouring	16,192	SF	0.50	8,096
Utility trenching	500	LF	32.00	16,000
	16,192	SF	3.36	54,427
<u>G1040 Hazardous Waste Remediation</u>				
By owner, no work anticipated				NIC

<i>Item Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
Site Preparation				147,253
<u>G2010 Roadways</u>				
No work anticipated				NIC
<u>G2020 Parking Lots</u>				
Wheel stops				Use existing
ADA Signage				Use existing
<u>G2030 Pedestrian Paving</u>				
Concrete sidewalk on-site	3,195	SF	9.50	30,353
ADA ramps and detection pads	1	EA	600.00	600
	16,192	SF	1.91	30,953
<u>G2040 Site Development</u>				
Bike Rack	2	EA	800.00	1,600
Gate	22	LF	120.00	2,640
Outdoor furnishings	1	LS	10,000.00	10,000
	16,192	SF	0.88	14,240
<u>G2050 Landscaping</u>				
Landscape Planting and Restoration	2,491	SF		
Topsoil - 12" depth	92	CY	50.00	4,613
Mulch, 2" depth	16	CY	55.00	863
Trees On-site				
2" cal	10	EA	350.00	3,500
Shrubs - 2 to 5 gallon	623	EA	28.00	17,437
Groundcover - 1 gallon	623	EA	10.50	6,539
Pruning and restoration of existing plantings	1,500	SF	7.00	10,500
Planting irrigation, new and existing adjustments	2,491	SF	2.30	5,729
	16,192	SF	3.04	49,181
Site Development				94,373
<u>G3010 Water Supply</u>				
Domestic Water Service				
Water line building w/meter	120	LF	80.00	9,600
	16,192	SF	0.59	9,600

<i>Item Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
<u>G3020 Sanitary Sewer</u>				
New sanitary service to building				NIC
<u>G3030 Storm Sewer</u>				
Piping to planters	200	LF	18.00	3,600
	16,192	SF	0.22	3,600
<u>G3040 Heating Distribution</u>				
No work anticipated				NIC
<u>G3050 Cooling Distribution</u>				
No work anticipated				NIC
<u>G3060 Fuel Distribution</u>				
Gas piping from tank to VRV system	120	LF	70.00	8,400
	16,192	SF	0.52	8,400
<u>G4010 Electrical Distribution</u>				
No Work Anticipated				-
				NIC
				-
<u>G4020 Site Lighting</u>				
Bollard lighting	5	EA	1,080.00	5,400
Exterior building lighting	4	EA	750.00	3,000
	16,192	SF	0.52	8,400
<u>G4030 Site Communications & Security</u>				
By Owner				NIC
<u>G4030 Site Communications & Security</u>				
No Work Anticipated				NIC
Site Utilities				30,000

Grants Pass Library

GRANTS PASS LIBRARY

Site Criteria

SITE CRITERIA

To make it easier to study and understand the relative opportunities and challenges of each site the parameters are set at the following:

- 37,000 square foot building if single story
- 2 level maximum building height
- 74 car parking lot (1 space per 500 sf) + 2 loading spaces

Site Area:

Components include:

Building Area: 37,000 sf one story

20,000 sf two story (allows for stairs/elevator and atrium connection between floors)

Parking Area: 28,000 sf (allows 74 cars, two loading spaces + plantings)

Plaza: 4500 sf

Site Circulation: 3800 sf

One story Library w/ at grade parking - Total Net Site Area required: 73,300 square feet *

(See attached diagram) *

Two Story Library w/ at grade parking- Total Net Site Area required: 56,300 square feet *

One Story Library w/ below grade parking- Total Net Site Area required: 41,500 square feet *

*Does not include area for setbacks, odd shaped lots, easements etc. Need to be added on a site by site basis. Estimate approx. 10-30% additional area depending on site location and configuration.

Preferred Zones:

Grants Pass Zoning allows Library use in the following zones with a Type I Planning procedure (straightforward):

- NC: Neighborhood Commercial
- GC (GC-1): General Commercial
- GC-2: General Commercial
- CBD: Central Business District
- OR: Office – Residential
- BP: Business Park

SITE CRITERIA

Libraries can be in Residential, Industrial and other zones but will require a more stringent review process involving neighboring property owners. (see attached Zoning Map and excerpts)

New Library vs. Renovation of Existing Building:

A renovation of an existing building is possible, but the following should be considered:

- A new building offers an opportunity to plan an efficient library layout that maximizes square footage. Planning a library within an existing building often results in less efficient use of space because there is often less flexibility in the existing building layout. To accommodate the full program, it may take more than 37,000 sf of existing area. It may also be a less adaptable/flexible space over time.
- Careful consideration must be made to the condition of the existing building. Seismic, accessibility and energy code upgrades are often triggered resulting in expensive retrofitting.
- Renovation is often equal or more expensive than building new depending on the existing building condition and layout.
- Renovating an existing building can be more resource efficient and sustainable if the scope of required upgrades is limited.

Identify issues that influence Library Success.

General questions to address in the site analysis:

- What are the site's opportunities and what are the challenges?
- How does the site accommodate access and meet parking requirements?
- Does the site have neighboring properties that enhance the experience of going to and using the library?
- Is there an identity to the immediate area around the site that compliments the Library?
- Is this a good site for the City to invest in building the new library?

SITE CRITERIA

Other Considerations:

The following criteria should be applied and analyzed for each site under consideration:

Design Opportunities and Challenges:

- Size - Is the site big enough to accommodate the Building?
- Visibility – Does the site promote the library?
- Features – What are the views, natural features, historic context, amenities etc.
- Adjacencies – Do the adjacent uses compliment the Library?
- Planning / Zoning requirements - Are there any aspects of Planning/Zoning that affect the design?

Access and Parking:

- Pedestrian
- Public Transportation
- Vehicle
- Parking

Costs and Benefits:

- Building Costs (slope, soil, massing,)
- Utilities and Site Costs (services, shoring, site access, construction staging, tree protection, hazardous materials)
- Development Impact

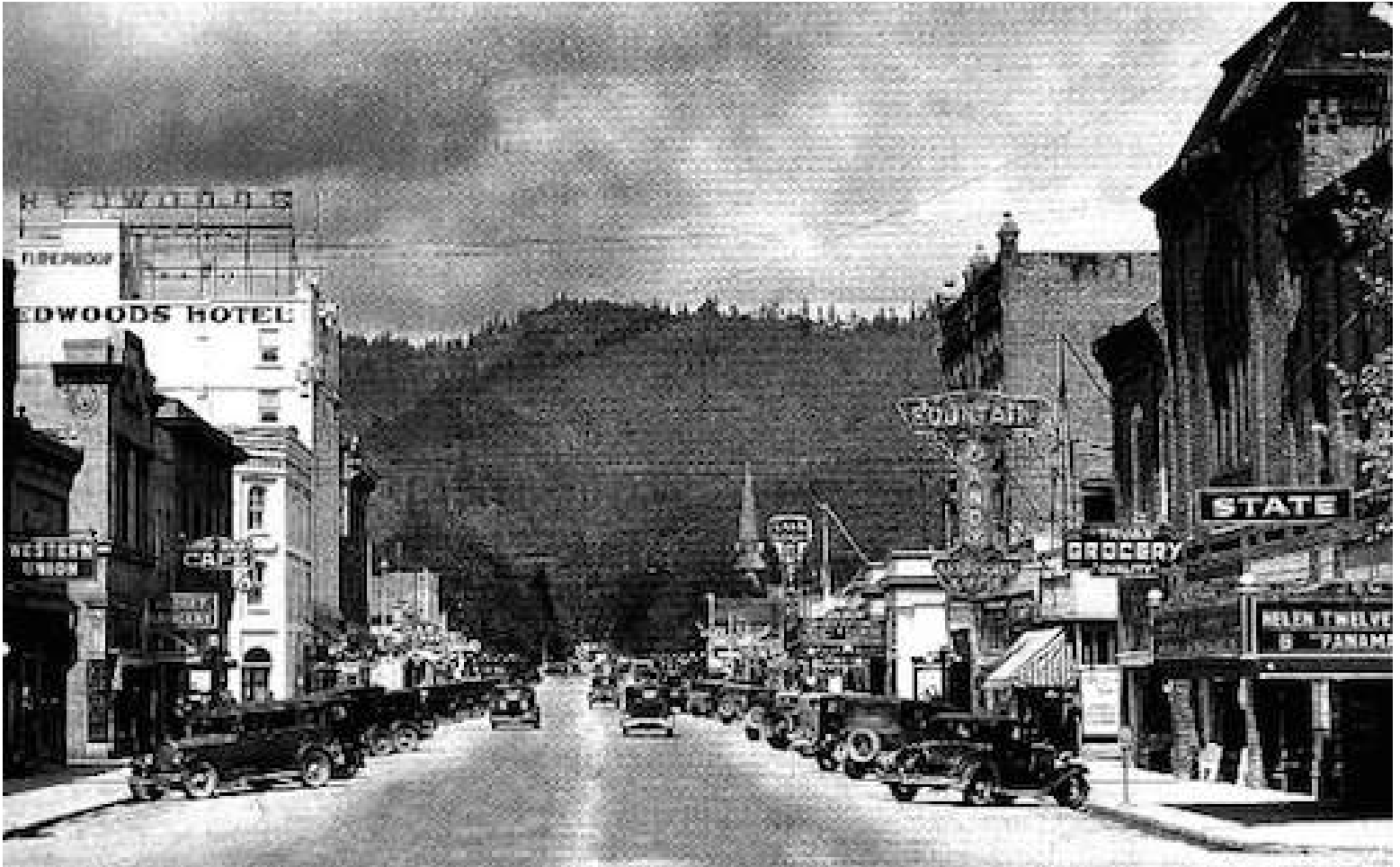
SITE CRITERIA



NET AREA

73,300 SF

*Net area does not include setbacks, odd site shapes, easements, etc.



Downtown Grants Pass c. 1930

GRANTS PASS LIBRARY
Design Concepts

“THE MAIN QUESTIONS”

How does the library integrate with Historic Grants Pass?
How do we activate the building edges?



How do you arrive?
What is its presence from the sidewalk?



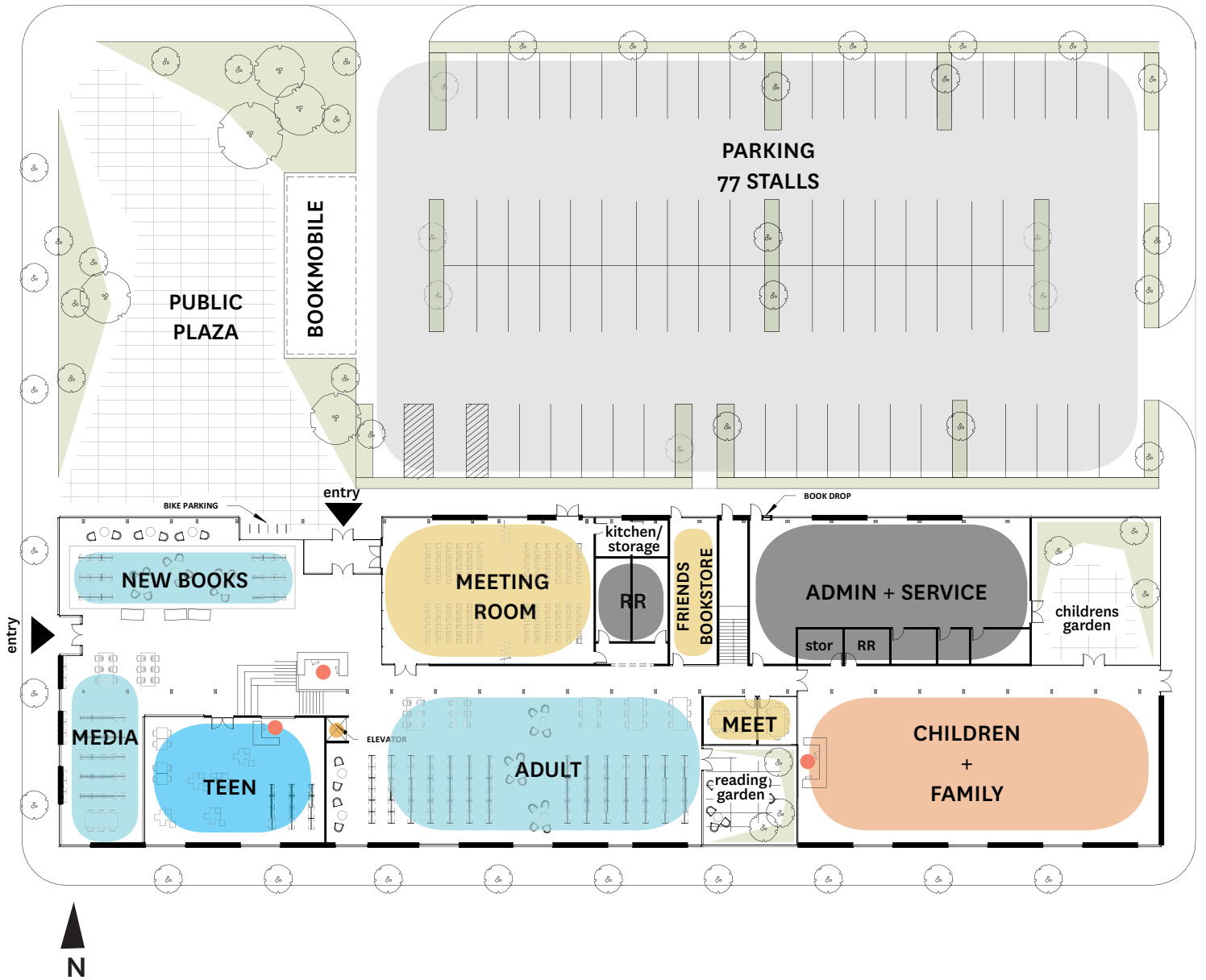
How do you bring in natural light? Is there a space to read outside?
How do you connect between floors?



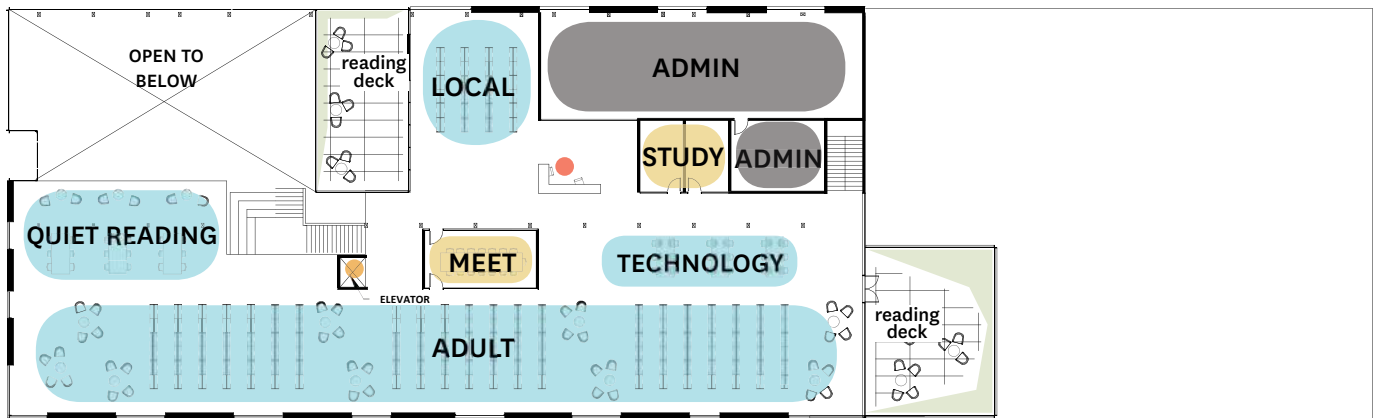
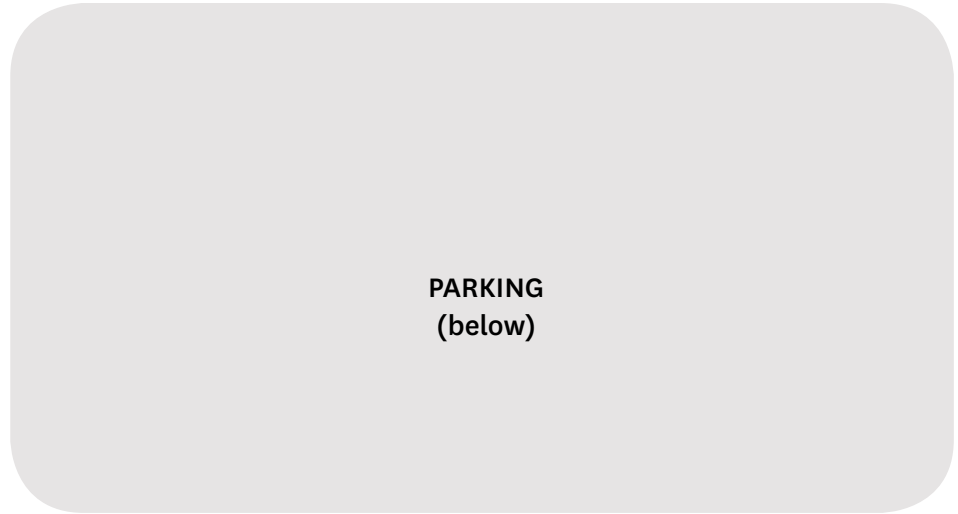
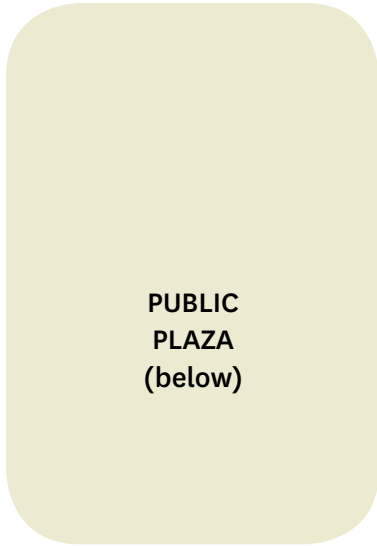
How do you create a warm and welcoming place?
How do you honor local industry?



GROUND FLOOR LEVEL



LEVEL 2



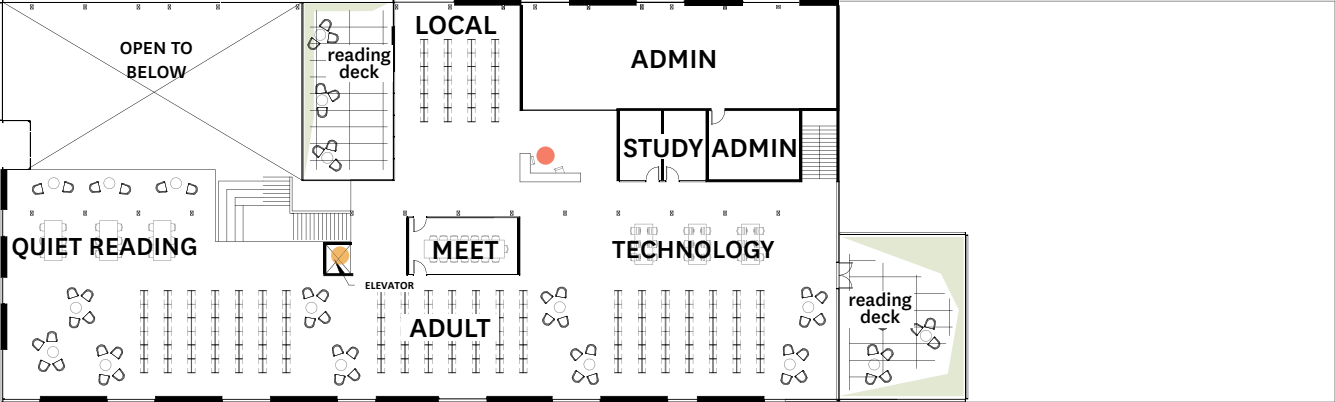
GROUND FLOOR LEVEL



LEVEL 2

PUBLIC PLAZA (below)

PARKING (below)



EXTERIOR VIEW



EXTERIOR VIEW - THROUGH PUBLIC PLAZA TOWARDS MAIN ENTRY

INTERIOR VIEW



INTERIOR VIEW - MAIN LOBBY

GRANTS PASS LIBRARY

Cost Estimate

Josephine Community Library District Grants Pass



Prepared for:

HACKER

Laura Klinger
Hacker Architects
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Prepared by:



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Josephine Community Library District Grants Pass Library

Scope of Work

Scope of Work and Cost Basis

The scope of work includes the development of a Master plan level concept cost plan for the new construction of the Grants Pass in Josephine County, Oregon. The anticipated location of the library is between SE 6th and SE 7th and SE L Street and SE K Street. The cost plan is based upon concept drawings dated January 16, 2019, narrative information and discussions with Hacker.

The costs for this study are developed from the assumptions and clarifications listed below.

Assumptions and Clarifications

Site acquisition is not included, demolition to structures and paving is included.
FF&E including Library shelving is included as an additional additive to the project
Regular business hours in an unoccupied building
This cost report provides current market rates for labor and materials.

Soft Costs

Soft costs are included in the cost plan at the Summary Level. These cost are typically paid for by the owner and are in addition to the Contractor's costs.

These costs include:

- A/E fees- Architect and consultants under the Architects Contract.
- Engineering fees and studies - Other project specific consultants not under the Architect's contract (Ex: Environmental impact, location work, etc.)
- Permits and Fees- Includes MUP, building permits, Fire Department review, etc.
- Commissioning- Third Party System Commissioning
- Jurisdictional costs

In this exercise the Markups are at 30%.

In preparing the cost model multiple sources were used. The source information includes a current perspective on codes, technology, energy conservation, local general and sub construction markets and labor agreements, material costs and availability and labor efficiencies.

Procurement: The project planned delivery method is Design,bid,build.

Schedule: The project assumed start date is Q1 2021.

Josephine Community Library District Grants Pass Library

Program Areas

BUILDING

Grants Pass Library	36,909	SF
Public Areas	1,367	SF
Adult Services	9,928	SF
Youth Services	5,442	SF
Meeting	3,731	SF
Admin/staff/office	4,405	SF
Outreach	964	SF
Circulation and Restrooms	11,072	SF
Level 1	26,400	SF
Level 2	14,500	SF
<i>Reading decks</i>	2,000	SF
<i>Reading Gardens</i>	2,250	SF

SITWORK

Grants Pass Library	35,900	SF
Building foot print	26,400	SF
New Planting	4,000	SF
ROW sidewalk and curb	5,500	SF
Off- Site	56,500	SF
Public Plaza, and walkway	15,500	SF
Parking	30,000	SF
New Planting	11,000	SF

Josephine Community Library District
Grants Pass Library

Baseline Cost Model Summary

	Grants Pass Library		Parking Lot		Plaza		
	TOTAL SF	36,909	TOTAL SF	30,000	TOTAL SF	15,500	
COMPONENT COST SUMMARY	\$ / SF	Cost - \$	\$ / SF	Cost - \$	\$ / SF	Cost - \$	
1. Foundations	\$ 5.94	\$ 219,102	\$ -	\$ -	\$ -	\$ -	
2. Vertical Structure	\$ 41.10	\$ 1,516,992	\$ -	\$ -	\$ -	\$ -	
3. Floor and Roof Structure	\$ 30.41	\$ 1,122,245	\$ -	\$ -	\$ -	\$ -	
4. External Cladding	\$ 42.91	\$ 1,583,761	\$ -	\$ -	\$ -	\$ -	
5. Roofing and Waterproofing	\$ 23.22	\$ 857,172	\$ -	\$ -	\$ -	\$ -	
SHELL	\$ 143.58	\$ 5,299,272	\$ -	\$ -	\$ -	\$ -	
6. Interior Partitions	\$ 14.22	\$ 524,954	\$ -	\$ -	\$ -	\$ -	
7. Interior Finishes	\$ 27.76	\$ 1,024,717	\$ -	\$ -	\$ -	\$ -	
INTERIORS	\$ 41.99	\$ 1,549,671	\$ -	\$ -	\$ -	\$ -	
8. Equipment and Specialties	\$ 5.87	\$ 216,710	\$ -	\$ -	\$ -	\$ -	
9. Vertical Transportation	\$ 7.98	\$ 294,630	\$ -	\$ -	\$ -	\$ -	
EQUIPMENT & VERT. TRANS	\$ 13.85	\$ 511,340	\$ -	\$ -	\$ -	\$ -	
10. Plumbing	\$ 7.79	\$ 287,366	\$ -	\$ -	\$ -	\$ -	
11. HVAC	\$ 18.64	\$ 687,817	\$ -	\$ -	\$ -	\$ -	
12. Electrical	\$ 45.59	\$ 1,682,686	\$ -	\$ -	\$ -	\$ -	
13. Fire Protection	\$ 6.00	\$ 221,454	\$ -	\$ -	\$ -	\$ -	
MECHANICAL AND ELECTRICAL	\$ 78.01	\$ 2,879,323	\$ -	\$ -	\$ -	\$ -	
BUILDING 1 - 13 - DIRECT COST	\$ 277.43	\$ 10,239,606	\$ -	\$ -	\$ -	\$ -	
Site Preparation	\$ 14.46	\$ 533,670	\$ 16.40	\$ 492,100	\$ 3.40	\$ 101,950	
Site Improvements	\$ 9.54	\$ 352,243	\$ 15.57	\$ 467,167	\$ 9.16	\$ 274,869	
Site Utilities	\$ 3.48	\$ 128,610	\$ 4.80	\$ 144,075	\$ 3.79	\$ 113,760	
SITWORK- DIRECT COST	\$ 27.49	\$ 1,014,523	\$ 36.78	\$ 1,103,342	\$ 16.35	\$ 490,579	
BUILDING AND SITE- DIRECT COST	\$ 304.92	\$ 11,254,128	\$ 36.78	\$ 1,103,342	\$ 16.35	\$ 490,579	
Contingency -Design	10%	\$ 1,125,413	\$ 12,379,541	\$ 110,334	\$ 1,213,676	\$ 49,058	\$ 539,637
Contingency- Construction	3%	\$ 337,623.9	\$ 12,717,165	\$ 33,100	\$ 1,246,777	\$ 14,717	\$ 554,355
General Conditions and Requirements	14.5%	\$ 1,843,989	\$ 14,561,154	\$ 180,783	\$ 1,427,559	\$ 71,134	\$ 625,489
Fee- OH&P	5%	\$ 728,058	\$ 15,289,212	\$ 71,378	\$ 1,498,937	\$ 24,529	\$ 650,018
Bonds and Insurance	1.50%	\$ 218,417	\$ 15,507,629	\$ 21,413	\$ 1,520,351	\$ 7,359	\$ 657,376
Escalation to Start (April 2021)	9.7%	\$ 1,507,342	\$ 17,014,971	\$ 147,778	\$ 1,668,129	\$ 47,684	\$ 705,061
Project Mark up Costs		\$ 5,760,842		\$ 564,787		\$ 214,481	
TOTAL CONSTRUCTION COST - Q1 - 2021	\$ 461.00	\$ 17,014,971	\$ 55.60	\$ 1,668,129	\$ 45.49	\$ 705,061	
Soft Cost (see breakdown pg 2)	30%	\$ 138.30	\$ 5,104,491	\$ 16.68	\$ 500,439	\$ 13.65	\$ 211,518
FF&E Costs (furniture and shelving)		\$ 48.90	\$ 1,804,850			\$ -	\$ -
TOTAL PROJECT COST	\$ 648.16	\$ 23,922,975	\$ 72.29	\$ 2,168,567	\$ 59.13	\$ 916,579	

Josephine Community Library District
Grants Pass Library

Grants Pass Library

<i>Item Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
Total Library Area	36,909	SF		
<u>1. Foundations</u>				
Continuous Footing	297	CY	530.00	157,587
Spread Footing	41	EA	1,500.00	61,515
	36,909	SF	5.94	219,102
<u>2. Vertical Structure</u>				
Metal stud exterior wall framing, insulated	26,760	SF	18.20	487,032
Structural steel framing	157	TN	6,200.00	972,552
Glu-lam beams	1,196	LF	48.00	57,408
	36,909	SF	41.10	1,516,992
<u>3. Floor and Roof Structure</u>				
New 4" SOG	26,400	SF	12.90	340,560
CLT W/ Topping slab	14,500	SF	26.70	387,150
Roof metal joists framing	32,472	SF	12.15	394,535
	36,909	SF	30.41	1,122,245
<u>4. Exterior Cladding</u>				
Exterior Glazing	9,634	SF	110.00	1,059,696
Rainscreen system complete	17,126	SF	28.60	489,815
New Entry doors and ADA hardware	2	STS	3,650.00	7,300
Doors to decks and reading gardens	5	PR	3,590.00	17,950
Door to Bookstore (SF)	1	EA	2,150.00	2,150
Exterior egress door	1	PR	2,890.00	2,890
Exterior egress door	2	EA	1,980.00	3,960
	36,909	SF		1,583,761
<u>5. Roofing, Waterproofing & Skylights</u>				
Insulated roof system -complete	29,872	SF	19.58	584,894
Roof drains and downspouts	1,036	LF	24.40	25,278
Skylights	2,600	SF	95.00	247,000
	36,909	SF	23.22	857,172

<i>Item Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
<u>6. Interior Partitions, Doors & Glazing</u>				
Partitions incl. acoustic and fire rated applications				
Interior partitions, 2x stud and gyp. (includes rated walls)	3,724	SF	16.50	61,446
Interior to exterior wall	17,126	SF	7.50	128,448
Folding partition	1	EA	25,000.00	25,000
Window walls and borrowed lights				
Interior glazed wall and door system	1,860	SF	105.00	195,300
Vestibule	672	SF	105.00	70,560
Relites	144	SF	70.00	10,080
Interior doors and frames				
Wood doors, flush	17	EA	1,880.00	31,960
Hollow metal door	2	EA	1,080.00	2,160
	36,909	SF	14.22	524,954
<u>7. Floor, Wall & Ceiling Finishes</u>				
Floors				
Carpet flooring, incl. base 30%	12,973	SF	7.00	90,809
Polished Concrete 60%	22,145	SF	8.00	177,163
Cork/rubber flooring, incl. base 10%	500	SF	9.50	4,750
Tile flooring, incl. base -Restrooms	800	SF	14.50	11,600
Walk off mat	50	SF	32.00	1,600
Sealed concrete - Service	440	SF	1.80	792
Raised concrete paver systems at reading decks	2,000	SF	36.00	72,000
Base- Wood	1,098	LF	12.80	14,048
Base- Rubber	260	LF	4.25	1,105
Walls				
Paint walls throughout	23,830	SF	1.15	27,404
Tile, at restroom wet wall to 4'	1,008	SF	16.00	16,128
Wood clad columns	4,320	SF	18.90	81,648
Ceilings				
Restroom - Gyp	800	SF	12.00	9,600
Service- Gyp	440	SF	8.00	3,520
ACT ceiling- Admin, study	2,600	LF	4.50	11,700
Wood slat ceiling, w/duct liner backing	26,500	SF	18.90	500,850
	36,909	SF	27.76	1,024,717
<u>8. Function Equipment & Specialties</u>				
Equipment and Fittings				
Casework- Admin	38	LF	550.00	20,900
Casework- Public	126	LF	790.00	99,540
Casework- Circulation Desk	32	LF	1,150.00	36,800

<i>Item Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
New Library Shelving- Seismically braced			<i>See Summary for Allowance</i>	
Restroom fit outs	1	LS	26,500.00	26,500
Breakroom- upper and lowers	12	LF	650.00	7,800
Appliances	1	LS	5,000.00	5,000
Book drop	1	LS	1,250.00	1,250
Corner guards	18	EA	190.00	3,420
Signage, Graphics and Wayfinding	1	LS	15,500.00	15,500
	36,909	SF	5.87	216,710

9. Stairs & Vertical Transportation

3500# Elevator	2	STP	36,000.00	72,000
Egress Stair	1	FLT	11,500.00	11,500
Grand stair w/seating	1	FLT	32,000.00	32,000
Glass railings- interior	240	LF	400.00	96,000
Glass Railings at reading decks	150	LF	375.00	56,250
Handrails	160	LF	168.00	26,880
	36,909	SF		294,630

10. Plumbing Systems

Connections to service	1	LS	50,000.00	50,000
Fire Service line and connection	1	LS	20,000.00	20,000
Route domestic water to fixtures	1,456	LF	40.00	58,240
Route sanitary piping and venting to fixtures	1,768	LF	48.00	84,864
Pumps, backflow prevention	1	LS	20,000.00	20,000
Insulation	728	LF	4.00	2,912
Plumbing fixtures:	26	Fx		
Toilets	12	EA	1,450.00	17,400
Lavs wall hung	12	EA	1,050.00	12,600
Hand Sinks	2	EA	1,225.00	2,450
Hose bibs	6	EA	650.00	3,900
Water heating	1	LS	15,000.00	15,000
	36,909	SF	7.79	287,366

11. Heating, Ventilation & Air Conditioning

Heat generation & chilling				
VRV ductless system- complete	36,909	SF	15.50	572,090
Zone control	36,909	SF	3.00	110,727
Testing and balancing	40	HRs	125.00	5,000
	36,909	SF	18.64	687,817

12. Electrical Lighting, Power & Communication

Main service and distribution				
Primary Service- By Franchise				NIC
Primary Feeders - By Franchise				NIC

<i>Item Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
Primary feeders, trenching, conduit and pull wire	150	LF	70.00	10,500
Main Switchboard	1	LS	28,500.00	28,500
Distribution panels	2	EA	15,000	30,000
New electrical wiring and conduit	36,909	SF	12.60	465,053
Lighting				
New lighting LED	36,909	SF	11.43	421,870
Controls	36,909	SF	6.00	221,454
Conduit, J-Boxes and wiring	36,909	LF	0.88	32,480
User convenience power				
Receptacles	410	EA	450.00	184,545
A/V in meeting	2	EA	10,500.00	21,000
Telephone & communication				
Voice data ports, USB chargers -revisions	308	EA	550.00	169,166
Alarm & security				
Fire alarm system	36,909	SF	2.55	94,118
Other				
Allow for commissioning assist & documentation of sustainability measures	32	HR	125.00	4,000
	36,909	SF	45.59	1,682,686

13. Fire Protection Systems

Fire protection				
Fire Sprinkler with concealed heads	36,909	SF	6.00	221,454
	36,909	SF	6.00	221,454

Josephine Community Library District
Grants Pass Library

Building related sitework

<i>Item Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
<u>G1010 Site Clearing</u>				
Construction fence	1,050	LF	9.00	9,450
Construction gate	1	EA	1,500.00	1,500
Site protection	35,900	SF	0.50	17,950
Dust Control	8	MO	550.00	4,400
Street cleaning	4	MO	550.00	2,200
Arborist	1	LS	2,000.00	2,000
Tree removal	3	EA	700.00	2,100
Tree protection	1	LS	1,500.00	1,500
Lay out	1	LS	2,500.00	2,500
	35,900	SF	1.21	43,600
<u>G1020 Site Demolition and Relocations</u>				
Demo - Asphalt and concrete	35,900	SF	3.70	132,830
Demo- Site signage and misc. structures	1	LS	30,000.00	30,000
Demo- Landscaping, clear and grub	35,900	SF	2.60	93,340
	35,900	SF	7.14	256,170
<u>G1030 Site Earthwork</u>				
Site grading and contouring, lay out	35,900	SF	0.50	17,950
Compact for new paving	35,900	SF	1.00	35,900
Excavate for new Building	2,933	CY	28.00	82,133
Prep for planting areas	4,000	SF	2.00	8,000
Base aggregates				
Concrete pedestrian paving - 6" depth	665	CY	45.00	29,917
Building footprint, 1'	978	CY	45.00	44,000
Utility trenching	500	LF	32.00	16,000
	35,900	SF	6.52	233,900

<i>Item Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
<u>G1040 Hazardous Waste Remediation</u>				
No work anticipated				NIC
				533,670
Site Preparation				
<u>G2010 Roadways</u>				
No work anticipated				NIC
<u>G2020 Parking Lots</u>				
<u>G2030 Pedestrian Paving</u>				
Concrete paver systems at gardens	2,250	SF	36.00	81,000
Concrete sidewalk on-site	6,000	SF	12.80	76,800
ROW sidewalk and curbs	5,500	SF	16.50	90,750
ADA ramps detection pads (ramps are existing)	4	EA	1,050.00	4,200
				-
				-
				252,750
<u>G2040 Site Development</u>				
Bike Rack	5	EA	800.00	4,000
Outdoor furnishings	1	LS	25,000.00	25,000
				29,000
<u>G2050 Landscaping</u>				
Landscape Planting and Restoration	4,000	SF		
Topsoil - 12" depth	148	CY	50.00	7,407
Mulch, 2" depth	25	CY	55.00	1,385
Trees On-site				
2" cal	10	EA	350.00	3,500
Shrubs - 2 to 5 gallon	1,000	EA	28.00	28,000

<i>Item Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
Groundcover - 1 gallon	1,000	EA	10.50	10,500
Pruning and restoration of existing plantings	1,500	SF	7.00	10,500
Planting irrigation	4,000	SF	2.30	9,200
	35,900	SF	1.96	70,493

Site Development

352,243

G3010 Water Supply

Domestic Water Service

Water line building w/meter

150 LF 155.00 23,250

35,900 SF 0.65 23,250

G3020 Sanitary Sewer

New sanitary service to building

150 LF 175.00 26,250

-

G3030 Storm Sewer

Piping to planters

220 LF 45.00 9,900

35,900 SF 1.01 36,150

G3040 Heating Distribution

No work anticipated

NIC

G3050 Cooling Distribution

No work anticipated

NIC

G3060 Fuel Distribution

Gas piping for HVAC system

175 LF 70.00 12,250

35,900 SF 0.34 12,250

G4010 Electrical Distribution

Connections to building and controls

1 LS 35,000.00 35,000

<i>Item Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
<u>G4020 Site Lighting</u>				
Bollard lighting	12	EA	1,080.00	12,960
Exterior building lighting	12	EA	750.00	9,000
	35,900	SF	1.59	56,960
<u>G4030 Site Communications & Security</u>				
By Owner				<i>NIC</i>
Site Utilities				128,610

Josephine Community Library District Grants Pass Library

Parking Lot

<i>Item Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
<u>G1010 Site Clearing</u>				
Construction fence	500	LF	9.00	4,500
Construction gate	1	EA	1,500.00	1,500
Site protection	30,000	SF	0.50	15,000
Dust Control	8	MO	550.00	4,400
Street cleaning	4	MO	550.00	2,200
Lay out	1	LS	2,500.00	2,500
	30,000	SF	1.00	30,100
<u>G1020 Site Demolition and Relocations</u>				
Demo - Existing building -complete	30,000	SF	8.00	240,000
Haz mat allowance	1	LS	50,000.00	50,000
Demo - Asphalt and concrete	30,000	SF	3.70	111,000
	30,000	SF	13.37	401,000
<u>G1030 Site Earthwork</u>				
Site grading and contouring, lay out	30,000	SF	0.50	15,000
Compact for new paving	30,000	SF	1.00	30,000
Prep for planting areas	8,000	SF	2.00	16,000
	30,000	SF	2.03	61,000
<u>G1040 Hazardous Waste Remediation</u>				
Not required				
Site Preparation				492,100
<u>G2010 Roadways</u>				
No work anticipated				<i>NIC</i>
<u>G2020 Parking Lots</u>				
HMA paving parking lot paving w/seal coat	30,000	SF	10.00	300,000
Planting curbs	1,046	LF	32.00	33,472

Wheel stops	77	EA	130.00	10,010
ADA Signage	1	LS	5,000.00	5,000
Striping	30,000	SF	0.12	3,600
				-
<u>G2030 Pedestrian Paving</u>				-
Not Required				
	30,000	SF	11.74	352,082
<u>G2050 Landscaping</u>				
Landscape Planting and Restoration	8,000	SF		
Topsoil - 12" depth	296	CY	50.00	14,815
Mulch, 2" depth	50	CY	55.00	2,770
Trees On-site				
2" cal	6	EA	350.00	2,100
Shrubs - 2 to 5 gallon	2,000	EA	28.00	56,000
Groundcover - 1 gallon	2,000	EA	10.50	21,000
Planting irrigation	8,000	SF	2.30	18,400
	30,000	SF	3.84	115,085
Site Development				467,167
<u>G3010 Water Supply</u>				
No work anticipated				<i>NIC</i>
	30,000	SF		-
<u>G3020 Sanitary Sewer</u>				
				-
<u>G3030 Storm Sewer</u>	535	LF	45.00	24,075
Piping to planters				
	30,000	SF	0.80	24,075
<u>G3040 Heating Distribution</u>				
No work anticipated				<i>NIC</i>
<u>G3050 Cooling Distribution</u>				
No work anticipated				<i>NIC</i>
<u>G3060 Fuel Distribution</u>				
No work anticipated				<i>NIC</i>
	30,000	SF		-

G4010 Electrical Distribution

G4020 Site Lighting

Parking lighting	1	LS	100,000.00	100,000
Controls	1	LS	20,000.00	20,000
	30,000	SF	4.00	120,000

G4030 Site Communications & Security

By Owner *NIC*

Site Utilities **144,075**

Josephine Community Library District

Grants Pass Library

Plaza

<i>Item Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
<u>G1010 Site Clearing</u>				
Construction fence	300	LF	9.00	2,700
Construction gate	1	EA	1,500.00	1,500
Site protection	15,500	SF	0.50	7,750
Dust Control	4	MO	550.00	2,200
Street cleaning	4	MO	550.00	2,200
Lay out	1	LS	2,500.00	2,500
	15,500	SF	1.22	18,850
<u>G1020 Site Demolition and Relocations</u>				
Demo - Asphalt and concrete	15,500	SF	3.70	57,350
	15,500	SF	3.70	57,350
<u>G1030 Site Earthwork</u>				
Site grading and contouring, lay out	15,500	SF	0.50	7,750
Compact for new paving	12,000	SF	1.00	12,000
Prep for planting areas	3,000	SF	2.00	6,000
	15,500	SF	1.66	25,750
<u>G1040 Hazardous Waste Remediation</u>				
Site Preparation				101,950
<u>G2010 Roadways</u>				
No work anticipated				<i>NIC</i>
<u>G2020 Parking Lots</u>				
No work anticipated				<i>NIC</i>
				-

G2030 Pedestrian Paving

Plaza paving	12,000	SF	15.75	-	189,000
	15,500	SF	12.19		189,000

G2040 Site Development

Outdoor furnishings	1	LS	40,000.00		40,000
	15,500	SF	2.58		40,000

G2050 Landscaping

Landscape Planting and Restoration	3,000	SF			
Topsoil - 12" depth	111	CY	50.00		5,556
Mulch, 2" depth	19	CY	55.00		1,039
Trees On-site					
2" cal	10	EA	350.00		3,500
Shrubs - 2 to 5 gallon	750	EA	28.00		21,000
Groundcover - 1 gallon	750	EA	10.50		7,875
Planting irrigation	3,000	SF	2.30		6,900
	15,500	SF	2.96		45,869

Site Development

274,869

G3010 Water Supply

No work anticipated *NIC*

15,500 SF -

G3020 Sanitary Sewer

No work anticipated *NIC*

-

G3030 Storm Sewer

Piping to planters 480 LF 45.00 21,600

15,500 SF 1.39 21,600

G3040 Heating Distribution

No work anticipated *NIC*

G3050 Cooling Distribution

No work anticipated *NIC*

G3060 Fuel Distribution

15,500	SF		-
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G4010 Electrical Distribution

G4020 Site Lighting

Bollard lighting	2	EA	1,080.00	2,160
Plaza lighting	1	LS	75,000.00	75,000
Controls	1	LS	15,000.00	15,000

15,500	SF	5.95	92,160
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G4030 Site Communications & Security

By Owner				NIC
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Site Utilities

			113,760
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