



Elizabeth Comfort
Finance Director, Interim

Department of Finance

Public Services Building
2051 Kaen Road, Suite 490 | Oregon City, OR 97045

Board of County Commissioners
Clackamas County

Members of the Board:

Approval of Software Services Agreement with zLink, Inc. for Building Information and Asset Management Software

Purpose/ Outcomes	Authorize the purchase of zLink Facilities Asset Management Software
Dollar Amount and Fiscal Impact	Contract total value of \$588,197.36 for five (5) years.
Funding Source	Facilities Management Fund 744-7536-00-485330
Duration	Initial term of five (5) years, with the option for additional annual renewals thereafter.
Previous Board Action	None
Strategic Plan Alignment	Facilities Management's (FM) Strategic Plan includes the contracting, implementation and use of a new asset management system such as zLink to manage all facilities assigned to FM and be an all-inclusive program to track all county owned, leased and donated properties.
Counsel Review	Approved March 3, 2020
Contact Person	Jeff Jorgensen 503-557-6414

BACKGROUND:

The County currently uses MPulse Asset Management software for tracking facilities/assets. That software is at its end of life and does not provide the functionality needed by the County to properly track all facilities related assets across the county. Due to the old software's issues, the facilities management team is currently relying on the tracking of said assets with incomplete excel spreadsheets. The County conducted a formal RFP for asset management software and made a selection after carefully evaluating each proposal. zLink's asset management software was determined to be in the best interest of the County based on its features and functionality along with a competitive licensing price.

The proposed contract is for a five (5) year period, with the option for additional annual renewals thereafter. Finance negotiated favorable renewal escalators for these future one year renewals. Implementation is planned to begin April 1, 2020 with a tentative completion in January 2021.

This request is for the Board to approve the first five (5) year period of the contract. Finance will submit future requests to extend for additional renewals.

PROCUREMENT PROCESS:

In accordance with the Local Contract Review Board Rules, on November 13, 2018, Procurement published Request for Proposals #2018-101 Building Information and Asset Management System with a closing date of January 17, 2019. Five (5) proposals were received and an evaluation committee of qualified staff evaluated the proposals per the stated criteria.



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After the initial evaluation meeting was conducted it was determined that presentations of each software solution was needed in order to make an informed selection. Once all presentations were completed the evaluation team's scores were finalized and zLink, Inc. was recommended for contract award. An Intent to Award Notice was posted to ORPIN on June 6, 2019 and no protests were received. Upon the expiration of the protest period, the final dollar amount and scope was negotiated and finalized.

RECOMMENDATION:

Staff recommends the Board of County Commissioners approve the attached Contract with zLink, Inc. and to complete the transaction, authorize the Procurement Office to execute any other needed instruments and purchase orders in order to complete the initial five (5) year purchase.

Respectfully submitted,

Elizabeth Comfort, Director

Placed on the Agenda of _____ by Procurement and Contract Services



CLACKAMAS COUNTY
TECHNOLOGY SERVICES CONTRACT

This Technology Services Contract (this "Contract") is entered into between zLink, Inc. ("Contractor"), and Clackamas County, a political subdivision of the State of Oregon ("County"), on behalf of its Finance Department. Contractor and County are each a "Party" and together the "Parties."

ARTICLE I.

1. Effective Date and Duration. This Contract shall become effective upon signature of both parties ("Effective Date"). Unless earlier terminated or extended, this Contract shall expire on June 30, 2025. However, such expiration shall not extinguish or prejudice the County's right to enforce this Contract with respect to: (a) any breach of a Contractor warranty; or (b) any default or defect in Contractor performance that has not been cured.

This Contract may be extended only if, sixty (60) days prior to the then expiration date, the Contractor provides a written quote to the County for a one (1) year renewal term, and the County accepts a new renewal term by the issuance of an official County purchase order. Except for the renewal term and associated fee, no other terms and conditions of the original Contract may be changed through this process.

2. Statement of Work. Contractor will provide the technology services described in Article IV (the "Services"). The Services, described in greater detail in Article IV, generally include the purchase, installation, maintenance, and use of multiple software modules, apps, reports, databases, and associated programs

3. Travel and Other Expense. Authorized: [] Yes [X] No

If travel expense reimbursement is authorized in this Contract, such expense shall only be reimbursed at the rates in the County Contractor Travel Reimbursement Policy, hereby incorporated by reference and found at: http://www.clackamas.us/bids/terms.html. Travel expense reimbursement is not in excess of the not to exceed consideration.

4. Contract Documents. This Contract consists only of this Contract and there are no other exhibits or attachments.

5. Contractor and County Contacts.

Table with 2 columns: Contractor and County. Contractor contact: Administrator: Jessica Nelson, Phone: 978-309-3628 ext. 11, Email: jnelson@zlinkcorp.com. County contact: Administrator: Jeff Jorgensen, Phone: 503-557-6422, Email: CJohnson@clackamas.us

6. Consideration. The County agrees to pay Contractor, from available and authorized funds, a sum not to exceed five hundred eighty-eight thousand one hundred ninety-seven dollars and thirty-six cents (\$588,197.36) for providing Services from the Effective Date through June 30, 2025. Contractor agrees that the fees for any renewal terms shall not exceed two percent (2%) over the previous year's annual fee. Contractor shall be paid in accordance with the following fee schedule:

Fee Schedule		
Software Licensing Fees*		
Item 1	Per user monthly fee up to 65 General/Named User Software Licenses that include the following modules: System Administrator, As-Builts, Assets, Condition Assessments, Documents, Executive Summary, Inventory, Maintenance, Mobile, Projects, Scheduling, Space, Sustainability, Web Services, Work Order	\$ 65.69
Item 2	Per user monthly fee for General/Named User Software Licenses in excess of 65. Must be purchased in blocks of 5 licenses.	\$ 49.00
Item 3	Per user monthly fee for up to 500 Requestor Software Licenses.	\$ 2.00
Item 4	Per user monthly fee for Requestor Software Licenses in excess of 500. Must be purchased in blocks of 50 licenses.	\$ 2.00
Software Support*		
Item 1	Systems Analyst Hourly Fee	\$ 70.49
Software Maintenance*		
Item 1	Annual Software Maintenance Fee	\$ 12,648.00
*Effective on 1/1/2022, 1/1/2023, 1/1/2024, and 1/1/2025, the above fees are subject to an increase of 5% over the previous year's fees.		
Implimentation Planning and Support Fees		
Item 1	Project Manager Hourly Fee	\$ 105.74
Item 2	Business Process Engineer Hourly Fee	\$ 87.90
Requirements Definition		
Item 1	Information Systems Engineer Hourly Fee	\$ 82.24
Item 2	Sr. Systems Analyst	\$ 70.49
Functional Development		
Item 1	Information Systems Engineer Hourly Fee	\$ 82.24
Item 2	Sr. Systems Analyst Hourly Fee	\$ 70.49
Data Migration		
Item 1	Sr. Database Architech Hourly Fee	\$ 85.46
Item 2	Sr. Systems Analyst Hourly Fee	\$ 70.49
Drawings and Data Linkage		
Item 1	CAD Manager	\$ 64.62
Item 2	Sr. CAD Specialist	\$ 52.37
Training		
Item 1	Fee per Sytem Administrator Training	\$ 3,000.00
Item 2	Fee per Module User Training	\$ 3,000.00
Travel		
Item 1	Cost per Trip	\$ 1,800.00

The Services include a planned volume of each item listed in Article IV. These planned volumes represent the amount of each item that County and Contractor expect to be needed to provide the Services. County and Contractor acknowledge that the Services includes processes that might result in changes to planned volumes or other components of Services. The County may make adjustments to the planned volumes listed in the Services for the above items. Any such adjustments shall be communicated in writing by the County Administrator, or other authorized County official, to the Contractor.

Payment information will be reported to the Internal Revenue Service (“IRS”) under the name and taxpayer ID number submitted. (See I.R.S. 1099 for additional instructions regarding taxpayer ID numbers.) Information not matching IRS records will subject Contractor payments to backup withholding.

ARTICLE II.

1. NO EFFECT OF CLICK-THROUGH TERMS

In no event will Contractor include any “click-through” terms nor shall the use of the Services be made subject to any terms and conditions in accessing or using the Services other than those that are contained in this Contract or imposed by federal, state, or local laws. Moreover, in the event such terms and conditions are ever presented to County or other authorized users of the Services, they shall not be binding and will have no force or effect.

2. ACCESS TO RECORDS. Contractor shall maintain books, records, documents, and other evidence and accounting procedures and practices sufficient to reflect properly all costs anticipated to be incurred in the performance of this Contract. Upon not less than 14 days’ advance notice, Contractor, at its place of business or, at its option, electronically, shall provide to County and their duly authorized representatives access to the books, documents, papers, and records of Contractor which are directly pertinent to this Contract for the purpose of making audit, examination, excerpts, and transcripts. Such books and records shall be maintained by Contractor for a minimum of three (3) years, or such longer period as may be required by applicable law, following final payment and termination of this Contract, or until the conclusion of any audit, controversy or litigation arising out of or related to this Contract, whichever date is later.

3. AUDITS. Contractor agrees that a SSAE 16 audit certification (SSAE 16, issued by the American Institute of Certified Public Accountants) will be conducted annually, and Contractor agrees to provide County with the current SSAE 16 audit certification upon County’s request.

4. AVAILABILITY OF FUNDS. Any continuation or extension of this Contract after the end of the fiscal period in which it is written is contingent on a new appropriation for each succeeding fiscal period sufficient to continue to make payments under this Contract, as determined by the County in its sole administrative discretion.

5. CAPTIONS. The captions or headings in this Contract are for convenience only and in no way define, limit, or describe the scope or intent of any provisions of this Contract.

6. COMPLIANCE WITH APPLICABLE LAW. Contractor shall comply with all applicable federal, state and local laws, regulations, executive orders, and ordinances, as such may be amended from time to time.

7. EXECUTION AND COUNTERPARTS. This Contract may be executed in several counterparts, each of which shall be an original, all of which shall constitute but one and the same instrument.

8. GOVERNING LAW. This Contract shall be governed and construed in accordance with the laws of the State of Oregon without regard to principles of conflicts of law. Contractor consents to

jurisdiction of the Circuit Court for Clackamas County, in the State of Oregon for any claim, action, or suit between County and Contractor that arises out of or relates to the performance of this Contract. Provided, however, that if any such claim, action, or suit may be brought in a federal forum, it shall be brought and conducted solely and exclusively within the United States District Court for the District of Oregon.

9. INDEMNIFICATION. Contractor shall be responsible for all damage to property, injury to persons, and loss, expense, inconvenience, and delay which may be caused by, or result from, the conduct of Work, or from any act, omission, or neglect of Contractor, its subcontractors, agents, or employees. The Contractor agrees to indemnify, hold harmless and defend the County, and its officers, elected officials, agents and employees from and against all claims and actions, and all expenses incidental to the investigation and defense thereof, arising out of or based upon damage or injuries to persons or property caused by the errors, omissions, fault or negligence of the Contractor or the Contractor's employees, subcontractors, or agents. Contractor's indemnification obligation expressly includes, but is not limited to, claims for infringement or claims arising from a data breach. However, neither Contractor nor any attorney engaged by Contractor shall defend the claim in the name of County or any department of County, nor purport to act as legal representative of County or any of its departments, without first receiving from the Clackamas County Counsel's Office authority to act as legal counsel for County, nor shall Contractor settle any claim on behalf of County without the approval of the Clackamas County Counsel's Office. County may, at its election and expense, assume its own defense and settlement.

10. INDEPENDENT CONTRACTOR STATUS. The service(s) to be rendered under this Contract are those of an independent contractor. Although the County reserves the right to determine (and modify) the delivery schedule for the Work to be performed and to evaluate the quality of the completed performance, County cannot and will not control the means or manner of Contractor's performance. Contractor is responsible for determining the appropriate means and manner of performing the Work. Contractor is not to be considered an agent or employee of County for any purpose, including, but not limited to: (A) The Contractor will be solely responsible for payment of any Federal or State taxes required as a result of this Contract; and (B) This Contract is not intended to entitle the Contractor to any benefits generally granted to County employees, including, but not limited to, vacation, holiday and sick leave, other leaves with pay, tenure, medical and dental coverage, life and disability insurance, overtime, Social Security, Workers' Compensation, unemployment compensation, or retirement benefits.

11. INSURANCE. Contractor shall secure at its own expense and keep in effect during the term of the performance under this Contract the insurance required and minimum coverage indicated below. Contractor shall provide proof of said insurance and name the County as an additional insured on all required liability policies. Proof of insurance and notice of any material change should be submitted to the following address: Clackamas County Procurement Division, 2051 Kaen Road, Oregon City, OR 97045 or procurement@clackamas.us.

Required - Workers Compensation: Contractor shall comply with the workers' compensation requirements in ORS 656.017, unless exempt under ORS 656.126.
<input checked="" type="checkbox"/> Required – Commercial General Liability: combined single limit, or the equivalent, of not less than \$1,000,000 per occurrence, with an annual aggregate limit of \$2,000,000 for Bodily Injury and Property Damage.
<input checked="" type="checkbox"/> Required – Professional Liability: combined single limit, or the equivalent, of not less than \$1,000,000 per occurrence, with an annual aggregate limit of \$2,000,000 for damages caused by error, omission or negligent acts.
<input checked="" type="checkbox"/> Required – Automobile Liability: combined single limit, or the equivalent, of not less than \$1,000,000 per occurrence for Bodily Injury and Property Damage.

Required by County – Privacy and Network Security. Privacy and Network Security coverages shall be obtained and maintained to provide protection against liability for (a) system attack; (b) denial or loss of service attacks; (c) spread of malicious software code; (d) unauthorized access and use of computer systems; and (e) liability from the loss or disclosure of confidential data with limit of \$1,000,000 per claim/annual aggregate.

12. LIMITATION OF LIABILITIES. This Contract is expressly subject to the debt limitation of Oregon counties set forth in Article XI, Section 10, of the Oregon Constitution, and is contingent upon funds being appropriated therefore. Any provisions herein which would conflict with law are deemed inoperative to that extent. Except for liability arising under or related to Article II, Section 14 or Section 25 neither party shall be liable for (i) any indirect, incidental, consequential or special damages under this Contract or (ii) any damages of any sort arising solely from the termination of this Contract in accordance with its terms.

13. NOTICES. Except as otherwise expressly provided in this Contract, any communications between the parties hereto or notices to be given hereunder shall be given in writing by personal delivery, email, or mailing the same, postage prepaid, to the County at: Clackamas County Procurement, 2051 Kaen Road, Oregon City, OR 97045, or procurement@clackamas.us, or to Contractor or at the address or number set forth in Article I of this Contract, or to such other addresses or numbers as either party may hereafter indicate. Any communication or notice so addressed and mailed shall be deemed to be given five (5) days after mailing. Any communication or notice by personal delivery shall be deemed to be given when actually delivered.

14. REPRESENTATIONS AND WARRANTIES. Contractor represents and warrants to County that (A) Contractor has the power and authority to enter into and perform this Contract; (B) this Contract, when executed and delivered, shall be a valid and binding obligation of Contractor enforceable in accordance with its terms; (C) Contractor shall at all times during the term of this Contract, be qualified, professionally competent, and duly licensed to perform the Work; (D) Contractor is an independent contractor as defined in ORS 670.600; and (E) the Work under this Contract shall be performed in a good and workmanlike manner and in accordance with the highest professional standards. The warranties set forth in this section are in addition to, and not in lieu of, any other warranties provided.

14.1. Liens.

Contractor shall hold the County harmless from claimants supplying labor or materials to the Contractor or its subcontractors in the performance of this Contract.

15. SURVIVAL. All rights and obligations shall cease upon termination or expiration of this Contract, except for the rights and obligations set forth in Article II, Paragraphs 2, 8, 9, 13, 14, 15, 17, 20, 22, 23, 28, 29, and 31, together with all other rights which by their context are intended to survive, and if Contractor retains any County Data after termination, Article III Paragraph 2.

16. SEVERABILITY If any term or provision of this Contract is declared by a court of competent jurisdiction to be illegal or in conflict with any law, the validity of the remaining terms and provisions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the Contract did not contain the particular term or provision held to be invalid.

17. SUBCONTRACTS AND ASSIGNMENTS. Contractor shall not enter into any subcontracts for any of the Services required by this Contract, or assign or transfer any of its interest in this Contract by operation of law or otherwise, without obtaining prior written approval from the County. In addition to any provisions the County may require, Contractor shall include in any permitted subcontract under this Contract a requirement that the subcontractor be bound by this Article II, Paragraphs 1, 8, 13, 15,

and 27 as if the subcontractor were the Contractor. County's consent to any subcontract shall not relieve Contractor of any of its duties or obligations under this Contract. For the avoidance of doubt, the use of vendors shall not be subject to this Section.

18. SUCCESSORS IN INTEREST. The provisions of this Contract shall be binding upon and shall inure to the benefit of the parties hereto, and their respective authorized successors and assigns.

19. TAX COMPLIANCE CERTIFICATION. The Contractor shall comply with all federal, state and local laws, regulation, executive orders and ordinances applicable to this Contract. Contractor represents and warrants that it has complied, and will continue to comply throughout the duration of this Contract and any extensions, with all tax laws of this state or any political subdivision of this state, including but not limited to ORS 305.620 and ORS chapters 316, 317, and 318. Any violation of this section shall constitute a material breach of this Contract and shall entitle County to terminate this Contract, to pursue and recover any and all damages that arise from the breach and the termination of this Contract, and to pursue any or all of the remedies available under this Contract or applicable law.

20. TERMINATIONS. (A) This Contract may be terminated by mutual agreement of the parties or by the County for one of the following reasons: (i) for convenience upon thirty (30) days written notice to Contractor; or (ii) at any time the County fails to receive funding, appropriations, or other expenditure authority as solely determined by the County. Upon receipt of written notice of termination from the County, Contractor shall immediately stop performance of the Work. (B) If Contractor breaches any Contract provision or is declared insolvent, County may terminate after thirty (30) days written notice with an opportunity to cure. Upon termination of this Contract, Contractor shall deliver to County all documents, information, works-in-progress and other property that are or would be deliverables had the Contract Work been completed. Upon County's request, Contractor shall surrender to anyone County designates, all documents, research, objects or other tangible things needed to complete the Work.

21. EFFECT OF TERMINATION. In the event of any termination or expiration of this Contract:

21.1. Contractor will provide County data to County in accordance with its transition assistance Services ("**Transition Assistance**") as set forth in Section 23 below; and

21.2. The Parties will, upon written request of the other Party, either return to the requesting Party or destroy any information of requesting Party that are in other Parties possession or control.

22. REMEDIES.

22.1. In the event of termination pursuant to Article II Sections 20(A), Contractor's sole remedy shall be a claim for the sum designated for accomplishing the Services multiplied by the percentage of Services completed and accepted by the County, less previous amounts paid and any claim(s) which the County has against Contractor. If previous amounts paid to Contractor exceed the amount due to Contractor, Contractor shall pay any excess to County on demand.

22.2. In the event of termination for any other reason, each party shall have any remedy available to it in law or equity.

22.3. Upon receiving a notice of termination of this Contract, Contractor shall immediately cease all activities under this Contract, unless County expressly directs otherwise in such notice of termination or as required for Transition Assistance.

23. TRANSITION ASSISTANCE.

Upon termination of the Agreement for any reason, Contractor will return County's data 1) in a format that is reasonably within Contractor's technical capability to provide, 2) in a format that has been approved by County, 3) made available for the County to download, and 4) at County's request, uploaded into the County's new Building Information and Asset Management System.

Transition Assistance as outlined in this Section is included in the not to exceed amount set forth in Article I, Section 6, above.

24. NO THIRD PARTY BENEFICIARIES. County and Contractor are the only parties to this Contract and are the only parties entitled to enforce its terms. Nothing in this Contract gives, is intended to give, or shall be construed to give or provide any benefit or right, whether directly, indirectly or otherwise, to third persons unless such third persons are individually identified by name herein and expressly described as intended beneficiaries of the terms of this Contract.

25. FOREIGN CONTRACTOR. If the Contractor is not domiciled in or registered to do business in the State of Oregon, Contractor shall promptly provide to the Oregon Department of Revenue and the Secretary of State, Corporate Division, all information required by those agencies relative to this Contract. The Contractor shall demonstrate its legal capacity to perform these Services in the State of Oregon prior to entering into this Contract.

26. FORCE MAJEURE. Neither County nor Contractor shall be held responsible for delay or default caused by fire, terrorism, riot, acts of God, war, internet service interruptions, slowdowns, vandalism, or "hacker" attacks where such cause was beyond, respectively, County's or Contractor's reasonable control. Contractor shall, however, make reasonable efforts to remove or eliminate such a cause of delay or default and shall upon the cessation of the cause, diligently pursue performance of its obligations under this Contract.

27. WAIVER. The failure of a Party to enforce any provision of this Contract shall not constitute a waiver by such Party of that or any other provision.

28. PUBLIC CONTRACTING REQUIREMENTS. Pursuant to the public contracting requirements contained in Oregon Revised Statutes ("ORS") Chapter 279B.220 through 279B.235, Contractor shall:

- 28.1.** Make payments promptly, as due, to all persons supplying to Contractor labor or materials for the prosecution of the work provided for in the Contract.
- 28.2.** Pay all contributions or amounts due the Industrial Accident Fund from such Contractor or subcontractor incurred in the performance of the Contract.
- 28.3.** Not permit any lien or claim to be filed or prosecuted against County on account of any labor or material furnished.
- 28.4.** Pay the Department of Revenue all sums withheld from employees pursuant to ORS 316.167.
- 28.5.** If Contractor fails, neglects or refuses to make prompt payment of any claim for labor or services furnished to Contractor or a subcontractor by any person in connection with the Contract as such claim becomes due, the proper officer representing Clackamas County may pay such claim to the person furnishing the labor or services and charge the amount of the payment against funds due or to become due Contractor by reason of the Contract.
- 28.6.** As applicable, the Contractor shall pay employees for work in accordance with ORS 279B.235, which is incorporated herein by this reference. The Contractor shall comply with the prohibitions set forth in ORS 652.220, compliance of which is a material

element of this Contract, and failure to comply is a breach entitling County to terminate this Contract for cause.

28.7. If the Work involves lawn and landscape maintenance, Contractor shall salvage, recycle, compost, or mulch yard waste material at an approved site, if feasible and cost effective.

29. CONFIDENTIALITY. Contractor acknowledges that it and its employees and agents may, in the course of performing their obligations under this Contract, be exposed to or acquire information that the County desires or is required to maintain as confidential. Any and all information of any form obtained by Contractor or its employees or agents in the performance of this Contract, including but not limited to Personal Information (as "Personal Information" is defined in ORS 646A.602(11)), shall be deemed to be confidential information of the County ("Confidential Information"). Any reports or other documents or items (including software) which result from the use of the Confidential Information by Contractor shall be treated with respect to confidentiality in the same manner as the Confidential Information.

Contractor agrees to hold Confidential Information in strict confidence, using at least the same degree of care that Contractor uses in maintaining the confidentiality of its own confidential information, and not to copy, reproduce, sell, assign, license, market, transfer or otherwise dispose of, give or disclose Confidential Information to third parties or use Confidential Information for any purposes whatsoever (other than in the performance of this Contract), and to advise each of its employees and agents of their obligations to keep Confidential Information confidential.

Contractor agrees that, except as directed by the County, Contractor will not at any time during or after the term of this Contract, disclose, directly or indirectly, any Confidential Information to any person, and that upon termination or expiration of this Contract or the County's request, Contractor will turn over to the County all documents, papers, records and other materials in Contractor's possession which embody Confidential Information. Contractor acknowledges that breach of this Contract, including disclosure of any Confidential Information, or disclosure of other information that, at law or in good conscience or equity, ought to remain confidential, will give rise to irreparable injury to the County that cannot adequately be compensated in damages. Accordingly, the County may seek and obtain injunctive relief against the breach or threatened breach of the foregoing undertakings, in addition to any other legal remedies that may be available. Contractor acknowledges and agrees that the covenants contained herein are necessary for the protection of the legitimate business interests of the County and are reasonable in scope and content.

Contractor agrees to comply with all reasonable requests by the County to ensure the confidentiality and nondisclosure of the Confidential Information, including if requested and without limitation: (a) obtaining nondisclosure agreements, in a form approved by the County, from each of Contractor's employees and agents who are performing services, and providing copies of such agreements to the County; and (b) performing criminal background checks on each of Contractor's employees and agents who are performing services, and providing a copy of the results to the County.

Contractor shall report, either orally or in writing, to the County any use or disclosure of Confidential Information not authorized by this Contract or in writing by the County, including any reasonable belief that an unauthorized individual has accessed Confidential Information. Contractor shall make the report to the County immediately upon discovery of the unauthorized disclosure, but in no event more than two (2) business days after Contractor reasonably believes there has been such unauthorized use or disclosure. Contractor's report shall identify: (i) the nature of the unauthorized use or disclosure, (ii) the Confidential Information used or disclosed, (iii) who made the unauthorized use or received the unauthorized disclosure, (iv) what Contractor has done or shall do to mitigate any deleterious effect of the unauthorized use or disclosure, and (v) what corrective action Contractor has

taken or shall take to prevent future similar unauthorized use or disclosure. Contractor shall provide such other information, including a written report, as reasonably requested by the County.

Notwithstanding any other provision in this Contract, Contractor will be responsible for all damages, fines and corrective action (including credit monitoring services) arising from disclosure of such Confidential Information caused by a breach of its data security or the confidentiality provisions hereunder.

The provisions in this Section shall operate in addition to, and not as limitation of, the confidentiality and similar requirements set forth in the rest of the Contract, as it may otherwise be amended. Contractor's obligations under this Contract shall survive the expiration or termination of the Contract, as amended, and shall be perpetual.

- 30. Acceptance Testing.** Prior to accepting the solution, the County and Contractor shall perform acceptance testing (also referred to as User Acceptance Testing, UAT, or like terms) in accordance with the Statement of Work. Unless otherwise stated in the Statement of Work, Contractor shall perform all tasks and functions necessary to facilitate acceptance testing. Acceptance by County shall not relieve Contractor from its responsibility under any warranty. Payment for products, Services, or the solution does not constitute Acceptance, nor does it constitute a waiver of any applicable warranty.
- 31. No Attorney Fees.** In the event any arbitration, action or proceeding, including any bankruptcy proceeding, is instituted to enforce any term of this Contract, each party shall be responsible for its own attorneys' fees and expenses.

ARTICLE III.

1. SOFTWARE LICENSE PROVISIONS

- 1.1. License.** During the Term of this Contract, Contractor hereby grants a non-exclusive, non-transferable, non-sublicensable license to County and its authorized users to access and use the Services in accordance with the terms and conditions of this Contract. Contractor will be responsible for any hosting necessary for the Services, and County and its Authorized users will be responsible for obtaining internet connections and other third party software and Services necessary for it to access the Contractor hosted Services.
- 1.2. Copies of Documentation.** Contractor will provide County with access to the documentation, as may be updated from time to time. The County may reproduce the documentation, and any web-based or computer-based training materials, if applicable, provided that each copy thereby produced shall be marked with Contractor's proprietary markings as delivered to the County. County may use the documentation solely in connection with the use of the Services.
- 1.3. Title.** As between Contractor and County, Contractor retains title to and ownership of the Services, software, source code, and products, including all intellectual property rights relating thereto (collectively, "Contractor Intellectual Property"). County will have no rights with respect to the Services, software, source code, and products, other than those expressly granted under this Contract. Any suggestions for changes or improvements to Services that County provides to Contractor, whether solicited by Contractor or not, shall be owned by Contractor and Contractor hereby irrevocably assigns, and shall assign, to Contractor all right, title, and interest in and to such suggestions. Except as expressly or implicitly provided for under this Contract, Contractor shall have no obligation to incorporate such suggestion into its products or Services.

1.4. Restrictions on Use. County and its authorized users will not (and will not permit any third party to), (i) share County's or any authorized user's login credentials; (ii) reverse engineer, decompile, disassemble, or otherwise attempt to discern the source code, underlying ideas, algorithms, file formats, or interface protocols of the Services, software, Services or products or of any files contained in or generated by the Services; (iii) copy, modify adapt or translate the Services, software, Services or products, or otherwise make any use, resell, distribution or sublicense the software, Services, or products other than in connection with this Contract; (iv) make the Services, software, or products available on a "service bureau" basis or allow any third party to use the software, Services or products; (v) to the extent allowable by law, disclose the Services, software, or products or any of its components to third parties; (vi) remove or modify any proprietary marking or restrictive legends placed on the Services, software, or products; (vii) use the Services in violation of any applicable law; (viii) create or augment any mapping-related dataset including a mapping or navigation dataset, business listings database, mailing list, or telemarketing list) for use in an implementation that is not connected to the Services; (ix) introduce into the Services any viruses, worms, defects, Trojan horses, malware, or any items of a destructive nature; (x) use the Services to post advertising or listings; (xi) use the Services to defame, abuse, harass, stalk, or threaten others; (xii) permit access or use of the Services by any individual outside the United States; (xiii) hide or obscure any authorized user's location; (xiv) permit access or use of the Services, for any activities other than to enhance County's own Services, where reliance solely on, or failure to use, the Services could lead to death, personal injury, or property damages.

1.5. County Data. As between Contractor and County, County owns and shall retain all rights, title, and interest, including, without limitation, all intellectual property rights, in and to and data that are (1) entered into the System by County, (2) entered into the System by Contractor or other third parties on County's behalf, or (3) is derived by or created by the System or related functionality using data as specified in (1) or (2) of this sentence ("County Data"). County shall have the sole responsibility for the accuracy, quality, and legality of the County Data, including obtaining all rights and consents necessary to share the County Data with Contractor as set forth in this Contract. Contractor shall not access County user accounts or County Data, except; (i) in the course of data center operations, (ii) in response to Services or technical issues, (iii) as required by the express terms of this Contract, (iv) at County written request. Contractor shall not collect, access, or use user-specific or personally identifying County information. In the event that Contractor determines that accessing personally identifying information as strictly necessary to provide the Services to the County, the County must provide Contractor with prior, written approval of said access.

1.6. Export of County Data. The County will have ability to directly query a near-live copy of the System including all County Data in order to extract County Data stored in the Applications. Furthermore, the County will have the ability to export common datasets directly from the Contractor user interface.

2. SECURITY

2.1. Data Protection. Protection of personal privacy and data shall be an integral part of the business activities of the Contractor, who shall use reasonable commercial efforts to ensure there is no inappropriate or unauthorized use of County information at any time. To this end, the Contractor shall safeguard the confidentiality, integrity and availability of County information by complying with the following conditions:

- 2.1.1. The Contractor shall implement and maintain appropriate administrative, technical and organizational security measures designed to safeguard against unauthorized access, disclosure or theft of non-public data. Such security measures shall be in accordance with recognized industry practice and not less stringent than the measures the Contractor applies to its own non-public data of similar kind.
- 2.1.2. All County Data obtained by the Contractor in the performance of the Contract shall become and remain the property of the County.
- 2.1.3. All County Data stored in the Applications shall be encrypted at rest and in transit with controlled access. Unless otherwise stipulated, the Contractor is responsible for encryption of the personal data. Any stipulation of responsibilities will identify specific roles and responsibilities and shall be included in the statement of work, or otherwise made a part of the Contract.
- 2.1.4. Unless otherwise stipulated, the Contractor shall encrypt all non-public data at rest and in transit. The County shall identify data it deems as non-public data to Contractor.
- 2.1.5. Except as otherwise provided herein, Contractor shall not use any information collected in connection with the Services issued from this Contract for any purpose other than fulfilling the Services; provided, however, County understands and agrees that when it uses certain features of the Services, certain information and data may be collected from Authorized users, including monitoring and recording activity, and tracking physical location, which may include personal identifying information. County agrees that Contractor may use such information, subject to applicable law, to (i) provide more effective Services, or (ii) to develop and test its Services.

2.2. DATA LOCATION.

Contractor shall store County Data in data centers in the U.S. Contractor shall permit its personnel and contractors to access County Data remotely from the U.S. as required to perform Services or provide technical support.

- 2.2.1. Backup and Retrieval. Contractor shall be responsible for the commercially reasonable and prudent infrastructure and maintenance of the infrastructure to provide the herein described services. This includes, but is not limited to database backups, application backups, OS patches and upgrades, database patches and upgrades, power supply, network security, etc.

2.3. Security Incident or Data Breach Notification. Contractor is responsible for all damages and resulting obligations, such as credit monitoring, arising from or in connection with a data breach.

- 2.3.1. **Incident Response.** Contractor may need to communicate with outside parties regarding a security incident, which may include contacting law enforcement, fielding media inquiries and seeking external expertise as mutually agreed upon, defined by law, contained in the contract or as otherwise determined by the Contractor. Discussing security incidents with the County should be handled on an urgent as needed basis, as part of Contractor's communication and mitigation processes as mutually agreed upon, defined by law or contained in the Contract or as otherwise determined by the Contractor.

- 2.3.2. **Security Incident Reporting Requirements.** Each Party shall report a security incident to the other Party's identified contact immediately, as soon as possible, or promptly without out reasonable delay, or as defined in the Contract.

2.3.3. Breach Reporting Requirements.

2.3.3.1. Each Party shall promptly notify the other Party of any such security breach that materially compromises the County systems and/or data. Both Parties agree to cooperate in any investigation of such a security breach.

2.3.3.2. Contractor shall promptly notify County of any unauthorized access or unauthorized disclosure or use by a third party of County Data collected or obtained by the Contractor under this Contract. Contractor shall provide such notice following discovery and without unreasonable delay.

2.4. Access to Security Logs and Reports.

Contractor shall provide security reports upon County's reasonable written request. Reports shall include latency statistics, user access, user access IP address, user access history and security logs for all public jurisdiction files related to this Contract.

2.5. Encryption of Data at Rest.

At a minimum, Contractor shall ensure hard drive encryption consistent with validated cryptography standards as referenced in FIPS 140-2, Security Requirements for Cryptographic Modules for all personal data, unless the County approves in writing for the storage of County Data on a Contractor portable device in order to accomplish Services as defined in the statement of work. If more stringent encryption is included in Article IV, those requirement shall govern in the Contract.

ARTICLE IV - STATEMENT OF WORK
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II. zLink Inc. Solution Overview

We will implement a Building Information and Asset Management (BIAM) System based on selected and tightly integrated modules of our industry leading COTS Platform zLinkFM™ and provide web-enabled easy-to-use secure user interaction. This visualized access to drawings and data is available on all mobile platforms to provide “anytime anywhere” access to all BIAM information.

OUR APPROACH

- Our approach and plan is based on our experience implementing facility management software projects in Government and Industry for the past 18+ years using zLinkFM™.
- Provide leading edge technology that integrates engineering drawing, models, infrastructure, and corporate databases.
- Enable delivery platforms that are independent of operating systems, browsers or hardware.
- Empower users with an intuitive User Interface that masks the complexity of underlying CAD drawings, models and databases.
- Use ‘Mobile First’ approach to provide ‘anytime anywhere’ visualization of all facility management information.

Since 2011 zLinkFM™ has been recognized by Gartner Inc. as one of the leading products in our market of IWMS and CAFM Systems, based on “*ease of use functionality with data integration framework that enables flexible extensions*” and “*completeness of its vision*”. The proposed BIAM solution will fully address Clackamas County’s Requirements as stated in its Solicitation RFP and provide an extremely easy-to-use, browser-based user experience.

OUR zLinkFM™ PLATFORM

- ***It is based on the premise that facility drawings are the core of all facilities related information.*** They best define the footprint of the building and the spatial context for locating the entire facilities infrastructure, people, and assets that are contained in the facility. In addition, they provide the basis for information required by virtually all corporate functions.
- The system modules are designed to facilitate major facility management functions. The *As-Builts Module* implements an ability to manage the core repository of facility drawings and models, which provide the reference to all other facility data. Presently the zLinkFM™ platform includes 26 software components/modules.
- Building Systems are referenced to the As-Built drawings to enable *visualization* of all aspects of the infrastructure in the context of space and easily view the relationship between the building and related systems.
- The proposed solution would be based on a configuration of several of the zLinkFM™ Modules that provide the best fit to Clackamas County’s requirements.
- The zLinkFM™ system is web-based with comprehensive and yet flexible and adaptable Graphical User Interface (U/I) that is simple, easy to master and seamlessly integrates end-user functions with access and use of information.

- All modules are available on mobile hand-held devices and are independent of operating systems, browsers, or physical hardware. The cloud based system has single sign-on capability.

The integrated configuration of the selected zLinkFM™ modules will encapsulate the facilities drawings of the building, its structural and architectural design (2D and 3D/BIM models), and the spatial context for locating the infrastructure assets in the facility.

Thus zLinkFM™ Enterprise Platform provides a unique capability to manage design drawings, documents and data, in the context of the Clackamas County business requirement, through an easy to use web browser based user interface and a common repository of drawings and documents that are tightly coupled to related data.

Depending on the specific functional requirements Clackamas County's authorized users will interact with the installed BIAM System solution using easy to use Graphical User forms to perform their work tasks. Authorized users' interaction with system will be contingent upon their "authority" to access the system and data based on their "privileges" to use the system.

- **Implementation within 9 months from Project Kick-off**

Our implementation approach and plan are based on our experience implementing similar projects in Government and Industry for the past 18 years. We have optimized the implementation, data migration, set-up and support protocols to ensure on time delivery and full coverage of defined requirements.

The implementation will be accomplished in three major phases that maximize the value proposition of the BIAM implementation.

- Phase I – Mandatory requirements for all facilities with maximum availability of data
- Phase II – Mandatory requirements for facilities where there is need for additional data
- Phase III – Secondary requirements for all facilities

Each phase will be accomplished in 9 months per the proposed implementation plan.

Key elements of our Plan:

- Initial Kick-off meeting to agree on the project Plan and Deliverables
- Within 30 days –from Project Kick-off meeting:
 - zLink will deliver the envisioned software package and activate access to selected users to test the functionality provided to ensure all requirements are fully addressed.
- Complete data review and pilot migration within next 120 days:
 - Import CAD drawings and data; create Search and Extract Indexes for each document stored.
 - QA Asset data and imported CAD drawings.
- Design and install needed interfaces
- Perform Training and UAT testing 130 days from Kick-off:

Upon completion of data migration zLink will train and support Clackamas County designated users to perform UAT Tests.

- Complete any corrective actions from UAT within ten (10) days from UAT completion and issuance of UAT report.
- Go Live 10 9 months or sooner after Kick-off meeting and activate Help Desk support operations.

III. Why zLink – our Value Proposition to Clackamas County

OUR STRENGTH

Our team has the experience, technology skills, and resources to provide organically full-service capability covering the spectrum of facilities management capabilities, from the development of CAD drawings and BIM models, field surveys, and engineering documentation to installation and post implementation support for our zLinkFM™ COTS solutions necessary to achieve this goal.

- Full Service Capability** – zLink has an organic capability to implement the complete solution (from CAD to software) using an integrated “Life Cycle” management process. We have a unique capability to support every aspect of the solution with in-house expert staff. This eliminates risks, overcomes major barriers to implement the needed solutions, and ensures on-time deliverables and user satisfaction.
- Ability to Execute** - An in-depth knowledge of the facility management field allows zLink staff to create the solution that will best satisfy Clackamas County’s needs. Our post implementation Customer Support, Help Desk and maintenance services ensures a reliable platform with advanced tools, I/O functions and secure access to data any-time from anywhere using internet / mobile technologies.
- Innovative Technology that Creates Intelligence by Coupling Drawings and Data** – The core zLinkFM™ technology enables enterprise-wide functional integration of facility “life cycle management” information. Data are created once and are instantly available across all organizational levels. End-user applications such as Real Property portfolio management, space allocation and usage, asset inventory, maintenance, and capital budgeting are enabled quickly to fit the Clackamas County needs without any software code change.
- Integration** - the integrated data become the “core intelligence” for users across organizational levels to make better decisions, plan and perform their work tasks efficiently. A holistic view enables optimized Facility utilization, cross-functional project management, and enterprise-wide collaboration. In addition, it allows users to rapidly reengineer their business processes with ease by creating and integrating “workflows” with business rules that reflect the reengineered business practices across organizational units.
- Cost Effectiveness** – zLink prices its services and software based on an internal pricing structure without any third-party overheads. Based on very effective and efficient implementation and engineering processes it can deliver innovative and functionally richer solutions faster and at lower costs than its competitors.
- SaaS implementation** – “Software as a Service (SaaS)” solutions have become the deployment method of choice for zLinkFM™ clients. zLinkFM™ was amongst the first platforms available as a true SaaS option, in addition to providing an Intranet hosting capability. In addition, our SaaS implementation is on Federally Audited and Certified hosting data centers (FedRAMP) that meet and exceed the high performance and security standards

required to meet NIST Pub-800-53 Federal Regulations for Secure Data Access and Systems Operations.

- g. **Mobile Platform** – zLinkFM™ platform provides leading edge technology that integrates drawings, databases, and the Web on a hand held mobile device. zLinkFM™ is device (iOS and Android) and browser independent. This provides the facility professional the same easy access to drawing-centric facility information “as and where” required. In addition, growth in demand for Services by Tenants and multi-sourcing of facilities services increasingly requires that service providers, partners and other contract staff have ready and easy access “anywhere-anytime” to workplace data and processes via the portal interfaces that zLinkFM™ web-based architecture solutions provides.



2.0 Proposed Solution - Architecture and Requirements

The proposed BIAM System COTS based solution is designed to address the requirement to replace the current system. However, Clackamas County's requirements will not remain static, and will evolve mirroring Clackamas County's changes to its business practices and Regulations and reporting to State and Federal Government Departments.

zLinkFM™ platform software components included in this solution provide broad functional capability to address additional evolving requirements and data related to Leases, Maintenance Contracts with Contractors, Maintenance Plans, and other corporate Facility Management functions.

The following diagram shows the full capability of the zLinkFM™ architecture. It supports three major hosting environments:

- Microsoft Azure Cloud
- Intranet Hosting
- Dedicated SaaS Hosting

Scaling: *The proposed Clackamas County solution will be based on the Microsoft Azure Cloud environment. This allows extremely easy expansion of the hardware infrastructure on demand as required to meet increased processing and storage needs.*

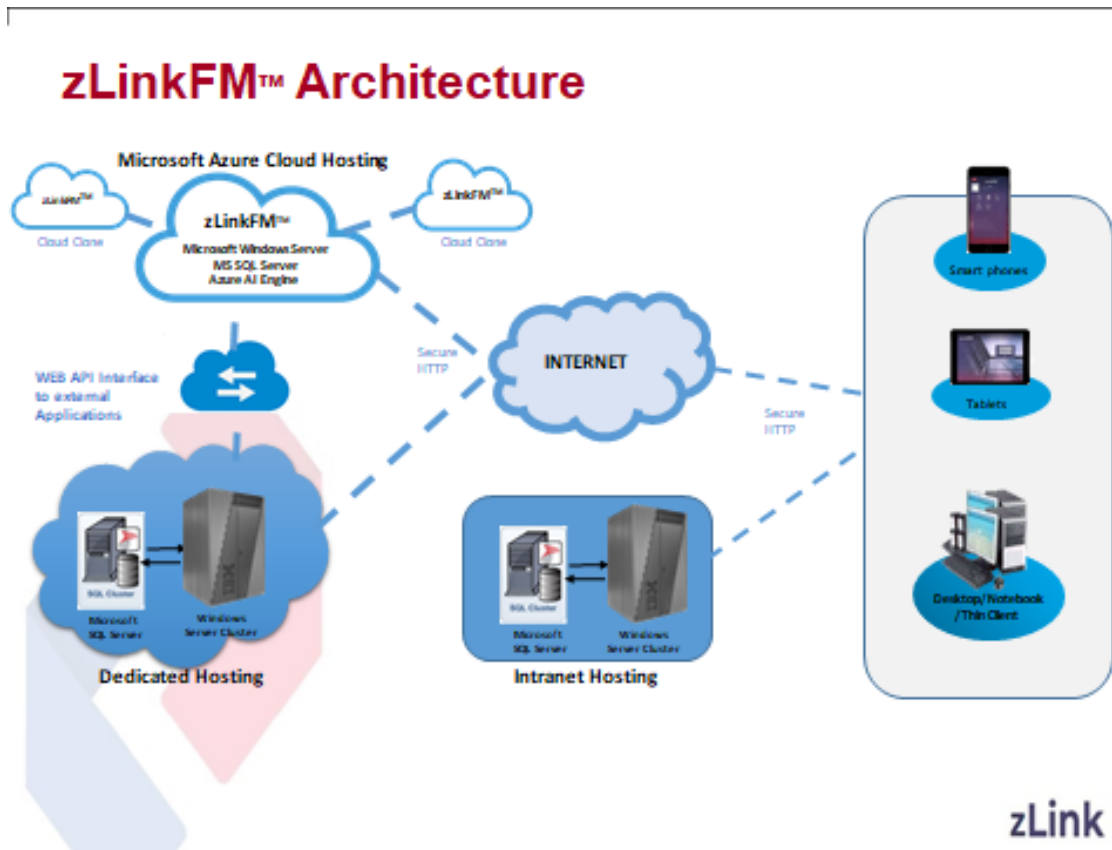


Figure 2.1 - zLinkFM™ Architecture

The envisioned BIAM System platform will include the following zLinkFM™ software components:

- **As-Builts & 3D/BIM** – enables the creation and utility of **Drawing Repository** – it forms the core of the entire platform, provides the common basis for the creation, maintenance, use, storage, management, and referencing all related Drawings, BIM Models and data. The As-Builts drawings are referenced by all Modules to provide a space-centric view of all facility information and be shared by all authorized users to support broad set of business functions including the framework for operational and maintenance planning, lease costs charge backs and financial reporting.

The As-Builts module provides an easy web browser access to authorized users to perform:

- Mark-up As-Builts and create their own archives.
 - Share As-Builts with colleagues, publish for contracting, use for site inspections or locate assets and employee.
 - Control revisions of As-Builts.
 - View As-Builts online from anywhere using mobile technology (tablets and Smartphones).
 - Key word based easy retrieval of data for custom reports or extracts for “business analytics”.
- **Asset Management** – Keeps track of thousands of facilities assets and the associated data, as well as where they are located. Asset management includes all movable (except furniture) and fixed assets. Movable assets generally comprise business use equipment and machinery, information technology assets and other employee or common use related assets. Fixed assets include life safety systems, large capital equipment and infrastructure assets related to major facility systems. Mechanical equipment such as air handling units, pumps, and motors; electrical components such as panels, transformers, and generators; and plumbing shut off valves—are easily located and tracked for their performance and relationship with other components. Asset Management module capability includes: Fixed and moveable assets including IT equipment; All assets located on floor plans; Repositioning using drag-and-drop or move projects; Tightly coupled data related to acquisition date, costs and depreciation; Integration with financial and preventive maintenance functions; Life cycle tracking from acquisition to disposition.

The zLinkFM™ Assets module function enables location-specific asset data. Assets linked to drawings provide a wide variety of more meaningful reports. Safety and compliance issues mandate good documentation. The zLinkFM™ Asset Management module allows for easy, frequent updating, resulting in more accurate asset documentation and reporting information.

- **Condition Assessment** – enables the user to record, store and maintain information about the Condition of a Facility / Building and its Assets and provides the necessary options to facilitate their assessment for Capital funding related to deficiencies remediation, construction, and long term maintenance requirements. The Assessment is entered for each facility based on Unicode standard formats. The assigned Architects and Engineers capture the Condition of the Facility and its Assets in real-time using tablets interacting with the system. Each deficiency is recorded, detailed notices are entered and pictures / sketches can be attached to highlight “conditions” and other observations of the inspectors. The system then calculates the remediation or replacement cost based on the year of installation and escalation factor. A facility Condition Index is calculated based on the replacement and total repair cost.

Replacement / Repair decisions are made external to the system and linked / attached to the Facility Condition Assessment Report for Capital Planning and for approval of new Construction and Maintenance Projects. The Condition Assessment data can be interrogated to determine the best allocation / fit of funds to identified projects.

- **Documents Management** – improves Engineering and Maintenance / Facilities staff productivity as it eliminates the need to search for the appropriate As-Builts CAD or BIM Models for information about the Design, Space, Infrastructure Asset and FLS components and related information. In addition, the Documents Module mitigates risk for loss of critical CAD and facility maintenance and project related documents in the event of fires, floods or other disasters; it provides a highly simplified and productive automated access to needed information about the design and construction of the facilities. Easy to use functional tools enable users to store, retrieve, distribute and share electronic documents and drawings in a broad set of file formats across the Facilities Portfolio and business functions (e.g., Engineering, Contracting, Accounting, Services, Maintenance, etc.).

Technical Specifications, Maintenance Procedures, Manufacturer Warranties, Digital Pictures and Videos showing Condition of Facilities, CAD files and related Capital Assets and Maintenance Projects files can be stored and retrieved using web-enabled U/I. The Documents Management Module ensures accurate information and records are maintained and retrievable on-line when they are needed, and thus eliminating the risk of lost or misplaced CAD and related documents for the facility.

- **Inventory Management** – provides all necessary functionalities to manage and maintain inventory requirements. zLinkFM™ inventory management tracks and manages the stock of various consumable parts and also provides settings to initiate the ordering of these parts when the quantity falls below a certain level. zLinkFM™ supports multiple stores so that stock can be added to the main store and transferred to the secondary stores. The module also provides necessary options to capture all related data along with the inventory like the invoice number/date, cost of the item, the vendor, the department that ordered the part etc. Parts can be associated to various equipment categories that can utilize it so that the technicians or work order managers get a filtered view of the parts that are associated with the equipment while performing the work order.

Work order managers/authorized technicians can easily see the stock of each part in a single click. There is an option to attach various parts as part of the work order; later the count can be updated based on the actual use of the parts while completing the work order. New parts request can be tracked using inventory request work type and the approval for inventory request can be achieved using custom work flows. The cost of the parts used can be charged back to GL accounts or departments based on the preference of the end user.

- **Maintenance Management** – provides the functionality to plan, execute, manage and report on preventive maintenance procedures and schedules for all facilities, assets and equipment that require maintenance. All maintenance is based on Plans and work performed is automatically recorded and performance can be tracked and accordingly reported.
- **Mobile Platform - User Friendly GUI** – Provides authentication of Clackamas County users to access and use the system and focus on their work rather than the complexity of underlying drawings, data and the system access mechanisms. Since the entire platform operates in a browser window that is mostly a common application for the desk-top and the handheld

Tablets and Smartphones, it improves users' productivity by using same functionality across all U/I platforms. zLinkFM™ is device (iOS and Android) and browser independent. It will allow users to perform their work tasks anytime-from-anyplace – for example: facility managers and others within the organization can move about the various Building Developments and access the CAD drawings and related documents to inspect and carry out a vast variety of tasks. Any changes that are made in the field on the mobile devices will be automatically synchronized with the database, thus ensuring that all drawings and data changes are kept up-to-date.

- **Project Management** – enables Facilities Management and Engineers to define, track and manage all facilities infrastructure assets maintenance, construction, and facility development projects. The Project Management component facilitates the construction, performance and management of a Project in collaborative and integrated Work Flow that enables the users to create a link between Project Scope, related Work Orders, Budgets and assigned organizational responsibility.

Furthermore, it incorporates Work Orders that capture the details of work defined including “start and end dates”, budgets and actual labor / parts costs, variances, assigned resources, the organization performing the work and the responsible manager assigned to manage the Project.

- **Scheduling and Hoteling** – Scheduling and Hoteling Functions are incorporated in the zLinkFM™ **Space Management** and enable organizations to optimize the use of critical facility resources and working space when these Spaces / Facilities are shared or used by multiple functions and staff (e.g., Conference Rooms, Shared Offices, Medical Wards, University Dormitories and Lodgings for Students or Veterans in Government Facilities, Labs in Hospitals, Operating Rooms, Telecommuters, etc.).

It improves utilization of valuable Space and Assets and ensures that related use records and plans are sustained for analysis and regulatory reporting, and to account expenses and recover funds from Government and Industry Grants.

- **Space Management** – provides key functions to create and maintain data about facility space use and costs, to perform Space Capacity and Occupancy Planning, Track Staff Assignments and Assets to Space, and support Employee Moves (a single employee or Departmental moves).

Its primary function is to monitor and track the effective use and cost associated with real estate space, and to allocate and optimize space among many departments and do accurate cost accounting. Vacant spaces are readily identified, while Employees moves and changes in employee office assignments are planned and performed with minimal loss of productivity.

Authorized users can perform the following business processes:

- Space Planning
- Capacity Planning and Forecasting
- Create and Maintain Space Classification and Occupancy Standards to meet changing needs
- Occupancy Density and Analysis
- Space Assignments to Departments, Divisions, Organizations and other organizational groupings

- Space Assignments for Employees (e.g., New Hires, transfers, consolidations and departmental moves)
- Space Reporting and Analytic reports for cost planning and charge backs
- Employee Moves Planning and Execution (Single Employee or Departmental)
- Maintenance of Employee Locations and Data

Workflows can be created to generate notifications / alerts at predefined intervals or when Key Performance Indicator is outside a specific range. These alerts are provided to designated staff to take specific action – for example Occupancy Density impacts the Cost per GSFT per Employee (if Occupancy Density increases the cost per SQF decreases and cost per SQF increases when Occupancy Density decreases).

Space Planners can quickly compute the Occupancy Density and compare it against predefined Capacity limits. The Space Planner or Financial Analyst set a procedure to extract or view in real time Occupancy data, based on criteria such as Employees Classification, Occupancy Density by Department or Organization for a building or Real Estate Portfolio, related costs, compare the results against historical data and defined plans. Forecasting is matter of creating long term plans and entering the data. The information can be extracted from a portfolio of buildings and facilities and automatically updated as part of executive Planning Report (e.g., Dashboard of Key Performance Indicators).

- **Sustainability** – provides for the capture and integration of sub-metering of consumables such as power, oil and natural gas, water for chillers and medical gas by major components of a facilities / building.

zLinkFM™ enables the real-time connection between “as-built” floor plans and sub-metering technology to provide visualization and measurement of energy and other resource consumption patterns inside a facility. The energy and sustainability capability supports management in ensuring that consumption of energy, fuels, and water by a facility is consistent with the business practices and requirements to reduce operating costs. It provides a capability to measure, analyze, and invest in systems to reduce consumption and improve LED Footprint.

- **Web Services** – it is the software component that zLinkFM™ uses to enable users input / output interaction and internal functions via Internet and Intranet protocols with other third party systems interfacing / interoperate with zLinkFM™. It is part of the implementation and set-up process. Web-Services provides an extensive capability for broad information exchange with all internal corporate legacy and external systems.

Web Services is designed to support interoperable machine-to-machine interaction over a network. It has an interface described in a machine process-able format (specifically WSDL). Other systems interact with the Web Services in a manner prescribed by its description using SOAP messages, typically conveyed using HTTP with an XML serialization in conjunction with other Web-related standards. No specialized software engineering is required from zLink. The required skills are present and available within the customer’s IT Technical Services organization. The IT staff can develop the custom code for interfaces needed between any application / system and zLinkFM™.

- **Work Order** – used to manage defined work tasks for Preventive and Facilities Maintenance, as well as Projects and Employee Moves (e.g., to schedule and perform moves of furniture

and files, change telephone extensions and IT assets, prepare and clean designated rooms, emails, etc.).

Work Orders may incorporate Work-Flows that adapt processes to the business functions; depending on the end user needs, work-flows define specific “actions” and “alerts” across the organization and direct individuals on “how to proceed” in performing their related assignment.

All Work Orders for Preventive Maintenance or other repeatable work tasks are automatically scheduled and their performance status automatically reported. All repeatable Work Orders are created once and reused across the Annual Schedule (e.g., Weekly, Monthly, Quarterly and Annually) and linked to technical specifications and instructions on how to perform the defined work. Staff and responsible Manager can be assigned to Work Orders and accordingly performance is tracked and status reported. Additional information can be incorporated into the Work Orders such as “materials and costs, labor hours and charge back costs”, and subsequently used to update financial systems.

- **System Administration** – The Systems Administration Module allows managing enterprise-wide access through designated points of responsibility. Provides *Super User* privileges to a designated client user responsible for the BIAM Platform System Administration. The System Administrator provides end-users with Log-in IDs and Passwords, adds, deletes, updates end-user information, sets Account Expiration dates for end-users, enforces access policies, and oversees data security. The System Administrator has the options to configure Users, Sites, Buildings and Floors, and tools for managing the user’s access and facility information.

The system enables control structures and user hierarchies for managing access to data and establishing privileges for editing data at different organizational levels. Specific user access can be controlled at various organizational, functional, drawing or data level. In addition, the system can maintain a log of all project related transactions to provide a project history and oversee compliant use of the system by authorized users.

- **Executive Summary / KPI Dash Boards** – Standard and unique Dashboards are created by defining the data sets which are considered to provide meaningful summary of Key Performance Indicators (KPI) as to the range of work tasks whose performance / status measures specific business functions / organization Performance over a time-period. For example KPIs can be set-up to provide real-time information on Maintenance Plans for Contractors by Development, Maintenance Variances of Planned Work vs. Actual and Prior Years for Same Buildings.
- **Preferences** – it enables each user to customize the system I/O GUI forms to fit their preferred viewing background color settings, CAD layers and data.

In addition, the following functional capabilities are included in each of the modules:

- **Reporting** – incorporates an Active Reports Framework that enables users to quickly define the data and report formats they need. It supports export of data to XLSX, PDF, RFT, DWG, TXT etc. Any type of files can be kept in the system as attachments and can be accessed and viewed by the user using the system’s web-based I/O GUI functions. All IWMS users can use Active Reports Framework to define the reports they need for Performance Tracking and Business Analytics, and general add-hock reporting.

- **Flexible Workflows** – This is Utility Module that will allow Clackamas County to re-engineer their work processes for efficient utilization of resources without being constrained by software defined procedures; and also provide “alerts and notifications” based on defined “conditions encapsulated by the data reported” – for example “Planned Maintenance Not Started” or “Completed Late by N Days”. This type of conditions will automatically generate Notices to Management and users responsible for the related Tasks to take action.

Security Compliance and Certifications

The hosted BIAM System will implement a security system based on the state-of-the-art encryption technologies available in the market place. The drawings and data are stored on a secure and partitioned web site, which is accessible to a variety of stakeholders within the enterprise, as well as outside parties such as A/E firms and sub-contractors, on an as-needed basis, to fully integrate facility management.

zLinkFM™ runs on HTTPS protocol with SHA 256 with Extended validation and 4096 bit key – this is in compliance to SHA-2 (Secure Hash Algorithm 2) designed by the National Security Agency (NSA). SHA-2 was published in 2001 by the National Institute of Standards and Technology (NIST) a U.S. Federal Standard (FIPS).

- zLinkFM™ COTS has been Certified and Accredited by the Federal Government as compliant to Disabilities Act Rule 508 and NST 800-53 Pub for Secure Access and System Processes.
- Obtained Authority to Operate from Government Accountability Office (GAO), Consumer Finance Protection Bureau (CFPB), and Defense Information Systems Agency (DISA.)

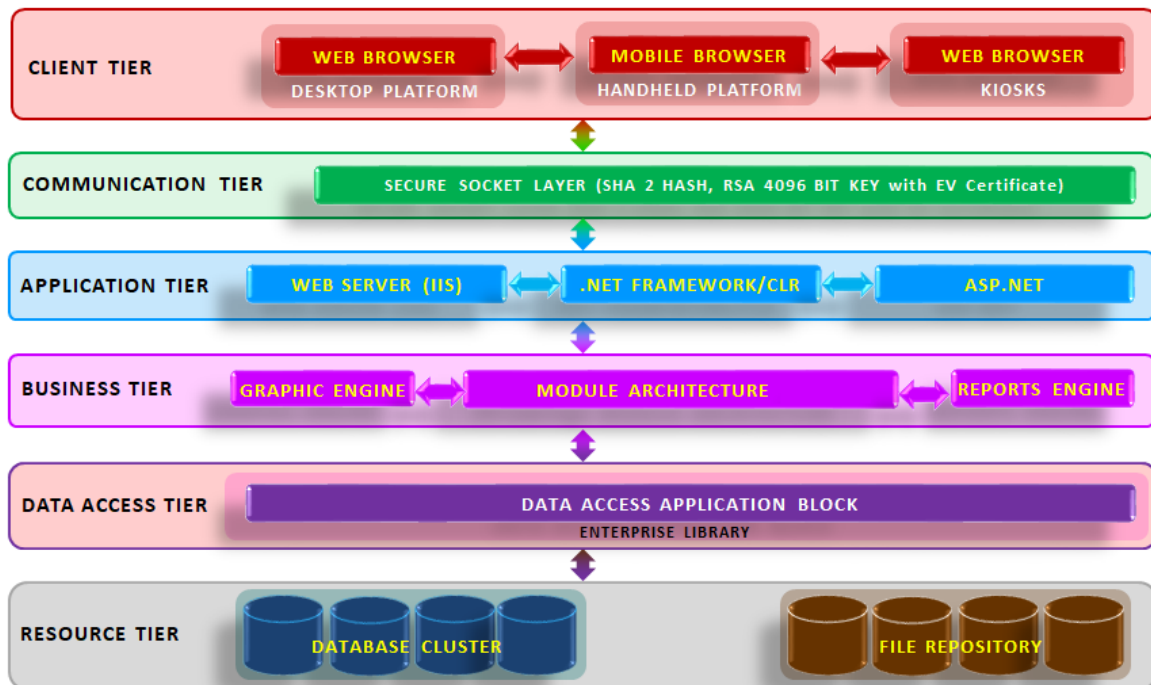


Figure 2.2 - Security Architecture Framework

Authentication and Authorizations

While system access is simple via the Web enabled I/O services, these services encapsulate up-to-date software tools to ensure secure access to data for those users with appropriate security authorization and yet ensure system reliability, maintainability and protection of data.

Only authorized users can interact with the system and their interaction is subject to their System Access authorization privileges in compliance to Clackamas County Policies as incorporated into the system by the System Administrator.

The system automatically applies the security rules embedded into a separate and encrypted database file that when a Log-In attempt is initiated the system IIS (i.e., 8.0)¹ that authenticates the source of the request and initiates the ASP.NET logical process to authenticate the Token and the Credentials of the Requestor (user).

Information Security Controls - zLinkFM™ System Administration module incorporates industry leading information security controls in compliance with FIPS and NIST-800-53

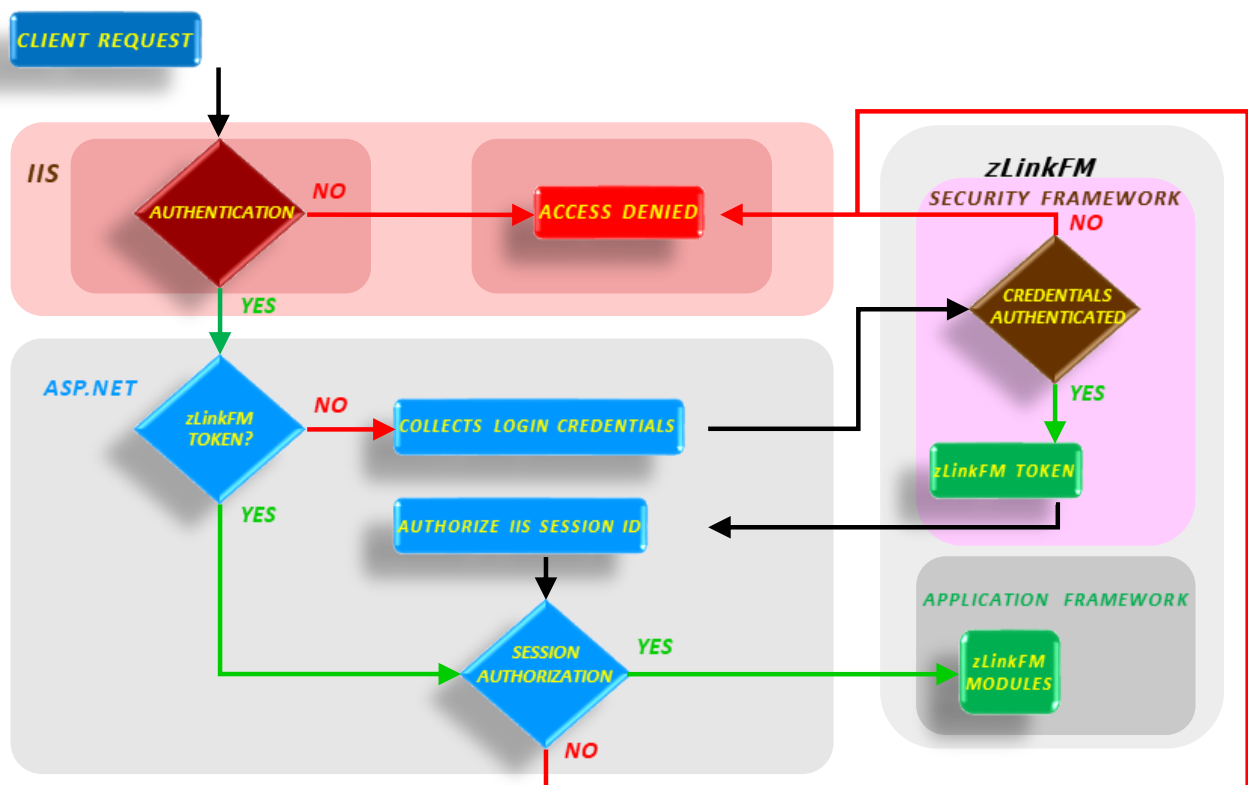


Figure 2.3 – zLinkFM™ Request Approval Process

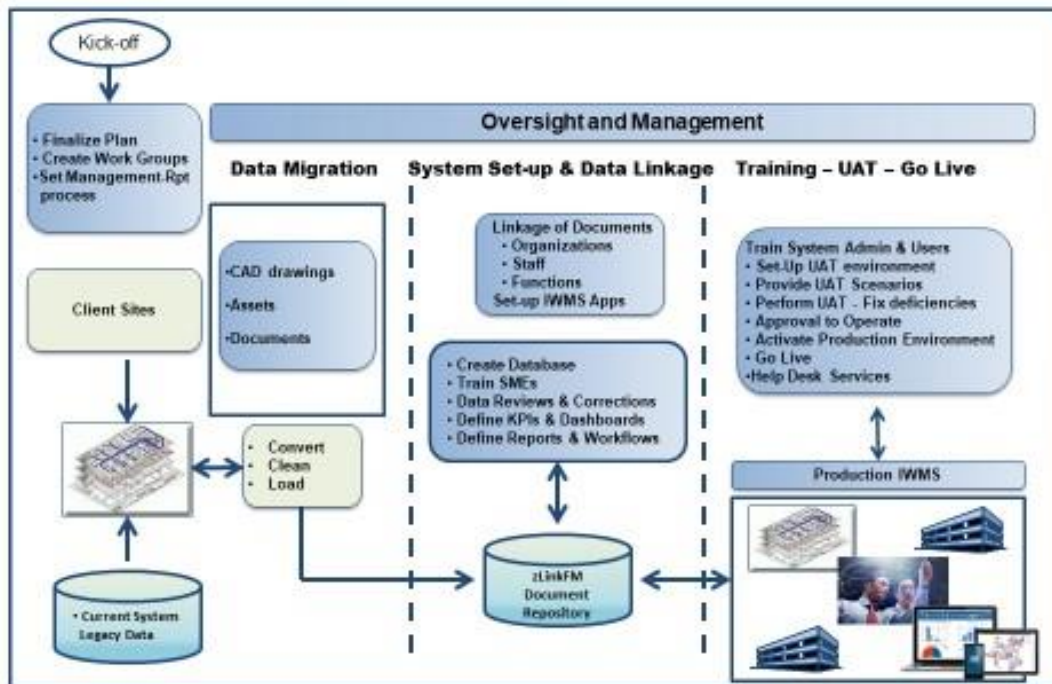
¹ Details of the features IIS 8.0 / 8.5 and ASP.NET 4.5 at <https://www.iis.net/overview>

3.0 Implementation Plan and Services

3.1 Our Implementation Process

Our implementation process is the cultivation of knowledge derived from hundreds of similar implementations for Corporations, Government Departments and Agencies, Medical Centers, Higher Education, and in private enterprises. The following chart provides a simple overview of our Implementation processes that reflect the work sequence for data migration, software installation, and testing. The specific protocols of these work steps are detailed below.

Implementation Overview



During our initial interaction with Clackamas County we will perform a fast fact finding assessment of the requirements and needs. We will focus not only on the data migration and collection process, CAD As-Builts / BIM Models, Documents Management, Asset Data Management, Tracking and Integration with Maintenance – zLink staff will explore with Clackamas County the potential for immediate implementation based on an out-of-the-box version as-is the current zLinkFM™ Modular solution. We will record any special Clackamas County requirements and plan to incorporate appropriate solution to address these Clackamas County requirements at a price and timeline mutually agreed.

Project Delivery – How to best support Project Management and track progress using the Project Management tools of zLinkFM™.

- Integrate progress tracking data back to Implementation Plans
- Create KPIs for Executive Reporting and Cost management
- Interfaces with other Clackamas County Corporate systems if required
- Tracking of issues and their resolution, sharing information with Clackamas County Program Manager and senior stakeholders.

- Establish on-going Project Status Review Meetings and manage risks.

In addition we will assess how to best enable reporting based on Key Performance Indicators (KPIs) that track life-cycle management, maintenance, use, operations and costs of Clackamas County's capital assets portfolio.

3.1.1 Kick-Off Meeting

Post Contract Award, zLink will organize a Kick-off meeting to address the overall plan.

- Implementation Plan that includes the detailed work tasks.
- Key Stakeholders, project contributors and their responsibilities.
- Detailed list of required data / files to be collected including drawings (CAD files), Asset Data, Leased Facilities data etc.
- Understanding of current systems, Use process and on-going projects.
- General reporting needs and Technical Services to be supported with the envisioned solution.

We will demonstrate zLinkFM™ key functions of an-out-of-the-box solution and how it will be implemented to create the envisioned BIAM that fully supports Clackamas County's requirements.

Feedback from Sponsor Executive, Stakeholders and Contracting Officer Representative will be noted and used to finalize Implementation Plan within seven days from kick-off meeting. Project Management and Tracking procedures will be set-up in accordance with Clackamas County's practices.

3.1.2 Program Management

- [Reporting and Communications](#)

zLink Project Manager will oversee zLink's effort and interface with Clackamas County's Sponsor Executive, Stakeholders and Contracting Officer Representative (COR). Our Project Manager will work closely with Clackamas County staff, establish processes for good communications, Risk Mitigation and on-time deliverables.

Our management processes track budgets and progress against schedule and cost baselines, and we evaluate risk factors on an ongoing basis. The Project Manager prepares and arranges formal monthly briefings to client (i.e., Clackamas County) Executive Sponsor, Stakeholders and COR. These briefings include Project Status Reports, explanation of any variances, current work tasks performance, task objectives for the reporting period, data migration progress and issues, emerging risks and mitigation actions, and any other issues to be addressed as required.

Good and timely communications are essential to ensure on-time work performance and quality of deliverables. It is our experience that interactive communications using teleconferencing (e.g., *GoToMeeting*) as the most efficient means for zLink and remote clients team members to meet and communicate. Because zLink is based in Maynard, MA many meetings and working sessions will be conducted online. We will support the scheduling of Working Group members, schedule of planned meetings, keep and publish Meeting Minutes, Deliverables and Status Reports.

- [Risk Management](#)

We use Risk Management and Mitigation process to ensure the early identification and mitigation of Risks. When Risks are identified, a designated person is assigned the responsibility to plan and address the Risk. In our experience we have found that most risks result from Task delays due to issues of timely coordination and participation of decision makers. zLink's PM will list those tasks that present the greatest potential of risk and must be proactively controlled by stakeholders and participants.

- **Quality Assurance**

The following internal procedures are used to ensure full compliance of process and deliverables specified in the SOW.

- **Data Migration and Importing Assessments:** An evaluation consisting of an examination of documentation and/or activities associated with the receipt of CAD Drawings and Data files. Assessments are performed to: a) catalogue what has been received, its quality and determine missing information; b) communicate with customer staff to take corrective actions; and c) assure compliance of received data to the Project SOW.
- **Deliverables Reviews:** An evaluation consisting of an examination of software documentation, test procedures and scripts to assure compliance to SOW and client specifications. The types of documentations to be evaluated include: Baseline Schedule, Interface Requirements Specifications (IRS), Readiness Review Reports, UAT Test Scenarios, Installation Guides and Support, Support (Post Installation).
- **Integration and Test phase:** zLink's engineering staff work closely with client staff to perform Integration Test and verify the results. All issues related to Software Problem/Change Reports will be documented, solutions assessed for completeness and applicability, progress monitored and tracked, and all related documents updated.

3.1.3 Data Migration and Software Installation

- **Data Migration** - It is a priority and the longest duration task to be initiated immediately after Project kick-off meeting. Our staff will coordinate with Clackamas County staff to create a "data import" inventory list of required data to be collected including CAD files, Assets Data, Leased Records, Facilities Location and Names and discuss potential interfaces.

It is important to collect the data as soon as possible and in parallel with software installation and testing of the proposed solution. Our staff will work with Clackamas County staff to set-up a secure FTP process to collect existing CAD files and data. Asset Data files will be collected and accuracy, location, status will be verified. The verification will be enabled by loading all CAD drawings into a temporary configuration of the system database and provide to Clackamas County staff interactive access to review (CAD drawings, and Asset data etc.) to correct / mitigate the deficiencies. Records will be updated as needed.

zLink will load the received CAD files and create As-Built drawings for verification based on existing source material that Clackamas County will provide. These drawings which will include Floor Plans Layers that are imported into the repository and shared with

Clackamas County staff to verify their accuracy using the zLinkFM™ functionality. During this process, when a drawing is imported it will be linked and provided with an Index Reference ID for quick retrieval with all the related data to be imported and updated in the repository for final reviews by Clackamas County staff.

The zLinkFM™ repository will be an enterprise-wide solution to access, manage, update and control these drawings and related files using the envisioned system and database management services to accomplish this task.

3.1.4 Build Property Database

All property data and files provided by Clackamas County such as Buildings by Development Site will be validated and prepared for import into the system. Lease Contracts will be stored and linked to Leased Facilities, and accordingly linked with the As-Built and Assets data to provide an integrated record. All the Buildings and Facilities CADs and files, will be available on the repository for periodic review by Clackamas County staff throughout the build process.

3.1.5 Define Reports and Dashboards

zLinkFM™ embedded Reporting capability and functionality allows users and executives to format their own reports and incorporate in their dashboards key performance data from any of the data sets stored in the zLinkFM™ repository. For example, a dashboard can be used to show the following:

- Total Drawings and documents related to specific or categories of assets.
- Total Leases, Expenses, Vacancy, etc.
- Maintenance Plans, Status and Operating Costs
- Income vs. Operating and Maintenance Costs by Development at a Building Level (Current and Historical).
- Regulatory Federal, State and City Reports

There are no limits to the data-sets that can be defined as a KPI and be used by management and executives for business analytics and performance tracking of Utilization, Maintenance and Related Services, Suppliers, Contractor Performance, and Financials.

3.1.6 Interface with Legacy Systems

It is our experience that life cycle management of Facilities and Capital Assets may require real-time data interchange with internal legacy systems such as Asset Inventory Management System, Maintenance, Personnel / HR, Finance and Accounting, and Active Directory for User Names. After the Kick-off meeting the zLink technical lead will work with Clackamas County staff to identify and discuss requirements for these interfaces to define specifications and ensure such interfaces are created and incorporated into the envisioned system.

3.2 Installation of COTS Pre-Production Environment

Within 30 days from Project Kick-off meeting, zLink will set-up a fully functional and integrated application and database environment configured from the selected zLinkFM™ COTS platform modules. The configured installed application/database platform will be a Cloud based SaaS implementation at zLink's hosting partner.

This early set-up will be used to populate the database with actual data and for team members to conduct periodic quality and completion reviews as the project progresses. zLink has its own ETL software designed to convert and load excel files into the zLinkFM™ database tables and perform file conversions and loads files formatted using the Comma Separated Values (CSV) format.

3.3 Building Project Profiles, Reports and Interfaces

This step will be performed over the duration of the implementation process. zLink staff and Clackamas County's Subject Matter Experts (SMEs) will define the specifications for required interfaces with other legacy systems supporting Facilities Maintenance Projects and Regulatory Reporting if needed. They will also identify / define Executive and Management KPIs and related reports.

At the end of these tasks, zLink software engineers will create and implement the required interfaces, test and ready the KPIs to produce required dashboards and reports, and ensure the integration of the envisioned system components.

3.4 Training

The Training will be scheduled once Security Assessment and Data Migration are completed.

Training Plan

As part of the system implementation, zLink provides training to all its customers. zLink offers a wide range of training options to serve all levels of trainees to help organizations fully use zLinkFM™ applications. Based on our experience in working with numerous customer organizations zLink has developed a detailed training program.

Training Methodology

zLink offers two types of training to zLinkFM™ users: (1) Administrators, and (2) Facility Users (includes data entry/data management, viewing/report creation, and maintenance providers/technicians). Training sessions are also designed to train the Trainers who can be leveraged to expand the training throughout the organization.

zLinkFM™ Administrator Training – System Administration

This will be an intensive two day training session conducted at the client's facility. An experienced zLink professional will conduct the training session. This session will cover all modules that zLink will be implementing as part of this project, like modifying database tables and fields; setting up users and security; creating reports, charts, graphs, and dashboards; personalizing the navigator; administering drawing publishing. The session will be interactive where the trainees will work on a live system and gain practical experience in executing various functions of the system. This course is designed for the zLinkFM™ Administrator and the system administrator, responsible for installing the software, maintaining system integrity, and personalizing the interface. An administrative user has all privileges including modifying the drawings and databases and customizing reports and therefore such topics will all be covered in detail.

zLinkFM™ Facility User Training - Fundamentals

Facility user training will cover all aspects of using all modules of the system. This will be a one day training session. Participants will learn about the basic components of zLinkFM™ databases, drawings, and reports. Participants will become competent in the zLinkFM™ CAFM system

domains: Space Management, Employee and Move Management, Property and Lease management, Maintenance and Work Order Management, Project Management and Asset Management This course is great for users who are new to zLinkFM™ or who would like to learn more about the available functionality beyond the scope of their current use. A facility user can access the system and make use of most features except changing data. The facility user training will be a one-day session and will be done at the client's facility. This session will be interactive where the trainees work on the live system.

On-Going Technical Support

In addition to on-site training, zLink will be providing technical support on an on-going basis. One of the key features of this service is problem analysis and resolution in which zLink support engineers provide corrective support to resolve identifiable and reproducible software product problems, and to help the client identify problems that are difficult to reproduce. zLink support engineers also provide advisory support for user installation. In addition, zLink support provides information on the latest product features and known problems and solutions.

Computer Skill Requirements

zLinkFM™ has an easy-to-use interface. The access to the system is through the popular web browser and therefore no special training or skill is required to become a proficient user of the system.

zLinkFM™ administrators may be required to customize the system such as adding new database elements and therefore some basic knowledge of database concepts is desirable. Data entry is straightforward through simple forms and no special skills are required.

Online Training Access

In addition to the User Guide CD there is an in context help on the system. Online demos are available as needed.

Training Curriculum

Key topics to be covered during the training session are as follows:

Facility User Training

- Open, View and mark-up on drawings
- Plot drawings
- Download drawings
- Save and email drawings
- Open and view data on each space
- Keyword search and advanced search
- Generate distribution maps
- Square footage calculations on selected spaces
- Generate square footage reports
- Export data and reports to other formats
- View asset data and generate reports
- Plot drawings with assets
- Search asset locations
- View attachments on assets

Administrator Training

In addition to all topics covered under the facility user training, the Administrator training will cover the following topics also:

- Upload and delete drawings
- Conduct integrity checks on drawings
- Manage drawing revisions
- Link data to drawings and edit
- Add new data elements
- Import data from external sources
- Create new asset classes symbols, and attributes
- Link assets to spaces
- Attach external documents to assets
- Link leases to CAD drawings
- Store lease abstracts or electronic versions of leases
- Generate email notification of important dates to leasing agent and tenant representative
- Store documents electronically – Amendments, Addendums, Renewals, and Cancellations
- Track information related to properties owned by other entities by appropriate owner name
- Correlate a map location (GIS) with data for real estate management
- Creating move projects for large move efforts
- Implement rule based allocation of space
- Establishing project lead for managing the move
- Create work orders for executing the move
- Maintain a history of previous moves

Training Strategy

zLink training demonstrates the power, ease and flexibility of the zLinkFM™ application as it applies to each client. It is beneficial to have all the stakeholders at the training. IT, Accounting, Interior designers, Construction, Electricians, Plumbers, HVAC techs would all be benefited by the different features available in the zLinkFM™ application.

Once training is completed designated users are provided with the appropriate Sign-in authority.

Future Users will be provided with online training as needed and always have access to support materials and help.

3.5 UAT

This will be part of the system installation and acceptance process.

- UAT set-up is a preproduction environment with all required data sets and functionality of the envisioned production system to ensure realistic training that will simulate actual production work processes and daily work tasks by the users.
- A standard test plan and QA Scenarios for data validation, creation and use during the installation and testing process.
- QA Scenarios will cover mandatory Requirements (with corresponding Use Cases supplied by Clackamas County) for all data records and functions per requirements.

UAT will proceed with zLink staff available to support Clackamas County staff during UAT to resolve any issues or missteps in testing. zLink staff will ensure all deficiencies are corrected and accepted by Clackamas County. A final Report of the UAT outcome will be produced recommending a “Go Live” decision by the authorized Clackamas County’s Project Executive.

3.6 “GO LIVE”

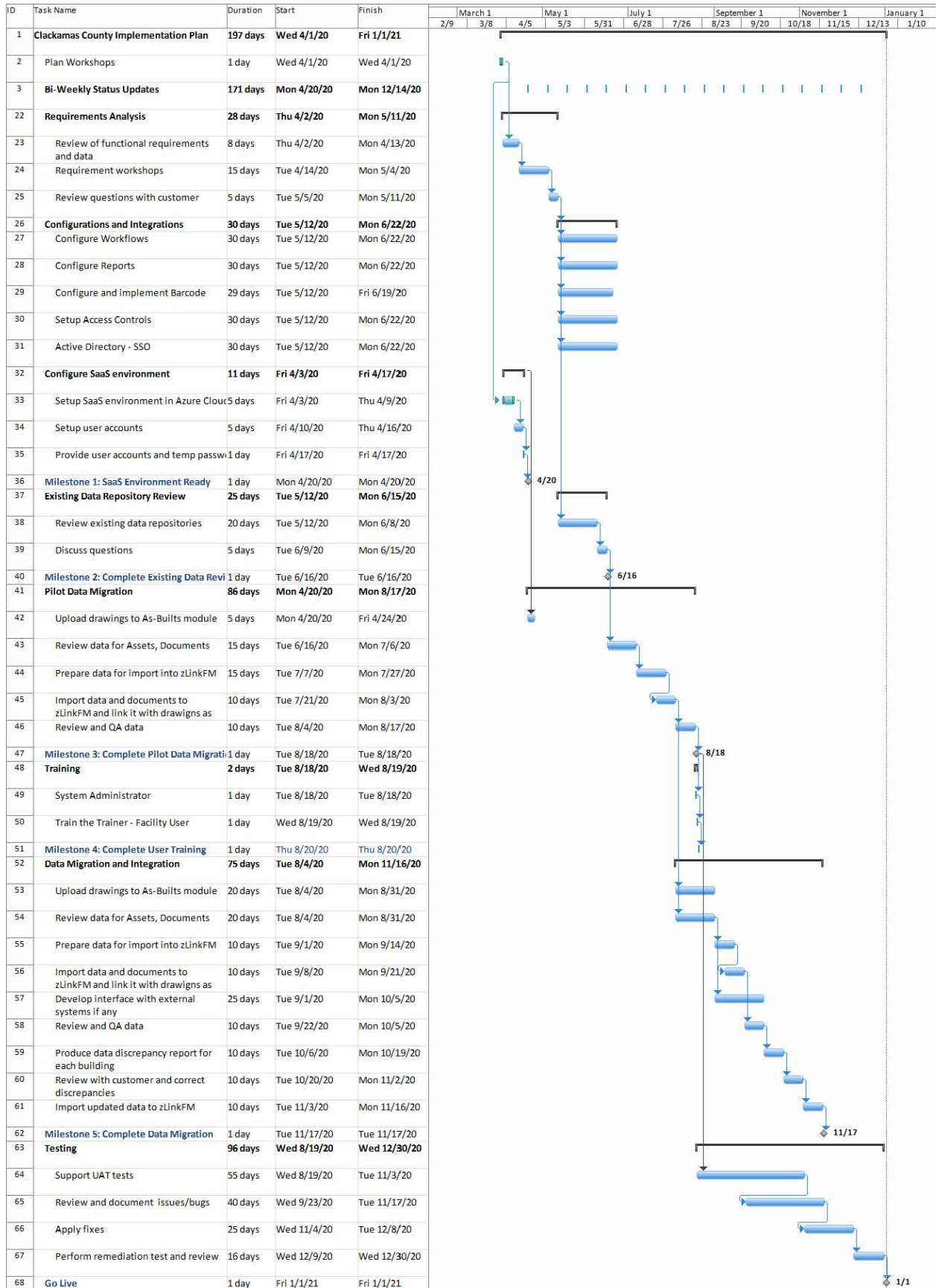
zLink’s Engineering and Deployment senior staff will review, tests and verify that:

- All system components are fully operational, including Back-up and Restore Procedures, and that Clackamas County's IT Technical Services are ready to assume operational responsibility for the system.
- Knowledge Transfer for Production Deployment and Integration to operations staff is completed and Clackamas County staff / users can perform the following steps:
 - a. Understand the deployment architecture and related User Guides and Operations documents provided
 - b. Demonstrate access and use of the installed system management functions
 - c. Walkthrough of implemented system configuration
 - d. Complete and submit final Project Status report

At the end of these steps, zLink's Program and Implementation Managers will review with Clackamas County's Program Executive Work Deliverables Status and conduct a wrap-up session to finalize Completion Report and next steps to GO LIVE.

3.7 *Timeline and Deliverables*

This following chart provides an overview of zLink Proposed timeline for the Program. Our experience, given the size of Clackamas County's needs, dictates a prudent approach to data migration and then integration of all the required zLinkFM™ modules into an open single and flexible System.



4.0 Maintenance and Warranty Services

4.1 Warranty Overview

zLink fully Warranties its software configurations implemented at Client or zLink managed and operated Computing and Network Facilities. If Clackamas County decides to implement the proposed solution on their own facilities, zLink's "Warranty" shall cover the software incorporated in the installed configuration of zLinkFM™ Modules for 24 months. zLink shall provide patches and fixes as required for the duration. Clackamas County must ensure that all Patches and Fixes are implemented to ensure new upgrades to new release will be implemented without transitional issues.

4.2 Support and Maintenance

If the County chooses an on-site Implementation of a synchronized back-up database, zLink shall provide Clackamas County IT and Data Center technical staff with the Application and Database Install Files and related "Install Instructions", and instruct Clackamas County IT staff as needed. Teleconferences for real-time interface communications are used to provide interactive support services to Clackamas County when these services are needed.

Clackamas County's IT and Datacenter staff will be responsible for these servers and network facilities data to be loaded into their own database system to be hosted in correctly configured hardware and network servers, and the data center has the appropriate monitoring and network capacity and security software to provide reliably uninterrupted store of data to be transmitted from the SaaS Application database.

Methods and Restrictions

- zLink does not provide any hardware or software other than the Application and Database Software, and provides warranty only for its own install zLinkFM™ system configuration.
- Client authorized Software Engineering and Technical staff may connect zLink Engineering Technical Support via a VPN to their installed database and system, and collaborate with zLink Engineers in resolving identified issues.

4.3 Technical Support Services

zLink will provide Help Desk and Support Services to Clackamas County in compliance with the final contract. zLink does not use or rely on 3rd party resources to provide Technical Support or any other service to its clients. We are unique in this regard as we make sure quality, responsiveness and accountability is assured.

Help-Desk Process:

- a) Help Desk Support Services are provided to clients between 9:00 AM EST to 5:00 PM EST. Special provision are arranged for clients with operations internationally and US Pacific Time Zones. However, Automated Call Forwarding is used for Off-hours coverage whereby the calls are sent to zLink's staff covering the off-hours Help Desk shift.
 - *Help Desk receives "Requests for Assistance" in two forms - email or a telephone call:*
 - **Email:** xxxx.support@zlinkcorp.com (xxxx = Client Project ID).

- **Phone:** Call 978-451-6621 (9am EST to 5pm EST.)
 - All "Requests" are registered and a "Ticket Number" is generated with Date/Time Stamp.
 - Tickets info emailed to caller.
- b) Help Desk attendant will address the issue interacting with the caller over the phone or over email whichever method is more appropriate.
- c) If expert assistance is required the Help Desk attendant will immediately escalate the call:
- *Web and Database issues inquiries will be forwarded to Tech Group.*
- d) *zLink staff assigned to support Help Desk operations update / record "status and resolution" for zLink and client to close "Incident Request / Reported Issue".*
- e) All "Issues / Incidents" will be addressed on specific schedule depending on their severity:
- Highest Priority - Severity Level 1- Response within 1 hour - Resolution within 12 hours
 - Medium Priority - Severity Level 2- Response within 2 hours - Resolution within 24 hours
 - Low Priority - Severity Level 3 - Response within 4 hours and Resolution within 48 hours
 - Functional and "not software related issues" – Severity Level 4 – Response within 24 hours and Resolution within 5 Business Days.

zLink will assign a senior staff member who would be experienced with Clackamas County installed zLinkFM™ configuration and functions, and had direct access to our Engineering group and Executives.

4.4 Annual Maintenance and Support

- **Software Updates:** zLink provides periodic software maintenance and technical support options with regard to the solution software. Any new functional enhancements to the software which affect/improve the functionality of the zLinkFM™ COTS based solutions are delivered as part of the internally hosted solution software maintenance. Client input regarding improvements and new functionality are welcomed and incorporated when feasible by zLink VP of Engineering in next Upgrade, Fix or new Release.

Changes to the software due to Government Regulation changes are provided as soon as we receive notice from Clients or become aware of the new Regulations from Government Agency.

- **Software Update Notification:** zLink will provide upgrade notices to the Client Contracting Officer or to its designated Software Engineering Representative when upgrades (functional enhancements to the software which affect/improve the functionality of purchased modules) are available.
- **Technical Support:** zLink provides technical and general user support response lines to address all Severity Level issues 24x7. Client System Administrators may call or email a request to our Support and discuss the "issue" with a technical support staff, and if the

issue cannot be resolved immediately the Technical Manager is notified and expedites the required support.

4.5 Contract Transition

At the end-of-contract, zLink copies all client data in the format stored and delivers the data to the client when such transfer is requested by the client. This activity is only required for SaaS implementations.

For SaaS installed systems, zLink staff coordinates the delivery - transfer of client data with Client staff and provides 30 days grace period before access to the system by client staff is terminated.

4.6 Location of Service Resources

zLink supports its clients from its US Head Quarters in Maynard, MA. The Engineering staff at Maynard work closely with our Software Engineering and CAD Groups to provide all services as needed.

This approach has served zLink as well as Government and major International client organizations. The Help Desk operations are also available 24 hours a day.

4.7 In-House Training for Technical Support and Skills Required

zLink provides comprehensive training for client End User and Systems Administrators staff.

It is expected that Clackamas County like all our other clients who have installed and operate the system within their computing and network facilities have the expert technical and IT staff to provide the needed services. Enterprises that design, implement, support and operate on their own their applications have the skills to install, operate and provide first line of support and Issue Determination for zLinkFM™ on their own.

Our Engineers and Technical Support staff will be available to support at any time to address an issue that is directly related to the zLinkFM™ installed solution operation and functions.

6.0 Cost Model

The zLink pricing structure is summarized below. The zLinkFM™ platform is available as Software-as-a-Service (SaaS) and as an Onsite option. zLink recommends the SaaS as the most efficient and cost effective option.

SaaS Internet Hosted Implementation

The SaaS option has been implemented by about 80% of the zLinkFM™ platform client base, including large Corporate and Government clients, such as the Parsons Brinckerhoff , Siemens USA, US Government Accountability Office (GAO), and the Veterans Administration (VA). The major advantages of the SaaS option include:

- Simplified pricing based on number of users
- Automatic access to new software releases at no additional cost
- *Elimination of expensive infrastructure support costs*
- Automatic scaling of processor and storage to meet expanding requirements

This option eliminates a major cost component not required to be identified in the price proposal – on-site IT support for managing and maintaining applications and IT infrastructure.

Prices are quoted per user per month based on selected modules integrated into the overall solution. Licensed Read/Write users can have access to the full functional capability of each proposed module.

Unit costs are provided for various services offered by zLink. All services are available organically without third-party participation. This allows extreme flexibility in addressing Clackamas County requirements and delivering a working solution without external risk factors.

Fixed price costs for these specific services will be provided when the scope and requirement has been clearly defined, and the quality of the source material is established.

6.1 Software License

The SaaS license is for 65 named users and 500 limited access Requestor Users. However, zLinkFM™ platform supports three license user types 1) Administrative User – capable of managing, editing, and changing data configurations and user accounts; and 2) General User – for read/write access for daily operations; and 3) Limited Access users. Clackamas County can choose to designate the named users as required.

The following zLinkFM™ modules are included based on the stated requirements and the functional capability of the zLinkFM™ platform modules.

- As-Built Floor Plans (CAD) & 3D/BIM
- Asset Management
- Condition Assessment
- Documents Management
- Inventory Management
- Maintenance
- Mobile Platform
- Project Management
- Scheduling
- Space Management
- Sustainability
- Web Services
- Work Order
- System Administration
- Executive Summary Reporting (KPIs)

Any additional modules would be priced as required during subsequent phases of the proposed implementation.

Each user will have access privileges as described in the requirements. In addition, the software license cost includes all hardware infrastructure required to store, manage, and disseminate Clackamas County stored documents, drawings, data, and reports using the client web interface.

While all licensed staff users will have the ability to access the system, the Read only users may be limited to a defined number of simultaneous users.

6.2 Customization

The customization effort includes activities that establish the inclusion of all configuration elements and additional data requirements identified during the requirements analysis to insure a complete environment on the zLinkFM™ platform. Specifically this may include:

- Establishing new configurable items
- Adding additional data fields
- Defining specific standard reports; and
- Calibrating data migration utilities

This effort is limited to data and functional capability that is specific to a client. Functional enhancements that are included in the normal zLinkFM™ release are not charged to clients. At this time there is no proposed customization effort.

6.3 Drawings Creation and Upload

This task will review all existing floor plans and load them into the zLinkFM™ platform repository. The drawings will be checked for correctness using the various utilities that are designed to support this effort. They will be accessible through the As-Built module for review as the data load process is initiated.

Where there are no existing or incomplete drawings, CAD drawings would need to be created. Clackamas County will be responsible to create these drawings and costs related to the creation of missing drawings are not included in this proposal.

6.4 Space Polylines

zLink does not propose and has not priced any tasks to perform Polylining on Clackamas County CAD files at this time.

Net Polylines measure the space enclosed by the wall facing boundaries and support applications related to the usable space of the specific area – such as maintenance, furniture placement, and utilization. The BOMA standard polylines allocate the entire space of the building to some area. These are used to manage cost charge-backs, lease management and other applications related to financial allocation of space.

6.5 Data Migration and Linking

This task will retrieve all data and populate the zLinkFM™ platform SQL database. At the completion of this task, all CAD and Document files will be available to Clackamas County authorized users through the zLinkFM™ user interface functions.

6.6 Testing, Installation and Configuration

The implementation process includes activities that establish the Clackamas County environment on the zLinkFM™ platform. Specifically this includes:

- Establishing Clackamas County user accounts
- Testing the User Interface
- Configuring the Clackamas County environment;
- Providing access to System Administration users

While all user accounts are implemented, Clackamas County may choose to defer access until all space and department data has been populated and linked to the appropriate drawings.

6.7 Training

The training is scheduled for two different user groups:

1. Administrator – training is designed for all users who have administrative access to the zLinkFM™ environment. The named users have full access to the entire functional capability of each module.
2. General User – is designed for all users who have read/write and read-only access to the functional capability of each module.

Training is designed for all users able to access information from the zLinkFM™ environment and can be conducted over the web if required.

On-going additional training can be provided as a part of the on-site support activity or through web-based training sessions.

6.8 Additional Services

In addition to hosting the software, zLink can organically provide all services to ensure the complete implementation of the proposed BIAM system. These may include:

1. Development of CAD drawings
2. Facility field surveys to collect accurate data
3. Polylining of CAD drawings
4. Linking drawings and data

All additional services are proposed on a fixed price basis based on confirmed requirements and quality and quantity of source

Assumption:

- Named Users – 65; Requestor Users - 500
- Asset location information to be provided by CC
- Lease information provided by CC
- Migration data to be provided by CC
- Number of Sites – 155
- Mobile devices to be provided by CC
- Implementation effort is 6 months
- Facilities Area: 1,309,462 sq. ft.

*Note – with the revised quote zLink will be providing two apps

- Scheduling App
- Task Request App

Clackamas County - Building Information and Asset Management System (BIAM)								
Cost Summary - Implementation & Support								
			BASE YEAR 1	OPTION YEAR 2	OPTION YEAR 3	OPTION YEAR 4	OPTION YEAR 5	
SOFTWARE LICENSE			\$ 63,240.00	\$ 66,402.00	\$ 69,722.10	\$ 73,208.21	\$ 76,868.62	
SOFTWARE IMPLEMENTATION			\$ 92,405.20					
SOFTWARE MAINTENANCE				\$ 12,648.00	\$ 13,280.40	\$ 13,944.42	\$ 14,641.64	
SOFTWARE SUPPORT				\$ 21,147.00	\$ 22,204.35	\$ 23,536.61	\$ 24,948.81	
Total			\$155,645.20	\$100,197.00	\$105,206.85	\$110,689.24	\$116,459.07	\$588,197.36

3 Yr	2 Yr	Total
\$361,049.05	\$227,148.31	\$588,197.36

Cost/site/month (5yr AvG): \$63.25

Additional General Users (Discount 25 %): \$49.00/user/month (minimum group 5)

Additional Requestors: \$2.00/user/month (minimum group 50)

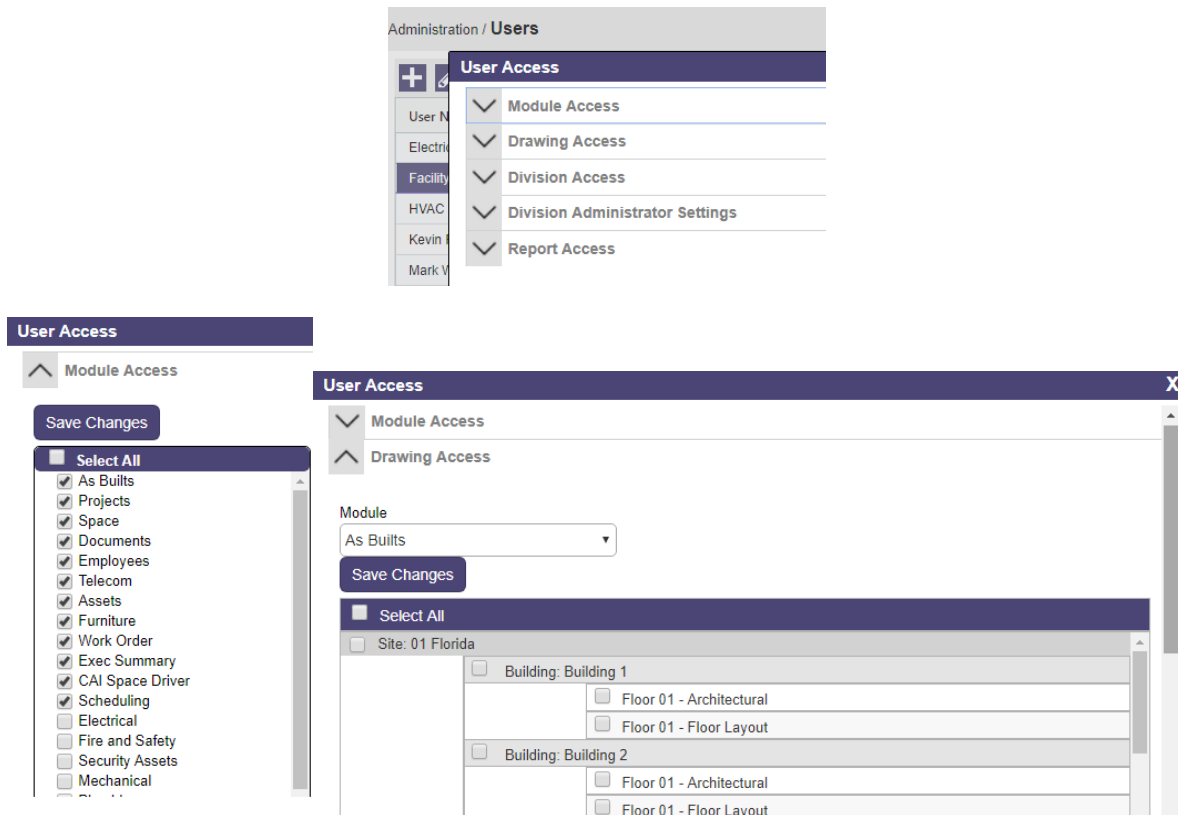
**Clackamas County, OR - Building Information
and Asset Management System (BIAM) - Cost Detail**

Item	Description	SaaS Monthly Fee 65 Users	Totals
1.0	Software Licenses		
	zLinkFM Module Configuration		
	System Administrator	\$ 375.00	
	As-Builts	\$ 425.00	
	Assets	\$ 355.00	
	Condition Assessment	\$ 350.00	
	Documents	\$ 330.00	
	Executive Summary	\$ 170.00	
	Inventory	\$ 218.00	
	Maintenance	\$ 350.00	
	Mobile	\$ 218.00	
	Projects	\$ 218.00	
	Scheduling	\$ 350.00	
	Space	\$ 218.00	
	Sustainability	\$ 218.00	
	Web Services	\$ 125.00	
	Work Order	\$ 350.00	
	Requestors (500 @ \$2.00/month)	<u>\$ 1,000.00</u>	
	Total Base	\$ 5,270.00	\$ 63,240.00

2.0	Implementation Planning and Support					
	Project Manager	80	105.74	\$ 8,459.20		
	Business Process Engineer	80	\$ 87.90	<u>\$ 7,032.00</u>		
	Total			\$ 15,491.20	\$ 15,491.20	
3.0	Requirements Definition					
	Information Systems Engineer	80	\$ 82.24	\$ 6,579.20		
	Sr. Systems Analyst	80	\$ 70.49	<u>\$ 5,639.20</u>		
	Total			\$ 12,218.40	\$ 12,218.40	
4.0	Functional Development					
	Information Systems Engineer	120	\$ 82.24	\$ 9,868.80		
	Sr. Systems Analyst	120	\$ 70.49	<u>\$ 8,458.80</u>		
	Total			\$ 18,327.60	\$ 18,327.60	
5.0	Data Migration					
	Sr. Database Architect	120	\$ 85.46	\$ 10,255.20		
	Sr. Systems Analyst	120	\$ 70.49	<u>\$ 8,458.80</u>		
	Total			\$ 18,714.00	\$ 18,714.00	
6.0	Drawings and Data Linkage					
	CAD Manager	80	\$ 64.62	\$ 5,169.60		
	Sr. CAD Specialist	120	\$ 52.37	<u>\$ 6,284.40</u>		
	Total			\$ 11,454.00	\$ 11,454.00	
7.0	Training					
	System Administrator	1	3000	\$ 3,000.00		
	Module Users	2	3000	<u>\$ 6,000.00</u>		
	Total			\$ 9,000.00	\$ 9,000.00	
8.0	Travel					
	4 Trips @ 1800	4	1800	<u>\$ 7,200.00</u>		
	Total			\$ 7,200.00	\$ 7,200.00	
	Total Base Year Implementation				\$ 92,405.20	
9.0	Software Support					
	Systems Analyst	300	\$ 70.49	<u>\$ 21,147.00</u>		
	Total			\$ 21,147.00	\$ 21,147.00	

APPENDIX D: Software Components Overview - Screenshots

- **System Administration** - provides super-user privileges to the System Administrator, a designated client user, for their zLinkFM™ environment. System Administrator provides zLinkFM™ end-users with Log-in IDs and Passwords, adds, deletes, updates end-user information, sets Account Expiration dates for end-users, enforces access policies and oversees data security. The Systems Administrator has the options to configure Users, Sites, Buildings and Floors, and tools for managing the user's access and facility information. The following is a sample “drop down” selection UI form that the Systems Administrator will use to establish end-user Privileges to Access data and interact with the system.



The Systems Administration component allows managing enterprise-wide access through designated points of responsibility. The system enables control structures and user hierarchies for managing access to data and establishing privileges for editing data at different organizational levels. Examples include a Project Manager, who can act as the single point of control for updated drawing in the baseline database. Specific user access can be controlled at various organizational, functional, drawing or data level. In addition, the system can maintain a log of all project related transactions to provide a project history.

zLinkFM™ V10.0.2 Mark Williams ABC Inc. Settings Reports Logbook

Administration / Users

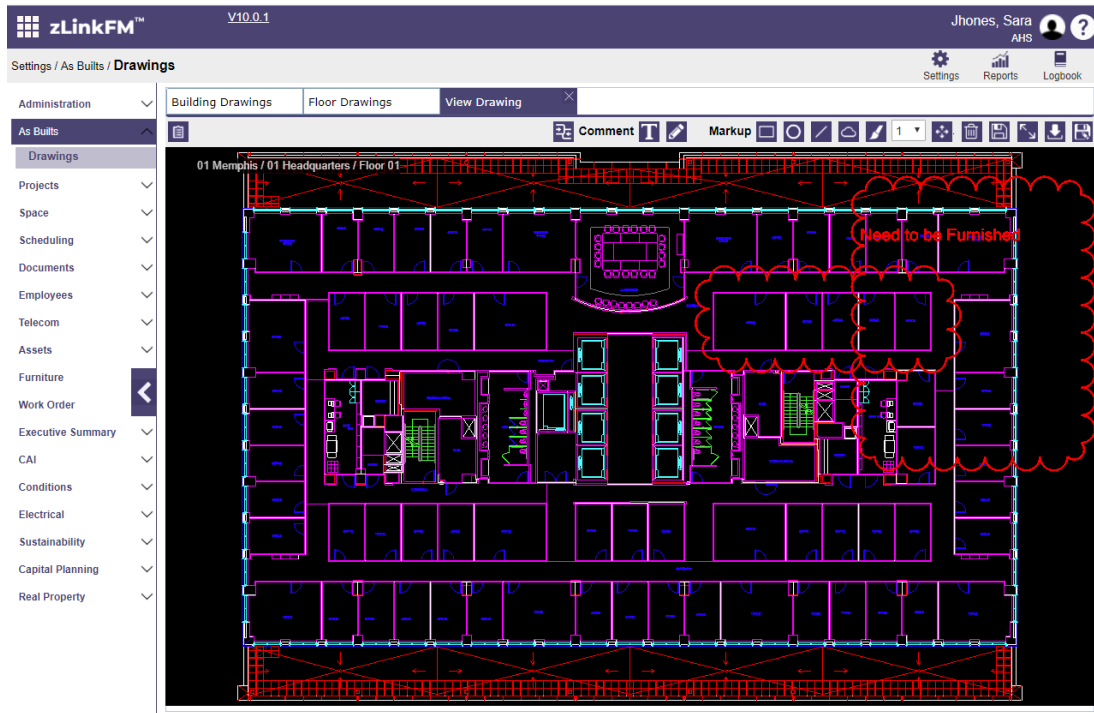
Administration Customers Users Portfolio List Workflow

User Name	Login Name ↑	User Role	Status	User Access Level	Account Exp
Demo Admin	admin005	Administrator	Active	Organization	31 Mar 2020
John Paul	demouser1	Module Administrator	Active	Organization	30 Oct 2019
User11 Demo	demouser11	zLink User	Active	Organization	30 Oct 2019
Vishnu VS	demouser12	zLink User	Active	Organization	30 Oct 2019
Roger smith	demouser2	Administrator	Active	Organization	30 Oct 2019
John Smith	johns	Administrator	Active	Organization	17 Dec 2019
Org Short	orgshort	Administrator	Expired	Organization	31 Jan 2014
Pretty Admin	ppadmin	Administrator	Active	Organization	04 Jan 2020
Mark Williams	pretty	zLink Administrator	Active	Organization	01 Dec 2019
Smith John	smith	Administrator	Active	Organization	27 Dec 2019
zLink Test	zlinktest	Administrator	Active	Organization	25 Jun 2020

- **As-Builts** - it creates and maintains the core repository of As-Built drawings and it is required in all zLinkFM™ implementations as it is used to create and maintain a Space-centric database. While no CAD software is required to view and work with the drawings in zLinkFM™, the As-Builts database drawings are accurate CAD drawings and are referenced by all software components to provide a space-centric view of all facility information and be shared by all to support broad set of business functions. Polylines of space depicted in drawings enables Space designations to business functions and organizations, and provides the framework for operational and maintenance planning, lease costs charge backs and financial reporting.

The As-Builts provides an easy web browser access to authorized users to perform:

- Mark-up As-Builts and create their own archives
- Share As-Builts with colleagues, publish for contracting, use for site inspections or locate assets and employee
- Control revisions of As-Builts
- View As-Builts online using mobile technology (tablets and Smartphones)
- Key word based retrieval of data for custom reports or extracts for “business analytics”



- **Asset Management** - enables the capture (definition) and maintenance of records of the assets incorporated into the zLinkFM™ repository and the Life Cycle tracking of these assets (acquisition, utilization, location, costs, charge back for cost recovery).

An Asset (Movable or Fixed) can be any item that has value and is depreciated, whose acquisition and maintenance cost is recorded; for example in Hospitals significant assets include Infrastructure Assets (e.g., Boilers, Compressors, etc.), MRI, Lab Equipment, Beds and Furniture, and many more items. The costs related to the use, depreciation, maintenance and disposition are recorded and incorporated in financial systems.

Asset Management capability supports:

- Fixed and moveable assets including IT equipment
- All assets located on floor plans
- Repositioning using drag-and-drop or move projects
- Tightly couples data related to acquisition date, costs and depreciation
- Integration with financial and preventive maintenance functions
- Life cycle tracking from acquisition to disposition

Asset Management is also enabled by zLinkFM™ embedded technology that incorporates creation and use of Bar-coded labels to retrieve information about date of installation, manufacturer, SKU codes and data required for tracking and identification of origin. zLinkFM™ also integrates write-read tools to create and read bar-codes. All Assets data that have bar-codes can be automatically imported and thereafter used to track the Assets Life cycle critical event dates and costs from acquisition, use, maintenance, inspections and disposal. The information can be automatically accessible / forwarded to the corporate systems such Inventory, Accounting / Finance, Oracle EPS or SAP.

zLinkFM™ V10.0.1 Jhones, Sara AHS

Assets / Drawings Settings Reports Logbook

Floor Drawings View Drawing

01 Memphis / 01 Headquarters / Floor 01

Module Switch

Drawing List

zLinkFM

Space Details

No. of Spaces selected = 42
Gross Area = 11110.22 (Sq. Ft.)

Asset Details

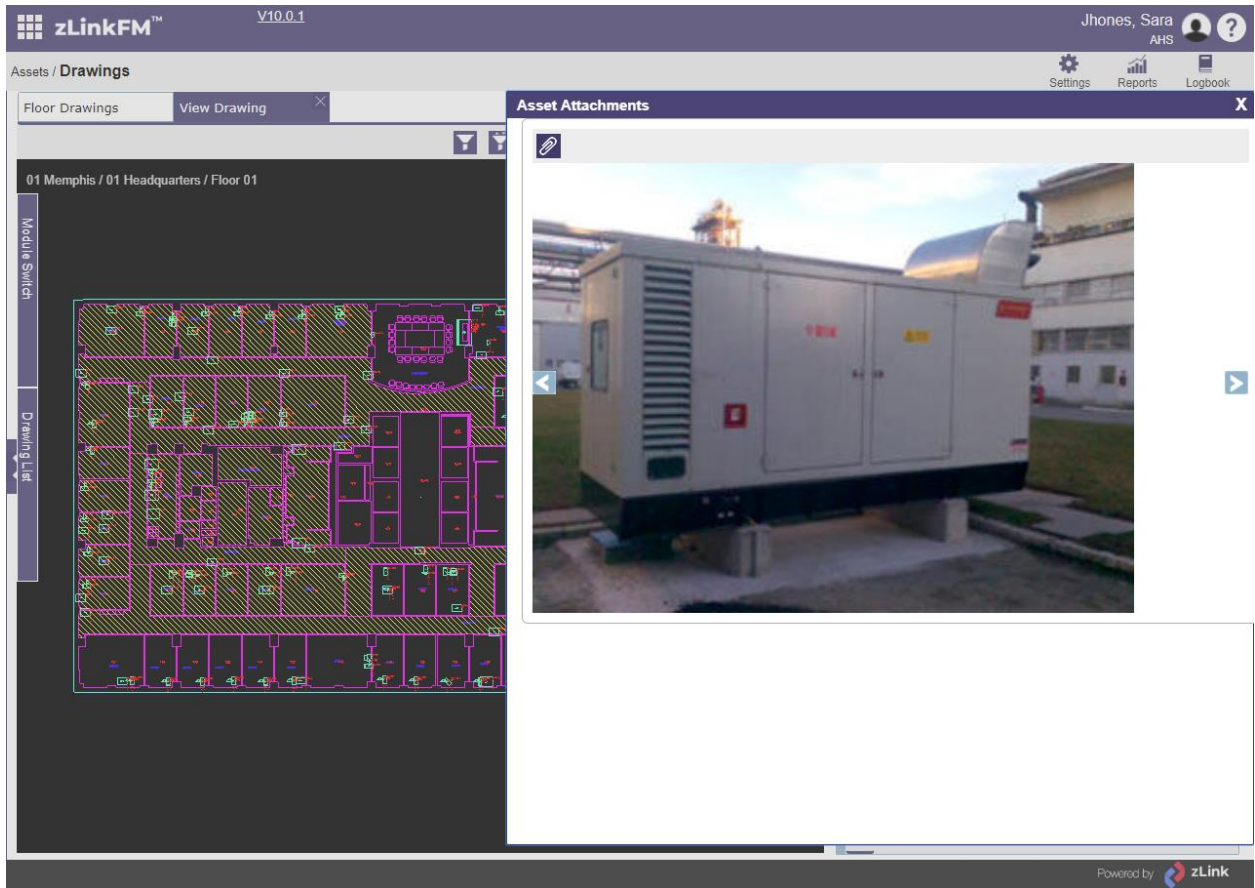
No. of Assets = 105
Computer Monitor Total Count = 28
Desktop Printer Total Count = 4
Exhaust and Induction Fans Total Count = 2
Multi Function Copier Total Count = 5
Personal Computer Total Count = 29

OK Add Legend

Asset No.	Asset Class	Status
M-342	Computer Monitor	Assigned
PC-304	Personal Computer	Assigned
PCM-1	Multi Function Copier	Assigned
M-341	Computer Monitor	Assigned
PC-303	Personal Computer	Assigned
M-339	Computer Monitor	Assigned
PC-301	Personal Computer	Assigned
DP-95	Desktop Printer	Assigned
M-330	Computer Monitor	Assigned
PC-350	Personal Computer	Assigned
M-410	Computer Monitor	Assigned
PC-300	Personal Computer	Assigned
PFI-38	PFI	Assigned
PC-299	Personal Computer	Assigned
M-544	Computer Monitor	Assigned
PCM-7	Multi Function Copier	Assigned
PFI-37	PFI	Assigned
M-340	Computer Monitor	Assigned
PC-302	Personal Computer	Assigned
PFI-19	PFI	Assigned
PFI-20	PFI	Assigned
PFI-22	PFI	Assigned

Operational Warehouse

Powered by zLink



- **CAI (Capital Assets Inventory)** - enables Medical Centers to track utilization of Capital Assets (Space) by Function / Organization and allocate costs to support Compliance Reporting to Government. It generates reports related to assignment of rooms for specific functions using Medical Center unique designations of space to functions and departments of the Medical Center (required at VA Medical Centers).
- **Capital Budgeting** – Streamlines capital budgeting and improves allocation. Capture, analyze, and approve capital requests for better budget visibility.
- **Documents Management** – it improves Engineering and Maintenance / Facilities staff productivity as it eliminates the need to search for the appropriate As-Built CAD or BIM Models for information about the Design, Space, Infrastructure Asset and FLS components and related information. In addition the Documents Management mitigates risk for loss of critical CAD and facility maintenance and project related documents in the event of fires, floods or other disasters; it provides a highly simplified and productive automated access to needed information about the design and construction of the facilities. Easy to use functional tools enable users to store, retrieve, distribute and share electronic documents and drawings in a broad set of file formats across the Facilities Portfolio and business functions (e.g., Engineering, Contracting, Accounting, Services, Maintenance, etc.).

Technical Specifications, Maintenance Procedures, Manufacturer Warranties, Digital Pictures and Videos showing Condition of Facilities, CAD files and related Capital Assets and

Maintenance Projects files can be stored and retrieved to ensure accurate information and records are maintained and retrievable on-line when they are needed eliminating the risk of lost or misplaced documents.

- **Employee Move Management** – is used to assign and track employee assignments to office space, support security control for access to facilities and restricted areas, and enables Space Planners to optimize space utilization by employee Classification and Grade (e.g., Clerical and Administration, Professional, Manager, Executive etc.) across organizations by linking employee data and assignments to specific offices, sites, rooms and areas. It supports Occupancy Standards, Density and Capacity planning.

The functions facilitate users to plan individual, group or department moves, create Work Orders for moves or other services that an organization requires, collaborate and coordinate work for authorized employee(s) moves and track and report status. Enables organizations to minimize unproductive downtime and maximize employee satisfaction while optimizing Space utilization; it facilitates the work by providing end users the following system functionality:

- Group or individual moves using visual drag and drop of selected employee from one location to another (Employee locations are reflected in the drawings at their assigned Space – office, cubicle, lab, etc.)
- Define and create Employee or Departmental Move projects
- Manage employee move across the enterprise
- Visual allocation of available space
- Tracking and Management of Move Projects
- Rule based space allocation to each employee
- Space utilization reports
- Employee ID and Security Classification

Employee locator search capability quickly shows location on floor plans. Additional data is available by moving the cursor over employee icons and perform functions related to employee tracking and recorded presence. This provides for functional incorporation of Security Controls including Restricted Access to Designated Spaces, record of Entry and Exit, ID Tug Sensing Recognition etc.

zLinkFM™ V10.0.1 Jhones, Sara AHS

Employees / Drawings Settings Reports Logbook

Floor Drawings View Drawing

01 Memphis / 01 Headquarters / Floor 01

Module Switch Drawing List Employees

1319 1001 1004 1034 1035 1036 1051 1057 1061 1064 1068 1071 1075 1076 1149 1165 1166 1168 1188 1193 1206 1263 1270

Assigned Unassigned Scheduled ...

Edit Employee

Employee Code * 1319

First Name * Gail

Middle Name

Last Name * Haeffner

Photo

Off-2.jpg

Browse

Email haeffner@gmail.com

Grade Grade - A

Title Payroll Assistant

Supervisor Agdinaocay, Rodell

Site 01 Memphis

Gender

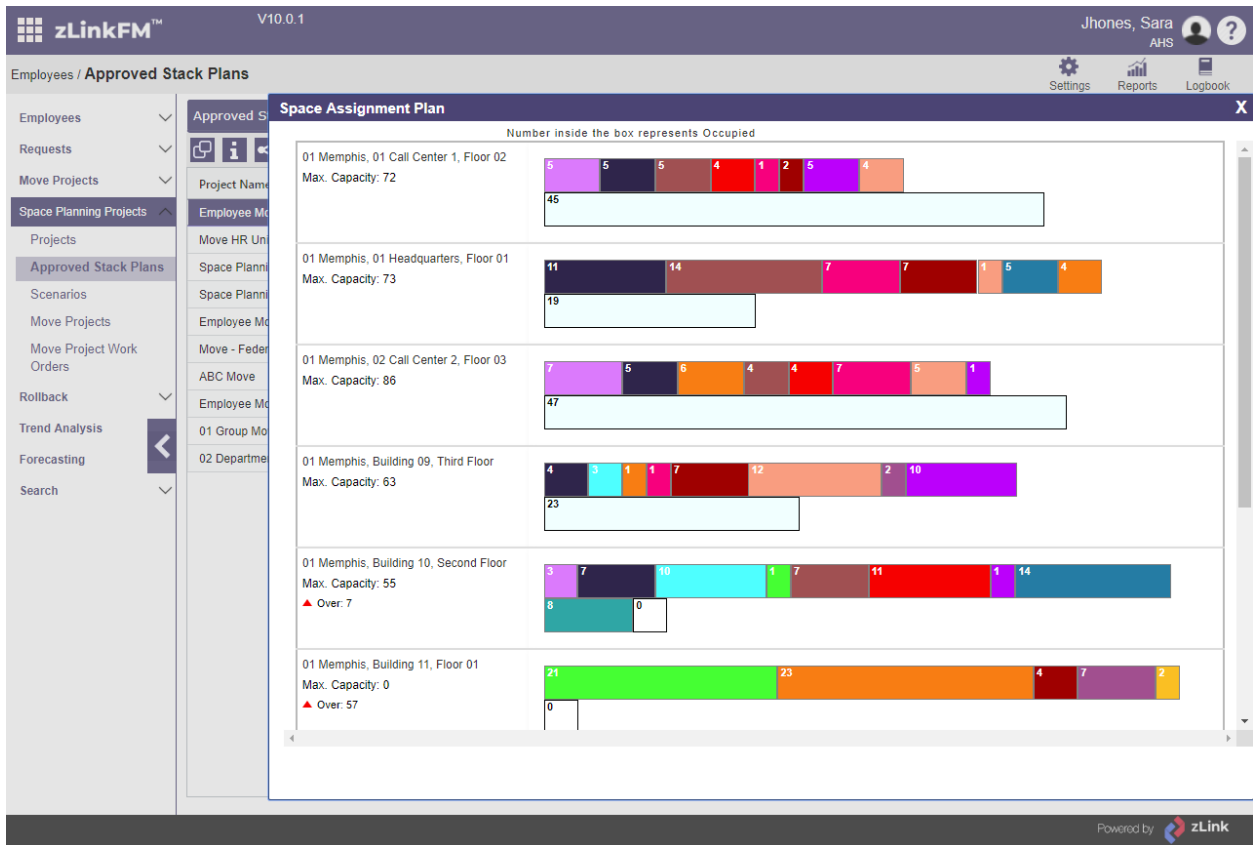
Save Changes

Powered by zLink

Extracting and Sorting Employee Office Assignments Data

The screenshot displays the zLinkFM web application interface. At the top, the browser address bar shows the URL: https://demo.zlinkfm.com/zLinkFMV10/employees-employeeemovedetails-report. The application header includes the zLinkFM logo, version V10.0.2, and user information for Mark Williams, San Diego. The main navigation bar shows 'Reports / Employees / Employee Move Details'. Below this, there are options to 'Select Criteria' and 'Report', along with a 'Sort By' dropdown menu set to '--Select--'. There are also buttons for 'Customize' and 'Schedule this report'. The main content area features a table titled 'Employee Move Details' with columns for SL.No., Request Token, Employee Name, Employee Code, From Room No., To Site, To Building, and To Floor. The table contains data for three move requests, with the second request (REQ 9) having seven associated moves. The bottom of the screenshot shows the Windows taskbar with various application icons and the system clock indicating 9:49 AM on 7/11/2019.

SL.No.	Request Token	Employee Name	Employee Code	From Room No.	To Site	To Building	To Floor
Move Status: Approved From Site: 01 San Diego From Building: 01-Administration Center From Floor: Floor 01							
1	REQ 11	Gail Haefner	1319	155	01 San Diego	03-5530 Overland Ave	Floor 01
Move Status: Approved From Site: 01 San Diego From Building: 06-5580 Overland Ave From Floor: Ground Floor							
1	REQ 9	Karen Hill Collins	85340	G12	01 San Diego	04-5570 Overland Ave	Floor 01
Move Status: Moved From Site: 01 San Diego From Building: 01-Administration Center From Floor: Floor 01							
1		Diana Simone	1001	140	01 San Diego	01-Administration Center	Floor 01
2		Bruce Kramer	1071	127	01 San Diego	02-County of San Diego	Floor 01
3		Lisa Baker Mitchell	85277	107	01 San Diego	01-Administration Center	Floor 01
4		Kevin Paul Jeff	EL 0091	103	01 San Diego	01-Administration Center	Floor 01
5		Sandra Kinion	1004	160	01 San Diego	01-Administration Center	Floor 01
6		Sandra Kinion	1004	152	01 San Diego	01-Administration Center	Floor 01
7		Gail Haefner	1319	155	01 San Diego	01-Administration Center	Floor 01



The system facilitates Space Planners internal Requests for Approval for moves subject to appropriate authority of the Initiator (the person requesting the move) to fund the move. The process from Approval-to-Completion of a move is tracked and managed based on automated workflow process supporting the defined Move Project and related Work Orders to participating departments.

The large moves where several employees will be reassigned work office space or when organizational relocations are planned, corporate Space Planners can use the stack methodology depicted above. Once a decision and authority is given for the move, a workflow based project is generated with corresponding Work Orders to initiate the project, notify employees, internal facilities to perform the physical moves of assets and employee items, enable visibility to the move to HR, IT, Security and management. This automated workflow enabled process incorporates controls and alerts to ensure on time collaborative execution, and automatically updates all space assignments.

Space Planners can select the employees to be moved from the drop-down list provided with the floor plan. For a single employee the Space Planner can click on the employee selected (displayed as a symbol in the current office) and move the cursor to the new office. The employee record is automatically updated.

- **Facility Condition Assessment** – enables the user to record, store and maintain information about the Condition of a Facility / Building and its Assets and provides the necessary options to facilitate their assessment for Capital funding related to deficiencies remediation, construction, and long term maintenance requirements. The Assessment is entered for each facility based on Unicode standard formats. The assigned Architects and Engineers capture

the Condition of the Facility and its Assets in real-time using tablets interacting with the system. Each deficiency is recorded, detailed notices are entered and pictures / sketches can be attached to highlight “conditions” and other observations of the inspectors. The system then calculates the remediation or replacement cost based on the year of installation and escalation factor. A facility Condition Index is calculated based on the replacement and total repair cost.

Replacement / Repair decisions are made external to the system and linked / attached to the Facility Condition Assessment Report for Capital Planning and for approval of new Construction and Maintenance Projects. The Condition Assessment data can be interrogated to determine the best allocation / fit of funds to identified projects.

- **Fire Life Safety** - supports the creation of Fire and Life Safety drawings and compliance reports. A required component for Public facilities that ensures compliance to public safety regulations. Information can be interfaced with First Responders and Emergencies procedures incorporated. The information is required to support Inspections and track changes to FLS equipment and inspection status / sign-offs.

The FLS Inspections are performed by trained inspectors who connect directly to the FA Panels using Tablets or Smart Phones and perform the inspections in real-time and generate all Joint Commission Regulatory Reports automatically. Reports can be emailed to the responsible Facilities Staff and stored for subsequent reviews to remediate any issues reported and track overall adequacy of the FLS System per Regulations.

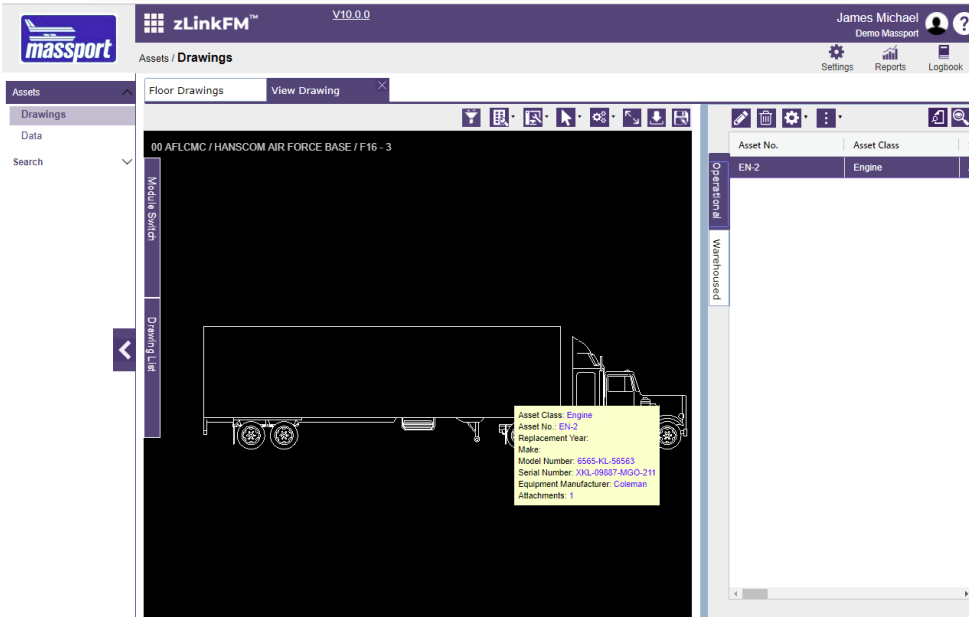
The screenshot displays the zLinkFM V10.0.1 interface. The main window shows a floor drawing for '01 Boston / 01 Headquarters / Floor 01'. The drawing includes a 'Middle Switch' and a 'Drawing Lift' area. A pop-up window provides details for a selected component: Space Key: 106, Room No.: 1E2, Space Category: 03 - Floor Common, Space Function: Electrical, Gross Area: 31.5, Cost Category: [blank], Space Standard: [blank], Seating Capacity: [blank], Division: [blank], Attachments: 1, and Pendant Sprinkler: 1.

On the right side, a table lists components and their status:

Component No.	Component Type	Status
FAPS-10	Fire Alarm Pull Station	Assigne
FAPS-10	Fire Alarm Pull Station	Assigne
FAPS-10	Fire Alarm Pull Station	Assigne
FAPS-10	Fire Alarm Pull Station	Assigne
FAPS-10	Fire Alarm Pull Station	Assigne
FAPS-10	Fire Alarm Pull Station	Assigne
FAPS-10	Fire Alarm Pull Station	Assigne
FAPS-10	Fire Alarm Pull Station	Assigne
FAS-1	Fire Alarm Speaker	Assigne
FAS-2	Fire Alarm Speaker	Assigne
FAS-3	Fire Alarm Speaker	Assigne
FAS-4	Fire Alarm Speaker	Assigne
FAS-5	Fire Alarm Speaker	Assigne
FAS-6	Fire Alarm Speaker	Assigne
FAS-7	Fire Alarm Speaker	Assigne
FAS-8	Fire Alarm Speaker	Assigne
FAS-9	Fire Alarm Speaker	Assigne
FAS-10	Fire Alarm Speaker	Assigne
FAS-11	Fire Alarm Speaker	Assigne
FAS-12	Fire Alarm Speaker	Assigne
FAS-13	Fire Alarm Speaker	Assigne
FAS-14	Fire Alarm Speaker	Assigne

- **Fleet Management** - Identifies, manages, and maintains all mobile assets used in the construction and maintenance of managed transportation infrastructure. These include motorized and non-motorized equipment, water, and air based assets. Each of these can be managed using an asset specific physical breakdown structure that can be used to detail cost and labor inputs.

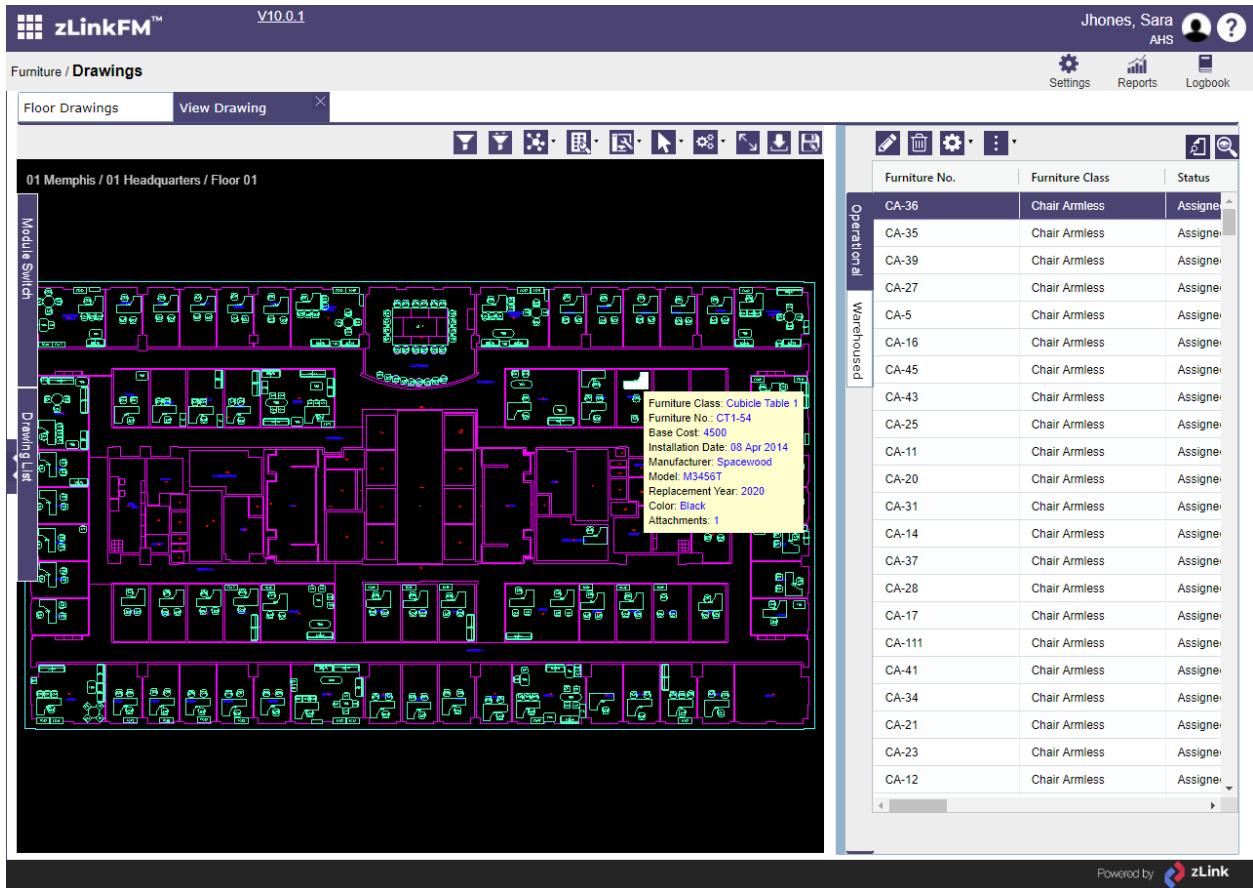
Integration of Motorized and Non-Motorized Fleet



- **Furniture** - supports furniture inventory audits and furniture utilization by having the furniture scaled and placed on floor plan drawings. Once furniture is “placed” in a Space (other than Storage where it is classified as Stored in Inventory), it is traceable using Bar Code and associated / linked to the Office Space and to the employee assigned at that office, or to a functional area such as Conference Room, Waiting Room etc.

Tracking the location of furniture is based on accurate record keeping ensuring that furniture is always linked to a Space, Function, or is in Inventory. If required, information about the dates of acquisition, maintenance, assignment, and disposition and life cycle costs can be captured.

Authorized users use similar functions as described in the Asset Management component above.

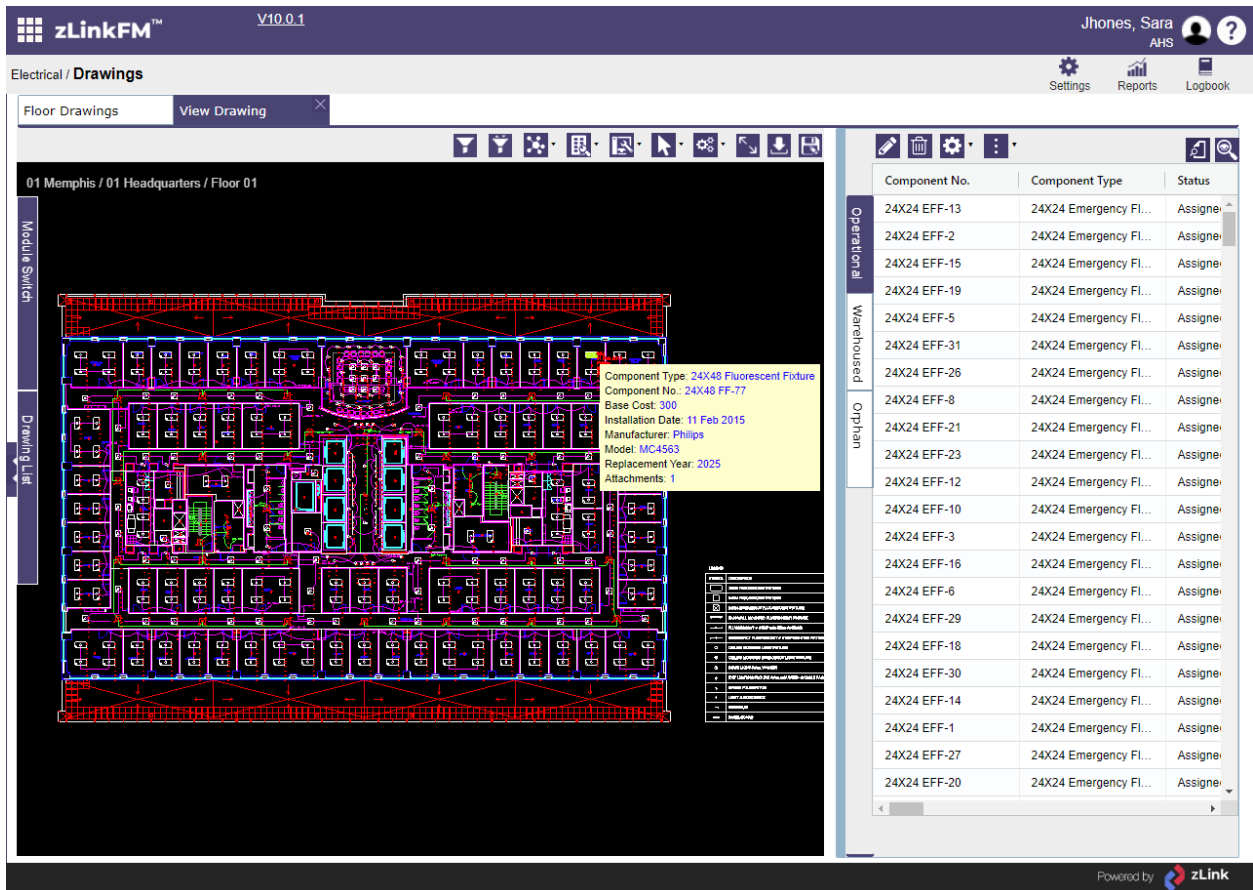


- Inventory Management** – provides all necessary functionalities to manage and maintain inventory requirements. zLinkFM™ inventory management tracks and manages the stock of various consumable parts and also provides settings to initiate the ordering of these parts when the quantity falls below a certain level. zLinkFM™ supports multiple stores so that stock can be added to the main store and transferred to the secondary stores. The module also provides necessary options to capture all related data along with the inventory like the invoice number/date, cost of the item, the vendor, the department that ordered the part etc. Parts can be associated to various equipment categories that can utilize it so that the technicians or work order managers get a filtered view of the parts that are associated with the equipment while performing the work order.

Work order managers/authorized technicians can easily see the stock of each part in a single click. There is an option to attach various parts as part of the work order; later the count can be updated based on the actual use of the parts while completing the work order. New parts request can be tracked using inventory request work type and the approval for inventory request can be achieved using custom work flows. The cost of the parts used can be charged back to GL accounts or departments based on the preference of the end user.

- Maintenance** - provides the functionality to plan, execute, manage and report on preventive maintenance procedures and schedules for all facilities, assets and equipment that require maintenance. All maintenance is based on Plans and work performed is automatically recorded and performance can be tracked and accordingly reported.

- **MEP (Mechanical, Electrical, Plumbing, Medical Gas)** - incorporates the drawings, technical specifications, maintenance history, costs, and parts inventory of the physical infrastructure. Used primarily by Facility Engineers to plan and perform infrastructure maintenance on equipment such as air handling units, pumps, and motors; electrical components such as panels, transformers, generators, and plumbing components. These assets and their parts are incorporated in the MEP drawings and part of the As-Builts architectural layers and are easily located and tracked for their performance and life cycle costs – acquisition, maintenance and replacement / disposition.



- **Mobile Platform** - provides a physical synchronization link between the desktop zLinkFM™ application and the handheld Tablets and Smartphones running zLinkFM™, which allows facility managers and others within the organization to move about the facility with all the necessary facility CAD drawings and data needed to carry out a vast variety of tasks. Any changes that are made in the field on the mobile devices are automatically synchronized with the database, thus ensuring that all drawings and data changes are kept up-to-date.
 - Authentication based on zLinkFM™ credentials
 - Switching drawing view across various software components in a single touch
 - Access key features using icon based easy to use menus
 - Device (iOS and Android) and browser independent
- **Project Management** - enables Facilities Management and Engineers to define, track and manage all facilities infrastructure assets maintenance, construction, and facility development projects. The Project Management component facilitates the construction, performance and

management of a Project in collaborative and integrated Work Flow that enables the users to create a link between Project Scope, related Work Orders, Budgets and assigned organizational responsibility.

Furthermore, it incorporates Work Orders that capture the details of work defined including “start and end dates”, budgets and actual labor / parts costs, variances, assigned resources, the organization performing the work and the responsible manager assigned to manage the Project.

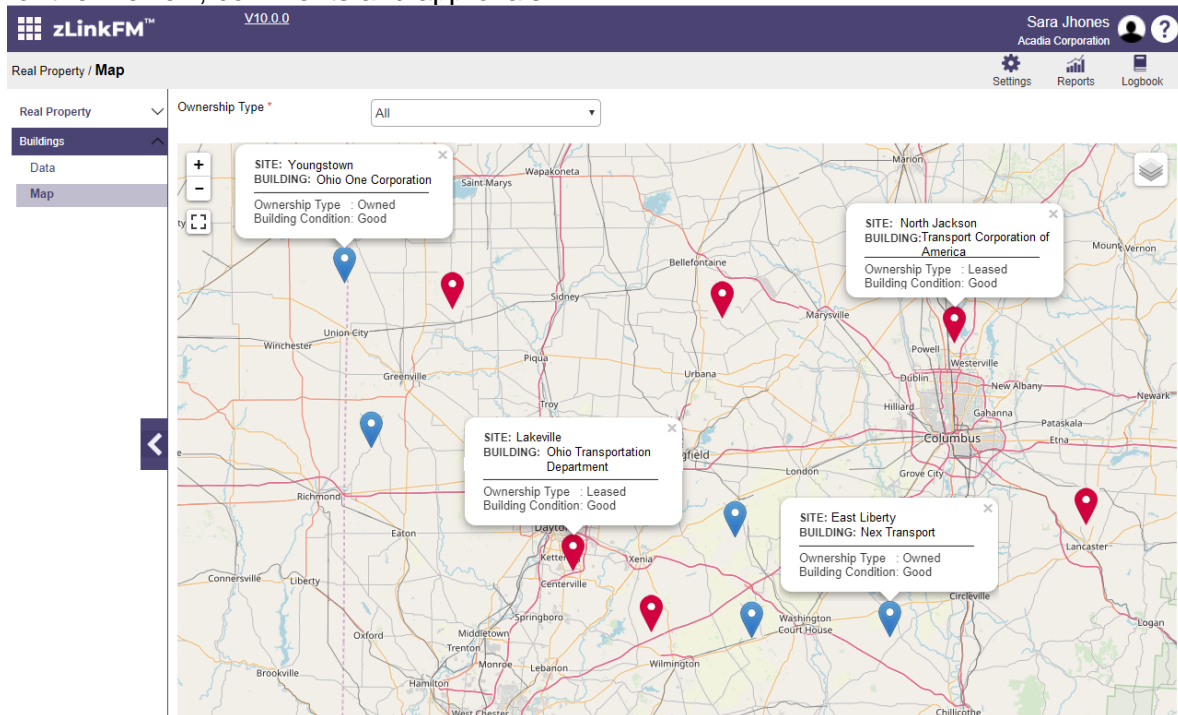
- **Real Property/Lease Management** – provides automated tools to manage Contracts and Leases for each facility in a portfolio. It maintains comprehensive data about the RE Portfolio by GSF and lease terms (Clauses, Expiration Dates, Capital Leases vs. Operational, Record Keeping etc.) and supports executive and financial reporting. It enables authorized users and management to view, aggregate, manage and analyze the portfolio on a broad set of metrics.

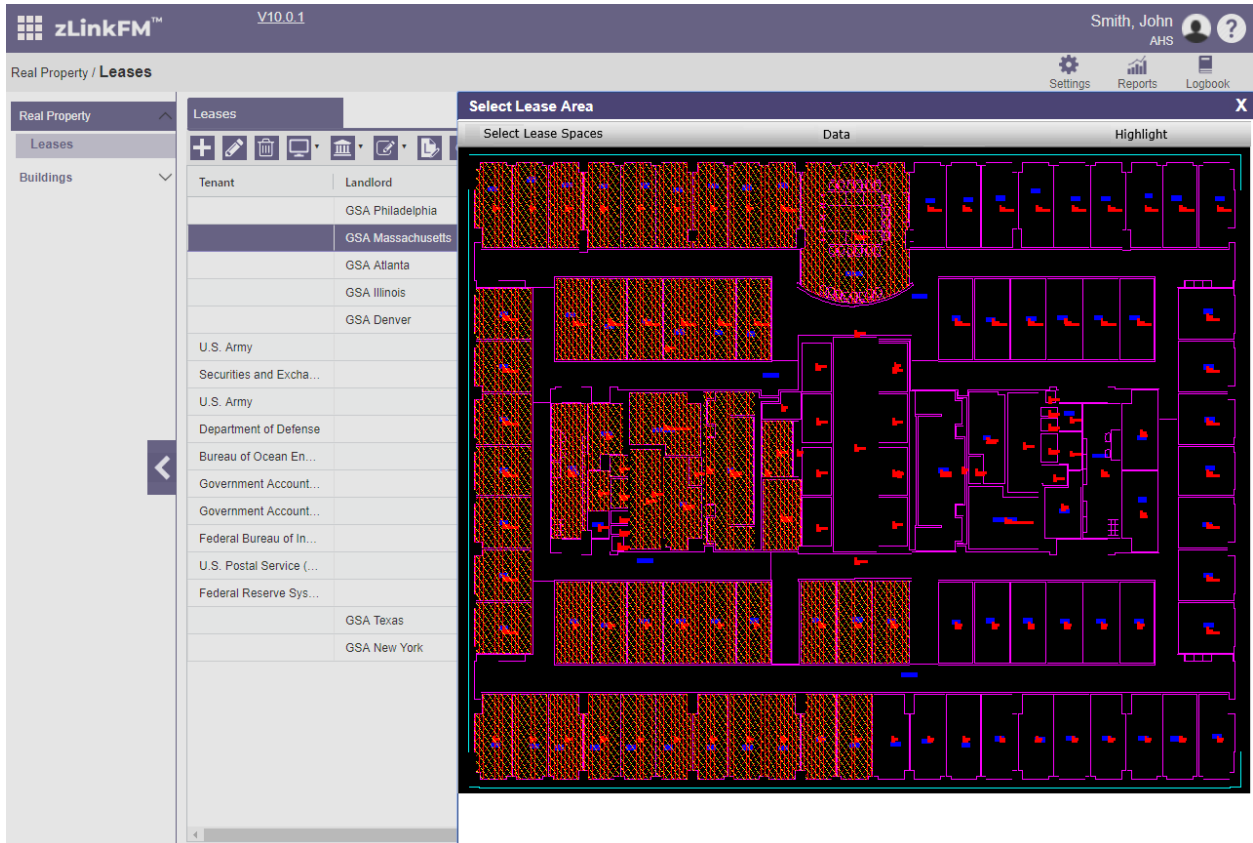
Alerts can be created automatically by using workflow processes to automatically email a Notice to responsible users about:

- Cost Details and Renewals of Leases
- Pending Payments
- Past Due Payments
- Expiring Contracts and Leases

Existing contracts regarding the maintenance of facilities are similarly encoded to create alerts and notifications and support on-time action by management to review performance per agreements and contracts, assess status and make effective decisions.

All legal documents can be attached to facilities record and available to any authorized users for their review, comments and approvals.





- **Scheduling/Hoteling** – Scheduling or “Room Reservation” enables system users to reserve meeting rooms efficiently and effectively. Users can book meeting rooms from a calendar view where time slots with booking/availability information are displayed against each meeting room. Free slots can be identified at a glance and the user can book the respective meeting room for the required time slot by double clicking inside the calendar view.

Key features include:

- Meeting room booking and cancellation
- Visualize meeting rooms in floor plans and book from there
- Email notifications to hosts, attendees and service providers
- Catering, equipment or audio-visual requirement management
- Workflow support for managing approval for scheduling and service request

Comprehensive search options are available to the users to search for work space / meeting and conference rooms with seating capacity, size, date, time slot, amenities etc. The search result will show only the rooms that match the search criteria in the list along with the calendar view that can be used by the user to book the room of their choice. Using the I/O functions of the selections screen the user can book the needed work-space / meeting rooms from a calendar view where time slots with booking/availability marking are displayed.

zLinkFM™ V10.0.2 Mark Williams ABC Inc. Settings Reports Logbook

Scheduling / Reserve Team Room

GIS
 Work Space Reservation
 Team Room Reservation
 Reserve Team Room
 Reservations
 Equipment Reservation
 Drawing View
 Requests
 Search

Reserve Date *
 11 Jul 2019

Filter

Site	Building	Floor	Room No.	AM	07:00 A
02 New York	Building 1	First Floor	166		
02 New York	Building 2	First Floor	193		
02 New York	Building 2	First Floor	105A		
02 New York	Building 2	First Floor	185		
02 New York	Building 2	First Floor	190		
02 New York	Building 2	First Floor	191		
02 New York	Building 2	First Floor	108A		
02 New York	Building 1	First Floor	164A		
02 New York	Building 2	First Floor	199		
02 New York	Building 2	First Floor	104		
03 Oregon	Building 1	First Floor	120		
03 Oregon	Building 1	First Floor	131		
03 Oregon	Building 1	First Floor	145		
03 Oregon	Building 1	First Floor	158		
03 Oregon	Building 1	First Floor	168		
03 Oregon	Building 1	First Floor	126		
03 Oregon	Building 1	First Floor	104		
03 Oregon	Building 1	First Floor	178		

Reserve Team Room

From *
 11 Jul 2019

Start time *
 9:00AM

To *
 11 Jul 2019

End time *
 9:30AM

Recurrence Pattern
 Daily Weekly

Room No.
 185

Check Availability

Event Name *
 Enter Event Name

Participants (Number)

Comments
 Max 4000 Chars

Invitees

Reserve

Powered by zLink

Once the system returns a List of the Current Schedule of all Conferences and or “Hoteling” spaces, the user by clicking on the preferred room listed can retrieve information about the room. All information about the room is available when a user searches for the room based on an input search criteria. All amenities along with the photo of the space are displayed to the user before they make a decision and reserve the space.

zLinkFM™ V10.0.2 Mark Williams ABC Inc. Settings Reports Logbook

Scheduling / Reserve Team Room

GIS
 Work Space Reservation
 Team Room Reservation
 Reserve Team Room
 Reservations
 Equipment Reservation
 Drawing View
 Requests
 Search

Filter

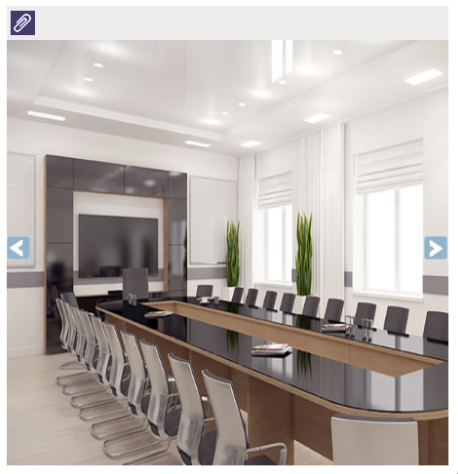
Site	Building
02 New York	Building 1
02 New York	Building 2
02 New York	Building 2
02 New York	Building 2
02 New York	Building 2
02 New York	Building 1
02 New York	Building 2
02 New York	Building 2
02 New York	Building 1
02 New York	Building 2
03 Oregon	Building 1
03 Oregon	Building 1
03 Oregon	Building 1
03 Oregon	Building 1
03 Oregon	Building 1
03 Oregon	Building 1
03 Oregon	Building 1
03 Oregon	Building 1
03 Oregon	Building 1
03 Oregon	Building 1
03 Oregon	Building 1

Room Details

Room No: 103
 Space Function: Office
 Seating Capacity: 10
 Area (Sq.ft): 143.79

Amenities

Audio/Visual Equipment: 1
 Polycom/Phone: 1
 White board: 1
 LAN Connection: 1
 Podium: 1



Powered by zLink

When the room is selected, the user can enter details like the purpose of the meeting; select the invitees for the meeting, amenities required for the meeting and services required like IT support, Security, Janitor and Catering support. The system also provides an option to enter other services where room configuration can be entered as part of the reservation requests.

Another approach that users can use to select Conference Rooms and Work Spaces to Reserve is to visually navigate the “floor plans”. By selecting the system function to highlight the location of designated “shared” work spaces and “meeting rooms / conference rooms” the system will automatically highlight these spaces. The user then, by pointing the cursor on the highlighted location, can interrogate the specifications / nature of the space. The following I/O Screen copy illuminates the described approach.

zLinkFM™ V10.0.2 Mark Williams ABC Inc. ?

Scheduling / Reserve Team Room / View Drawing Settings Reports Logbook

GIS Reserve Team Room Daily Reservation Summary

Work Space Reservation 02 New York / Building 2 / First Floor

Team Room Reservation

- Reserve Team Room
- Reservations

Equipment Reservation

Drawing View

Requests

Search

Reserve Date 11 Jul 2019 Search hh:mm

Room No.	Room Capacity	04:00 AM	04:30 AM	05:00 AM	05:30 AM	06:00 AM	06:30 AM	07:00 AM	07:30 AM	08:00 AM	08:30 AM	09:00 AM	09:30 AM
191	20												
190	50												
193	25												
104	25												
108A	25												
105A	25												
199	25												

Powered by zLink

If the selected room is available based on the calendar shown below the displayed floor plan, the users will click on the selected space on the floor plan and get the reservation Input screen to enter the date/time and amenities needed during the “reserved time” of the selected space.

- Space Management** – provides key functions to create and maintain data about facility space use and costs, to perform Space Capacity and Occupancy Planning, Track Staff Assignments and Assets to Space, and support Employee Moves (a single employee or Departmental moves). Its primary function is to monitor and track the effective use and cost associated with real estate space, and to allocate and optimize space among many departments and do accurate cost accounting. Vacant spaces are readily identified, while Employees moves and changes in employee office assignments are planned and performed with minimal loss of productivity.

Space utilization maps to facilitate planning

The screenshot shows the zLinkFM V10.0.0 interface. The main window displays a floor plan with a color-coded space utilization map. A legend on the right side, titled 'Space Key', lists various room numbers and their corresponding colors. Below the map, a table provides a key for the colors used in the drawing.

Color	Department	Space Key
White	Administration	1004-10
Light Blue	Executive Office	1004-34
Red	Facilities Management	1100-40
Yellow	Human Resources	201-00
Green	Information Technology	1000-11
Light Green	Logistics	802-21
Dark Green	Medical Access/Exam Center	201-87
Blue	Medical Office	800-85
Purple	Office Inspector Group	201-20
Light Purple	Pharmacy	3001-31
Dark Purple	Pharmacy - (Sub)	3100-44
Light Green	Pharmacy Benefits Management	121-34
Light Blue	Pharmacy Imaging	121-35
Light Green	IT - Floor Common	101-03-34

Authorized users can perform the following business processes:

- Space Planning
- Capacity Planning and Forecasting
- Create and Maintain Space Classification and Occupancy Standards
- Occupancy Density and Analysis
- Space Assignments to Departments, Divisions, and organizational units
- Space Assignments for Employees (e.g., New Hires, transfers, consolidations and departmental moves)
- Space Reporting and Analytic reports for cost planning and charge backs
- Employee Moves Planning and Execution (Single Employee or Departmental)
- Maintenance of Employee Locations and Data

Space Planners can quickly compute the Occupancy Density and compare it against predefined Capacity limits. The Space Planner or Financial Analyst set a procedure to extract or view in real time Occupancy data, based on criteria such as Employees Classification, Occupancy Density by Department or Organization for a building or Real Estate Portfolio, related costs, compare the results against historical data and defined plans. Forecasting is matter of creating long term plans and entering the data. The information can be extracted from a portfolio of buildings and facilities and automatically updated as part of executive Planning Report (e.g., Dashboard of Key Performance Indicators).

- Space ▾
- Trend Analysis ▲
- Snapshots
- Chargeable Area
- Usable Area
- Cost
- Space Functions
- Search ▾

Select Period Report

History

ABC Inc.

Trend Analysis: Space Functions

Trend Period: 01 Jan 2015 to 01 Feb 2017 11 Jul 2019 8:43 AM Page 1 of 3

Sl.No.	Space Function	Start Date Gross Area (Sq. Ft.)	Distr. (%)	End Date Gross Area (Sq. Ft.)	Distr. (%)	Average Gross Area (Sq. Ft.)	Distr. (%)
1	A/V Equipment	64.56	0.02	64.56	0.02	64.56	0.02
2	Administrative	8,820.08	2.49	8,820.08	2.49	8,820.08	2.49
3	Break Room	596.61	0.17	596.61	0.17	596.61	0.17
4	Cardboard Compacting	1,619.93	0.46	1,619.93	0.46	1,619.93	0.46
5	Closet	340.60	0.1	340.60	0.1	340.60	0.1
6	Cold Pack Area	1,888.12	0.53	1,888.12	0.53	1,888.12	0.53
7	Computer Equipment	9,221.25	2.6	9,221.25	2.6	9,221.25	2.6
8	Conference Room	2,718.27	0.77	2,718.27	0.77	2,718.27	0.77
9	Contractor	96.00	0.03	96.00	0.03	96.00	0.03
10	Control Room	4,070.63	1.15	4,070.63	1.15	4,070.63	1.15
11	Controlled Substances Area	2,727.33	0.77	2,727.33	0.77	2,727.33	0.77
12	Corridor	29,928.66	8.44	29,928.66	8.44	29,928.66	8.44
13	Director's Office	1,644.73	0.46	1,644.73	0.46	1,644.73	0.46

Report creation and formatting using Boolean conditions for search and data selection / presentation and totals.

Custom Report

Filter Field Order Preview Save As Save

Field Name	Selected	Value
Floor Finish	<input type="checkbox"/>	1.5
Free Seats	<input checked="" type="checkbox"/>	1.5
Gross Area	<input type="checkbox"/>	1.5
Gross Area Cost	<input type="checkbox"/>	1.5
Hazardous Area?	<input type="checkbox"/>	1.5
Occupied Seats	<input type="checkbox"/>	1.5
Rate	<input type="checkbox"/>	1.5
Rate Code	<input type="checkbox"/>	1.5
Room Description	<input type="checkbox"/>	1.5
Room No.	<input checked="" type="checkbox"/>	1.5
Seating Capacity	<input type="checkbox"/>	1.5
Section	<input type="checkbox"/>	1.5
Section (Short)	<input type="checkbox"/>	1.5
Site	<input checked="" type="checkbox"/>	1.5
Space Category	<input checked="" type="checkbox"/>	1.5
Space Function	<input checked="" type="checkbox"/>	1.5
Space Key	<input checked="" type="checkbox"/>	1.5
Space Standard	<input checked="" type="checkbox"/>	1.5

Filter

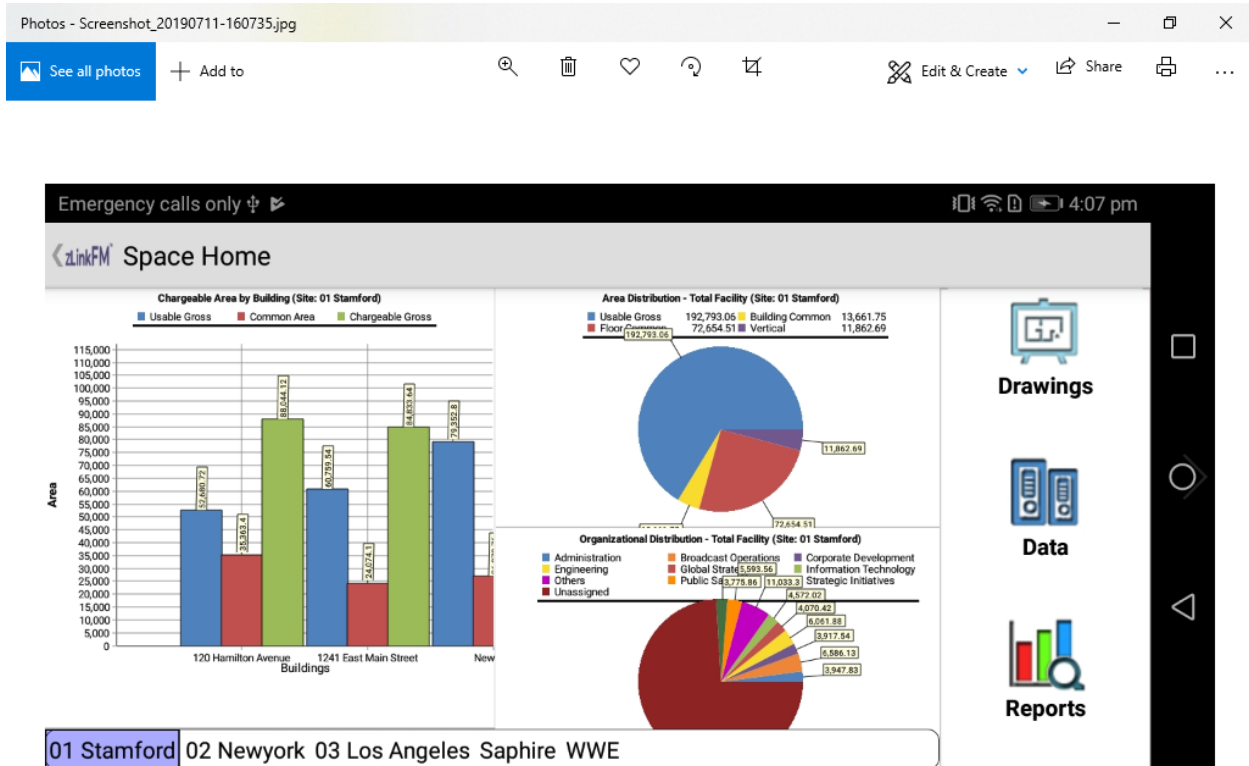
Query Builder

Query Builder Output:
(Site Equal to New York AND Space Category Equal to 01- Usable)

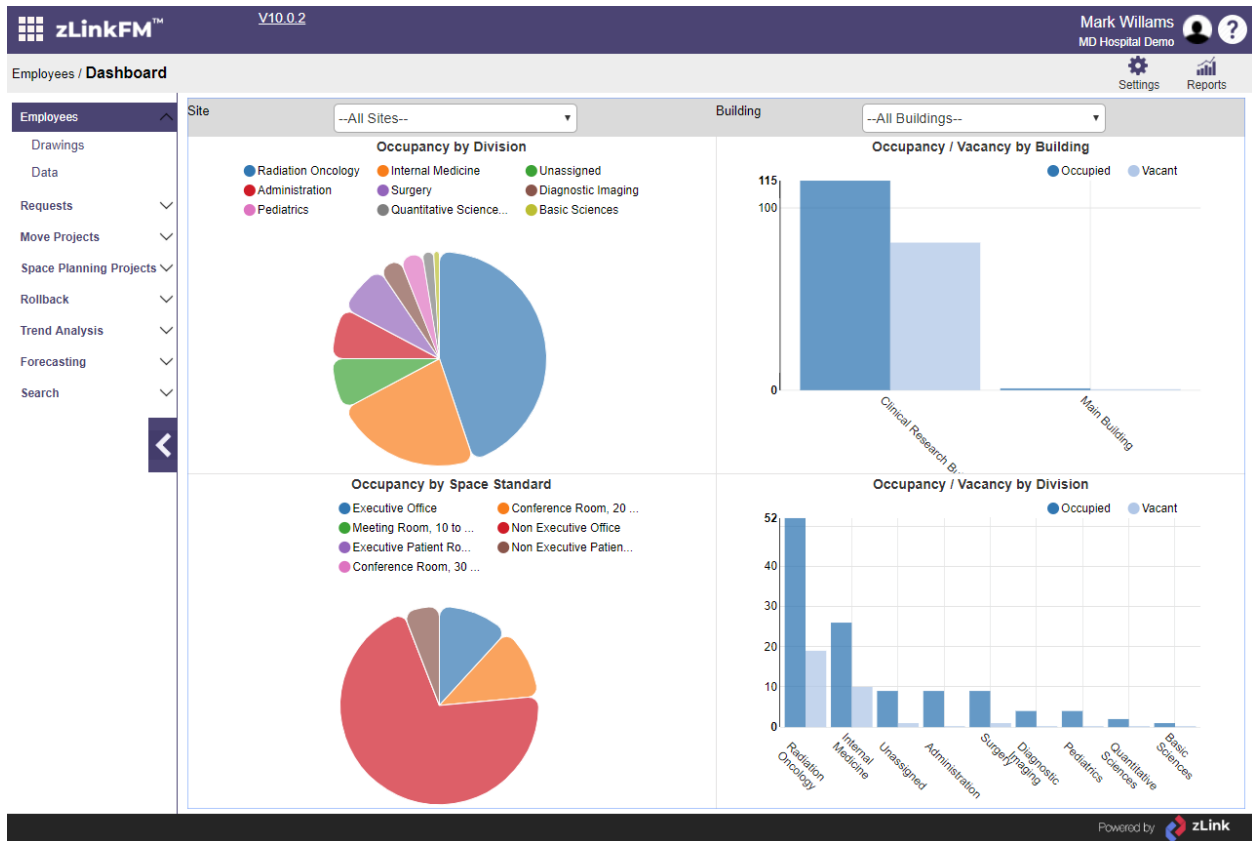
Operator: AND

Field Name *	Condition *	Value *
Site	Equal to	New York
Space Category	Equal to	01- Usable

Mobile capabilities for Android & iOS – Dashboard Display of Space Utilization



Dashboard - Space Utilization (Occupancy by Division) and Occupancy of Offices by Job Grade



Dashboard creation and formatting using Boolean conditions for search and data selection / presentation and totals.

The screenshot displays the zLinkFM V10.0.2 interface. The main content area shows a report titled "Gross Area Organizational Distribution" for "MD Hospital Demo" on "11 Jul 2019 8:48 AM". The report is a table with the following data:

St.No.	Division	Department	Usable Gross (Sq.Ft)	Common (Sq.Ft)	Chargeable Gross (Sq.Ft)
1	Administration		16,523.41	5,208.29	21,731.70
2	Anesthesiology & Critical Care		5,798.93	1,963.12	7,762.05
3	Basic Sciences		2,436.89	761.98	3,198.87
4	Basic Sciences	Biochemistry and Molecular Biology	703.04	206.90	909.94
5	Basic Sciences	Cancer Biology	8,305.79	2,811.78	11,117.57
6	Basic Sciences	Genetics	764.63	225.03	989.66
7	Cancer Medicine		9,517.54	2,368.61	11,886.15
8	Cancer Medicine	Breast Medical Oncology	550.21	186.43	736.64
9	Cancer Medicine	Gastrointestinal (GI) Medical Oncology	168.84	57.21	226.05
10	Cancer Medicine	Leukemia	7,831.90	2,651.35	10,483.25
11	Cancer Prevention & Population Sciences		6,138.92	2,029.71	8,168.63
12	Diagnostic Imaging		2,640.57	819.37	3,459.94
13	Diagnostic Imaging	Cancer Systems Imaging	1,043.59	353.29	1,396.88
14	Diagnostic Imaging	Diagnostic Radiology	1,516.92	513.53	2,030.45
15	Internal Medicine		3,680.42	1,215.55	4,895.97
16	Internal Medicine	Cardiology	4,646.35	1,412.72	6,059.07

- **Sustainability/Energy Management** – provides for the capture and integration of sub-metering of consumables such as power, oil and natural gas, water for chillers and medical gas by major components of a facilities / building.

zLinkFM™ enables the real-time connection between “as-built” floor plans and sub-metering technology to provide visualization and measurement of energy and other resource consumption patterns inside a facility. The energy and sustainability capability supports management in ensuring that consumption of energy, fuels, and water by a facility is consistent with the business practices and requirements to reduce operating costs. It provides a capability to measure, analyze, and invest in systems to reduce consumption and improve LED Footprint.

- **Telecom** – enables the creation of detail drawings depicting the facility’s data and voice grid, as well as the specifications regarding to telecom grid and its components (e.g., capacity, routers, jacks, modems, switches, etc.).
- **Work Order** – used to manage defined work tasks for Preventive and Facilities Maintenance, as well as Projects and Employee Moves (e.g., to schedule and perform moves of furniture and files, change telephone extensions and IT assets, prepare and clean designated rooms, emails, etc.).

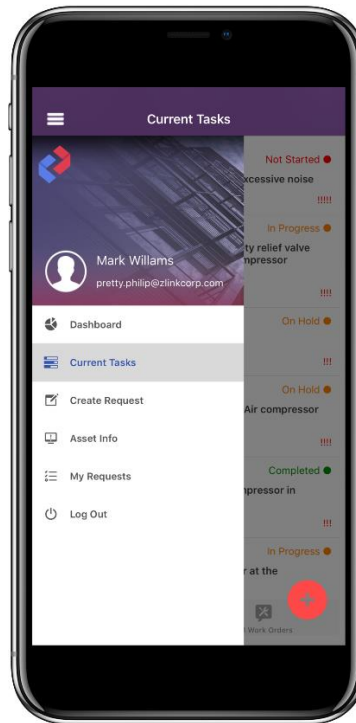
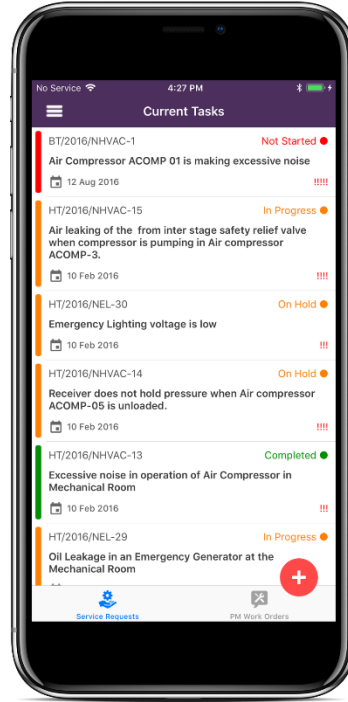
Work Orders may incorporate Workflows that adapt processes to the business functions; depending on the end user needs, work-flows define specific “actions” and “alerts” across the organization and direct individuals on “how to proceed” in performing their related assignment.

All Work Orders for Preventive Maintenance or other repeatable work tasks are automatically scheduled and their performance status automatically reported. All repeatable Work Orders are created once and reused across the Annual Schedule (e.g., Weekly, Monthly, Quarterly and Annually) and linked to technical specifications and instructions on how to perform the defined work. Staff and responsible Manager can be assigned to Work Orders and accordingly performance is tracked and status reported. Additional information can be incorporated into the Work Orders such as “materials and costs, labor hours and charge back costs”, and subsequently used to update financial systems.



- ***Task Manager*** – enables all members of an organization, business enterprise staff to submit Service Requests from Facilities Maintenance, IT and other organizations and track its fulfillment / status. Once a Service Request is created, the receiving organizations assign appropriate staff, schedule required work and track status as work is performed and reported by the staff assigned the work task relating to the Service Request.

The Task Manager component is essential in organizations with distributed facilities and large user base of corporate services such as maintenance, security, moves etc. Universities are a prime example of organizations where the Task Manager can significantly alleviate backlog of service request and reduce administration costs in managing the related process. The following are sample screenshots of the Task Manager.



- **Preferences** – it enables each user to customize the system I/O GUI forms to fit their preferred viewing background color settings, CAD layers and data.
- **Web Services** - it is the software component that zLinkFM™ uses to enable real-time connectivity of internal functions with other third party systems interfacing or interoperate with

zLinkFM™. It is part of the implementation and set-up process. Web-Services provides an extensive capability for broad information exchange with all internal corporate legacy and external systems. It is designed to support interoperable machine-to-machine interaction over a network. It has an interface described in a machine process-able format (specifically WSDL).

Other systems interact with the Web Services in a manner prescribed by its description using SOAP messages, typically conveyed using HTTP with an XML serialization in conjunction with other Web-related standards.

- **Reporting / Executive Summary / KPI Dash Boards** – zLinkFM™ incorporates an Active Reports Framework that enables users to quickly define the data and report formats they need. It supports export of data to XLSX, PDF, RFT, DWG, TXT etc. Any type of files can be kept in the system as attachments and can be accessed and viewed by the user using the system's web-based I/O GUI functions. All IWMS users can use Active Reports Framework to define the reports they need for Performance Tracking and Business Analytics, and general add-hock reporting.

Standard and unique Dashboards are created by defining the data sets which are considered to provide meaningful summary of Key Performance Indicators (KPI) as to the range of work tasks whose performance / status measures specific business functions / organization Performance over a time period – for example:

- Maintenance KPI may be the “Work Orders Competed vs. Planned in a Time Period.”
- Space Management KPI may be “Total Space Assignment by Organization”, Occupancy Trend Analysis.
- Sustainability KPI may be “Quarterly Volume and Cost of Consumables” and Vs. “Prior Year Quarter.”

The Dashboard display can be adjusted to support end-user preferences. The following display shows the system I/O forms that a user will use to select and format output data in a report to address specific needs at any time.

Report Creation and Formatting using Boolean conditions

zLinkFM™ V10.0.2 Mark Williams ABC Inc. Settings Reports Logbook

Settings / Space / General Settings

Filter

Query Builder

Query Builder Output:
(Site Equal to New York AND Space Category Equal to 01- Usable)

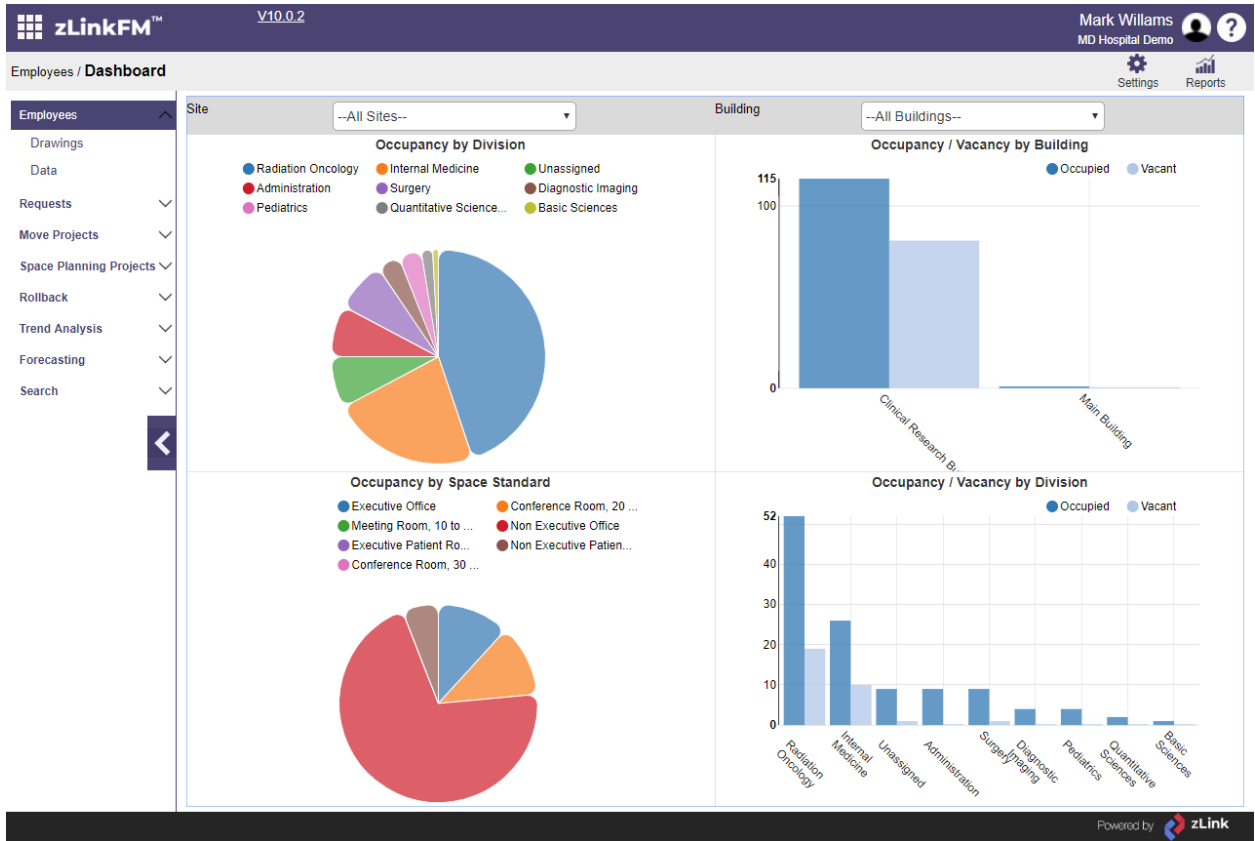
Add Condition Add Group

Operator
AND

Field Name *	Condition *	Value *
Site	Equal to	New York
Space Category	Equal to	01- Usable

Powered by zLink

Space Utilization – Occupancy by Division / Space Standard / Vacancy



ARTICLE V - CERTIFICATION STATEMENT FOR INDEPENDENT CONTRACTOR

(Contractor completes if Contractor is not a corporation or is a Professional Corporation)

Contractor certifies he/she is independent as defined in Oregon Revised Statutes 670.600 and meets the following standards that the Contractor is:

1. Free from direction and control, beyond the right of the County to specify the desired result; **AND**
2. Are licensed if licensure is required for the services; **AND**
3. Are responsible for other licenses or certificates necessary to provide the services **AND**
4. Are customarily engaged in an “independently established business.”

To qualify under the law, an “independently established business” must meet three (3) out of the following five (5) criteria. **Check as applicable:**

- _____ A. Maintains a business location that is: (a) Separate from the business or work of the County; or (b) that is in a portion of their own residence that is used primarily for business.
- _____ B. Bears the risk of loss, shown by factors such as: (a) Entering into fixed price contracts; (b) Being required to correct defective Services; (c) Warranting the services provided; or (d) Negotiating indemnification agreements or purchasing liability insurance, performance bonds, or s and omissions insurance.
- _____ C. Provides contracted services for two or more different persons within a 12-month period, or routinely engages in business advertising, solicitation or other marketing efforts reasonably calculated to obtain new contracts to provide similar services.
- _____ D. Makes significant investment in the business through means such as: (a) Purchasing tools or equipment necessary to provide the services; (b) Paying for the premises or facilities where the services are provided; or (c) Paying for licenses, certificates or specialized training required to provide the services.
- _____ E. Has the authority to hire and fire other persons to provide assistance in performing the services.

Additional provisions:

1. A person who files tax returns with a Schedule F and also performs agricultural services reportable on a Schedule C is not required to meet the independently established business requirements.
2. Establishing a business entity such as a corporation or limited liability company, does not, by itself, establish that the individual providing services will be considered an independent contractor.



ARTICLE VI – SIGNATURES

MERGER. THIS CONTRACT CONSTITUTES THE ENTIRE AGREEMENT BETWEEN THE PARTIES WITH RESPECT TO THE SUBJECT MATTER REFERENCED THEREIN. THERE ARE NO UNDERSTANDINGS, AGREEMENTS, OR REPRESENTATIONS, ORAL OR WRITTEN, NOT SPECIFIED HEREIN REGARDING THIS CONTRACT. NO AMENDMENT, CONSENT, OR WAIVER OF TERMS OF THIS CONTRACT SHALL BIND EITHER PARTY UNLESS IN WRITING AND SIGNED BY ALL PARTIES. ANY SUCH AMENDMENT, CONSENT, OR WAIVER SHALL BE EFFECTIVE ONLY IN THE SPECIFIC INSTANCE AND FOR THE SPECIFIC PURPOSE GIVEN. CONTRACTOR, BY THE SIGNATURE HERETO OF ITS AUTHORIZED REPRESENTATIVE, IS AN INDEPENDENT CONTRACTOR, ACKNOWLEDGES HAVING READ AND UNDERSTOOD THIS CONTRACT, AND CONTRACTOR AGREES TO BE BOUND BY ITS TERMS AND CONDITIONS.

By their signatures below, the parties to this Contract agree to the terms, conditions, and content expressed herein.

zLink, Inc.


Clackamas County Board of Commissioners

	<u>12/23/2019</u>		
Authorized Signature	Date	Chair	Date

Anupam Sachdev CEO
Name / Title (Printed)

Approved as to Form:

1463173-91
Oregon Business Registry #

	<u>03/03/2020</u>
County Counsel	Date

S Corporation MA
Entity Type / State of Formation



Elizabeth Comfort
Finance Director, Interim

Department of Finance

Public Services Building
2051 Kaen Road, Suite 490 | Oregon City, OR 97045

March 19, 2020

Board of County Commissioners
Clackamas County

Members of the Board:

**A Resolution Acknowledging Expenditures in Excess of Appropriations for Fiscal Year 2019 and Describing
Corrective Action in Accordance with ORS 297.466**

Purpose/Outcome	Acknowledgement of expenditures in excess of appropriations that occurred in Fiscal Year 2019 and description of the corrective action that will be implemented.
Dollar Amount and fiscal Impact	The dollar amount of each over expenditure is reported in the Comprehensive Annual Financial Report (CAFR) as part of the Notes to the Basic Financial Statements (Exhibit A).
Funding Source	Varies
Safety Impact	N/A
Duration	Audits are filed annually. Corrective action to be implemented will be permanent.
Previous Board Action/Review	N/A
Counsel Review	Reviewed and approved by County Counsel on March 9, 2020
Contact Person	Christa Bosserman-Wolfe, Deputy Finance Director, 503-742-5407
Contract No.	N/A

BACKGROUND:

As part of the annual audit each year, the County's external audit firm reports on compliance with various Oregon statutes. One of these requirements is to report upon compliance with Local Budget Law. Expenditures in excess of authorized appropriations are reported in the CAFR by fund. Detail of this can be found in the CAFR as part of the Notes to the Basic Financial Statements, as well as in the Auditor's Report on Compliance with Oregon Minimum Standards. For the full 2019 CAFR, please visit: <https://www.clackamas.us/finance/financearchive.html>.

ORS 297.466 requires within 30 days after filing an annual report with the Secretary of State that the governing body file with the Secretary of State and a plan of action adopted for addressing any deficiencies noted in the audit report. The resolution is to formally acknowledge the over expenditures and describes the corrective actions implemented. Corrective action is commencing now and will continue into the future on a quarterly schedule.

This Resolution has been reviewed and approved by County Counsel.

RECOMMENDATION:

Staff respectfully recommends the Board of Clackamas County approve this resolution acknowledging expenditures in excess of appropriations for fiscal year 2019 and describing corrective action in accordance with ORS 297.466.

Respectfully submitted,

Elizabeth Comfort, Interim Finance Director

**BEFORE THE BOARD OF COUNTY COMMISSIONERS
OF CLACKAMAS COUNTY, STATE OF OREGON**

A Resolution Acknowledging Expenditures
in Excess of Appropriations for Fiscal Year
2019 and Describing Corrective Action in
Accordance with ORS 297.466

RESOLUTION NO.

Page 1 of 1

Whereas, Clackamas County’s Comprehensive Annual Financial Report “(CAFR)” for the fiscal year ending June 30, 2019 reports expenditures in excess of appropriations; and

Whereas, Oregon Local Budget Law does not allow the expenditure of monies beyond the legal appropriation authority; and

Whereas, ORS 297.466(2) requires the governing body of Clackamas County to determine measures considered necessary for corrective actions and a period of time estimated to complete them; and

Whereas, ORS 297.466(3) requires Clackamas County to submit an adopted resolution of corrective measures to the Secretary of State’s Office within 30 days from the submission of Clackamas County’s CAFR to the Secretary of State; and

NOW, THEREFORE, BE IT RESOLVED that in order to ensure current and future compliance with the Oregon Local Budget Law, all Clackamas County Departments will perform a quarterly analysis to review and evaluate expenditures incurred to date compared to the total final adopted budget. Any over-expenditure will be further analyzed, discussed with the Department of Finance’s Budget Office, County Administration, and evaluated for further corrective measures.

NOW, THEREFORE, BE IT RESOLVED that in order to ensure current and future compliance with the Oregon Local Budget Law, and to create additional internal controls for compliance with the same, Clackamas County will implement the quarterly analysis procedures outlined above, by the summer of 2020.

Dated this 19th day of March, 2020.

BOARD OF COUNTY COMMISSIONERS

Chair

Recording Secretary

CLACKAMAS COUNTY, OREGON
NOTES TO BASIC FINANCIAL STATEMENTS (Continued)
YEAR ENDED JUNE 30, 2019

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

New Accounting Pronouncements

During the fiscal year ended June 30, 2019, the County implemented the following GASB pronouncements:

GASB Statement No. 83 – Certain Asset Retirement Obligations. This Statement addresses accounting and financial reporting for certain asset retirement obligations (AROs). An ARO is a legally enforceable liability associated with the retirement of a tangible capital asset. A government that has legal obligations to perform future asset retirement activities related to its tangible capital assets should recognize a liability based on the guidance in this Statement.

GASB Statement No. 88 – Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements. The primary objective of this Statement is to improve the information that is disclosed in notes to government financial statements related to debt, including direct borrowings and direct placements. It also clarifies which liabilities governments should include when disclosing information related to debt.

This Statement defines debt for purposes of disclosure in notes to financial statements as a liability that arises from a contractual obligation to pay cash (or other assets that may be used in lieu of cash) in one or more payments to settle an amount that is fixed at the date the contractual obligation is established. This Statement requires that additional essential information related to debt be disclosed in notes to financial statements, including unused lines of credit; assets pledged as collateral for the debt; and terms specified in debt agreements related to significant events of default with finance-related consequences, significant termination events with finance-related consequences, and significant subjective acceleration clauses.

GASB Statements No. 84, 87, 89, 90, and 91 – These are other pronouncements that have been issued by the GASB and are not required to be implemented until a future year. These pronouncements have not been early implemented by the County.

2. STEWARDSHIP, COMPLIANCE, AND ACCOUNTABILITY

Budgetary Information

Annual budgets are adopted on a basis consistent with ORS 294 – Local Budget Law and accounting principles generally accepted in the United States of America. All annual appropriations lapse at fiscal year-end.

CLACKAMAS COUNTY, OREGON
NOTES TO BASIC FINANCIAL STATEMENTS (Continued)
YEAR ENDED JUNE 30, 2019

2. STEWARDSHIP, COMPLIANCE, AND ACCOUNTABILITY (Continued)

Budgetary Information (Continued)

The following funds had excess expenditures over appropriations for the fiscal year-end:

<u>Fund</u>	<u>Amount</u>
General Fund	
County Administration	\$ 30,446
Sheriff Fund	
Public Protection	132,069
Community Development Fund	
Economic Development	373,904
Behavioral Health Fund	
Special Payments	62,013
Clackamas Broadband Utility Fund	
Special Payments	8,581

Deficit Fund Balances/Net Position

The following funds had a deficit fund balance at year-end due to accruals for vacation leave, net pension liability, and OPEB. These are not a violation of state laws.

<u>Fund</u>	<u>Amount</u>
Internal Service Funds:	
Records Management Fund	\$ (92,781)
Facilities Management Fund	(1,190,310)
Central Dispatch Fund	(2,177,561)

3. CASH AND INVESTMENTS

Cash and investments are comprised of the following:

Deposits with financial institutions:	
Demand deposits	\$ 29,361,916
Money market	89,044,642
Investments with US Agencies	194,240,763
Investments with time/interest bearing deposits	6,235,548
Investments with LGIP	138,898,828
	<u>\$ 457,781,697</u>