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LAURA M. TOY, Vice President
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SCOTT BAHR, Vice Chair
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33000 CIVIC CENTER DRIVE
LIVONIA, MICHIGAN 48154-3097
(734) 466-2250
citycouncil@livonia.gov

OFFICE OF THE COUNCIL

CAPITAL OUTLAY AND INFRASTRUCTURE COMMITTEE MEETING
WEDNESDAY, MARCH 1, 2023
7:00 P.M.

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The official documents are on file in the City Clerk's office.

CAPITAL OUTLAY AND INFRASTRUCTURE COMMITTEE
Wednesday, March 1, 2023
7:00 PM

Location:
Livonia City Hall, Council Chambers, 2nd floor
33000 Civic Center Drive
Livonia, MI 48154

Members:
Brandon McCullough, Chair
Scott Bahr, Vice Chair
Kathleen McIntyre, Member

AGENDA ITEM(S)

1. **CR 02-23** Subject matter of the 2022 Facility Condition Assessment and Space Needs Assessment.

2. **CR 48-23** Subject matter of the construction administration services for the Building Controls System Upgrade Project.

AUDIENCE COMMUNICATION

THE FOLLOWING HAVE BEEN NOTIFIED AND ARE REQUESTED TO ATTEND:

Maureen Miller Brosnan, Mayor
Paul Bernier, City Attorney
Jacob Rushlow, Assistant Superintendent of DPW
Sammy Lovin, Facilities Maintenance Supervisor
Andy Fountain, Plane Moran Cresa

THIS IS AN OPEN MEETING AND
ALL INTERESTED PARTIES ARE WELCOME TO ATTEND.

This meeting will be reported out at the **Regular Meeting of March 13, 2023**

Minutes of this meeting will be available for public inspection in the City Clerk's Office not more than eight business days following the date of the meeting.

SUSAN M. NASH, CITY CLERK

In accordance with Title II of the American with Disabilities Act as it pertains to access to Public Meetings, the City Clerk's Office of the City of Livonia, upon adequate notice, will make reasonable accommodations for persons with special needs. Please call (734) 466-2236 or email clerk@livonia.gov if you need assistance. **Council agendas are available on the City's website – www.livonia.gov - under Government, City Council, Agendas.**

LETTER TO THE LIVONIA CITY COUNCIL

1.

Council Office
January 23, 2023

MEETING DATE	PREPARED BY
COI030123/R031323	Sara Kasprowicz, Council Office Manager,

AGENDA ITEM

CR 02-23 Subject matter of the 2022 Facility Condition Assessment and Space Needs Assessment.

BACKGROUND

#002-23 RESOLVED, that upon the motion by Councilmember Brandon McCullough, seconded by Councilmember Rob Donovic, at the Regular Meeting held January 18, 2023, the Council does hereby refer the “2022 Facility Condition Assessment and Space Needs Assessment” to the Capital Outlay and Infrastructure Committee for further discussion.

RECOMMENDATION

To discuss item as presented.

FISCAL CONSIDERATION

ATTACHMENTS

1. R011823 Subject matter of Space Needs Assessment to COI CR 02-23
2. R021622 Approval of engineering svcs for Space Needs Assess and Cap Planning CR 51-22
3. 20221119_COL_FCA and SNA_Preliminary Findings-FINAL
4. 20221119_COL_Facility Condition Assessment-FINAL
5. 20221119_COL_Space Needs Assessment-FINAL

APPROVED BY

On a motion by Councilmember McCullough, supported by Councilmember Donovic and unanimously adopted, it was:

#002-23 RESOLVED, that upon the motion by Councilmember Brandon McCullough, seconded by Councilmember Rob Donovic, at the Regular Meeting held January 18, 2023, the Council does hereby refer the "2022 Facility Condition Assessment and Space Needs Assessment" to the Capital Outlay and Infrastructure Committee for further discussion.

ITEM REQUESTED BY COUNCIL (Regular Meeting of January 18, 2023)

Motion:	**McCullough**
Second:	**Donovic**
Ayes:	**Bahr, Donovic, Morgan, McCullough, McIntyre, Jolly**
Nays:	**None**
Absent:	**Toy**

On a motion by McCullough, seconded by Donovic, and unanimously adopted, it was:

#51-22 RESOLVED, that having considered the report and recommendation of the Assistant Director of Public Works, dated January 21, 2022, which bears the signatures of the Director of Public Works and the Director of Finance, and is approved for submission by the Mayor, to which is attached a proposed agreement between the City of Livonia and Plante Moran Cresa, LLC, 3000 Town Center, Suite 100, Southfield, MI 48075 to provide professional Space Needs Assessments and Capital Planning services, the Council does hereby authorize the Mayor and City Clerk, for and on behalf of the City of Livonia, to execute the attached agreement between the City of Livonia and Plante Moran Cresa, LLC, 3000 Town Center, Suite 100, Southfield, MI 48075, subject to approval as to form and substance by the Department of Law, to provide professional Space Needs Assessments and Capital Planning services in an amount not to exceed $120,000.00; FURTHER, the Council does hereby authorize an expenditure in an amount not to exceed $120,000.00 from funds budgeted in Account No. 418-000-813-000 (Building Improvement Fund–Professional Services) for this purpose.

UNFINISHED BUSINESS ITEM 17 (Regular Meeting of February 16,2022)

Motion by:	**McCullough**
Seconded by:	**Donovic**
ROLL CALL:	
Ayes:	**Morgan, McCullough, McIntyre, Toy*, Bahr, Donovic, Jolly**
Nays:	**None**
Absent:	**None**

Meeting was called to order at 8:00 p.m. by President Jim Jolly. Present: Rob Donovic, Scott Morgan, Brandon McCullough, Kathleen McIntyre, Scott Bahr and President Jim Jolly. Absent: Vice President Laura Toy

12. AWARD OF CONTRACT: Department of Public Works; re: with Plante Moran Cresa, LLC, to provide professional engineering services for Space Needs Assessments and Capital Planning; from budgeted funds.

    Dave Varga, Chief of Staff, presented the request to Council. He explained that this assessment was something that Council and the Community have asked for and was identified in the Livonia 21 Master Plan. They have met with officials from Livonia Public Schools, sharing key role that Plante Moran Cresa (PMC) played in developing their facilities. Brandon McCullough asked if this was procured or if PMC is on a rotating list of companies that offer professional services. Jacob Rushlow, Assistant Director of Public Works, responded that PMC is not currently and will be addressed later in the presentation. Rob Donovic noted the list of different capital planning services, asking if the buildings were in chronological order. Jacob stated the buildings are listed to identify all of the buildings. They are not in chronological order; they will be done at the same time.

    Scott Bahr noted this was discussed at length during the budget process last year. He referred to the buildings previously spoken about, noting that each Department Heads at each building will have a handle on what the needs of the buildings are. He asked to differentiate what is being done here from the normal activity. Jacob stated PMC would perform a needs assessment for space in each building, assess how Department Heads and key staff work within their facility and assess the condition of each building. This will create a life cycle analysis of the needs for each building. Jacob stated that recommendations to prioritize improvements will be provided in the report for each building along with budget considerations. Jacob introduced PMC to the podium.

    Andrew Fountain, 5938 Oakland Valley Drive, Oakland Township, provided background information on working with the school district, along with neighboring communities. Brandon McCullough referred to the Capital Improvement Plan, asking if it was part of Phase 1 or Phase 2. Andrew responded that the Space Needs Assessment and the Capital Improvement Plan are both in Phase 1. Brandon asked if what was under the due diligence were not included. Andrew stated that after reviewing historical information, if there were services that require any of those items, they would make recommendations to enter a contract to procure those services. Brandon asked if they would be making recommendations on new construction. Andrew responded that recommendations would be provided for each facility. Brandon asked upon approval, they are looking at three months. Andrew

clarified with a duration of four months.

Rob Donovic referred to Phase 2 services not having fees and questioned if this was the normal process. Andrew responded that the results from Phase 1 analysis will drive the scope of Phase 2. If the City wanted to activate Phase 2 services, they would create a fee and scope that matches Phase 1. Scott Bahr offered an approve resolution for the Consent agenda. Brandon McCullough asked about the procurement of this project, as he referred to earlier on this item. Jacob Rushlow responded that PMC services are a unique combination of services that they won't be able to find under roof, it would be a combination of different companies. Brandon stated that he is on the fence about not procuring the services and would like this item to be on the Regular agenda.

Jim Jolly stated that PMC provided work for the building of the new courthouse approximately ten (10) years ago and would like to hear about our experience in working with them. He noted that Mike Slater, Finance Director was there and could give detail on that project. Mike Slater agreed that PMC was the advisor on the new district court. He stated they provided excellent service on the project; they were on time and within budget. His experience was very favorable. He spoke that in the Finance ordinance, one of the exceptions for waiving sealed bids is the procurement of professional services. This is an existing exemption that Council has the opportunity to use for the procurement of this type of service.

DIRECTION: APPROVING REGULAR

LETTER TO THE LIVONIA CITY COUNCIL

17.

DPW
February 1, 2022

MEETING DATE	PREPARED BY
Study Meeting of January 31, 2022	Lori Miller, Deputy City Clerk,

AGENDA ITEM

AWARD OF CONTRACT: Department of Public Works; re: with Plante Moran Cresa, LLC, to provide professional engineering services for Space Needs Assessments and Capital Planning; from budgeted funds.

BACKGROUND

Over the past few months, the DPW, Planning & Economic Development, Parks & Recreation, Inspection, Finance, and the Mayor's Office have been collaborating with the goal of continued progress toward priorities set by the community in the Livonia Vision 21 master plan. With a focus on the Civic Center campus, the team realized the first step towards responsible capital planning for facility improvements begins with knowing what you have and how it's being used. A space needs assessment is proposed to be conducted for multiple building facilities including city hall, police and fire, library, senior center, rec center, housing, and community transit. This assessment will analyze available building space, utilization, capacity, departmental operations, and future objectives. Recommendations to prioritize improvement opportunities will be provided for each along with associated budget considerations. With the assessment complete, a capital improvement plan will be developed that will categorize the areas of need by critical, deferred maintenance, and enhancement in alignment with funding availability.

In order to assist the City with this endeavor, we have conferred with team members from Plante Moran Cresa (PMC). We believe that PMC can offer a unique combination of services not found by any other single planning firm in Southeast Michigan. Their approach to real estate consulting and program management services will truly guide the City with strategic, financial, and mission-driven decisions during capital project planning. They come with vast experience in relevant public/governmental sectors, including providing ongoing services as program manager for the Livonia Public Schools since 2012.

The detailed proposal and scope of services from PMC is attached.

RECOMMENDATION

It is respectfully requested that City council authorize the Mayor and City Clerk to execute an agreement for professional services with Plante Moran Cresa, LLC, 3000 Town Center, Suite 100, Southfield, MI 48075 for Space Needs and Capital Planning for an amount not to exceed $120,000.00 from budgeted funds.

FISCAL CONSIDERATION

Budgeted funds in the amount of $120,000.00 are available in account no. 418-000-813-000, Building Improvement Fund – Professional Services.

ATTACHMENTS

1. Plante Moran - Capital Planning and Space Needs Assessment EL 011822
2. Plante Moran - Cover letter

APPROVED BY



Date: January 21, 2022

Jacob Rushlow, P.E., Assistant Director of Public Works



Date: January 21, 2022

Donald Rohraff, Director of Public Works



Date: January 21, 2022

Michael Slater, Finance Director



Date: January 21, 2022

Maureen Miller Brosnan, Mayor

plante moran cresa
Real Estate Consultants

Plante Moran Cresa, LLC
3000 Town Center, Suite 100
Southfield, MI 48075
Tel: 248.223.3500 | Fax: 248.223.3150
pmcresa.com

January 18, 2022

VIA EMAIL TO: jrushlow@livonia.gov

Mr. Jacob Rushlow, P.E.
Assistant Director or Public Works
City of Livonia
12973 Farmington Rd.
Livonia, MI 48150

RE: Proposal for Space Needs and Capital Planning Services For City of Livonia

Dear Mr. Rushlow:

Thank you for the opportunity to allow Plante & Moran Cresa, L.L.C. (**"PMC"**) to present this proposal to provide the Space Needs and Capital Planning Services outlined in this letter (the **"Services"**) to City of Livonia (**"COL"**). PMC agrees on behalf of itself and each of its employees that no such person or entity shall represent the products or services of any related architect, engineer, property owner, landlord, contractor, or vendor.

ENGAGEMENT

It is our understanding that the engagement generally will involve providing Phase 1 - Space Needs and Capital Planning services for the City of Livonia Civic Center (the **"Project"**). Following the completion of Phase 1 Services, this engagement may be amended, at COL's discretion, for PMC to provide Phase 2 Services set forth herein.

Phase 1 - Space Needs and Capital Planning Services to be provided by PMC for this engagement are more particularly described in the Scope of Services attached as Exhibit A (the **"Services"**) and will be performed subject to the Terms and Conditions attached as Exhibit B.

In preparing this proposal, PMC has made the following key assumptions regarding this engagement. These key assumptions have been relied upon by PMC in determining the required Scope of Services designated on Exhibit A, PMC's compensation for its Services, and the terms of this engagement:

Project Related Assumptions:

- The Project's anticipated duration is four (4) months
- The Services will include Capital Planning Services of the following locations:
    - Livonia City Hall – 33000 Civic Center Dr. Livonia MI 48154
    - Livonia Police Department – 15050 Farmington Rd. Livonia MI 48154
    - Livonia City Fire Department - 14910 Farmington Rd. Livonia MI 48154
    - Livonia Civic Center Library – 32777 Five Mile Rd. Livonia MI 48154
    - Livonia Civic Center Park Senior Center – 15218 Farmington Rd. MI 48154

  - Jack E. Kirksey Livonia Community Recreation Center – 15100 Hubbard St. Livonia MI 48154
  - Livonia Housing Commission – 10800 Farmington Rd. Livonia MI 48150
  - Livonia Community Transit – 15218 Farmington Rd. Livonia MI 48154
  - Carl Sandburg Library – 30100 W. Seven Mile Rd. Livonia MI 48152
  - Alfred Noble Branch Library – 32901 Plymouth Rd. Livonia MI 48150
- Any alternations, building additions, or new facilities shall be constructed of normal, durable, and readily available materials, as used in the construction of similar facilities
- COL will provide PMC with all available building and site drawings, previous reports, assessments, equipment/building repair, replacement information and any other pertinent information
- COL will provide a single point of contact that is authorized to make timely decisions on behalf of COL for the services
- The funding source for the Services will be determined by COL which will be communicated to PMC in writing along with any associated funding related requirements.
- Plante Moran Real Estate Investment Advisors, L.L.C (**"PMREIA"**) will provide Phase 2 services, upon authorization by COL, as a sub-consultant to PMC.
- The current and potential future impacts of COVID-19 to PMC's Services are unknown and difficult for PMC or COL to anticipate and plan for. If COVID-19, or other circumstances beyond PMC's control, impact PMC's ability to travel, conduct in-person or onsite activities, or otherwise deliver its Services, PMC and COL shall work together in good faith to mitigate the impacts to PMC's services and PMC shall not be deemed in breach of the agreement.

COMPENSATION

PMC will be compensated by COL for its Services in accordance with the payment terms in Exhibit B as follows:

> **Phase 1 Services - Fixed Fee -** COL shall pay PMC a fixed fee of One Hundred Twenty Thousand and Dollars and zero cents ($120,00000), payable in equal monthly installments of Thirty Thousand Dollars and zero cents ($30,000.00);
>
> **Phase 2 Services -** COL and PMC may amend this agreement for PMC to perform Phase 2 Services, upon authorization by COL. COL and PMC will work together to establish a mutually agreeable fee and duration for Phase 2 services.

ACCEPTANCE & TERM

To accept this proposal including the terms of this letter and Exhibits A and B attached hereto, please sign below and return it to me. Upon execution, this proposal (including Exhibits A and B) will become a binding agreement (the **"Agreement"**) between COL and PMC.

This Agreement is effective, and PMC's Services will commence as of the Agreement's execution. The term of the Agreement shall continue for four (4) months from the effective date of the Agreement. Should you have any questions please contact me at 248-603-5088.

Sincerely,
PLANTE & MORAN CRESA, L.L.C.

Greg VanKirk
Partner

Andy Fountain
Vice President

We accept this proposal, including Exhibits A and B attached hereto, which sets forth the entire Agreement between COL and PMC for the Services specified herein. We acknowledge that such acceptance creates a binding agreement between COL and PMC.

Accepted and Agreed:
CITY OF LIVONIA

_____ /_____
By: Mayor Maureen Miller Brosnan Date
Its: Mayor City of Livonia

_____ /_____
By: Ms. Susan M. Nash Date
Its: City Clerk

_____ /_____
By: Paul Bernier Date
Its: Legal Counsel

_____ /_____
By: Mr. Michael Slater Date
Its: Finance Department Head

Exhibit A
Scope of Services

Upon execution of PMC's proposal dated January 18, 2022, this Exhibit A shall be incorporated into the Agreement between Plante & Moran Cresa, L.L.C. (**"PMC"**) and City of Livonia (**"COL"**). PMC shall provide to COL, in accordance with the terms and conditions set forth in Exhibit B, its Services comprised of the following:

Phase 1: PMC shall provide Space Needs Assessment and Capital Planning Services to COL upon execution of the initial engagement. PMC's Space Needs Assessment and Capital Planning Services may be comprised of the following:

Space Needs Assessment Services:

1. **Review of Previous Reports:** Reviewing previous reports provided by COL relative to COL's facilities. PMC will meet with COL staff to identify all reliable sources of existing data such as facility inventory lists, plans, maps, studies, etc. If available, existing studies, reports, and plans will be provided to PMC for use in completing the scope of work.

2. **Determine Space Needs:** The activities constituting PMC's Space Needs services may be comprised of the following:

    I. Conduct tours of COL's facilities and associated sites;
    II. Assistance developing and distributing user/occupant surveys;
    III. Conducting clarification interviews;
    IV. Assisting in the development of workplace standards;
    V. Assisting in defining expansion and contraction requirements;
    VI. Assisting in identifying preferred adjacency requirements;
    VII. Assisting in defining parking and site requirements;
    VIII. Assisting in defining preferred amenities,
    IX. Assisting in determining centralized and decentralized (multiple locations) operation requirements;
    X. Assisting in incorporating current workplace trends; and
    XI. Assisting and advising COL in the review and refinement of space needs and workplace strategy.

3. **Utilization and Capacity Analysis:** Based on the findings from COL's site tour and space needs activities, create a utilization and capacity analysis with corresponding floor plans for COL's facilities illustrating current usage and capacities for COL's consideration.

4. **Preliminary Findings:** Presenting preliminary findings of PMC's Space Needs and Building Utilization and Capacity Analysis at two (2) meeting with COL administration to review department and operational goals and objectives in comparison to current utilization and capacity information, review and prioritize improvement opportunities identified, and finalize preliminary budget findings.

5. **Final Report:** Based on input from COL's administration relative to the preliminary findings and in review of department and operational goals and objectives, provide a final presentation and report to the COL administration, and to City Council at three (3) meetings.

Capital Planning Services:

1. **Capital Assessment:** PMC shall perform a cursory capital assessment through one or more site visits to the Project identified in PMC's proposal as well as review previous reports provided by the COL, and capital needs relative to demolition, renovation, and replacement of like-kind.
2. **Due Diligence:** Assisting COL in reviewing the existing due diligence information including:
    a. Environmental Phase I and Phase II
    b. Baseline environmental assessment
    c. Asbestos/Lead surveys or reports
    d. Survey (ALTA or similar)
    e. Geotechnical reports
    f. Other due diligence reasonably necessary for potential redevelopment or sale

    If due diligence documentation is not available, PMC will assist COL in hiring and coordinating the services of professionals to obtain this information.
3. **Benchmarking:** Conduct benchmarking of current and projected capital projects in relation to market conditions in the greater context of local, regional, and national trends with relation to repurpose, sale, or demolition of the facility/site.
4. **Review of Purchase (or Lease) Agreement:** Assisting COL and its legal counsel with reviewing the purchase (or lease) agreement, and advise on the terms and conditions regarding:
    a. Facility sale
    b. Purchase agreements
    c. Option agreements
    d. Development agreements
5. **Capital Planning Improvement Plan:** Meeting with COL's project committee, administration, andCity council to discuss facility and technology system improvement needs and generate an implementation strategy based on COL's goals and budget. PMC will assist COL in developing a Capital Planning Improvement Plan that will categorize the areas of need/goals by critical,deferred maintenance, and enhancement in alignment with funding opportunities. PMC will assist COL to review asset management programs to be utilized as a repository of findings for the Capital Planning Improvement Plan.
6. **Preliminary Findings:** Presenting preliminary findings of PMC's assessment and analysis at two (2) COL administration meetings to review goals and objectives in comparison to current and projected capital and operations and review and prioritize improvement opportunities identified in relation to preliminary budget findings.
7. **Final Report:** Based on input from COL administration relative to the preliminary findings and in review of goals and objectives, provide a final presentation and report to the COL administration,and if requested, at three (3) COL City council meetings.

Phase 2: COL and PMC may amend the Agreement for PMC to provide Phase 2 services. PMC shall have no obligation to provide Phase 2 Services unless and until the Agreement is amended accordingly. Phase

2 Services shall be performed by PMREIA as a sub-consultant to PMC. PMREIA's Phase 2 Services may be comprised of the following:

The following key assumptions have been made by PMREIA In preparing this scope of work, which have been relied upon by PMREIA in determining the Services, PMREIA's compensation, and the terms of this Agreement.

- COL will create a steering committee with whom PMREIA will work pursuant to the Scope of Services
- COL will provide key relevant information to PMRIEA including:
  - Title work
  - Survey
  - Topographic survey
  - Environmental Reports
  - Soils reports
  - Utility plans, incl. availability and capacity
  - Programming requirements for public spaces
  - Relevant planning studies for each site

Deliverables/Meetings: At the completion of this assignment, PMREIA will provide COL a final report to summarize findings, the analysis, and recommendations. During the completion of the below scope of work, PMREIA will meet a total of three (3) times with the City selected steering committee to provide them with updates and to obtain guidance. Additionally, PMREIA will attend a meeting with the City Council to discuss the report and its findings.

Highest & Best Use Analysis – PMREIA will perform a real estate analysis utilizing both previously collected and current data to assess the property:

i. Area Assessment - Conduct a thorough walk-through of the subject properties/land and surrounding area(s) to understand their physical characteristics and current market uses that will influence redevelopment.

ii. Due Diligence – Review of property due diligence reports to understand zoning, master planning, visibility/access, title /survey issues, utility capacity, wetlands/woodlands, traffic counts, eligibility for incentives and environmental (as reports are available). To supplement the aforementioned, interviews with City engineering, planning, and zoning personnel will be conducted as warranted.

iii. Market Analysis – Assess current market conditions, trends, and market development pipeline to aid in key analysis assumptions such as property values, lease/rental rates, vacancy rates, absorption rates and construction costs. Analysis includes assessing the competitive market set/supply for all asset classes based on in-depth market knowledge, coupled with database

sources and key market data. Market data will also be gathered through networking with brokerage, real estate investor/owners and the development community within the market area.

Development Strategy – PMREIA will test various uses to determine feasibility and suggest approaches for redevelopment:

i. Financial Analysis: Consolidate the financial and market data assumptions from the highest and best use into a high-level financial pro-forma to determine the financial viability of the proposed program. The financial proforma will include sources/uses, cash flow schedules, financing scenarios and key return metrics. The analysis may identify potential economic "gaps" in the sources of capital projected.

ii. Development Approach: Assess/analyze possible development approach scenarios, dependent on programming and market analysis, including joint ventures or ground leases under a public/private partnership structure. The approaches will suggest tools or alternate development options that mitigate any economic gaps forecasted in the Financial Analysis. In anticipation of an RFP/RFQ, an RFI (request for information) may be formally or informally conducted to validate conceptual approaches and or enhance those identified in the analysis.

End of Exhibit A

Exhibit B
Terms & Conditions

Upon execution of PMC's proposal dated January 18, 2022, this Exhibit B shall be incorporated into the Agreement between Plante & Moran Cresa, L.L.C. (**"PMC"**) and City of Livonia (**"COL"**).

1. PMC's SERVICES:

1.1. PMC's services (the **"Services"**) include the consulting services designated on Exhibit A to the Agreement and additional services, if any, performed by PMC in connection with its engagement under the Agreement. PMC shall perform the Services in accordance with the Terms and Conditions in this Exhibit B.

1.2. PMC and COL acknowledge that PMC shall have no authority, express or implied, to enter into written or oral agreements on behalf of COL, to take any other actions with respect to COL's project or the business affairs of COL, or to commit or otherwise obligate COL in any manner whatsoever, without the prior written approval of COL. The Services provided by PMC are inherently advisory in nature. PMC shall have no responsibility for management decisions or management functions.

2. COL RESPONSIBILITIES:

2.1. COL shall designate Jacob Rushlow, Assistant Director of Public Works and Mark Taormina, Planning and Economic Development Director as qualified representatives with industry knowledge and authority to act on COL's behalf to be the contact person for purposes of the communications between COL and PMC regarding PMC's Services. These individuals will oversee the performance of the services identified in Exhibit B, including evaluating the adequacy of and accepting responsibility for the results of the services.

2.2. COL shall provide full information to PMC regarding COL's requirements as necessary for the performance of PMC's Services.

2.3. COL shall provide information, review documents provided by PMC, and render decisions relating to PMC's Services on a timely basis so as not to delay the performance of PMC's Services.

2.4. COL shall engage third parties to provide services, including by way of example, surveyors, testing consultants, architects, engineers, attorneys, and risk management consultants, as reasonably required for the performance of PMC's Services.

2.5. COL shall obtain all permits required for its use and operation of the project, facilities, and systems which are the subject of this engagement, including, by way of example, air and water discharge permits for operation of manufacturing process equipment.

2.6. COL represents that it has, or will obtain, adequate financing for the Project which is the subject of this engagement and that the required funds will be available on a timely basis. COL acknowledges that COL 's failure to timely provide necessary funds as required may adversely affect the Project's cost and schedule.

2.7. COL shall pay PMC for Services in accordance with the payment terms in the Agreement and these Terms and Conditions. For Services rendered, these rights and obligations shall survive the Agreement's termination or expiration.

2.8. COL agrees to report promptly in writing to PMC any default or defect in PMC's services or non-conformance with any provision of this agreement.

2.9. COL agrees during the term of this Agreement and for the period of one year after its completion or termination not to solicit for employment, on behalf of COL or any other entity, any PMC staff member or members working on the engagement under this Agreement, including former PMC staff members. COL acknowledges that PMC will incur substantial loss and damage if any of PMC's personnel terminate their employment with PMC to accept employment with COL or another entity engaged by COL, including without limitation the expense to train such personnel and loss of anticipated revenues. Accordingly, any provisions of this Agreement precluding claims for special, incidental, and consequential damages, or otherwise limiting damages, shall not apply to actions by PMC to enforce this section.

3. PMC'S RESPONSIBILITIES:

3.1. PMC shall perform the Services in accordance with the standard of professional skill and care exercised by other consultants performing similar services under similar circumstances.

3.2. PMC does not warrant or guarantee the outcome of project pro formas, budgets or other financial projections, or any other analysis (collectively "Analysis") developed by PMC for use in connection with its Services. Analysis prepared by PMC represents PMC's professional judgment as a consultant. It is recognized, however, that neither PMC nor COL has control over the cost of labor, materials or equipment, market conditions, contractors' methods of determining bid prices or other competitive bidding or negotiating conditions. PMC cannot and does not warrant or represent that the outcome of bids or negotiated prices will not vary from any project budget proposed, established, or approved by COL, or from any Analysis prepared by PMC.

3.3. PMC shall not be responsible for the failure of engineers, architects, general contractors, subcontractors, vendors, attorneys, or other consultants to carry out their respective duties and obligations to COL. PMC is not responsible for the performance of any party not employed directly by PMC, and PMC is not responsible for the performance of consultants engaged by PMC in connection with PMC's Services under this Agreement.

3.4. PMC's Services do not include professional architectural or engineering services. PMC shall not be responsible for the design of any project, for any errors, omissions or other deficiencies in the construction drawings and specifications for a project, for any other error or omissions of architects or other design professionals, if any, in connection with a project, or for the failure of the construction drawings and specifications for a project to comply with the requirements of COL or COL's landlord or subtenants, or with applicable codes or legal requirements. It shall be the responsibility of COL's architects and engineers, not PMC, to identify building code and other legal requirements pertaining to the design of a project for COL. PMC's Services do not include with respect to any existing or planned building or property the identification or resolution of any life safety issues or the non-compliance with any building code or legal requirements.

3.5. PMC shall not be responsible for construction means, methods, techniques, sequences and procedures, and safety programs and measures employed by contractors or others in the performance of their contracts, and shall not be responsible for the failure of any contractor or supplier to carry out work in accordance with the construction drawings and specifications or any other contract or legal requirements.

3.6. Any acts of PMC in providing consultation, advice and/or recommendations to COL regarding the performance or the default of COL's architect, contractor(s), vendors or other consultant(s), shall not be deemed to be the assumption by PMC of management or control of the architect, contractor(s), vendors or consultants or of COL's project.

3.7. PMC is not an attorney at law, and the Services provided by PMC exclude professional legal services. If the scope of PMC's Services includes assistance with the negotiations of agreements on behalf of COL, such agreements shall be subject to COL's approval. COL shall provide for the review of such agreements by COL's attorneys and insurance consultants as deemed to be appropriate by COL.

3.8. PMC shall not be considered in breach of this Agreement, nor be liable, for any delay or failures in performance resulting from circumstances beyond its reasonable control including, without limitation, acts of God, acts of war or terrorism, shortage or disruption of materials or labor, accidents, epidemic, pandemic, quarantine, natural catastrophe or weather, or government acts or omission. Notwithstanding the foregoing, PMC and COL shall make a good faith effort to mitigate any impacts of such circumstances to PMC's Services.

4. COMPENSATION:

4.1. For the performance of Services, COL shall compensate PMC as provided in the Agreement. Unless provided otherwise in the Agreement, PMC shall submit monthly invoices for Services rendered by PMC to COL. All invoices shall be prepared in accordance with the compensation terms in the Agreement and COL agrees to pay invoices within thirty (30) days after receipt thereof; provided, however, that in the event COL disputes the accuracy for any invoice prepared and presented, payment for the portion which is disputed by COL may be withheld until such dispute is resolved. Time is of the essence with respect to COL's payment obligations hereunder. All billings not in dispute are payable within thirty (30) days of receipt of invoice.

4.2. PMC shall be entitled to additional compensation if any of the following occur: increase in the Scope of Services designated on Exhibit A or other changes in the scope of PMC's Services with prior written approval of COL; change in any of the key assumptions of this engagement listed in the Agreement; change in the time period for performance of PMC's Services; change in the nature of the Services required to be performed, including changes that require more effort or resources of PMC; default of COL's architect, engineers, contractor(s), or other consultants or vendors; delay or interruption in the transaction or project; failure of COL to follow the advice and recommendations of PMC; or failure to provide adequate financing for the Project on a timely basis.

4.3. Should PMC be required to provide evidence, prepare for hearings, evaluate claims, assist in the review or preparation of claims or defenses, or otherwise participate or assist in the resolution of legal disputes either: (i) on behalf of COL or (ii) resulting from PMC's role providing its Services to

COL (unless caused by PMC's gross negligence or intentional misconduct), PMC will be reimbursed on a "Time and Materials" basis, which is defined to mean the numbers of hours of Services performed by PMC's personnel multiplied by PMC's then current standard hourly rates ("Standard Hourly Rates") plus the direct cost incurred by PMC in performance of such services.

4.4. Any taxes or fees, enacted by local, state, or federal government subsequent to the date of this agreement, and based on gross receipts or revenues will be added to the amounts due under this agreement, in accordance with any such fees or taxes.

4.5. The rights and obligations of this Article 4 shall survive the Agreement's termination or expiration.

5. LIMITATION ON LIABILITY:

5.1. In no event shall COL or PMC be liable to the other for special, incidental, or consequential damages, including without limitation, loss of anticipated profits, revenue or use of capital, loss of use of leased spaces, and penalties imposed under the leases, whether based on contract, tort, negligence, strict liability or otherwise; provided, however, that the foregoing shall not limit or preclude a claim of PMC with respect to compensation due to PMC under this Agreement.

5.2. Except for amounts due PMC under this Agreement, either party's liability under this Agreement shall not in any event exceed the amounts of compensation for Services paid to PMC under this Agreement.

5.3. Except for actions to enforce payment to PMC, any claim or cause of action arising under or otherwise relating to this engagement must be filed within one (1) year of the events giving rise to the claim or cause of action.

5.4. The rights and obligations of this Article 5 shall survive the Agreement's termination or expiration.

6. ENVIRONMENTAL CONDITION OF SITE:

6.1. PMC's Services shall not include any services or responsibility (including for the detection, identification, prevention, collection of samples, testing of samples, abatement, or disposal) related to known or unknown Constituents of Concern. Constituents of Concern shall include: (i) asbestos, (ii) petroleum, (iii) radioactive material, (iv) polychlorinated biphenyls (PCBs), (v) hazardous waste, (vi) lead, (vii) any viral, bacterial, or any other organism capable of inducing physical distress, harm, illness, or disease (including but not limited to any fungus, mold, mildew, mycotoxins, spores, or scents) or any byproduct thereof, or (viii) any other substance, product, waste, or other material listed under any other federal, state, or local (meaning any applicable jurisdiction) statute, law, rule, regulation, ordinance, resolution, code, order, or decree regulating, relating to, or imposing liability or standards concerning, any hazardous, toxic, or dangerous waste, substance, or material. The parties further acknowledge that PMC is not, and shall not be considered or required to be, an "owner," "arranger," "operator," "generator," or "transporter" of any Constituents of Concern.

7. MISCELLANEOUS:

7.1. Nothing contained in this Agreement shall create a contractual relationship or a cause of action in favor of a third party against either COL or PMC. The Services performed by PMC under this Agreement are for the sole benefit of COL, and shall not be relied upon by other parties.

7.2. PMC and COL may not assign their rights under this Agreement without the prior written consent of the other.

7.3. PMC shall be entitled to use COL's name, photographs, renderings, narrative descriptions and similar materials relating to PMC's Services in connection with publications, awards, press releases, and marketing materials.

7.4. Provided that COL has paid all amounts due to PMC under this Agreement, COL shall be entitled to use all studies, reports, summaries, cost estimates, budgets, and other documents prepared by PMC in the performance of its Services; provided, however that COL shall not disclose or permit other parties to use such information and documents. PMC shall be entitled to retain copies of such documents for PMC's files. Notwithstanding the foregoing, PMC shall retain all ownership and intellectual property rights in, and COL shall not use or permit the use by others of, all standard contract provisions and modifications, financial analysis programs and similar tools developed by PMC for PMC's use generally and not developed solely for purposes of this engagement.

7.5. Any disputes between COL and PMC relating to PMC's Services or this Agreement shall be governed by the laws of the State of Michigan without giving effect to any choice of law or conflict of law rules or provisions (whether of the State of Michigan or any other jurisdiction) that would cause the application of the laws of any jurisdiction other than the State of Michigan. Any controversy, dispute, or claim arising out of or relating to this Agreement, or the breach thereof, shall be settled by binding confidential arbitration in accordance with the applicable arbitration rules of the American Arbitration Association. Such confidential arbitration shall be held in Oakland County Michigan, and the judgment upon the award rendered by the arbitrator or arbitrators may be entered in any court having jurisdiction. In the event of any dispute between the parties arising out of or in connection with this Agreement or these Terms and Conditions, the prevailing party shall be entitled to recover its costs incurred in connection therewith, including reasonable attorney fees.

7.6. PMC and COL shall each maintain insurance coverage as deemed by each to be necessary for its own protection; provided, however, that COL shall include PMC as an additional insured under COL's general liability insurance policy with respect to claims and losses related to this engagement only. In addition, if PMC provides Services under this Agreement in connection with the construction of a project for COL, the following shall apply: (i) COL's general contractor's/construction manager's general liability insurance for such project shall include PMC as an additional insured; and (ii) PMC and COL shall each waive all rights against each other and the contractors, consultants, agents and employees of the other for any loss or damage, for which property insurance is maintained by the injured party, and PMC and COL each shall require appropriate similar waivers from their contractors, consultants and agents.

7.7. No failure by COL or PMC to insist upon strict performance of any covenant, agreement, term, or condition of this Agreement or to exercise any right, term, or remedy for a breach of this Agreement, shall constitute a waiver of any such breach or of such covenant, agreement, term, or condition.

7.8. The rights and obligations of this Article 7 shall survive the Agreement's termination or expiration.

TERMINATION

7.9. This Agreement may be terminated by COL upon thirty (30) days prior written notice if PMC is in default under this Agreement and fails to cure such default within such thirty day period. In addition, provided that COL is acting in good faith, COL shall be entitled to terminate this Agreement without cause upon thirty (30) days prior written notice to PMC.

7.10. PMC may terminate this Agreement or suspend its Services upon thirty (30) days prior written notice in the event of any of the following defaults by COL and failure of COL to cure such default within such thirty (30) day period: COL fails to make payment of amounts due to PMC under this Agreement; COL fails to follow the advice or recommendations of PMC; or COL otherwise is in default under this Agreement.

7.11. If PMC's Services are suspended for more than thirty (30) consecutive days, PMC may terminate this Agreement upon thirty (30) days prior written notice to COL.

7.12. In the event this Agreement is terminated for any reason, PMC shall be compensated on an equitable basis for services performed as of the effective date of termination in accordance with this Agreement. Upon any such termination and payment of amounts due to PMC, the parties hereto shall be released of any and all further liability hereunder.

7.13. This Agreement shall commence upon execution of the Agreement between PMC and COL and shall continue in effect for the term described in the Agreement, as may be extended by agreement of the parties, unless terminated sooner under the terms of this Section.

8. THIS AGREEMENT:

8.1. COL and PMC accept the obligations of good faith and fair dealing towards each other with respect to this engagement.

8.2. This Agreement includes the proposal executed by PMC and COL, Exhibit A Scope of PMC's Services, Exhibit B Terms and Conditions, and other documents, if any, listed in the Agreement. This Agreement sets forth the entire, integrated agreement between PMC and COL, supersedes all prior proposals, negotiations, representations, and agreements, whether written or oral, between PMC and COL, and shall govern the relationship between PMC and COL with respect to all Services provided by PMC to COL in connection with the engagement described in the Agreement. This Agreement may be amended only by written instrument signed by both PMC and COL.

8.3. Neither this Agreement nor PMC's performance of Services shall be deemed to create a partnership or joint venture between COL and PMC.

8.4. The parties to this Agreement have jointly participated in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises, this Agreement is to be construed as jointly drafted by the parties hereto and no presumption of burden of proof is to arise favoring or disfavoring any party by virtue of the authorship of any provision of this Agreement.

End of Exhibit B

plante moran cresa
Real Estate Consultants

Plante Moran Cresa, LLC
3000 Town Center, Suite 100
Southfield, MI 48075
Tel: 248.223.3500 | Fax: 248.223.3150
pmcresa.com

January 20, 2022

Mr. Jacob Rushlow, P.E.
Assistant Director of Public Works
City of Livonia
12973 Farmington Rd.
Livonia, MI 48150

Via Email To: jrushlow@livonia.gov

RE: Proposal for Space Needs and Capital Planning Services for City of Livonia

Dear Mr. Rushlow:

Thank you for allowing Plante Moran Cresa (PMC) the opportunity to submit our proposal for Space Needs and Capital Planning Services for the City of Livonia (COL). Our goal is to provide space needs and capital planning services that will work in harmony with the City, and to be your trusted advisor on this important engagement. We believe PMC's comprehensive approach and unique ability to perform these services will help guide the evaluation of the of City's real estate needs. As a trusted advisor, we bring dedicated resources, proven processes, and deep experience to guide our clients in making the right strategic, financial, and mission-driven decisions during their projects.

Teaming with our firm offers the following benefits to COL:

Relevant Public Sector Experience: In the past five years, PMC has completed more than $2.5 billion worth of capital projects for the public and municipal sectors (i.e., police stations, courthouses, K-12 school buildings, libraries, fire stations, city halls, etc.). This includes the renovation and expansion of more than 450 facilities, with costs ranging in value from $1 million to over $195 million. PMC has also served as program manager for Livonia Public Schools since 2012, planning and implementing over $400 million worth of capital improvements.

We understand municipalities: We specialize in working with mission-driven, consensus decision-making bodies. Our experience working on more than a billion dollars in public projects means we understand the challenges and opportunities these types of projects present.

We are local: We have 12 offices in Michigan with our headquarters located in Southfield, just 15 miles away from COL's municipal offices.

Independence: We will solely represent and advocate on behalf of your municipality, which allows us to provide unbiased recommendations throughout the project as your independent advocate.

Custom Solutions: PMC offers one-stop shopping for a full suite of Real Estate Consulting and Program Management services, providing best-in-class services to both our private and public sector clients, that we believe are unmatched in Southeast Michigan. We believe our approach will be truly unique by bringing our proven processes and deep experience in to guide COL's strategic goals.

We look forward to the opportunity to work with COL to ensure the goals and objectives of the Space Needs and Capital Planning Services process are met. Again, thank you for the opportunity to present this proposal. We look forward to discussing it in more detail with you.

Sincerely,

Greg VanKirk
Plante Moran Cresa

Andy Fountain
Plante Moran Cresa



plante moran | cresa

2022 Facility Condition Assessment

City of Livonia

November 2022

plante moran CRESA
REAL ESTATE CONSULTANTS

City of Livonia
33000 Civic Center Drive
Livonia, Michigan 48154

November 2022

Dear City of Livonia Leadership:

Plante Moran Cresa (PMC) was engaged by The City of Livonia (COL) to conduct a physical building assessment of nine (9) facilities currently in use by COL. The goal of this assessment was to provide COL with a capital planning template to determine the cost of maintaining COL's facilities over a ten-year period with three major components: critical need, deferrable maintenance, and future need.

The building assessments were intended to be at a high level; they were not exhaustive, nor did they include any diagnostic or destructive investigation. We conducted our assessment through on-site visits at each building and grounds, interviews with staff, and review of City of Livonia-provided documentation. We wish to acknowledge the city and the staff their time, assistance, and cooperation in providing information for the preparation of this assessment.

We understand COL's intent is to use the combination of these assessments as a guiding road map in determining the most practical and efficient way to maintain these buildings. It is our sincerest hope that this information will confidently supply you with objective facts in your quest for alignment and enable COL to make informed decisions beneficial to the future of their buildings.

We would be happy to answer any questions that may arise as well as provide clarifications to any items found herein. Please feel free to contact me with any questions or concerns regarding this report.

Sincerely,

Plante Moran Cresa



David Goldman,
Senior Consultant

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Facility Assessment

City of Livonia

33000 Civic Center Drive

Livonia, Michigan 48154

Contact:

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248-227-4691

David Goldman

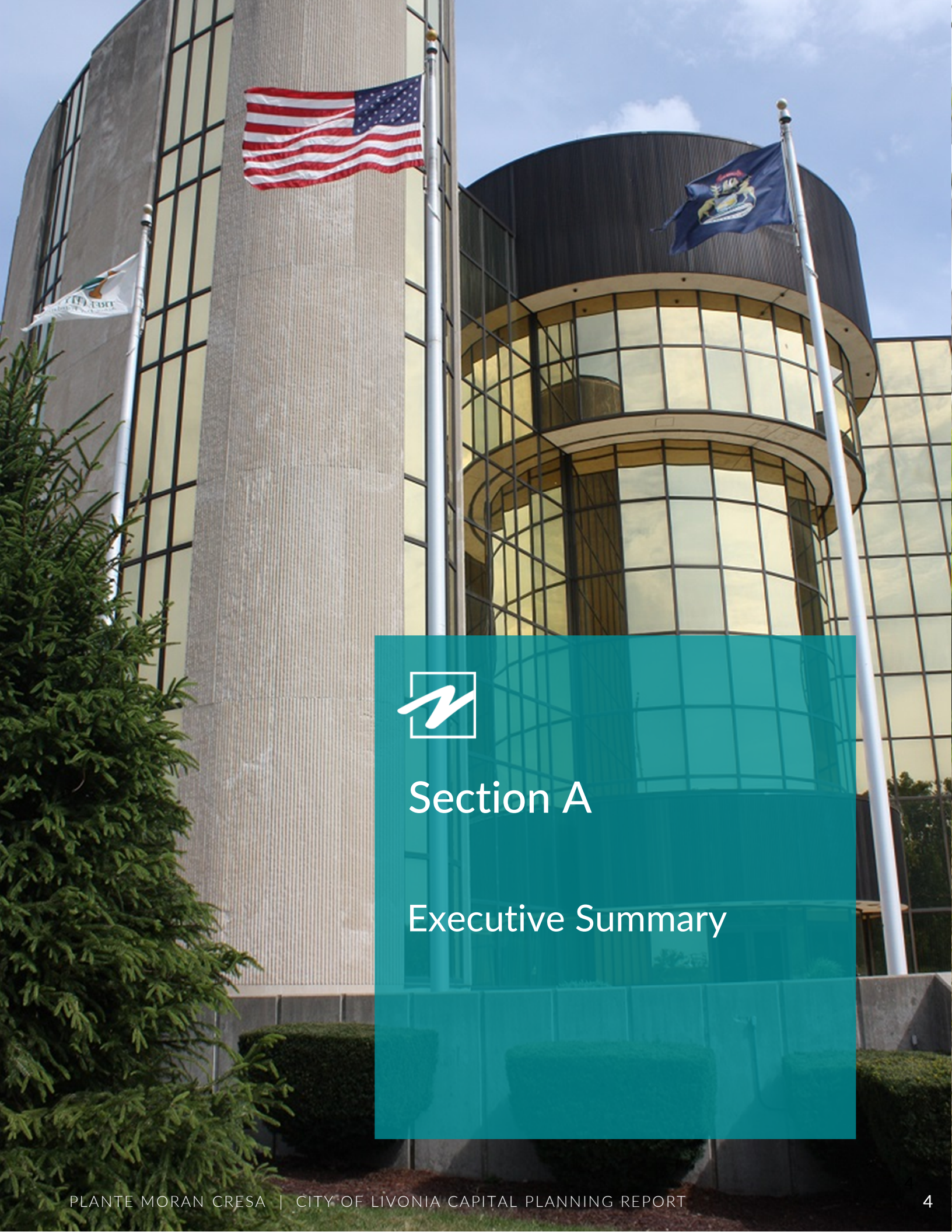
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248-568-0745

Plante Moran Cresa

3000 Towne Center, Suite 100

Southfield, MI 48075



Section A

Executive Summary

SECTION A

Executive Summary

Overview

Plante Moran Cresa (PMC) performed this property assessment at the request of **City of Livonia (COL)** for the city's, support services, transportation, and administrative buildings.

Date(s) of Assessment:	3/29/22 - 4/11/22
City Staff Present:	Sammy Lovin (Building Maintenance); Ted Davis (Senior Center/ Rec. Center); Jacob Rushlow (DPW)
PMC Staff Present:	David Goldman
Architect/Engineer Staff Present:	N/A
Number of Buildings:	9
Average Building Age:	~47 Years

Acknowledgements

For their assistance and cooperation, we wish to acknowledge all city staff, and all additional user groups who provided information for the preparation of this assessment report and during PMC's visit to each individual property.

Purpose

The purpose of this assessment is as follows:

- Observe and document readily visible building site conditions (roadways, walkways, surface parking, lighting, and equipment), building envelope conditions (roof systems, walls, windows and entry/exit doors) interior building conditions (walls, floors, ceilings, millwork/casework, restrooms, gymnasiums, lockers, pools, food service areas and equipment, etc.) as well as building system (heating, ventilating, air conditioning, plumbing, electrical) deficiencies that impact the function and value of the buildings and properties
- Quantify and communicate the condition of each building and site component and assign a repair / replacement value within a future ten-year period. Withing this ten-year timeframe, building and site needs are identified as: Critical Needs (1 – 3 years), Deferrable Maintenance (4 – 6 years) and Future Needs (7 – 10 years). Projected replacement costs include an annual escalation factor. **PMC recommends costs be revisited, at a minimum, once a year to adjust for inflation/escalation.**

Scope

This assessment report is based on city provided information and site visit(s) during which PMC performed a visual, nonintrusive, and nondestructive evaluation of various external and internal building components. This assessment is not a building code, safety, regulatory, or environmental compliance inspection. No diagnostic testing or invasive inspections took place. PMC took photographs to record the buildings' general conditions and to illustrate the specific observed deficiencies.

PMC observed representative samples of the major building components and the physical conditions of the following:

- Site conditions
- Building structure
- Architectural (interior finishes)
- Mechanical and electrical systems
- Plumbing system – Observations did not include collection or testing of water samples

The city provided PMC with the following documentation to aid in the creation of this report:

- Property site plans
- Floor plans

PMC took photographs to record the buildings' general conditions and to illustrate the specific observed deficiencies.

Building List:

1. City Hall
2. Police Station
3. Fire Station #1
4. Civic Center Library
5. Senior Center
6. Jack E. Kirksey Recreation Center
7. Housing Commission
8. Carl Sandburg Library
9. Alfred Branch Library

Assumptions & Clarifications

CITY OF LIVONIA ASSUMPTIONS / CLARIFICATIONS
This Facility Assessment Report is based on site visits during which PMC performed a visual, non-intrusive, and non-destructive evaluation of various external and internal building components. This assessment is not a building code, safety, regulatory, or environmental compliance inspection. PMC does not include the identification or resolution of any life safety issues or the non-compliance with any building code or other legal requirements
Placeholder allowances for landscaping have been designated for each facility and should be evaluated for funding amount as well as placement within the 10-yr timeframe.
Building and Site Acres estimated using DraftLogic online program if the information was not provided by the City.
Square footage used for the ceilings at city hall are based on the reflected ceiling plans from 1977.
Door count for city hall based on the plans from 1977
Roof Replacement at city hall is area above parking deck entrance and exit
While we made an effort to locate and identify all mechanical equipment; there may be some pieces that were not observed/assessed.
Assume 2,500 lb elevator for city hall
Assume that the Noble Library is beyond repair and needs to be demolished
Door count for civic Center Library based on the plans from 1986
It is assumed that any building aged 1980 or newer is non-asbestos containing. Prior to beginning any work, it is recommended that City of Livonia hire an environmental consultant to confirm this assumption and review the abatement scope at each facility. The funding allowances found within this 10-yr capital are assumptions based upon limited information
It is assumed that that fire proofing / caulking at all multi story City of Livonia facilities is code compliant. If this is not correct, there may be substantial costs to upgrade
Abatement allowance added for each building for unknown/unforeseen conditions. I licensed abatement contractor should be hired for all abatement work
Assume that new monument signs will be allowed by the city
Rework of concrete entrance at City Hall includes ramps and railings
Redesign entry fountain at City Hall includes new plumbing
Assume all utility feeds to each building are sufficient for the current use
Wood Paneling in City Hall Auditorium is Not Included in the costs
Curtain wall replacement costs at City Hall is an allowance only. Actual sizes will need to be obtained in order to provide a better estimate.
Number of VAVs in city hall is just an estimate. PMC did not look above any ceilings for these during our walkthrough
Technology costs are shown for the senior center at the request of City of Livonia staff. PMC to meet with city technology director to discuss pricing needed for Technology across all city buildings
There is a Roof Top HVAC unit on told on the recently renovated space in the fire station. This unit is oversized for the space and is causing a lot of humidity issues. This unit should be replaced with a correct sized unit.
Plante Moran meet with Casey O'Neil- City of Livonia- Information Systems Director and Steven Arslanian- LPD- Computer Services on 9/27/22 to discuss the technology needs for the city. The discussion included the following (high level):
Controls needed for all HVAC equipment (all locations)
The data center is located in the City Hall Basement. This should be relocated above ground
PD device re-fresh plan: laptops and desktops on a 5 year replacement plan; All larger equipment is on a 7-8 year replacement plan.
Each department buys their own technology
New Phone System needed at City Hall
Re-cabling of Rec. Center needed
Wireless network upgrades needed
Electronic time keeping system needs to be upgraded
It is suggested that Plante Moran do a more in-depth review and discussion of all technology needs with the city. An amendment to the contract is being drafted up as of 10/3/22. All costs provided are just allowances at this time

Condition Definitions

The following terms are used throughout the report and are defined as follows:

Excellent (E)

Observed to be new or like new.

Good (G)

Observed to be of average to above-average condition for the building system or material assessed, with consideration of its age, design, and geographical location. Generally, other than normal maintenance, no work is recommended or required.

Fair (F)

Observed to be of average condition for the building system evaluated. Satisfactory; however, some short-term and/or immediate attention is required or recommended (primarily due to normal aging and wear of the building system) to return the system to a good condition.

Poor (P)

Observed to be of below average condition for the building system evaluated. Requires immediate repair, significant work, or replacement is anticipated to return the building system or material to an acceptable condition.

Critical Need (CN)

Items that through our observations or discussions with COL may require capital expenditure **within the next 1 to 3 years** by virtue of current condition, remaining useful life, or COL's priorities.

Deferred Maintenance (DM)

These are items that through our observations or discussions with COL **may require capital expenditure within the next 4 to 6 years** by virtue of current condition, remaining useful life, or COL's priorities.

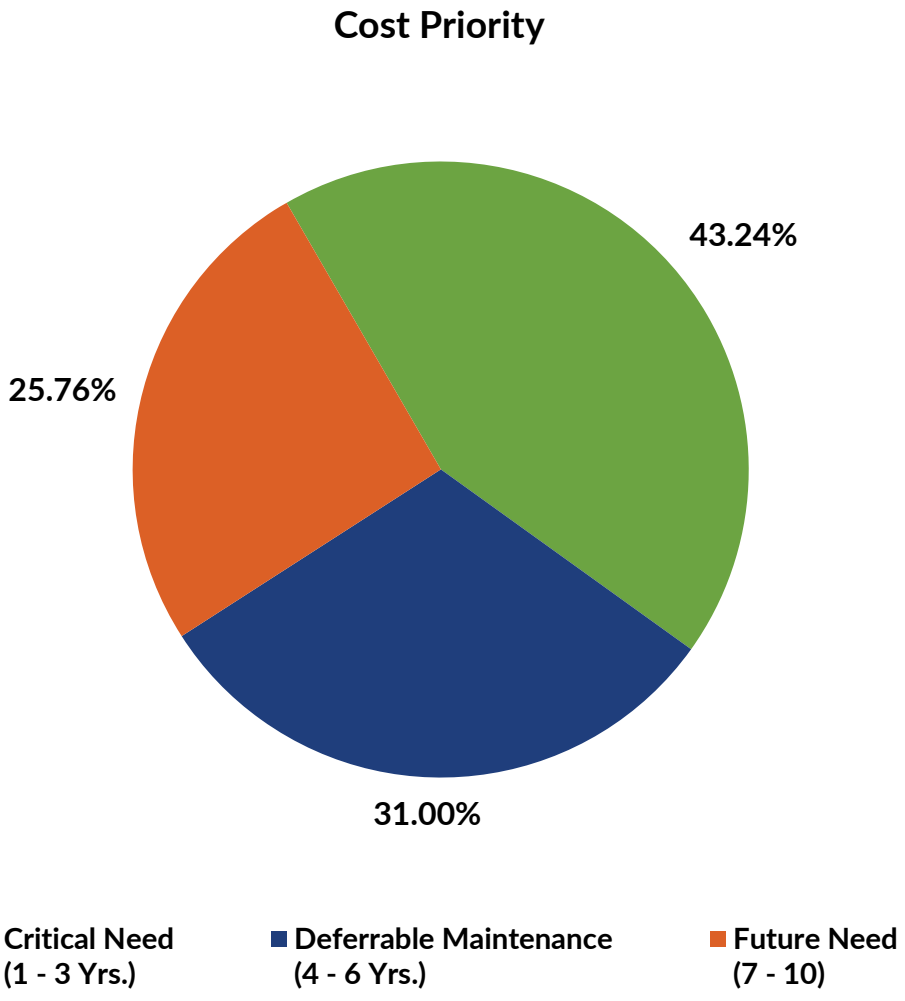
Future Need (FN)

These are items that through our observations or discussions with COL **may require capital expenditure within the next 7 to 10 years** by virtue of current condition, remaining useful life, or COL's priorities.

Summary of Costs by Priority

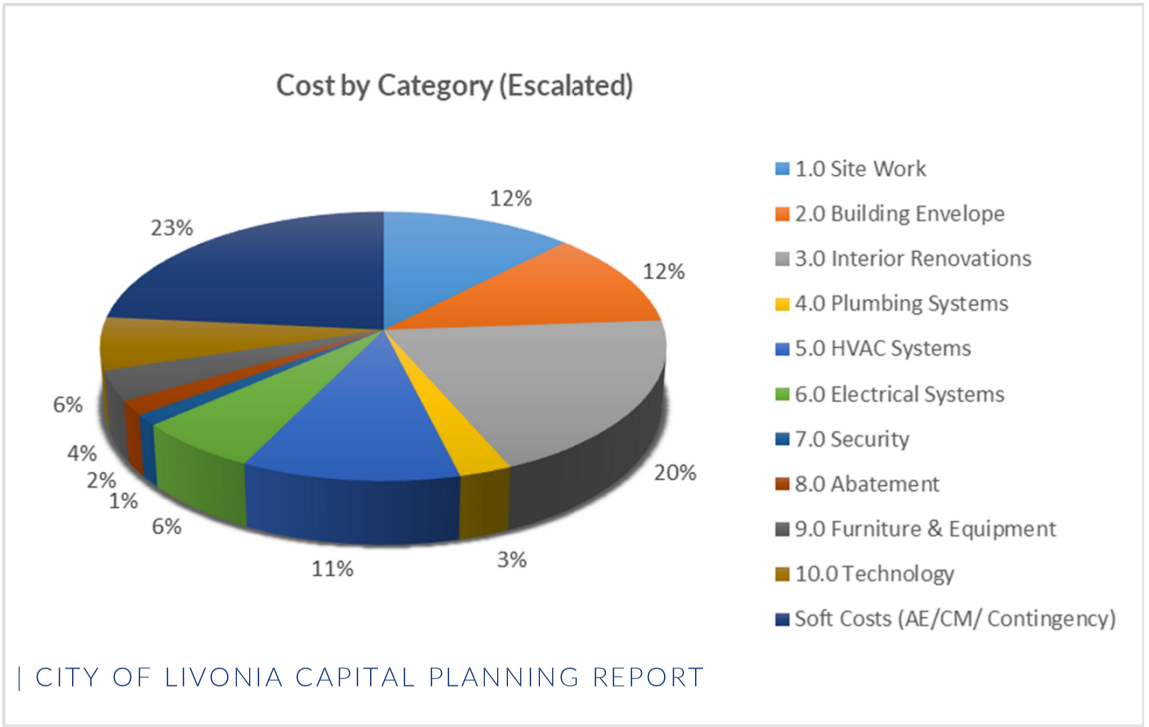
SUMMARY OF COSTS BY PRIORITIZATION FACILITY ASSESSMENT					
Bldg #	Name of Facility	Critical Need (1 - 3 Yrs.)	Deferrable Maintenance (4 - 6 Yrs.)	Future Need (7 - 10)	Complete Cost with Escalation
1	City Hall	$12,397,784	$7,595,335	$8,392,853	$28,385,972
2	Police Department	$8,467,808	$3,381,330	$1,875,608	$13,724,746
3	Fire Department #1	$1,335,601	$897,792	$766,557	$2,999,950
4	Civic Center Library	$6,348,772	$4,936,406	$1,240,231	$12,525,410
5	Senior Center/Community Transit	$5,811,271	$659,776	$1,029,377	$7,500,424
6	Livonia Community Recreation Center	$2,699,860	$10,977,139	$10,236,580	$23,913,579
7	Housing Commission	$856,369	$169,270	$310,537	$1,336,176
8	Carl Sandburg Library	$1,737,877	$821,019	$410,894	$2,969,791
9	Alfred Noble Branch Library*	$346,062	$0	$0	$346,062
10	City Wide - Technology	$1,928,999	$626,925	$713,730	$3,269,654
	TOTAL BUILDINGS BUDGET	$41,930,405	$30,064,991	$24,976,366	$96,971,763

* This is for demolition costs only



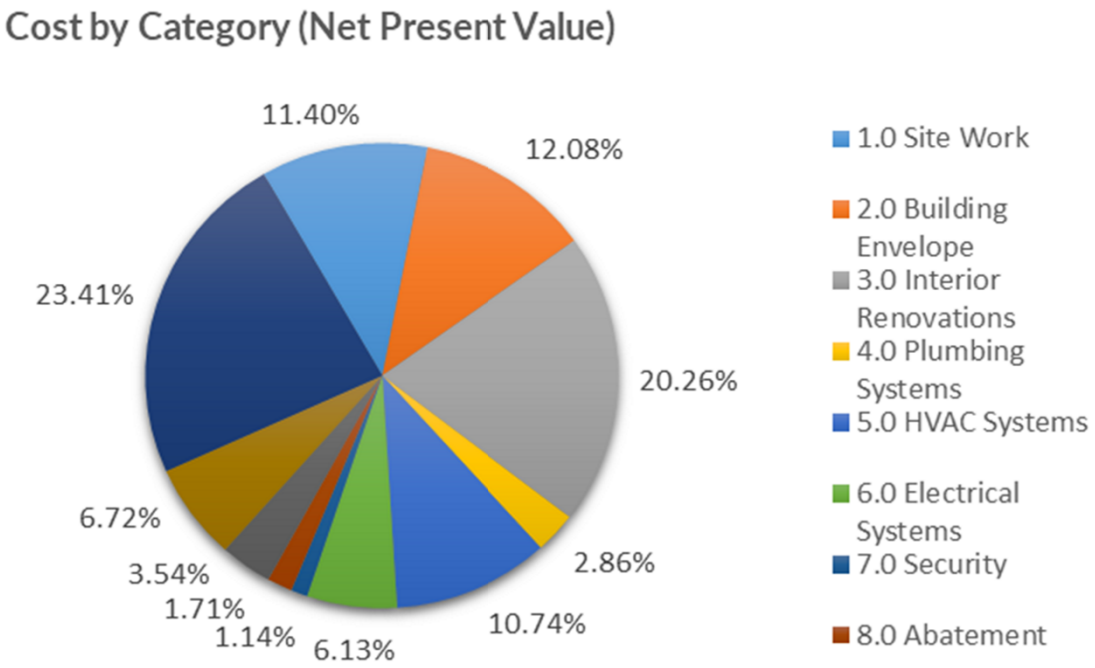
Summary of Costs by Category – Escalated

SUMMARY OF COSTS BY SCOPE OF WORK (ESCALATED)														
Bldg #	Name of Facility	Net Present Value	1.0 Site Work	2.0 Building Envelope	3.0 Interior Renovations	4.0 Plumbing Systems	5.0 HVAC Systems	6.0 Electrical Systems	7.0 Security	8.0 Abatement	9.0 Furniture & Equipment	10.0 Technology	Soft Costs (AE/CM/ Contingency)	Total Cost (Escalated)
1	City Hall	$24,609,976	$3,880,047	$2,737,260	$6,330,544	$473,710	$2,310,841	$1,329,946	$386,100	$799,200	$1,020,600	$2,921,138	$6,196,586	$28,385,972
2	Police Department	$12,278,278	$2,152,812	$542,592	$4,353,063	$319,378	$719,890	$901,578	$375,840	$540,000	$455,976	$0	$3,363,619	$13,724,746
3	Fire Department #1	$2,544,154	$104,976	$521,640	$596,333	$124,050	$386,508	$289,109	$95,904	$60,480	$81,000	$0	$739,951	$2,999,950
4	Civic Center Library	$10,984,002	$1,139,865	$1,647,000	$3,139,322	$52,618	$1,609,425	$767,275	$111,888	$120,960	$1,020,600	$0	$2,916,457	$12,525,410
5	Senior Center/Community Transit	$7,014,316	$899,640	$1,284,854	$1,491,075	$226,454	$403,380	$588,617	$69,768	$54,000	$454,680	$324,000	$1,703,955	$7,500,424
6	Livonia Community Recreation Center	$18,060,421	$2,547,711	$4,084,560	$2,595,170	$1,227,830	$5,050,504	$1,660,241	$159,840	$0	$272,160	$432,000	$5,883,562	$23,913,579
7	Housing Commission	$1,196,399	$312,284	$74,520	$165,264	$55,188	$77,807	$185,469	$32,400	$42,120	$70,200	$0	$320,923	$1,336,176
8	Carl Sandburg Library	$2,647,062	$613,950	$326,399	$355,996	$114,972	$221,076	$364,176	$47,952	$64,800	$144,180	$0	$716,289	$2,969,791
9	Alfred Noble Branch Library	$346,062	$258,336	$0	$0	$0	$0	$0	$0	$0	$0	$0	$87,726	$346,062
10	City Wide - Technology	$2,893,499	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,440,800	$828,854	$3,269,654
	TOTAL	$82,574,169	$11,909,620	$11,218,826	$19,026,767	$2,594,200	$10,779,431	$6,086,411	$1,279,692	$1,681,560	$3,519,396	$6,117,938	$22,757,921	$96,971,763



Summary of Costs by Category – Net Present Value

SUMMARY OF COSTS BY SCOPE OF WORK (NET PRESENT VALUE)													
Bldg #	Name of Facility	Net Present Value	1.0 Site Work	2.0 Building Envelope	3.0 Interior Renovations	4.0 Plumbing Systems	5.0 HVAC Systems	6.0 Electrical Systems	7.0 Security	8.0 Abatement	9.0 Furniture & Equipment	10.0 Technology	Soft Costs (AE/CM/ Contingency)
1	City Hall	$24,609,976	$2,963,801	$2,570,184	$5,505,499	$428,026	$2,245,264	$1,249,526	$297,000	$540,000	$810,000	$2,635,507	$5,365,170
2	Police Department	$12,278,278	$1,759,838	$542,592	$4,135,467	$321,106	$530,196	$780,341	$270,000	$540,000	$383,400	$0	$3,015,339
3	Fire Department #1	$2,544,154	$81,000	$521,640	$494,646	$107,876	$291,332	$216,974	$64,800	$60,480	$81,000	$0	$624,407
4	Civic Center Library	$10,984,002	$925,299	$1,517,400	$2,704,968	$48,470	$1,599,264	$602,942	$75,600	$120,960	$810,000	$0	$2,579,098
5	Senior Center/Community Transit	$7,014,316	$845,208	$1,284,854	$1,408,050	$208,310	$340,200	$473,256	$61,992	$54,000	$426,600	$324,000	$1,587,845
6	Livonia Community Recreation Center	$18,060,421	$1,782,883	$3,140,100	$2,017,516	$1,099,224	$3,587,069	$1,263,600	$108,000	$0	$216,000	$432,000	$4,414,029
7	Housing Commission	$1,196,399	$305,532	$71,280	$150,684	$50,004	$52,572	$145,837	$32,400	$32,400	$70,200	$0	$285,490
8	Carl Sandburg Library	$2,647,062	$491,335	$326,399	$312,444	$100,354	$221,076	$330,480	$32,400	$64,800	$129,600	$0	$638,174
9	Alfred Noble Branch Library	$346,062	$258,336	$0	$0	$0	$0	$0	$0	$0	$0	$0	$87,726
10	City Wide - Technology	$2,893,499	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,160,000	$733,499
	TOTAL	$82,574,169	$9,413,232	$9,974,450	$16,729,273	$2,363,369	$8,866,973	$5,062,956	$942,192	$1,412,640	$2,926,800	$5,551,507	$19,330,777



Opinion of Probable Cost

Based upon observations during our site visit and information received from our interviews with building users, which for the purpose of this report was deemed reliable, PMC prepared general scope opinions of probable cost based on appropriate remedies for the deficiencies noted. Such remedies and their associated cost were considered commensurate with subject's position in the market and prudent expenditures. These opinions are for components of systems exhibiting significant deferred maintenance and existing deficiencies requiring major repairs or replacement. Repairs or improvements that could be classified as cosmetic, a decorative part or parcel of a building renovation program, routine, or normal preventative maintenance were included as future needs. Costs provided are based on mid-level commercial pricing.

Our intent in this report is to outline material physical deficiencies and the corresponding opinion of probable costs that are commensurate with the complexity and age of the buildings. Opinions of probable costs that are a threshold amount of approximately $1,000 or less are omitted from our review.

Replacement and repair preliminary budgets are based on approximate quantities. Specific building square footages are estimates based on the information provided by the city. A detailed inventory of quantities for cost estimating is not a part of the scope of this report. Budgets were derived using Metro Detroit area material and labor costs. As this report projects costs over the next 10 years, PMC utilized a reasonable cost escalation factor for these costs based on the anticipated time of improvement implementation.

Please note that the budget values in this report are conceptual values only, and do not represent hard bid market pricing our opinions of probable costs will likely vary from actual market conditions. These conceptual budget values are intended for a high-level planning approach by the city in consideration for future renovations of the aforementioned buildings. We highly recommend that, if any of the recommendations are to move forward accordingly, the city (a) have a formal design completed by a registered architectural or engineering firm and (b) in conjunction with its registered architectural or engineering firm and construction professional develop a refined preliminary budgets and (c) undergo the formal competitive bid process per the requirements set forth.

Statement of Limitations

This assessment report represents a statement of the physical condition of the buildings and properties based upon visual site observation. It applies only to those portions of the property, items, and equipment that PMC staff were able to visually observe. Walls and ceilings were not opened to observe covered, hidden, or concealed conditions. PMC's assessment of plumbing systems did not include the collection or testing of water samples to determine water quality. The assessment of mechanical systems and equipment based on general observations of condition and/or age and not a full diagnostic or inspection by a certified maintainer.

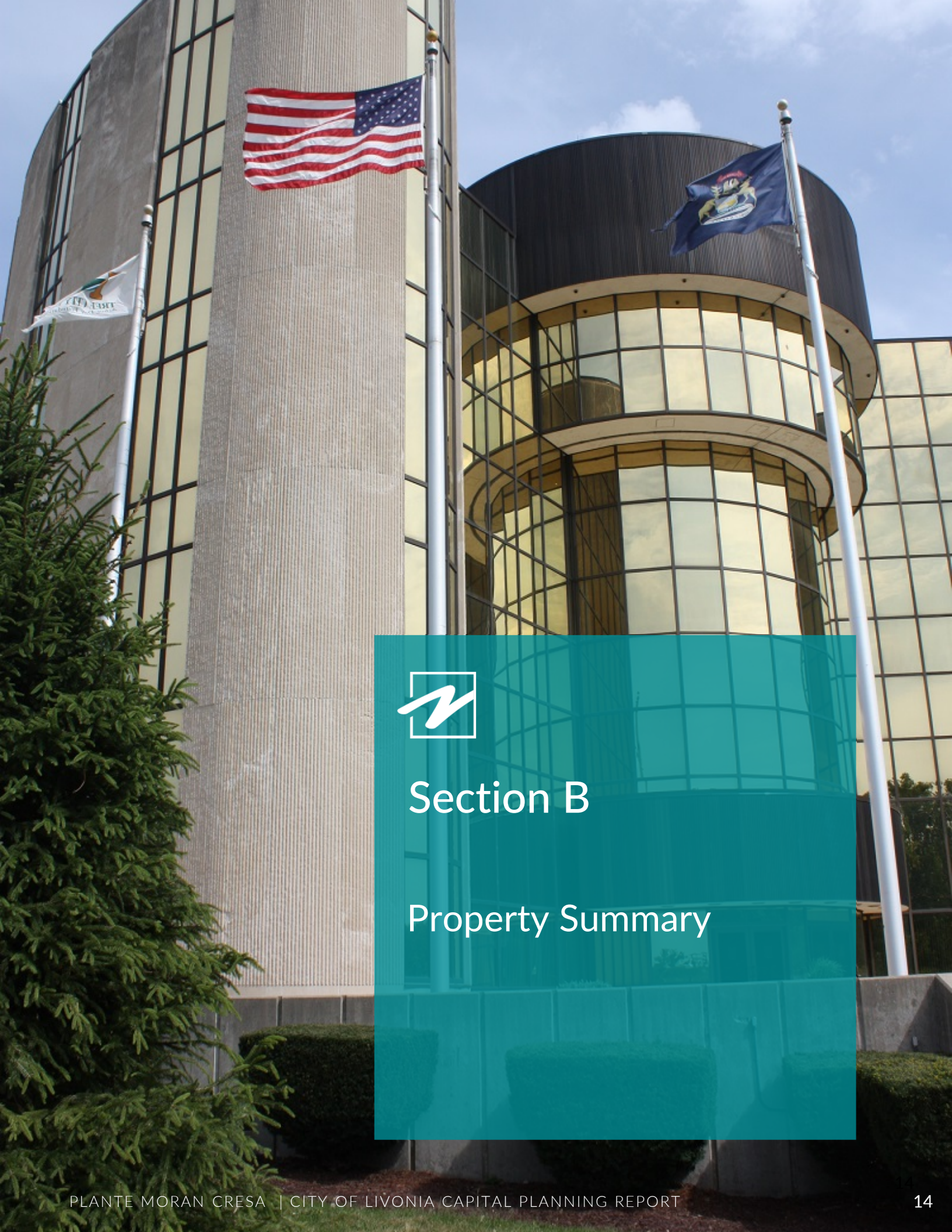
In addition, PMC did not sample any property components or test nonfunctioning equipment at the time the assessment was conducted. Minimal as-built or record drawings and specifications were available only to the extent described in this report. PMC's assessment, analysis, and recommendations are, in whole or in part, dependent on the information provided by The City of Livonia and other third parties. PMC cannot provide an opinion on the reliability of such information, and inaccuracies in such information may impact our assessment, analysis, and recommendations.

This assessment does not include any services (including the collection or testing of samples) related to known or unknown Constituents of Concern. Constituents of Concern shall include: (i) asbestos, (ii) petroleum, (iii) radioactive material, (iv) polychlorinated biphenyls (PCBs), (v) hazardous waste, (vi) lead, or (vii) any substance, product, waste, or other material listed under any other federal, state, or local (meaning any applicable jurisdiction) statute, law, rule, regulation, ordinance, resolution, code, order, or decree regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material. The parties further acknowledge that PMC is not and shall not be required to be an "owner," "arranger," "operator," "generator," or "transporter" of any Constituents of Concern.

This report was prepared for and intended solely for the information use of The City of Livonia and may not be used or relied upon by another party without the express written authorization of PMC.

The contents of the report are based on the relevant information available, and the condition observed at the time of issuance. Information and conditions are subject to change, and PMC assumes, no responsibility to update this report in the event of such change.

This assessment report should be read in its entirety. Information provided in the various sections is complementary and, in some instances, provides additional explanation of information concerning the assessment. Therefore, interpretations and conclusions drawn by reviewing only specific sections are the sole responsibility of the user.



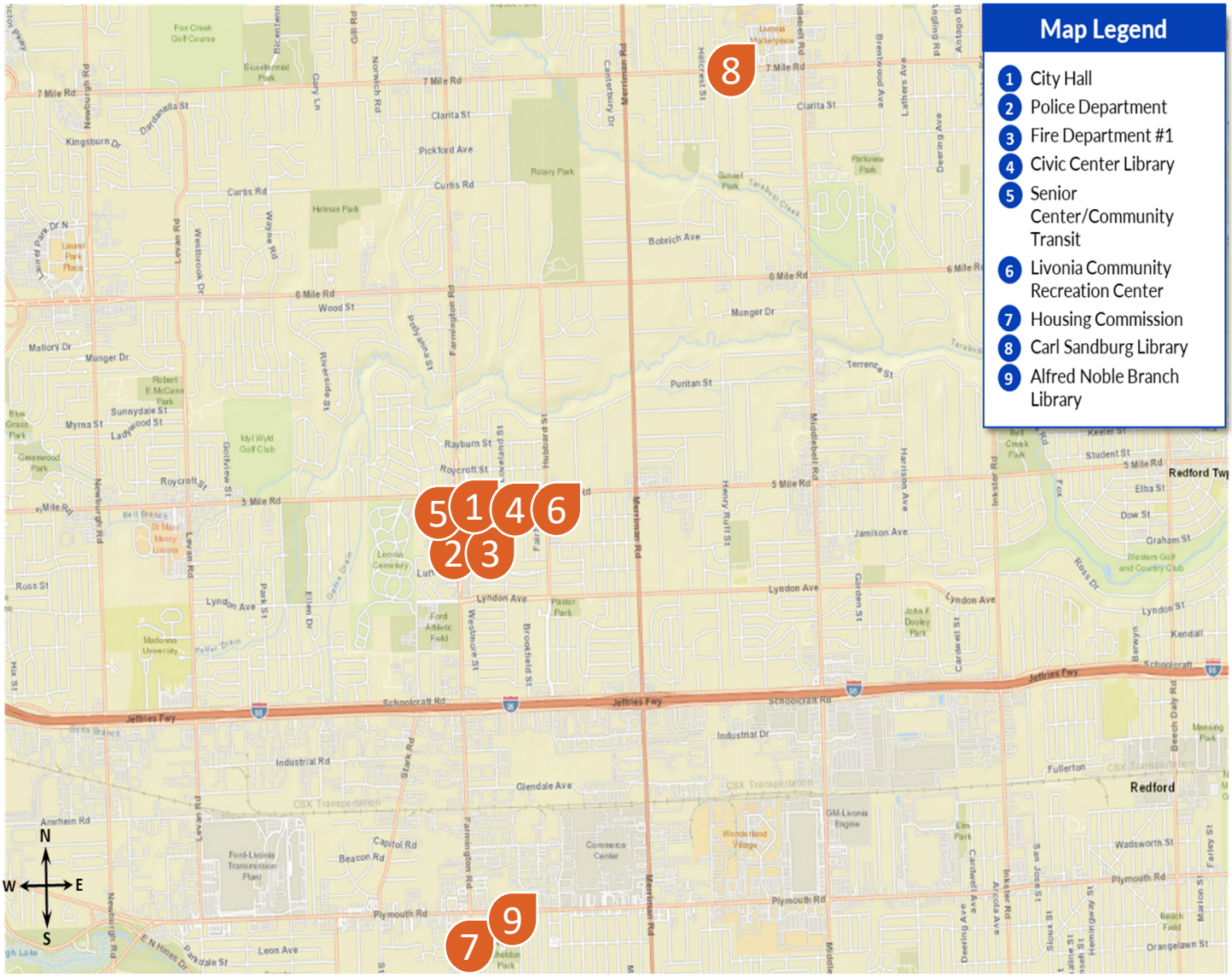
Section B

Property Summary

SECTION B

Property Summary

Building Locations Map | City, State



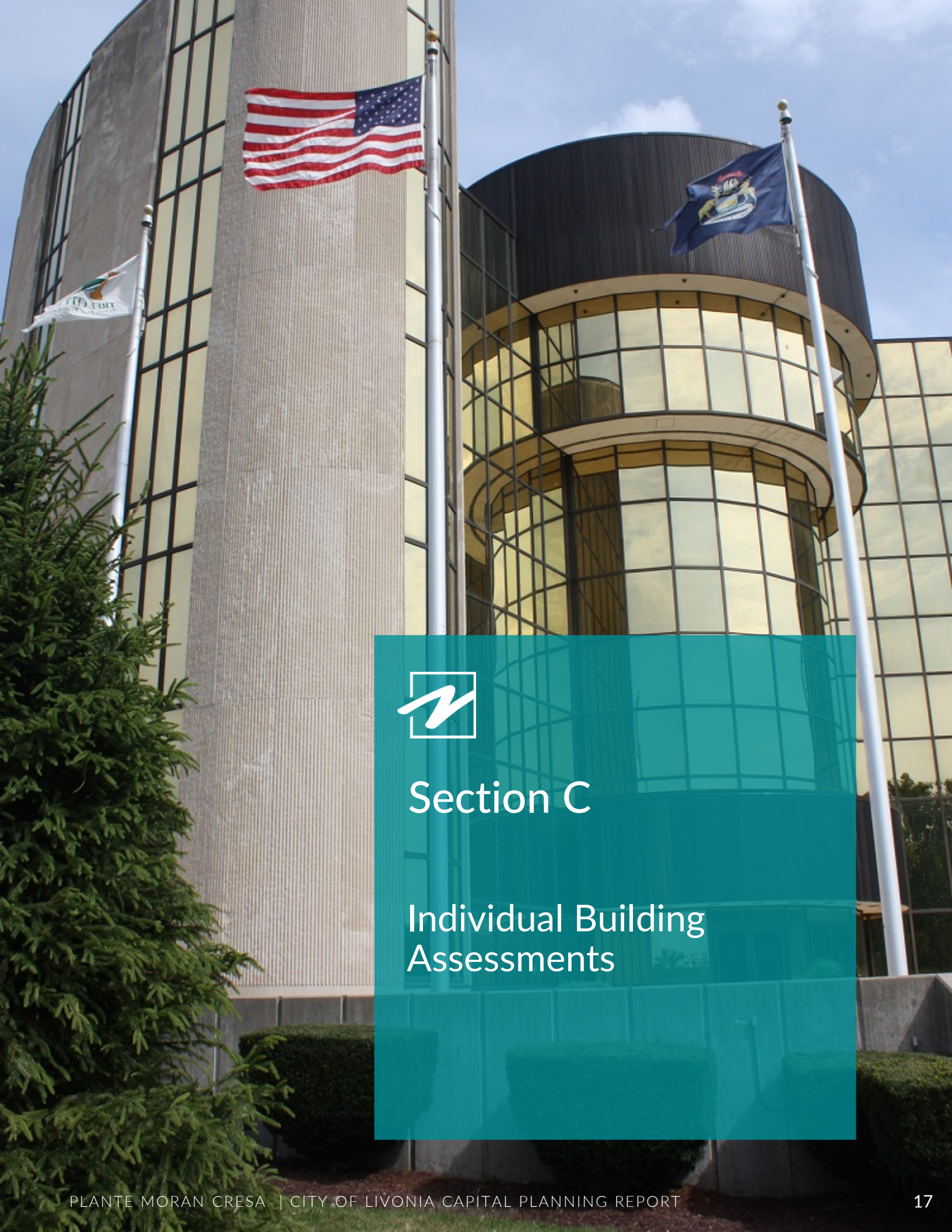
SECTION B

Property Summary

Building Locations Map | City, State

Bldg #	Facility	Address	City	State	Zip
	BUILDINGS				
1	City Hall	33000 Civic Center Drive	Livonia	Michigan	48154
2	Police Department	15052 Farmington Road	Livonia	Michigan	48154
3	City Fire Department	14910 Farmington Road	Livonia	Michigan	48154
4	Civic Center Library	32777 Five Mile Road	Livonia	Michigan	48154
5	Civic Center Park Senior Center & Transit Office	15218 Farmington Road	Livonia	Michigan	48154
6	Jack E. Kirksey Livonia Community Recreation Center	15100 Hubbard Street	Livonia	Michigan	48154
7	Housing Commission	10800 Farmington Road	Livonia	Michigan	48150
8	Carl Sandburg Library	30100 West Seven Mile Road	Livonia	Michigan	48152
9	Alfred Noble Branch Library	32901 Plymouth Road	Livonia	Michigan	48150

See Building Location Map on slide 15 for building location/proximity



Section C

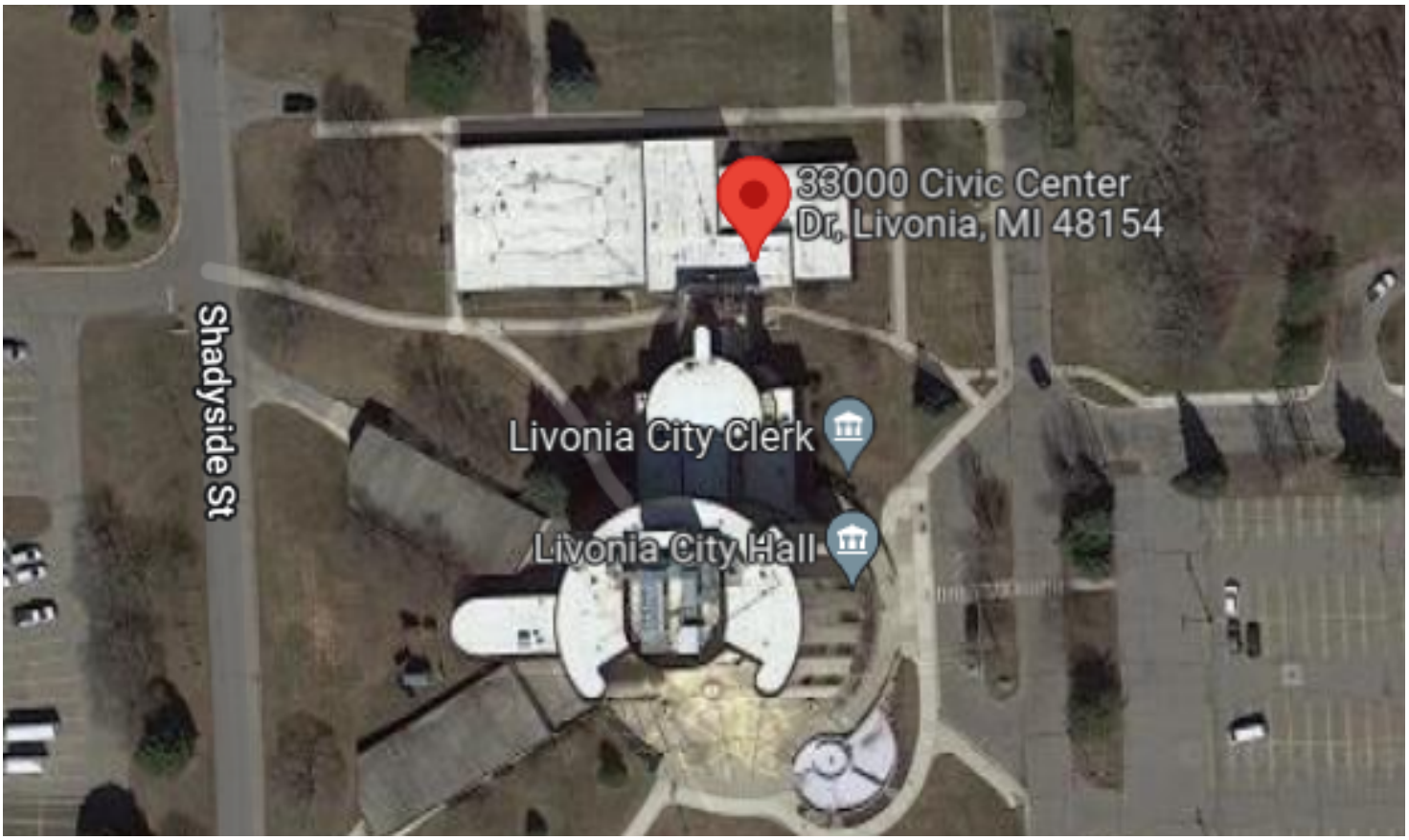
Individual Building Assessments

Building 01 – Livonia City Hall



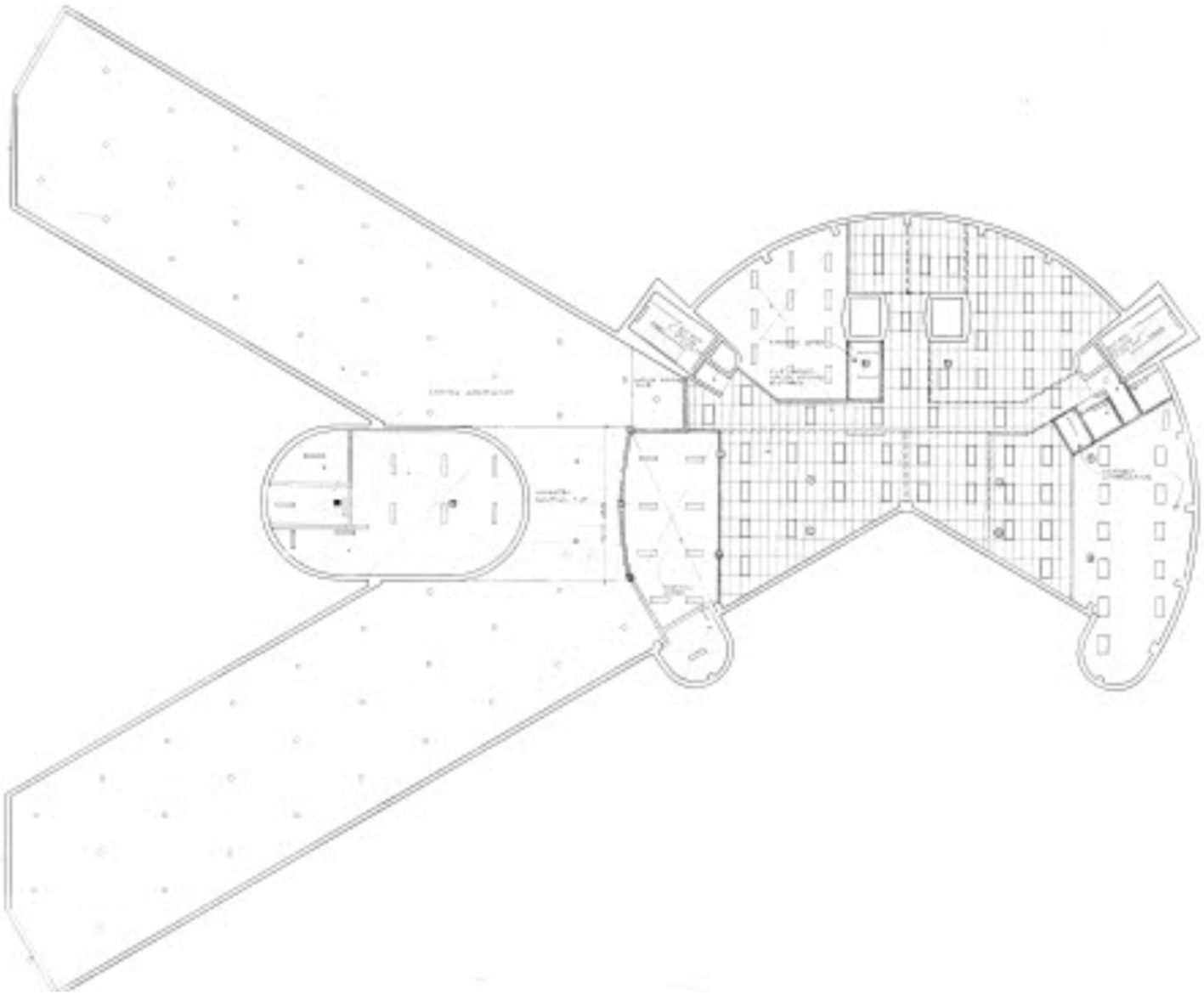
Address:	33000 Civic Center Dr. Livonia MI 48154
Year Built:	1977
Square Footage:	67,736
Site Area:	4.99 acres
Parking Spaces:	115
Stories:	5
Basement:	Yes
Elevator(s):	2
Exterior Façade:	Glass Curtain Wall/Brick/Concrete
Roof:	TPO
Fire Protection:	Fully Sprinkled

Site Plan:



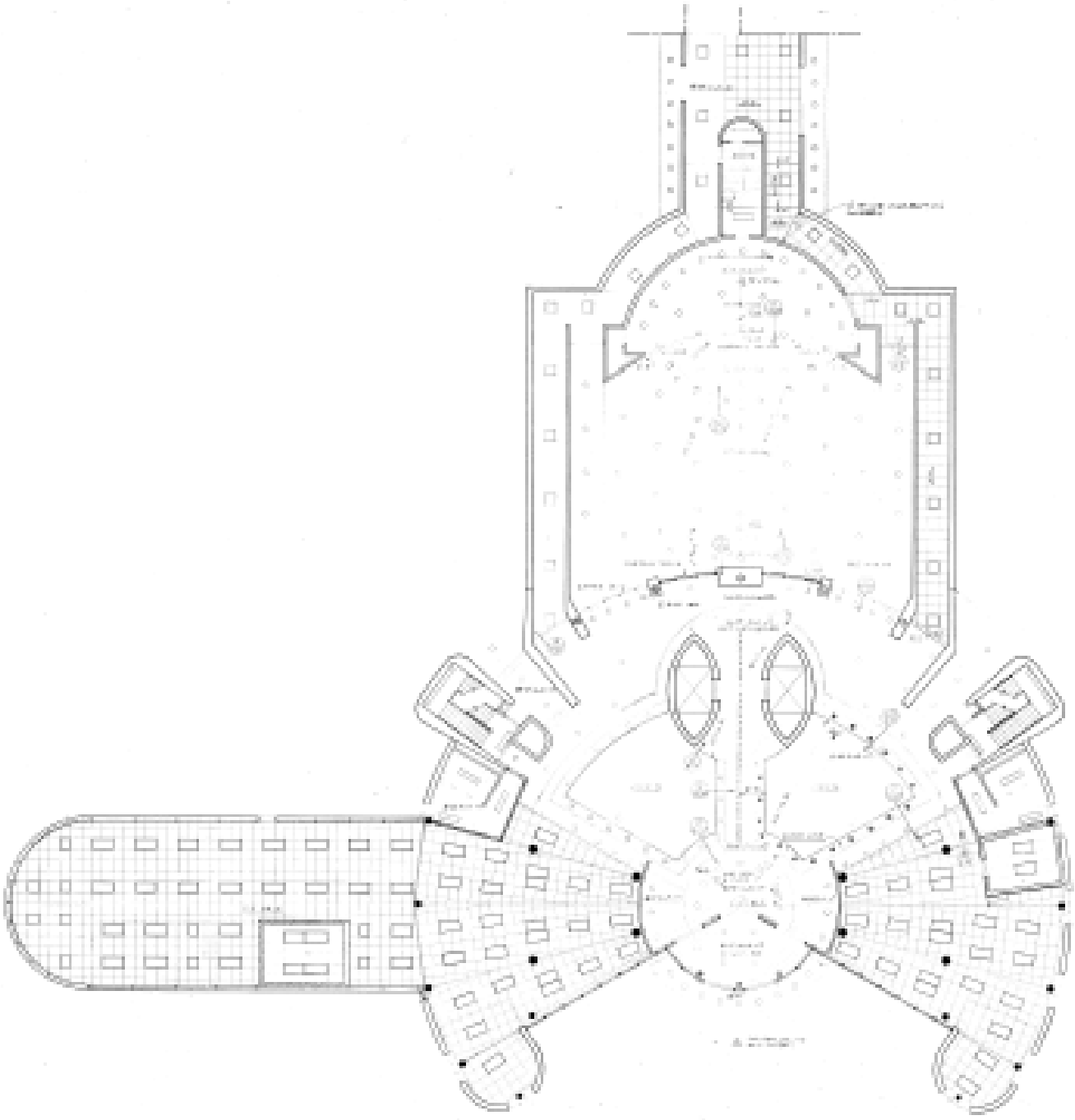
Building 01 – Livonia City Hall

Ground Floor Plan:



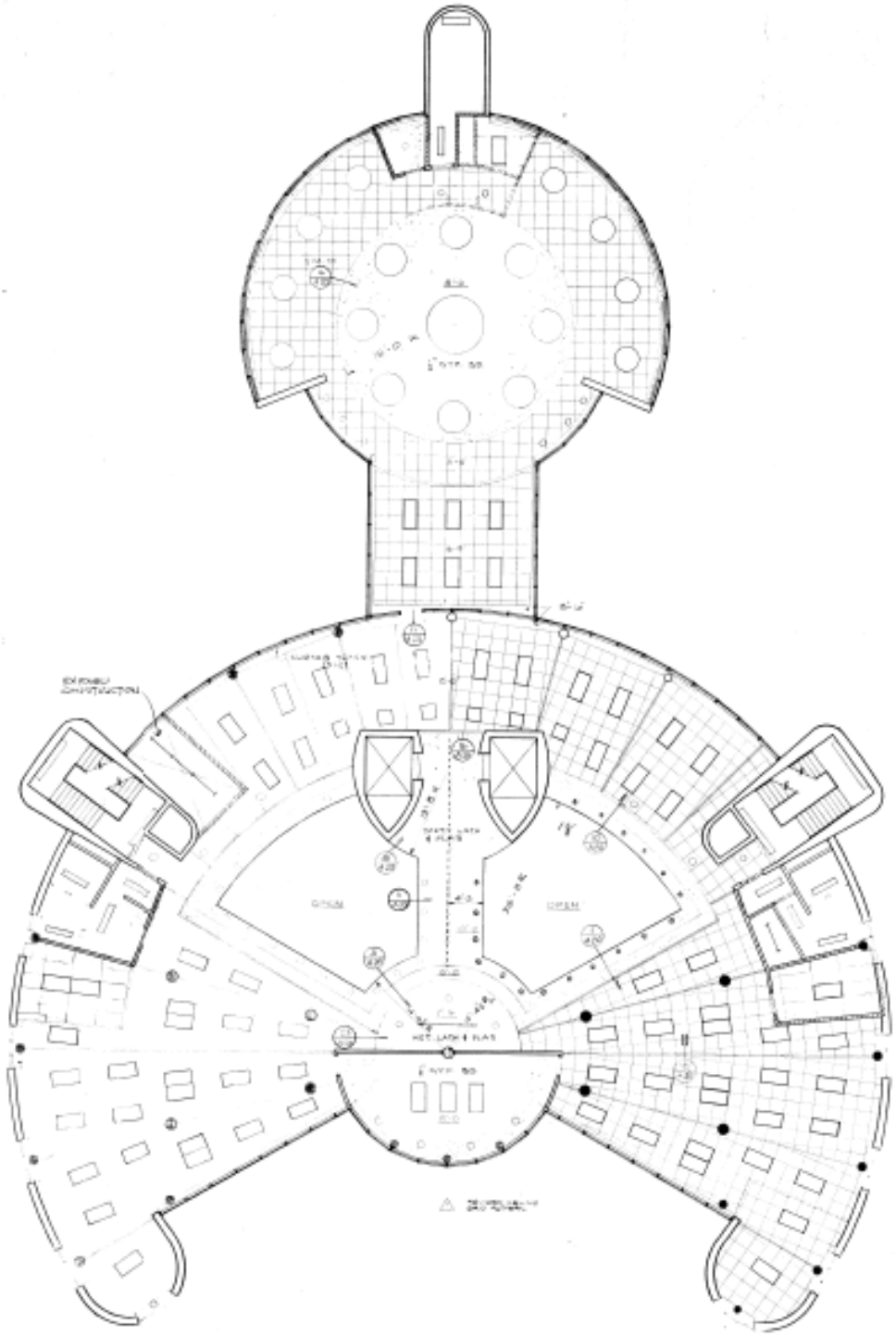
Building 01 – Livonia City Hall

1st Floor Plan:



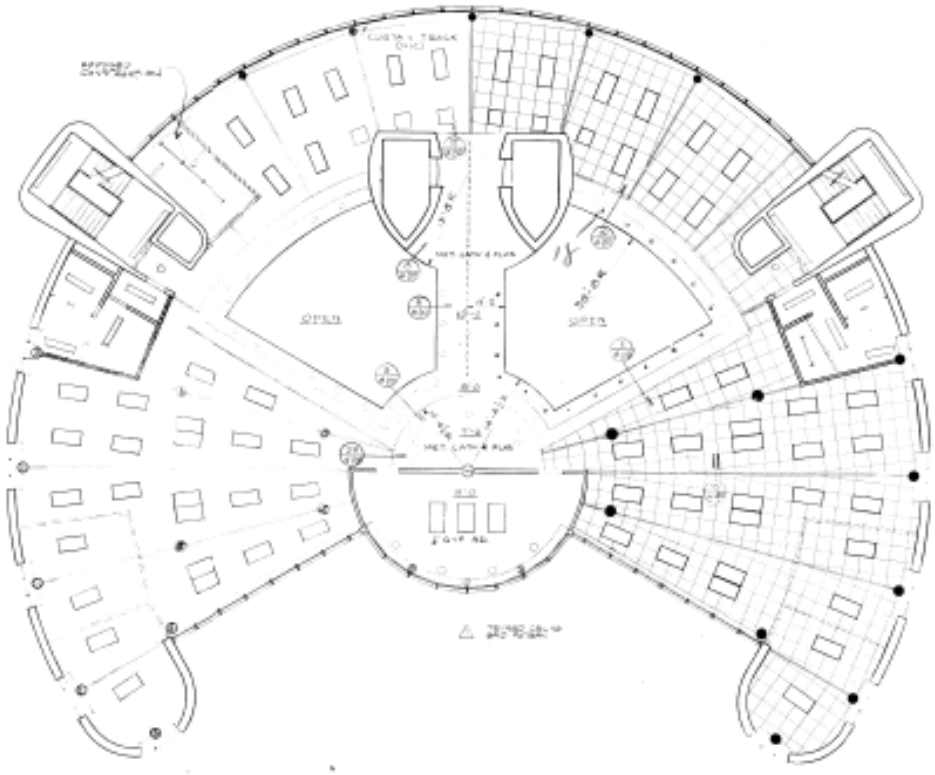
Building 01 – Livonia City Hall

2nd Floor Plan

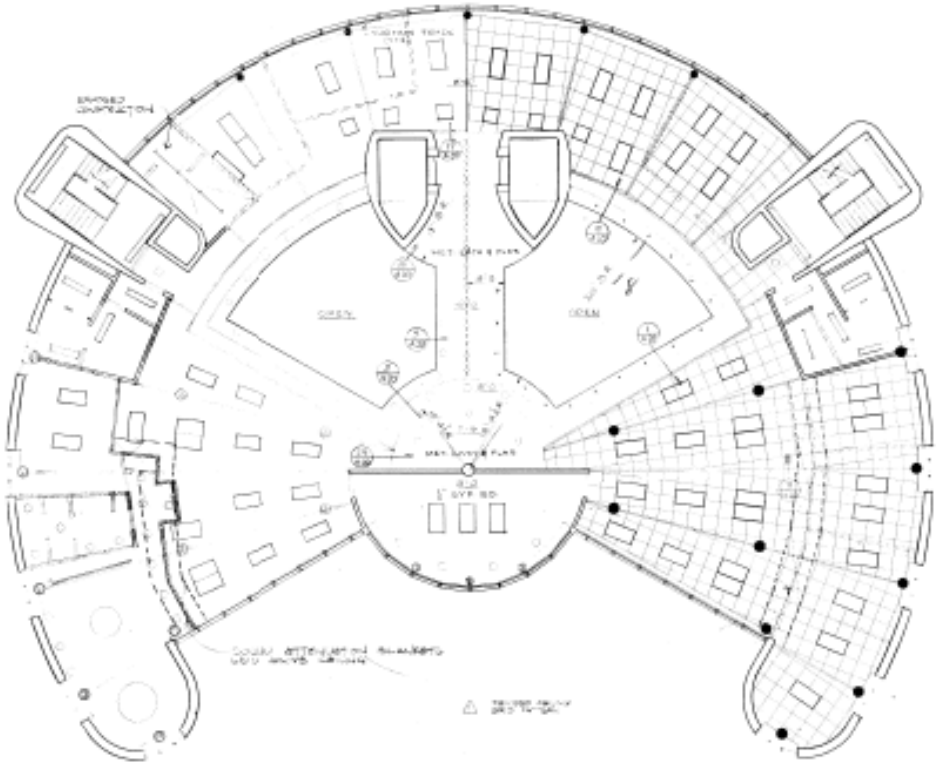


Building 01 – Livonia City Hall

3rd Floor Plan:

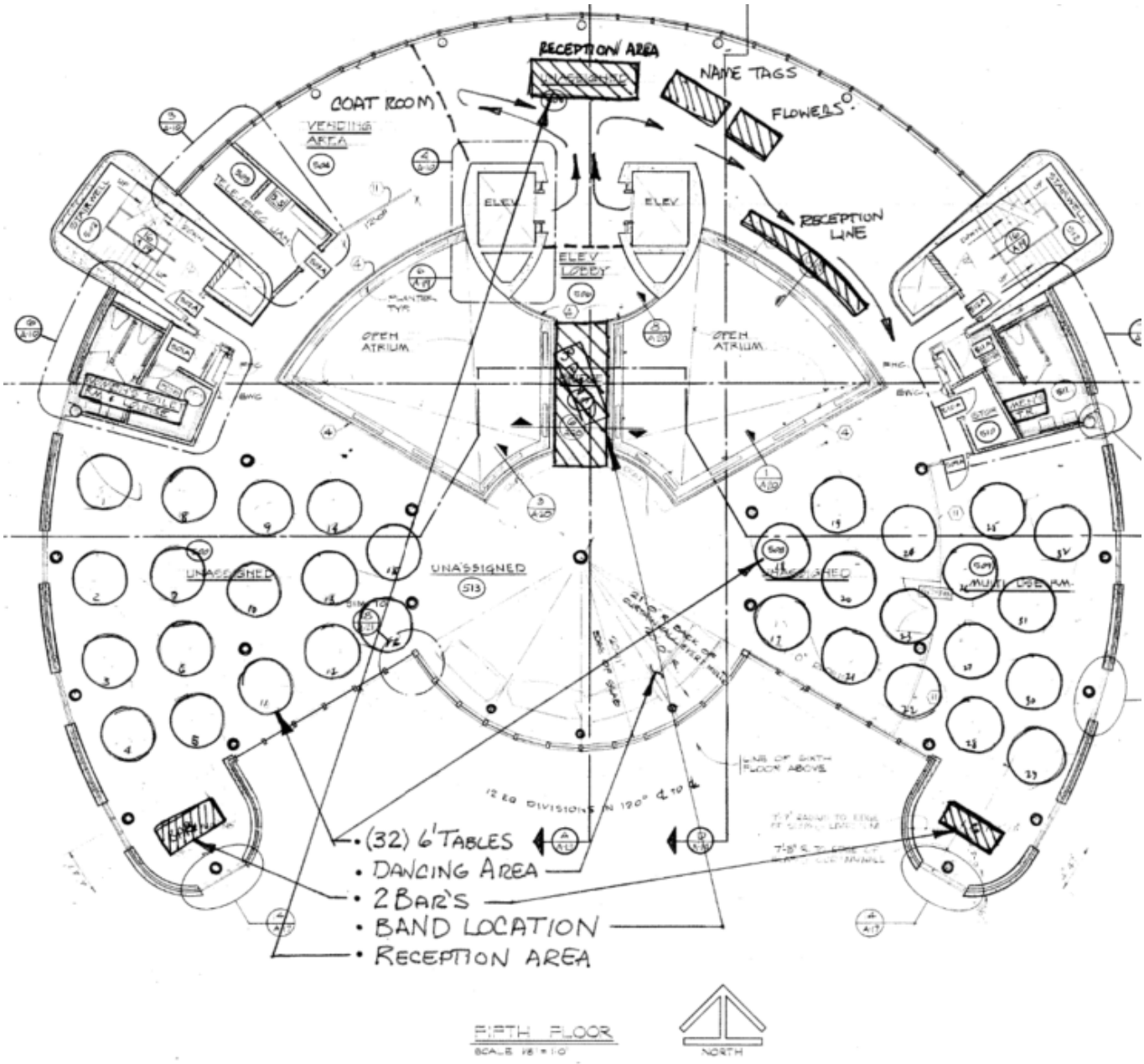


4th Floor Plan:



Building 01 – Livonia City Hall

5th Floor Plan:



Building 01 – Livonia City Hall

Summary of Budgets:

City Hall									
Building SF	67,736			Cost Data Specification Factor = Geographic Factor = Cost Escalation Factor =			Cost Escalation Factors 1.08	1.30	1.48
Program Area	Quantity Per Unit	Unit	# of Units	Total Units	As % of Total Cost	Critical Needs Cost (1 - 3 years)	Deferrable Maintenance Cost (4 - 6 years)	Future Need Cost (7 - 10 years)	
1.0 SITE									
Paving									
Pavement and Base Reconstruction	110,200	SF	1	110,200	2.90%	$0	$0	$1,056,862	
Selective Sidewalk & Curb Replacement	1	Allowance	1	1	0.66%	$54,000	$70,200	$79,920	
Sealcoating/Re-striping	110,200	SF	1	110,200	0.15%	$35,705	$0	$0	
Site Amenities - Bike Racks / Benches / Picnic Tables / Trash Receptacles / Etc.	1	Allowance	1	1	1.32%	$0	$421,200	$0	
Landscaping									
Improve Landscaping	1	Allowance	1	1	1.32%	$0	$0	$479,520	
Utilities									
Misc. Utility Repairs	1	Allowance	1	1	1.32%	$108,000	$140,400	$159,840	
Misc.									
Monument Sign - Powered & Electronic Display	1	Allowance	1	1	0.44%	$0	$140,400	$0	
Rework Concrete Entrance (Ramps and Railings)	1	Allowance	1	1	1.76%	$432,000	$0	$0	
Refurbish Entry Fountain (Includes New Plumbing)	1	Allowance	1	1	2.19%	$0	$702,000	$0	
SITE SUBTOTAL					**12.04%**	**$629,705**	**$1,474,200**	**$1,776,142**	
2.0 BUILDING ENVELOPE									
Roofing Work									
Replace Roof (EPDM)- .60 Mil/Reinforced/ Fully-Adhered (Parking Garage)	10,000	SF	1	10,000	1.54%	$378,000	$0	$0	
Replace Roof (EPDM)- .60 Mil/Reinforced/ Fully-Adhered (Main Tower) ~2015/ 30 yr. Warranty	13,800	SF	1	13,800	2.12%	$0	$0	$0	
Replace Roof (EPDM)- .60 Mil/Reinforced/ Fully-Adhered (Annex)	14,000	SF	1	14,000	2.15%	$0	$0	$783,216	
Misc. Drainage Repair	1	Allowance	1	1	0.07%	$18,144	$0	$0	
Paint Structural Steel for Equipment Screens	1	Allowance	1	1	0.09%	$0	$28,080	$0	
Replace Exterior Curtainwall System	1	Allowance	1	1	3.07%	$0	$0	$1,118,880	
Exterior Walls									
Re-Caulk Expansion Joints	1	Allowance	1	1	0.11%	$0	$0	$39,960	
Tuckpointing	1	Allowance	1	1	0.33%	$0	$105,300	$0	
Exterior Envelope Repairs/Upgrades (Curtain Wall/ Precast/ Soffits/ Painting)	1	Allowance	1	1	0.44%	$36,000	$46,800	$53,280	
Replace Exterior Doors	24	EA	1	24	0.53%	$129,600	$0	$0	
BUILDING ENVELOPE SUBTOTAL					**10.44%**	**$561,744**	**$180,180**	**$1,995,336**	
3.0 INTERIOR/FINISHES									
Interior Doors & Hardware									
Replace Door Hardware	200	EA	1	200	2.63%	$648,000	$0	$0	
Walls & Partitions									
Misc. Plaster/ Drywall Repairs	1	Allowance	1	1	0.88%	$0	$280,800	$0	
Ceilings									
Remove Existing & Install New Acoustic Tile Ceiling	30,700	SF	1	30,700	1.15%	$281,826	$0	$0	
Flooring									
Remove & Replace Flooring - Carpet	34,000	SF	1	34,000	1.00%	$246,024	$0	$0	
Remove and Replace VCT Tile	17,000	SF	1	17,000	0.67%	$165,240	$0	$0	
Remove and Replace Hard Tile Flooring	17,000	SF	1	17,000	2.24%	$550,800	$0	$0	
Interior Storefront Repairs/Replacement	1	Allowance	1	1	2.19%	$270,000	$351,000	$0	
Paint									
Painting Allowance	67,736	SF	1	67,736	0.74%	$0	$237,753	$0	
Signage									
Replace Interior Signage	67,736	SF	1	67,736	0.12%	$0	$38,041	$0	
Way-finding and Branding	1	Allowance	1	1	0.66%	$0	$0	$239,760	
Restrooms									
Renovate Floor Restrooms (2/floor)	12	EA	1	12	3.95%	$486,000	$631,800	$0	
Auditorium / Little Theater									
Replace Fabric and Make Repairs to Chairs	330	EA	1	330	0.22%	$53,460	$0	$0	
Rework Seating Configuration to Improve Accessibility	1	Allowance	1	1	1.10%	$270,000	$0	$0	
Casework & Countertops									
Replace Misc. Casework/Millwork	1	Allowance	1	1	2.19%	$270,000	$351,000	$0	
Other									
Replace Elevator	2	Allowance	1	2	2.63%	$0	$0	$959,040	
INTERIOR/FINISHES SUBTOTAL					**22.37%**	**$3,241,350**	**$1,890,394**	**$1,198,800**	
4.0 PLUMBING SYSTEMS									
Fire Protection									
Add / Modify Fire Suppression System for Improvements	1	Allowance	1	1	0.39%	$97,200	$0	$0	
Equipment & Fixtures									
Existing Lochinvar Water Heater, Serial # 1227M000978, 2012	1	EA	1	1	0.04%	$0	$11,232	$0	
Existing Lochinvar Water Heater, Serial # HG15292920, 2011	1	EA	1	1	0.04%	$0	$11,232	$0	
Provide Bottle Filler Drinking Fountains	6	EA	1	6	0.18%	$43,546	$0	$0	
Piping									
Replace Portions- Domestic Water/Sanitary Piping and Valves	1	Allowance	1	1	1.10%	$135,000	$175,500	$0	
PLUMBING SYSTEMS SUBTOTAL					**1.74%**	**$275,746**	**$197,964**	**$0**	

Building 01 – Livonia City Hall

Summary of Budgets:

City Hall									
Building SF	67,736			Cost Data Specification Factor = Geographic Factor = Cost Escalation Factor =			Cost Escalation Factors 1.08	1.30	1.48
Program Area	Quantity Per Unit	Unit	# of Units	Total Units	As % of Total Cost	Critical Needs Cost (1 - 3 years)	Deferrable Maintenance Cost (4 - 6 years)	Future Need Cost (7 - 10 years)	
5.0 HVAC SYSTEMS									
Equipment									
Existing Lochinvar Boiler, Serial # I11H10196040, 2011	1	EA		-	0.00%	$0	$0	$0	
Existing Lochinvar Boiler, Serial # I11H10196045, 2011	1	EA		-	0.00%	$0	$0	$0	
Existing Lochinvar Boiler, Serial # I11H10202692, 2011	1	EA		-	0.00%	$0	$0	$0	
Existing Lochinvar Boiler, 2011	1	EA		-	0.00%	$0	$0	$0	
Existing Lochinvar Boiler, Serial # H985854, 1998	1	EA	1	1	0.71%	$175,392	$0	$0	
Existing Lochinvar Boiler, Serial # H985853, 1998	1	EA	1	1	0.71%	$175,392	$0	$0	
Existing Lochinvar Boiler, Serial # H985852, 1998	1	EA	1	1	0.71%	$175,392	$0	$0	
Replace Boiler Pumps	3	EA	1	3	0.11%	$27,216	$0	$0	
Existing Trane Air Handler Unit, Serial # C18H06307, 2018	1	EA		-	0.00%	$0	$0	$0	
Existing Trane Air Handler Unit, Serial # C18H06309, 2018	1	EA		-	0.00%	$0	$0	$0	
Existing Alton Air Handling Unit (Not Able to Read Tag)	1	EA	1	1	1.10%	$270,000	$0	$0	
Replace Existing Variable Air Volume (VAV) Units	30	EA	1	30	0.79%	$0	$252,720	$0	
Existing McQuay Chiller, Serial #58K8504302, 1998	1	EA	1	1	0.88%	$216,000	$0	$0	
Existing Fujitsu Split System, Serial # KSA031893	1	EA	1	1	0.03%	$0	$0	$11,189	
Existing Fujitsu Split System, Serial # KSA022850	1	EA	1	1	0.03%	$0	$0	$11,189	
Piping									
Replace Portions- Hydronic Piping and Valves	1	Allowance	1	1	1.10%	$270,000	$0	$0	
Other HVAC									
Air and Water Balance	67,736	SF	1	67,736	0.09%	$21,946	$0	$0	
Commissioning	67,736	SF	1	67,736	0.06%	$14,631	$0	$0	
Temperature Controls	67,736	SF	1	67,736	1.49%	$365,774	$0	$0	
Clean/Sanitize All Ductwork and Grilles	1	Allowance	1	1	1.32%	$324,000	$0	$0	
HVAC SYSTEMS SUBTOTAL					**9.12%**	**$2,035,744**	**$252,720**	**$22,378**	
6.0 ELECTRICAL SYSTEMS									
Power									
Power for IT Equipment & Upgrades	1	Allowance	1	1	0.44%	$108,000	$0	$0	
Power for new HVAC	1	Allowance	1	1	0.25%	$60,480	$0	$0	
Upgrade Panels and Add New Circuits Throughout Building	67,736	SF	1	67,736	0.89%	$0	$285,304	$0	
Panel Capacity Investigations and Re-tagging	1	Allowance	1	1	0.20%	$48,600	$0	$0	
Lighting									
Replace Lighting with LEDs (New OS, Switching, and Controls	67,736	SF	1	67,736	2.97%	$731,549	$0	$0	
Replace Exterior Wall Packs	12	EA	1	12	0.04%	$10,886	$0	$0	
Replace Emergency & Exit Lights	67,736	SF	1	67,736	0.09%	$21,946	$0	$0	
Fire Alarm System									
Adjustments to Fire Alarm System	1	Allowance	1	1	0.20%	$0	$63,180	$0	
ELECTRICAL SYSTEMS SUBTOTAL					**5.08%**	**$981,462**	**$348,484**	**$0**	
7.0 SECURITY									
Security									
Security Allowance - Cameras / Surveillance	1	Allowance	1	1	0.00%	$0	$280,800	$0	
Security Allowance - Access Controls	1	Allowance	1	1	0.00%	$0	$105,300	$0	
SECURITY SYSTEMS SUBTOTAL					**1.21%**	**$0**	**$386,100**	**$0**	
8.0 ABATEMENT									
Abatement									
Abatement Allowance	1	Allowance	1	1	2.19%	$0	$0	$799,200	
ABATEMENT SUBTOTAL					**2.19%**	**$0**	**$0**	**$799,200**	
9.0 FURNITURE & EQUIPMENT									
General Furniture									
FFE Allowance	1	Allowance	1	1	3.29%	$270,000	$351,000	$399,600	
FURNITURE & EQUIPMENT SUBTOTAL					**3.29%**	**$270,000**	**$351,000**	**$399,600**	
10.0 TECHNOLOGY									
Technology									
Relocate Date Center from Basement to Above Ground	1	Allowance	1	1	6.58%	$1,620,000	$0	$0	
Re-rack Servers SAN (2020)		EA		-	0.00%	$0	$0	$0	
Re-rack Servers Host (2021)		EA		-	0.00%	$0	$0	$0	
New Phone System	1	Allowance	1	1	2.19%	$0	$702,000	$0	
TECHNOLOGY SUBTOTAL					**10.71%**	**$1,778,502**	**$908,053**	**$234,583**	
SOFT COSTS									
Building Infrastructure Improvement Total:					78.20%	$9,774,252	$5,989,095	$6,426,039	
Project Contingency:	10.00%				6.42%	$772,575	$473,004	$579,186	
Permits, Testing & Printing:	2.50%				1.77%	$212,458	$130,076	$159,276	
Professional Fees & Costs:	9.00%				7.10%	$854,528	$523,179	$640,624	
Construction Manager Fee & Costs:	9.00%				6.51%	$783,970	$479,981	$587,729	
PROJECT TOTAL					**100.00%**	**$12,397,784**	**$7,595,335**	**$8,392,853**	

Building 01 – Livonia City Hall

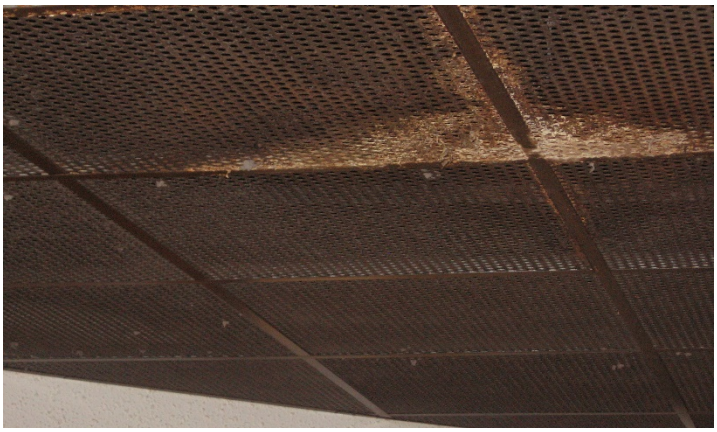
Photos: Provided by City of Livonia



Phone Room Leak Aftermath



Fifth Floor 2013



Fifth Floor Ventilation Grates 2013



First Floor Leak



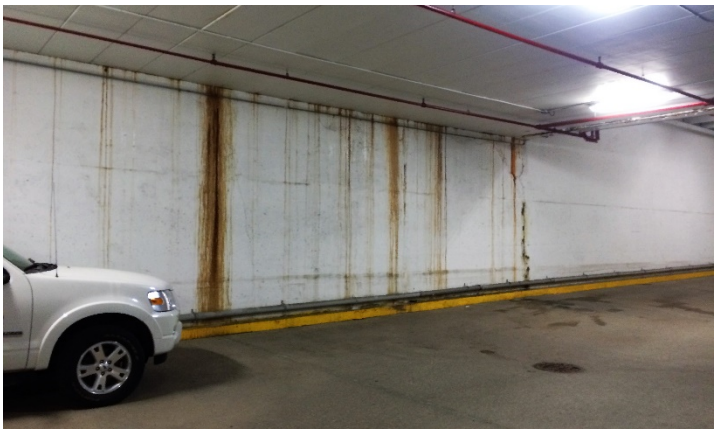
Annex Lobby 2017



Basement Leak Near Elevator 2016

Building 01 – Livonia City Hall

Photos: Provided by City of Livonia



Garage 20107



Garage 2017



Garage 2017



Ruptured Pipe in Annex 2022



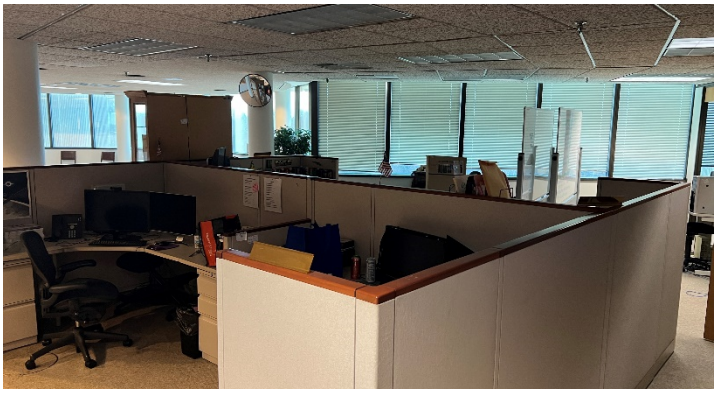
Annex Hall Damage 2022



Basement Storage & Sump 2016

Building 01 – Livonia City Hall

Photos:







Building 01 – Livonia City Hall

Photos:










Building 01 – Livonia City Hall

Photos:

















Building 01 – Livonia City Hall

Photos:










Building 01 – Livonia City Hall

Photos:















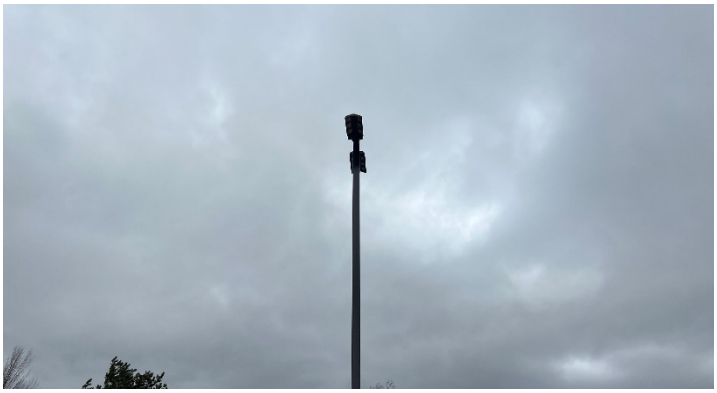


Building 01 – Livonia City Hall

Photos:










Building 01 – Livonia City Hall

Photos:










Building 02 – Livonia Police Department



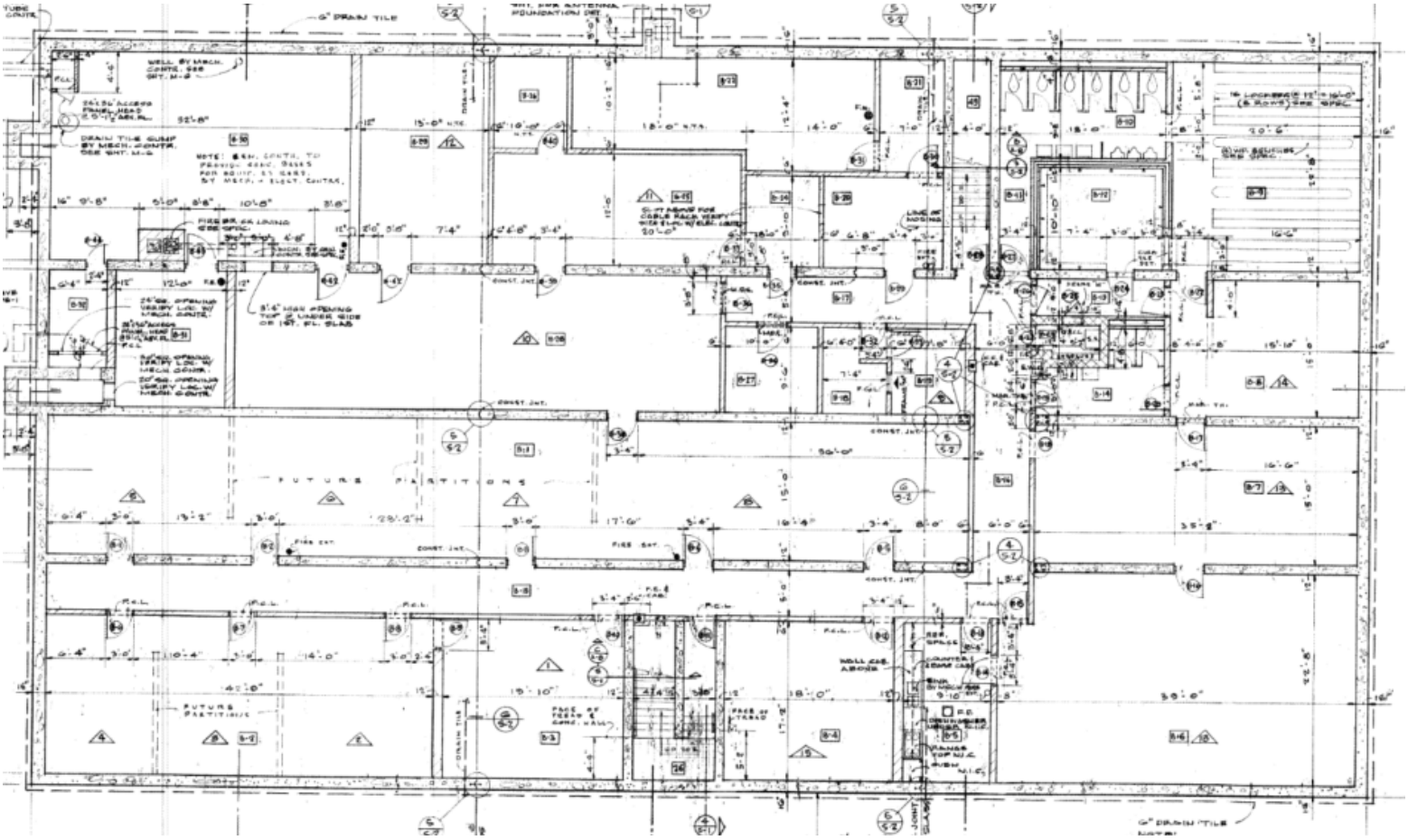
Address:	15050 Farmington Rd. Livonia MI 48154
Year Built:	1961/1987
Square Footage:	59,540
Site Area:	46.48 Acres
Parking Spaces:	76
Stories:	1
Basement:	Yes
Elevator(s):	Yes
Exterior Façade:	Brick
Roof:	PVC
Fire Protection:	No

Site Plan:



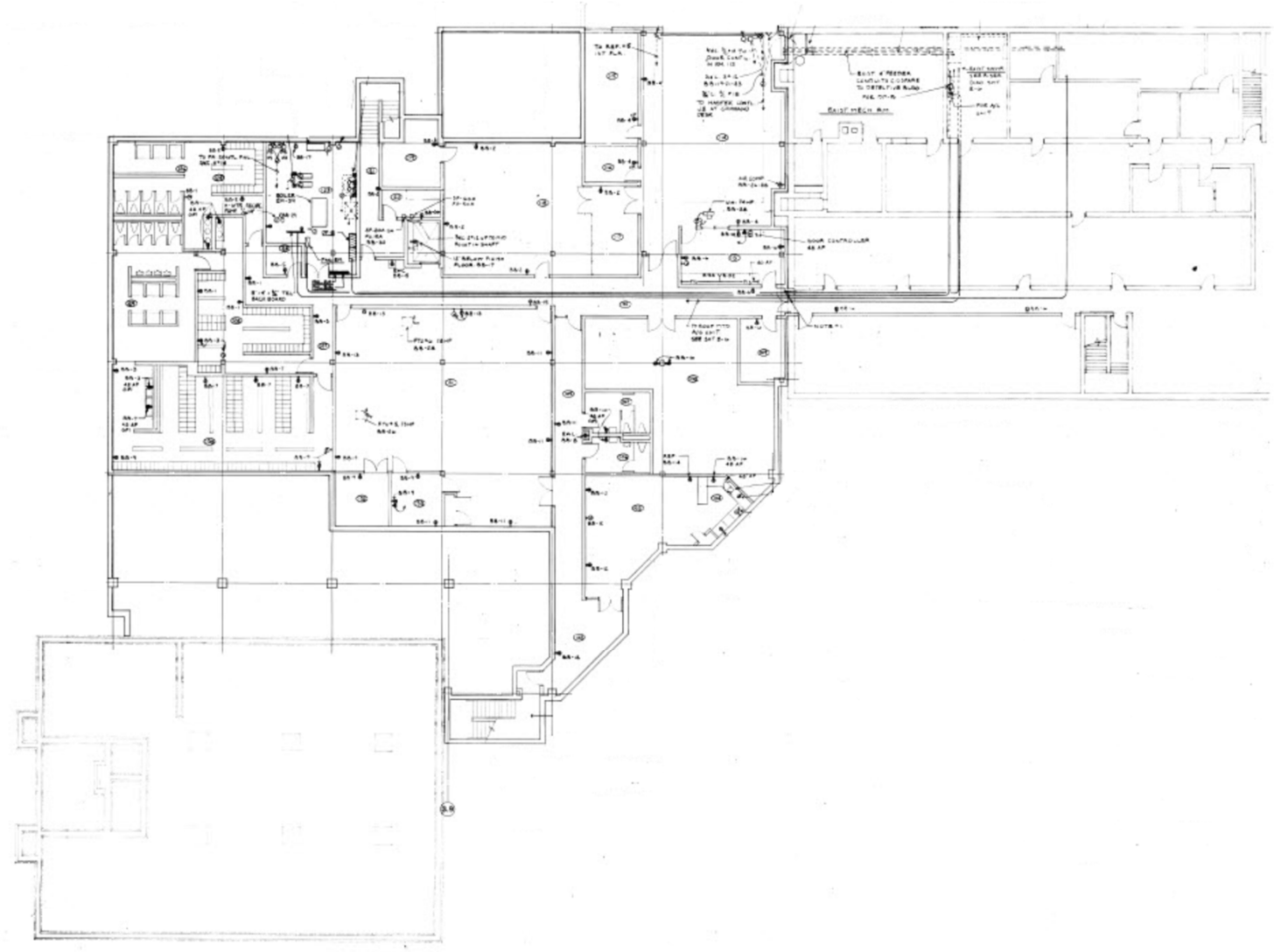
Building 02 – Livonia Police Department

Basement Floor Plan (1961):



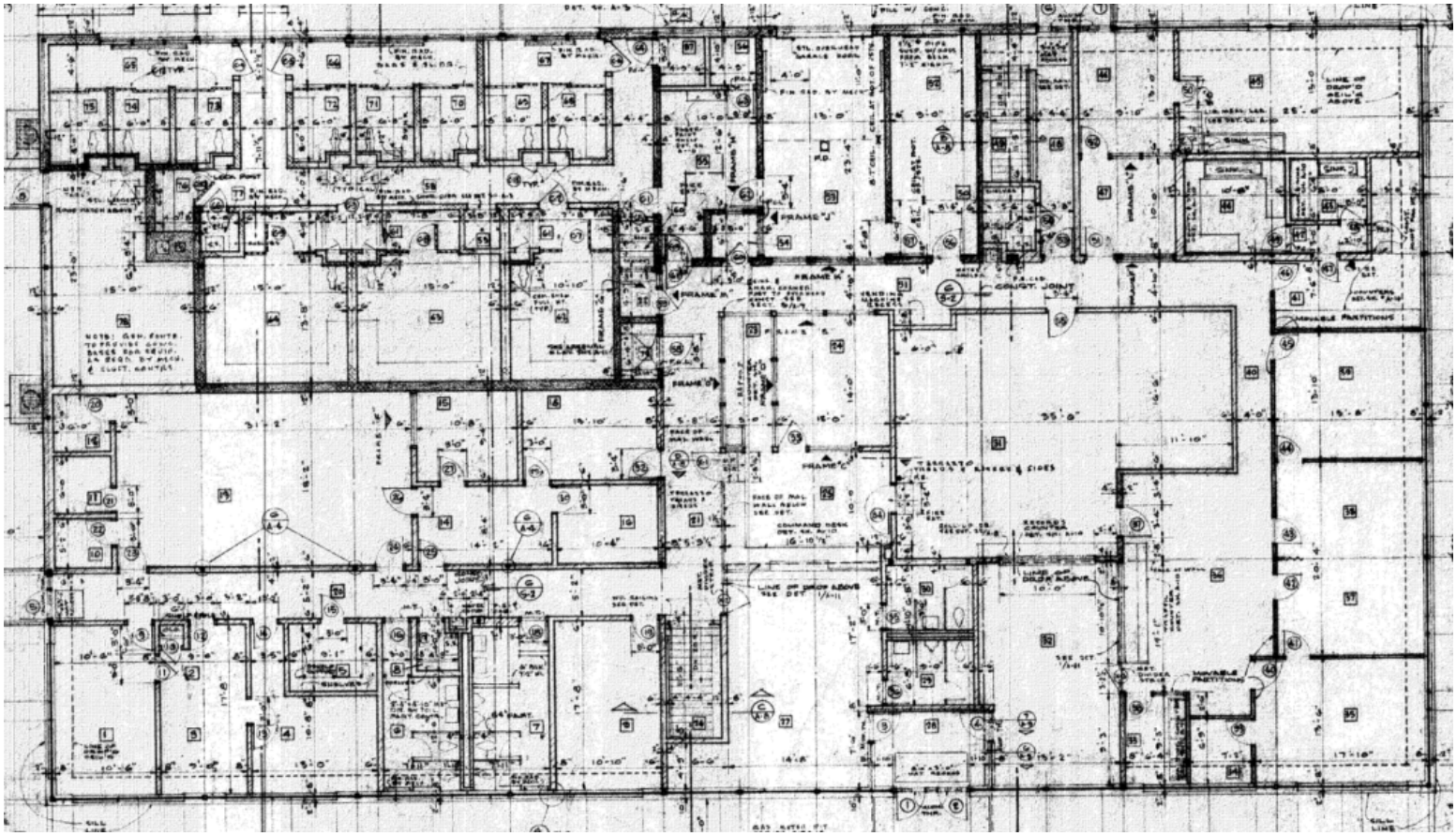
Building 02 – Livonia Police Department

Basement Floor Plan (1986):



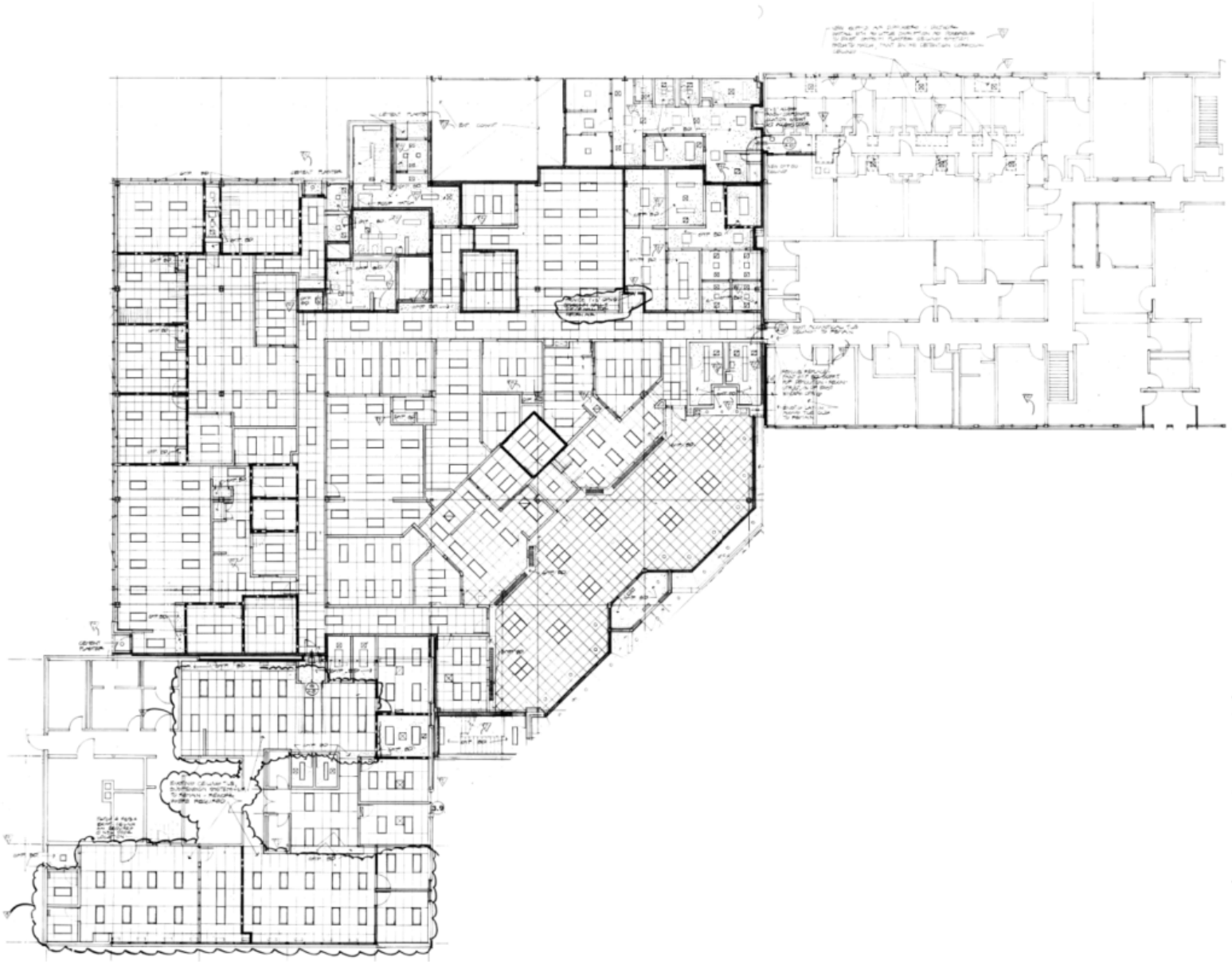
Building 02 – Livonia Police Department

1st Floor Plan (1961):



Building 02 – Livonia Police Department

1st Floor Plan (1986):



Building 02 – Livonia Police Department

Summary of Budgets:

Police Department									
Building SF	59,540			Cost Data Specification Factor = Geographic Factor = Cost Escalation Factor =		Cost Escalation Factors	1.08	1.30	1.48
Program Area	Quantity Per Unit	Unit	# of Units	Total Units	As % of Total Cost	Critical Needs Cost (1 - 3 years)	Deferrable Maintenance Cost (4 - 6 years)	Future Need Cost (7 - 10 years)	
1.0 SITE									
Paving									
Pavement and Base Reconstruction	156,000	SF	1	156,000	8.23%	$0	$1,314,144	$0	
Replace Concrete Stairs and Railings	1	Allowance	1	1	0.22%	$27,000	$0	$0	
Selective Sidewalk & Curb Replacement	1	Allowance	1	1	0.39%	$48,384	$0	$0	
Sealcoating/Re-striping	156,000	SF	1	156,000	0.41%	$50,544	$0	$0	
Utilities									
Catch Basin / Manholes	6	EA	1	6	0.24%	$0	$37,740	$0	
Misc. Utility Repairs	1	Allowance	1	1	0.44%	$0	$70,200	$0	
Fire Suppression Utilities	1	Allowance	1	1	0.44%	$54,000	$0	$0	
Misc.									
Monument Sign - Powered & Electronic Display	1	EA	1	1	0.44%	$54,000	$0	$0	
Reapirs Needed for Carports	1	Allowance	1	1	1.76%	$0	$280,800	$0	
Rework Concrete Entrance (Ramps and Railings)	1	Allowance	1	1	1.76%	$216,000	$0	$0	
SITE SUBTOTAL					**14.33%**	**$449,928**	**$1,702,884**	**$0**	
2.0 BUILDING ENVELOPE									
Roofing Work									
Existing PVC Roof (Under Warranty- Install Year Unknown)	37000		1	37,000	0.00%	$0	$0	$0	
Install Guard Rails Around Roof Hatch	1	Allowance	1	1	0.04%	$5,400	$0	$0	
Windows									
Replace Exterior Window Systems	1	Allowance	1	1	2.64%	$324,000	$0	$0	
Re-caulk Windows	1	Allowance	1	1	0.75%	$91,800	$0	$0	
Exterior Walls									
Re-Caulk Expansion Joints	1	Allowance	1	1	0.13%	$16,200	$0	$0	
Tuckpointing	1	Allowance	1	1	0.66%	$81,000	$0	$0	
Exterior Doors									
Overhead Door Replacement	2	EA	1	2	0.20%	$24,192	$0	$0	
BUILDING ENVELOPE SUBTOTAL					**4.42%**	**$542,592**	**$0**	**$0**	
3.0 INTERIOR/FINISHES									
Interior Doors & Hardware									
Replace Interior Doors & Hardware	240	EA	1	240	8.44%	$1,036,800	$0	$0	
Walls & Partitions									
Replace Fabric Wall Panels in Line Up Room	1	Allowance	1	1	0.13%	$16,200	$0	$0	
Ceilings									
Remove Existing & Install New Acoustic Tile Ceiling	60,000	SF	1	60,000	4.49%	$550,800	$0	$0	
Flooring									
Remove & Replace Flooring - Carpet	30,000	SF	1	30,000	1.77%	$108,540	$141,102	$0	
Remove & Replace VCT Flooring with LVT	30,000	SF	1	30,000	2.37%	$0	$379,080	$0	
Remove & Replace Carpet- Training Room	1	Allowance	1	1	0.44%	$54,000	$0	$0	
New Tile At Old Lobby Entrance	1	Allowance	1	1	0.04%	$5,400	$0	$0	
Windows									
Remove & Replace Window Treatments	1	Allowance	1	1	0.53%	$0	$0	$95,904	
Paint									
Paint - Basement	1	Allowance	1	1	0.66%	$81,000	$0	$0	
Paint - Interior	59,540	SF	1	59,540	0.79%	$0	$125,391	$0	
Paint Structural Steel in Carports	1	Allowance	1	1	0.53%	$64,800	$0	$0	
Paint Basement	1	Allowance	1	1	0.00%	$0	$0	$0	
Signage									
Replace Interior Signage	59,540	SF	1	59,540	0.21%	$0	$33,438	$0	
Restrooms									
Renovate Toilet Rooms	8	EA	1	8	3.52%	$432,000	$0	$0	
Casework & Countertops									
Replace Misc. Casework/Millwork	1	Allowance	1	1	0.35%	$21,600	$0	$31,968	
Other									
Elevator Cab Upgrade	1	Allowance	1	1	0.53%	$0	$84,240	$0	
Renovate Various Locker Rooms	1	Allowance	1	1	8.80%	$1,080,000	$0	$0	
Renovate Cafeteria / Lounge (In Process)	1	Allowance	1	1	0.09%	$10,800	$0	$0	
INTERIOR/FINISHES SUBTOTAL					**33.68%**	**$3,461,940**	**$763,251**	**$127,872**	
4.0 PLUMBING SYSTEMS									
Fire Protection									
New Fire Suppression System	40,000	SF	1	40,000	1.76%	$216,000	$0	$0	
Equipment & Fixtures									
Existing Lochinvar Hot Water Heater, Serial # 102522081, 2015	1	EA	1	1	0.07%	$0	$11,232	$0	
Existing Lochinvar Hot Water Heater, Serial # AB4230360, 2004- Replaced 2022	1	EA	1	1	0.07%	$0	$0	$0	
Existing Lochinvar Hot Water Heater, Serial # AB4258516, 2004- Replaced 2022	1	EA	1	1	0.07%	$0	$0	$0	
Existing Lochinvar Hot Water Heater, Serial # 1243A006858, 2012	1	EA	1	1	0.07%	$8,640	$0	$0	
Provide Bottle Filler Drinking Fountains	6	EA	1	6	0.35%	$43,546	$0	$0	
Piping		0			0.00%	$0	$0	$0	
Replace Piping, Valves & Unions	1	Allowance	1	1	0.22%	$0	$0	$39,960	
PLUMBING SYSTEMS SUBTOTAL					**2.62%**	**$268,186**	**$11,232**	**$39,960**	

Building 02 – Livonia Police Department

Summary of Budgets:

Police Department									
Building SF	59,540			Cost Data Specification Factor = Geographic Factor = Cost Escalation Factor =		Cost Escalation Factors	1.08	1.30	1.48
Program Area	Quantity Per Unit	Unit	# of Units	Total Units	As % of Total Cost	Critical Needs Cost (1 - 3 years)	Deferrable Maintenance Cost (4 - 6 years)	Future Need Cost (7 - 10 years)	
5.0 HVAC SYSTEMS									
Equipment									
Existing Lochinvar Boiler, 2009	1	EA	1	1	0.00%	$0	$0	$0	
Existing Lochinvar Boiler, Serial # I09H00221808, 2009	1	EA	1	1	0.00%	$0	$0	$0	
Existing Carrier Roof Top Unit, Serial # 2496G21157, 1996 (In Process)	1	EA	1	1	0.22%	$27,000	$0	$0	
Existing Trane Roof Top Unit, Serial # C13H04967, 2013	1	EA	1	1	0.22%	$0	$0	$39,960	
Existing Liebert Condensing Unit, Serial # 0739C03857, 2007	1	EA	1	1	0.22%	$0	$0	$39,960	
Existing Liebert Condensing Unit, Serial # 0112C46261, 2001	1	EA	1	1	0.22%	$0	$0	$39,960	
Existing Carrier Air Handling Unit, Serial # 2213U21703, 2021		EA		-	0.00%	$0	$0	$0	
Existing Trane Chiller, Serial # J98H82634, 1998	1	EA	1	1	0.88%	$108,000	$0	$0	
Existing Fujitsu Split System, Serial # BWB 000063, 2017	1	EA	1	1	0.12%	$0	$0	$22,378	
Existing Fujitsu Split System, Serial # BWP 000546, 2016	1	EA	1	1	0.12%	$0	$0	$22,378	
Existing Fujitsu Split System, Serial # QVA 017109, 2019	1	EA	1	1	0.12%	$0	$0	$22,378	
Existing Fujitsu Split System, Serial # QVN 012696, 2019	1	EA	1	1	0.12%	$0	$0	$22,378	
Piping									
Replace Piping, Valves & Unions	1	Allowance	1	1	0.22%	$0	$0	$39,960	
Other HVAC									
Air and Water Balance	59,540	SF	1	59,540	0.16%	$0	$0	$28,551	
Commissioning	59,540	SF	1	59,540	0.10%	$0	$0	$19,034	
Temperature Controls	59,540	SF	1	59,540	1.47%	$0	$0	$266,472	
HVAC SYSTEMS SUBTOTAL					**4.32%**	**$135,000**	**$0**	**$584,890**	
6.0 ELECTRICAL SYSTEMS									
Power									
Power for IT Equipment & Upgrades	1	Allowance	1	1	0.18%	$21,600	$0	$0	
Replace Existing Electrical Panels	1	Allowance	1	1	0.44%	$0	$0	$79,920	
Power for new HVAC	1	Allowance	1	1	0.49%	$60,480	$0	$89,510	
Miscellaneous Power Allowance	59,540	SF	1	59,540	0.21%	$25,721	$0	$0	
Panel Capacity Investigations and Re-tagging	1	Allowance	1	1	0.15%	$18,144	$0	$0	
Lighting									
Replace Lighting with LED's (New OS, Switching, etc.)	59,540	SF	1	59,540	3.82%	$469,413	$0	$0	
Replace Exterior Wall Packs	12	EA	1	12	0.09%	$10,886	$0	$0	
Fire Alarm System									
Adjustments to Fire Alarm System	1	Allowance	1	1	0.10%	$0	$0	$17,902	
Other									
Replace PA System	1	Allowance	1	1	0.88%	$108,000	$0	$0	
ELECTRICAL SYSTEMS SUBTOTAL					**6.36%**	**$714,245**	**$0**	**$187,332**	
7.0 SECURITY									
Security									
Security Allowance - Cameras / Surveillance	1	Allowance	1	1	0.00%	$0	$0	$119,880	
Security Allowance - Access Controls	1	Allowance	1	1	0.00%	$0	$0	$119,880	
Security Allowance	1	Allowance	1	1	0.88%	$36,000	$46,800	$53,280	
SECURITY SYSTEMS SUBTOTAL					**2.20%**	**$36,000**	**$46,800**	**$293,040**	
8.0 ABATEMENT									
Abatement									
Abatement Allowance	1	Allowance	1	1	4.40%	$540,000	$0	$0	
ABATEMENT SUBTOTAL					**4.40%**	**$540,000**	**$0**	**$0**	
9.0 FURNITURE & EQUIPMENT									
General Furniture									
FFE Allowance	1	Allowance	1	1	2.46%	$151,200	$0	$223,776	
Other									
Replace Jail Metal Benches/Cots	1	Allowance	1	1	0.66%	$81,000	$0	$0	
FURNITURE & EQUIPMENT SUBTOTAL					**3.12%**	**$232,200**	**$0**	**$223,776**	
10.0 TECHNOLOGY									
Technology									
Primary Dispatch Center - 2020		EA		-	0.00%	$0	$0	$0	
Primary Dispatch Center Equipment - 2021		EA		-	0.00%	$0	$0	$0	
Laptop/Desktop Replacement (Every 5 Years) $2,400/Each		EA		-	0.00%	$0	$0	$0	
TECHNOLOGY SUBTOTAL					**0.00%**	**$0**	**$0**	**$0**	
SOFT COSTS									
Building Infrastructure Improvement Total:					75.44%	$6,380,091	$2,524,166	$1,456,870	
Project Contingency:	10.00%				7.23%	$614,789	$252,417	$123,309	
Permits, Testing & Printing:	2.50%				1.99%	$169,067	$69,415	$33,910	
Professional Fees & Costs:	9.00%				8.00%	$680,004	$279,192	$136,390	
Construction Manager Fee & Costs:	9.00%				7.34%	$623,857	$256,140	$125,128	
PROJECT TOTAL					**100.00%**	**$8,467,808**	**$3,381,330**	**$1,875,608**	

Building 02 – Livonia Police Department

Photos:

















Building 02 – Livonia Police Department

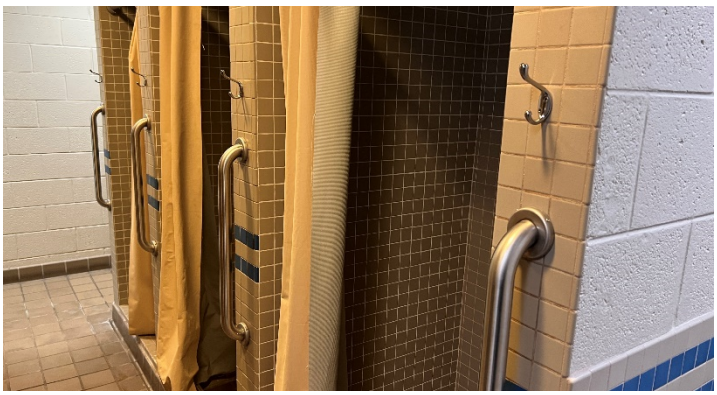
Photos:





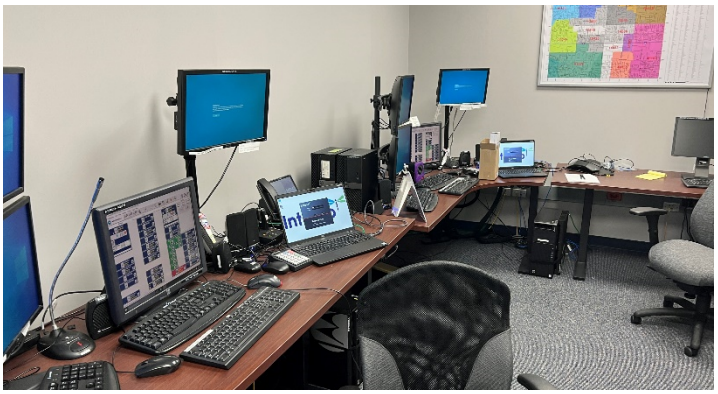












Building 02 – Livonia Police Department

Photos:

















Building 02 – Livonia Police Department

Photos:

















Building 02 – Livonia Police Department

Photos:







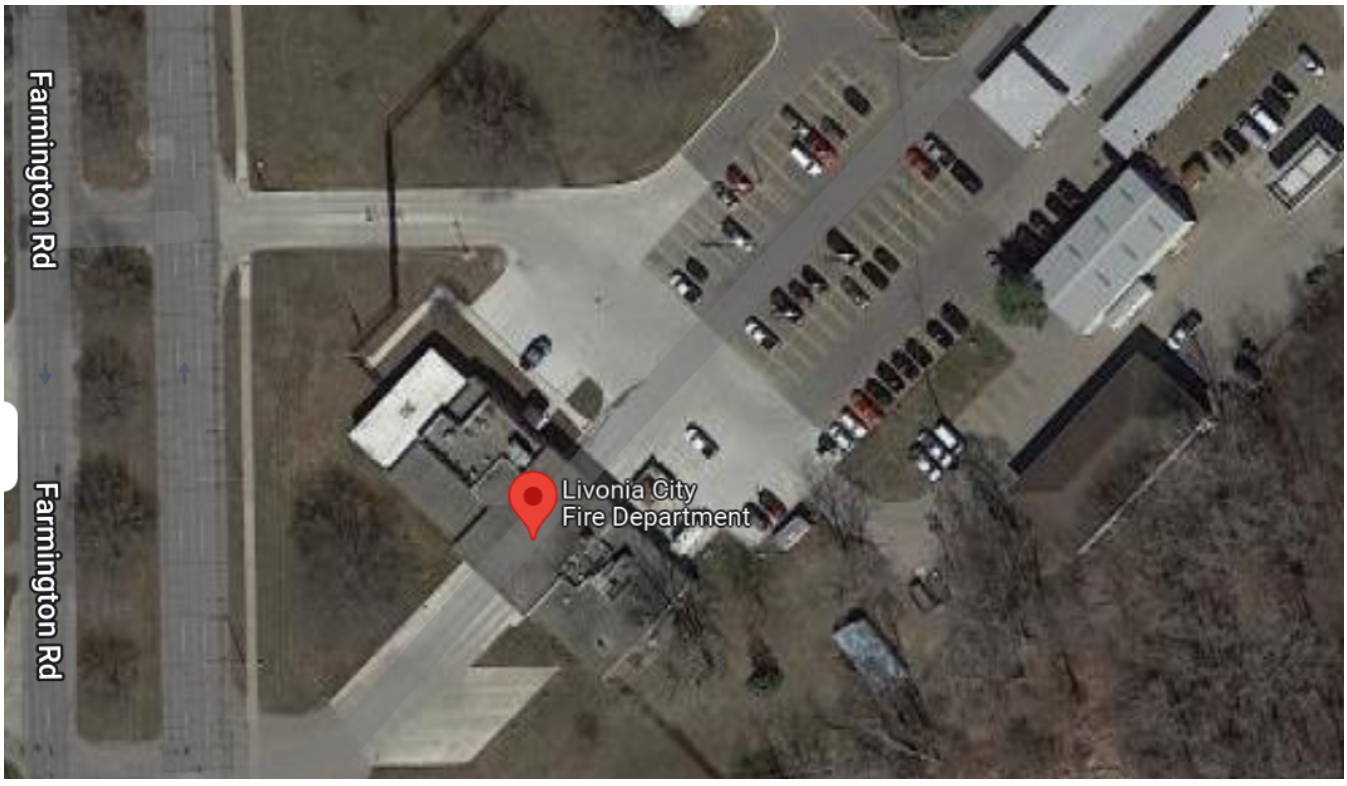



Building 03 – Livonia City Fire Department



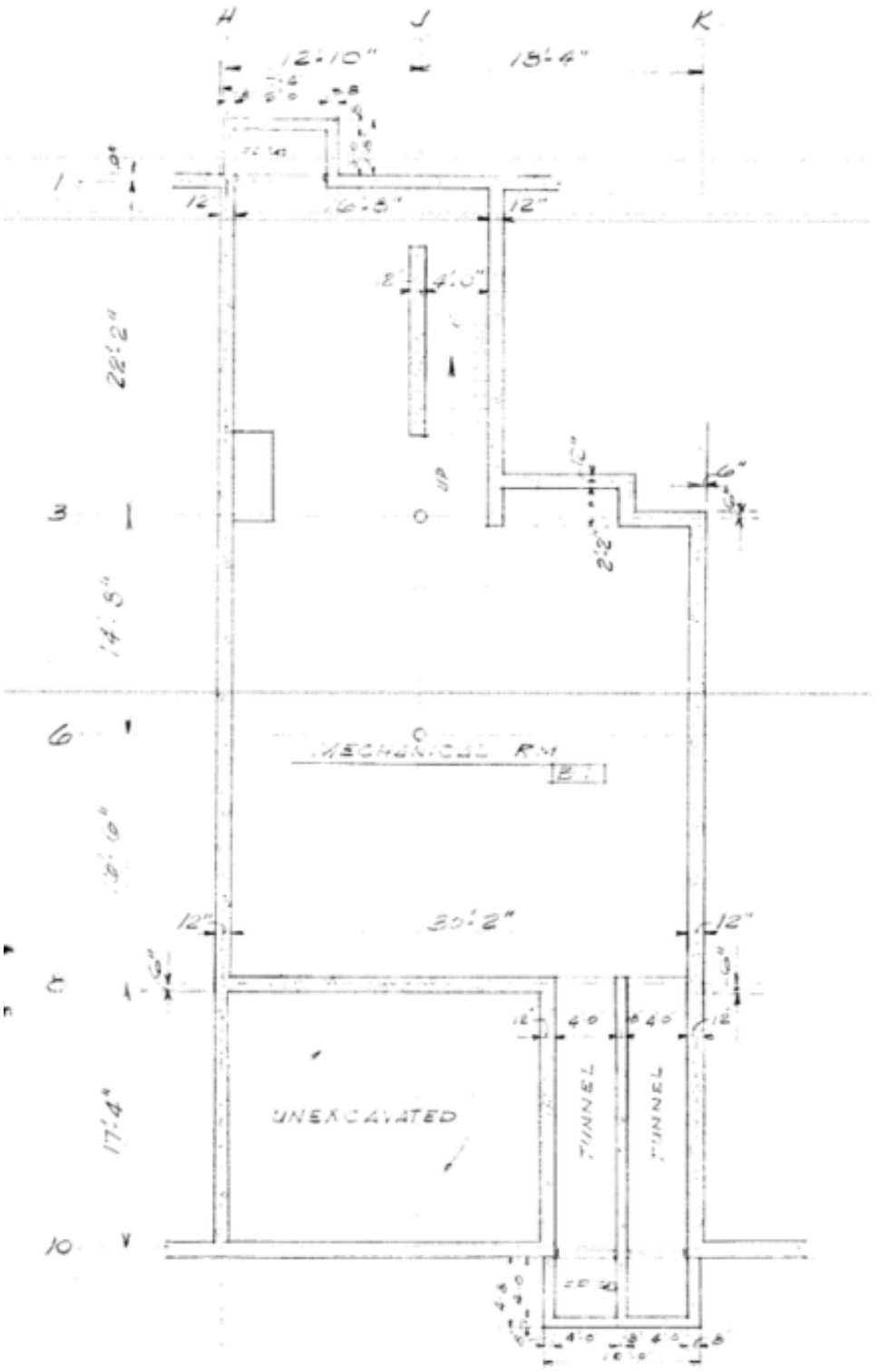
Address:	14910 Farmington Rd. Livonia MI 48154
Year Built:	1967 – 2018 (Addition)
Square Footage:	13,137
Site Area:	46.48 Acres
Parking Spaces:	26
Stories:	1
Basement:	Yes
Elevator(s):	No
Exterior Façade:	Brick
Roof:	PVC (Addition) & Tar
Fire Protection:	No

Site Plan:



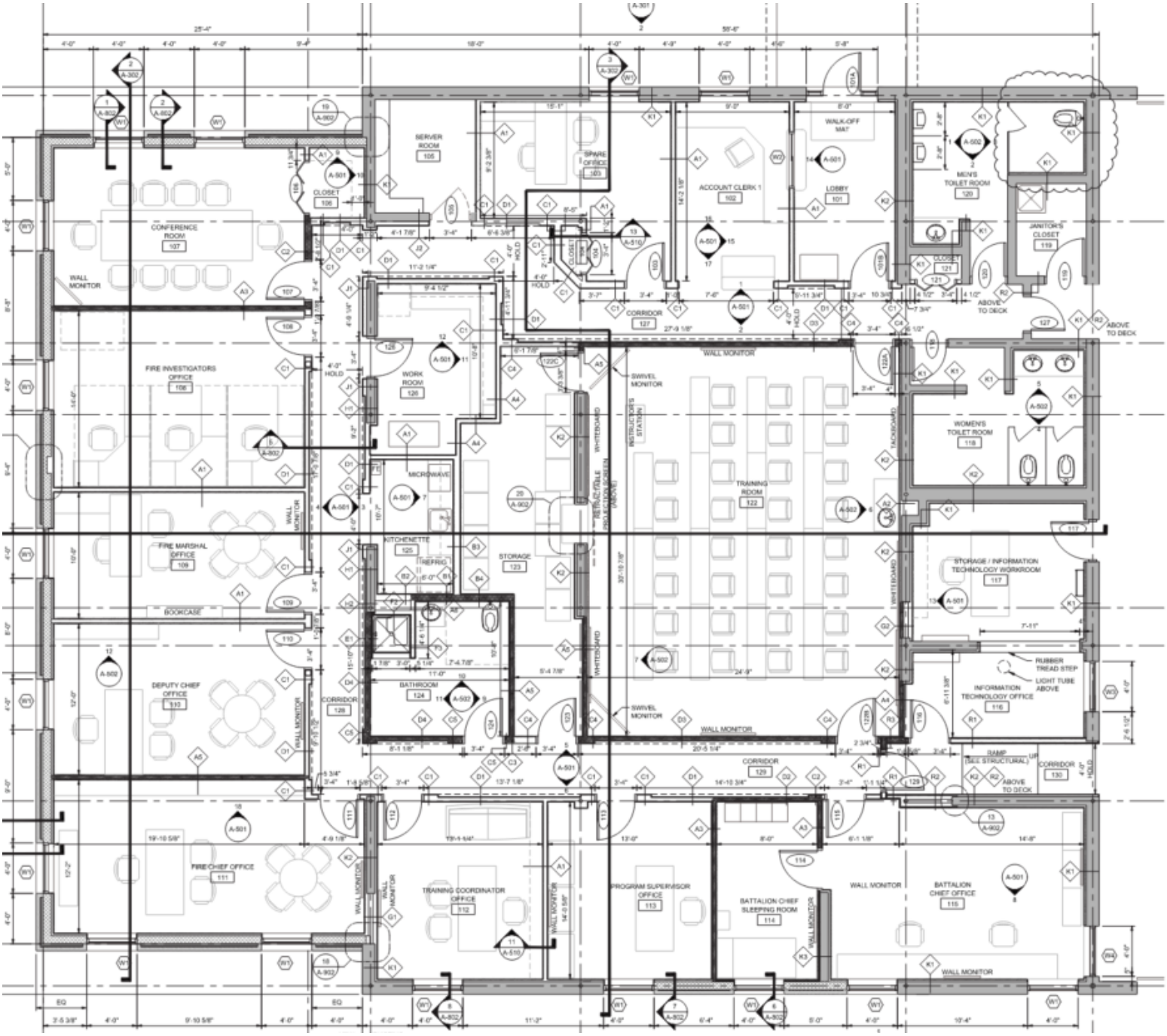
Building 03 – Livonia City Fire Department

Basement Floor Plan:



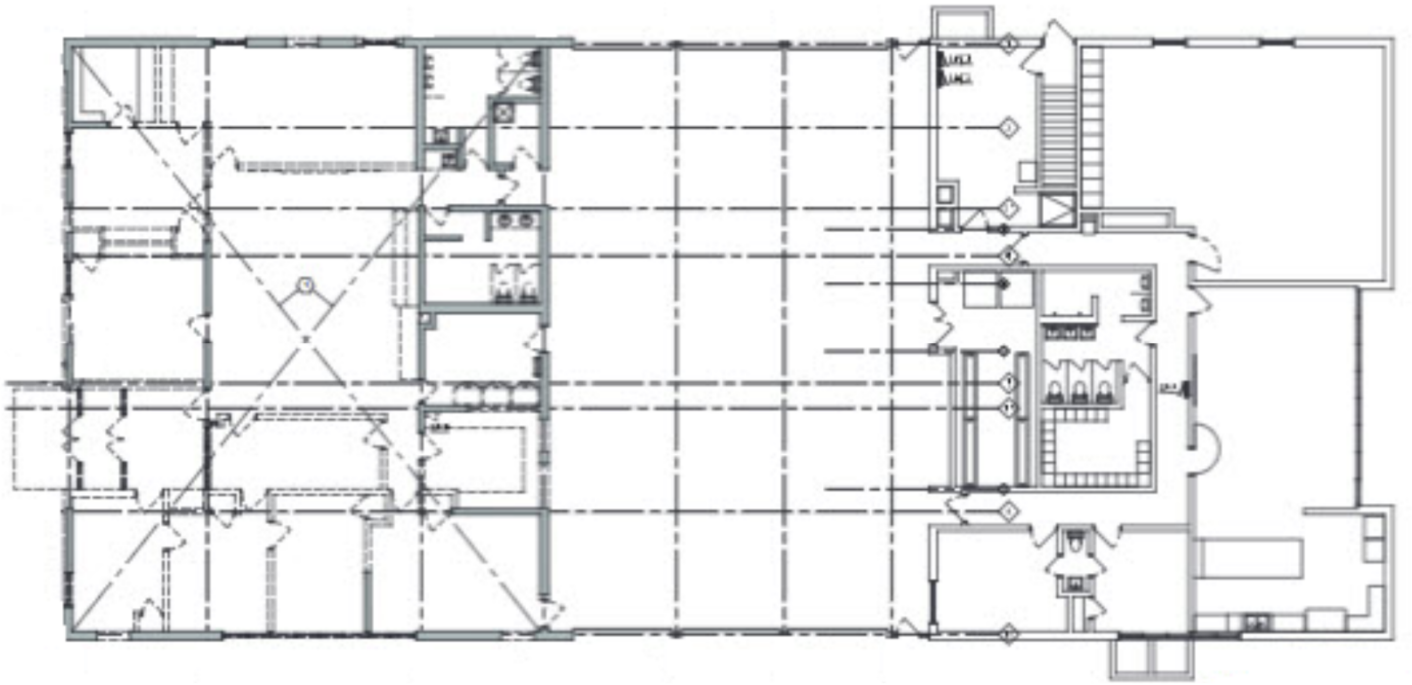
Building 03 – Livonia City Fire Department

1st Floor Plan (W/ Addition- 2017):

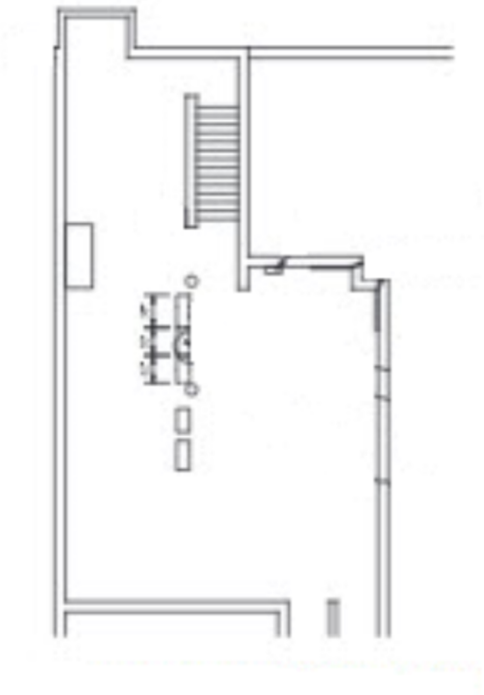


Building 03 – Livonia City Fire Department

1st Floor Plan:



Basement Floor Plan:



Penthouse Floor Plan:



Building 03 – Livonia City Fire Department

Summary of Budgets:

Fire Department #1									
Building SF	13,137			Cost Data Specification Factor = Geographic Factor = Cost Escalation Factor =		Cost Escalation Factors	1.08	1.30	1.48
Program Area	Quantity Per Unit	Unit	# of Units	Total Units	As % of Total Cost	Critical Needs Cost (1 - 3 years)	Deferrable Maintenance Cost (4 - 6 years)	Future Need Cost (7 - 10 years)	
1.0 SITE									
Paving									
Selective Sidewalk & Curb Replacement	1	Allowance	1	1	0.42%	$10,800	$0	$0	
Landscaping									
Improve Landscaping	1	Allowance	1	1	0.21%	$0	$0	$7,992	
Utilities									
Misc. Utility Repairs	1	Allowance	1	1	0.42%	$0	$0	$15,984	
Misc.									
Monument Sign - Powered & Electronic Display	1	EA	1	1	2.12%	$0	$70,200	$0	
SITE SUBTOTAL					**3.18%**	**$10,800**	**$70,200**	**$23,976**	
2.0 BUILDING ENVELOPE									
Roofing Work									
Replace Roof (EPDM) - .60 Mil/Reinforced/Fully-Adhered (Old Portion of Bldg.)- In Process	12,000	SF	1	12,000	17.83%	$453,600	$0	$0	
Windows									
Re-caulk Windows	1	Allowance	1	1	0.64%	$16,200	$0	$0	
Exterior Walls									
Re-Caulk Expansion Joints	1	Allowance	1	1	0.64%	$16,200	$0	$0	
Tuckpointing	1	Allowance	1	1	1.27%	$32,400	$0	$0	
Exterior Doors									
Exterior Hollow Metal Doors/Frames/Hardware- Single Door	1	EA	1	1	0.13%	$3,240	$0	$0	
BUILDING ENVELOPE SUBTOTAL					**20.50%**	**$521,640**	**$0**	**$0**	
3.0 INTERIOR/FINISHES									
Interior Doors & Hardware									
Replace Interior Doors & Hardware	35	EA	1	35	5.94%	$151,200	$0	$0	
Ceilings									
Remove Existing & Install New Acoustic Tile Ceiling	12,000	SF	1	12,000	0.00%	$0	$143,208	$0	
Flooring									
Remove & Replace Flooring - Carpet	6,000	SF	1	6,000	1.71%	$0	$0	$64,256	
Remove & Replace Corridor Flooring - LVT	2,500	SF	1	2,500	0.96%	$0	$0	$35,964	
Paint									
Paint - Interior	13,137	SF	1	13,137	0.84%	$0	$0	$31,497	
Restrooms									
Renovate Toilet/Locker Rooms	2	EA	1	2	1.43%	$36,288	$0	$0	
Lockers									
Replace Lockers by Dormitory	1	Allowance	1	1	2.12%	$54,000	$0	$0	
Casework & Countertops									
Replace Misc. Casework/Millwork	1	Allowance	1	1	2.12%	$0	$0	$79,920	
INTERIOR/FINISHES SUBTOTAL					**19.44%**	**$241,488**	**$143,208**	**$211,637**	
4.0 PLUMBING SYSTEMS									
Fire Protection									
New Fire Suppression System	13,137	SF	1	13,137	2.79%	$70,940	$0	$0	
Equipment & Fixtures									
Existing Lochinvar Hot Water Heater, Serial # 1326A008396, 2013	1	EA	1	1	0.34%	$0	$11,232	$0	
Replace Flush Valves & Faucets	1	Allowance	1	1	0.48%	$0	$0	$17,902	
Piping									
Replace Piping, Valves & Unions	1	Allowance	1	1	0.64%	$0	$0	$23,976	
PLUMBING SYSTEMS SUBTOTAL					**4.24%**	**$70,940**	**$11,232**	**$41,878**	
5.0 HVAC SYSTEMS									
Equipment									
Existing Lochinvar Boiler, Serial # G985529, 1998	1	EA	1	1	3.18%	$0	$105,300	$0	
Existing Lochinvar Boiler, Serial # G985530, 1998	1	EA	1	1	3.18%	$0	$105,300	$0	
Replace Boiler Pumps	2	EA	1	2	0.71%	$0	$23,587	$0	
Existing Trane Split System Heat Pump, Serial # 1802S1043X, 2018	1	EA	1		0.00%	$0	$0	$0	
Existing Trane Split System Heat Pump, Serial #, 1804S2187X, 2018	1	EA	1		0.00%	$0	$0	$0	
Existing Trane Roof Top Unit, Serial # 181312500L, 2018	1	EA	1		0.00%	$0	$0	$0	
Existing Trane Roof Top Unit Serial # 181410054D, 2018	1	EA	1		0.00%	$0	$0	$0	
Existing Trane Roof Top Unit Serial # N26101795D, 1998	1	EA	1	1	1.06%	$0	$0	$39,960	
Replace Exhaust Fans	5	EA	1	5	0.83%	$0	$27,518	$0	
Piping									
Replace Piping, Valves & Unions	1	Allowance	1	1	0.64%	$0	$0	$23,976	
Other HVAC									
Air and Water Balance	13,137	SF	1	13,137	0.17%	$0	$5,533	$0	
Commissioning	13,137	SF	1	13,137	0.11%	$0	$3,689	$0	
Temperature Controls	13,137	SF	1	13,137	1.56%	$0	$51,644	$0	
HVAC SYSTEMS SUBTOTAL					**11.45%**	**$0**	**$322,572**	**$63,936**	

Building 03 – Livonia City Fire Department

Summary of Budgets:

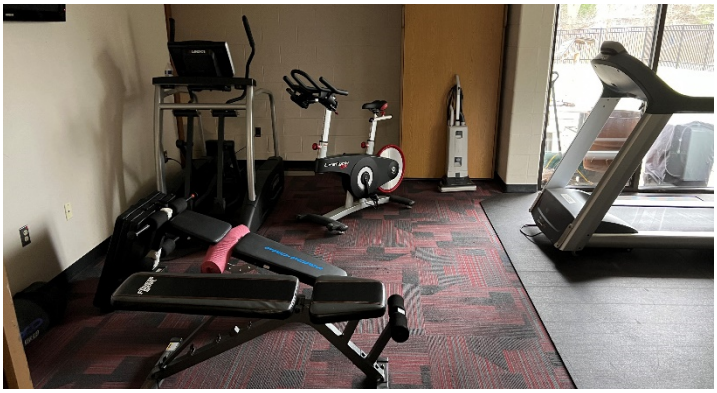
Fire Department #1									
Building SF	13,137			Cost Data Specification Factor = Geographic Factor = Cost Escalation Factor =		Cost Escalation Factors	1.08	1.30	1.48
Program Area	Quantity Per Unit	Unit	# of Units	Total Units	As % of Total Cost	Critical Needs Cost (1 - 3 years)	Deferrable Maintenance Cost (4 - 6 years)	Future Need Cost (7 - 10 years)	
6.0 ELECTRICAL SYSTEMS									
Power									
Power for IT Equipment & Upgrades	1	Allowance	1	1	0.85%	$0	$0	$31,968	
Power for new HVAC	1	Allowance	1	1	2.38%	$0	$0	$89,510	
Lighting									
Replace Lighting with LED's (New OS, Switching, etc.)	12,000	SF	1	12,000	3.72%	$0	$122,990	$0	
Replace Exterior Wall Packs	10	EA	1	10	0.36%	$0	$0	$13,427	
Fire Alarm System									
Replace Fire Alarm System	13,137	SF	1	13,137	1.23%	$31,214	$0	$0	
Other									
Existing Kohler Generator	1	EA	1		0.00%	$0	$0	$0	
ELECTRICAL SYSTEMS SUBTOTAL					**8.53%**	**$31,214**	**$122,990**	**$134,905**	
7.0 SECURITY									
Security									
Security Allowance - Cameras / Surveillance	1	Allowance	1	1	0.00%	$0	$0	$47,952	
Security Allowance - Access Controls	1	Allowance	1	1	0.00%	$0	$0	$47,952	
SECURITY SYSTEMS SUBTOTAL					**2.55%**	**$0**	**$0**	**$95,904**	
8.0 ABATEMENT									
Abatement									
Abatement Allowance	1	Allowance	1	1	2.38%	$60,480	$0	$0	
ABATEMENT SUBTOTAL					**2.38%**	**$60,480**	**$0**	**$0**	
9.0 FURNITURE & EQUIPMENT									
General Furniture									
FFE Allowance	1	Allowance	1	1	3.18%	$81,000	$0	$0	
FURNITURE & EQUIPMENT SUBTOTAL					**3.18%**	**$81,000**	**$0**	**$0**	
SOFT COSTS									
Building Infrastructure Improvement Total:					75.46%	$1,017,561	$670,202	$572,236	
Project Contingency:	10.00%				7.23%	$93,656	$67,020	$57,224	
Permits, Testing & Printing:	2.50%				1.99%	$25,755	$18,431	$15,736	
Professional Fees & Costs:	9.00%				7.99%	$103,591	$74,130	$63,294	
Construction Manager Fee & Costs:	9.00%				7.33%	$95,038	$68,009	$58,068	
PROJECT TOTAL					**100.00%**	**$1,335,601**	**$897,792**	**$766,557**	

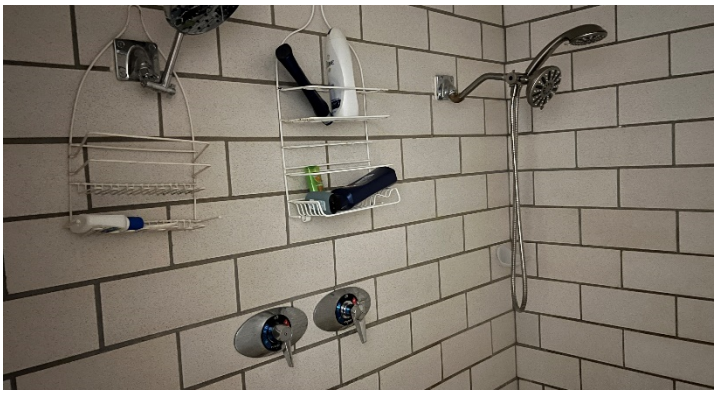
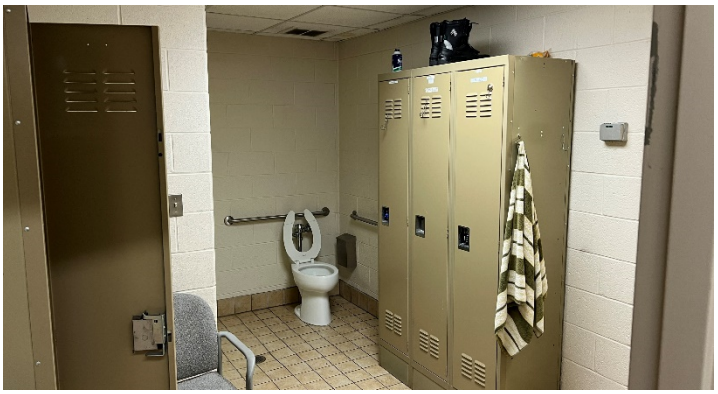
Building 03 – Livonia City Fire Department

Photos:







Building 03 – Livonia City Fire Department

Photos:









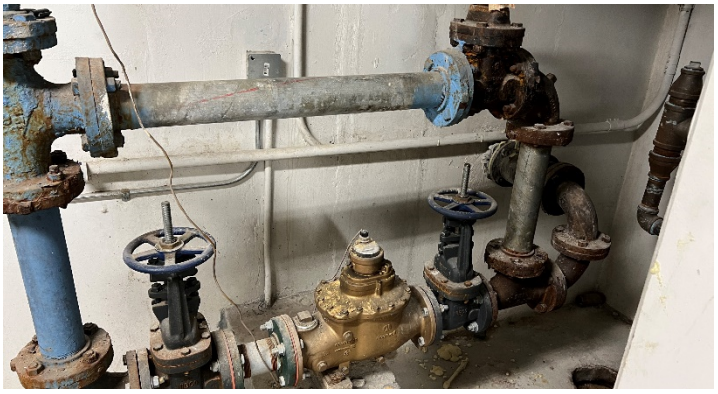

Building 03 – Livonia City Fire Department

Photos:

















Building 04 – Livonia Civic Center Library



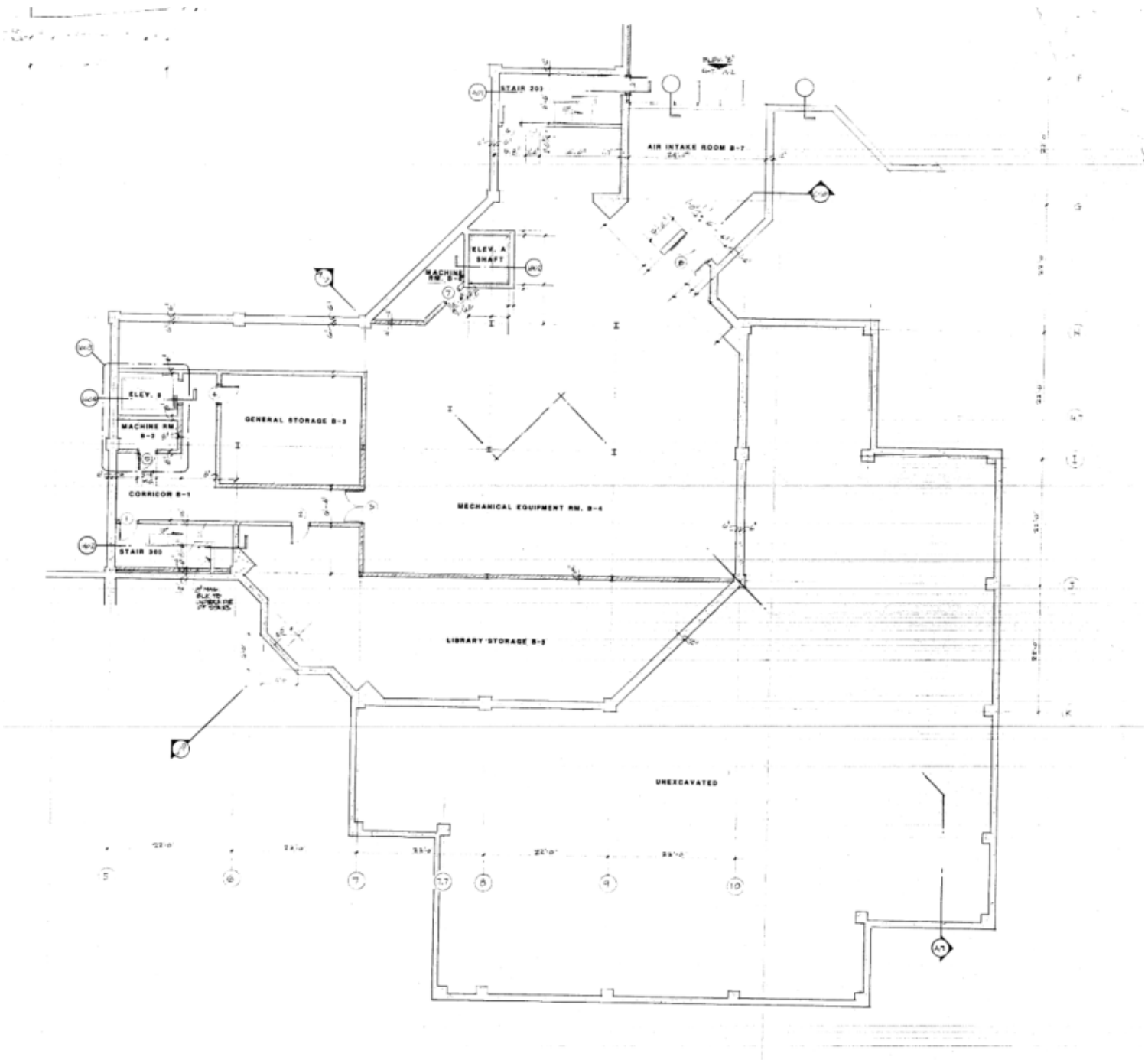
Address:	32777 Five Mile Rd. Livonia MI 48154
Year Built:	1987
Square Footage:	64,000
Site Area:	3.85
Parking Spaces:	197
Stories:	3
Basement:	Yes
Elevator(s):	No
Exterior Façade:	Brick & Limestone
Roof:	TPO
Fire Protection:	Yes

Site Plan:



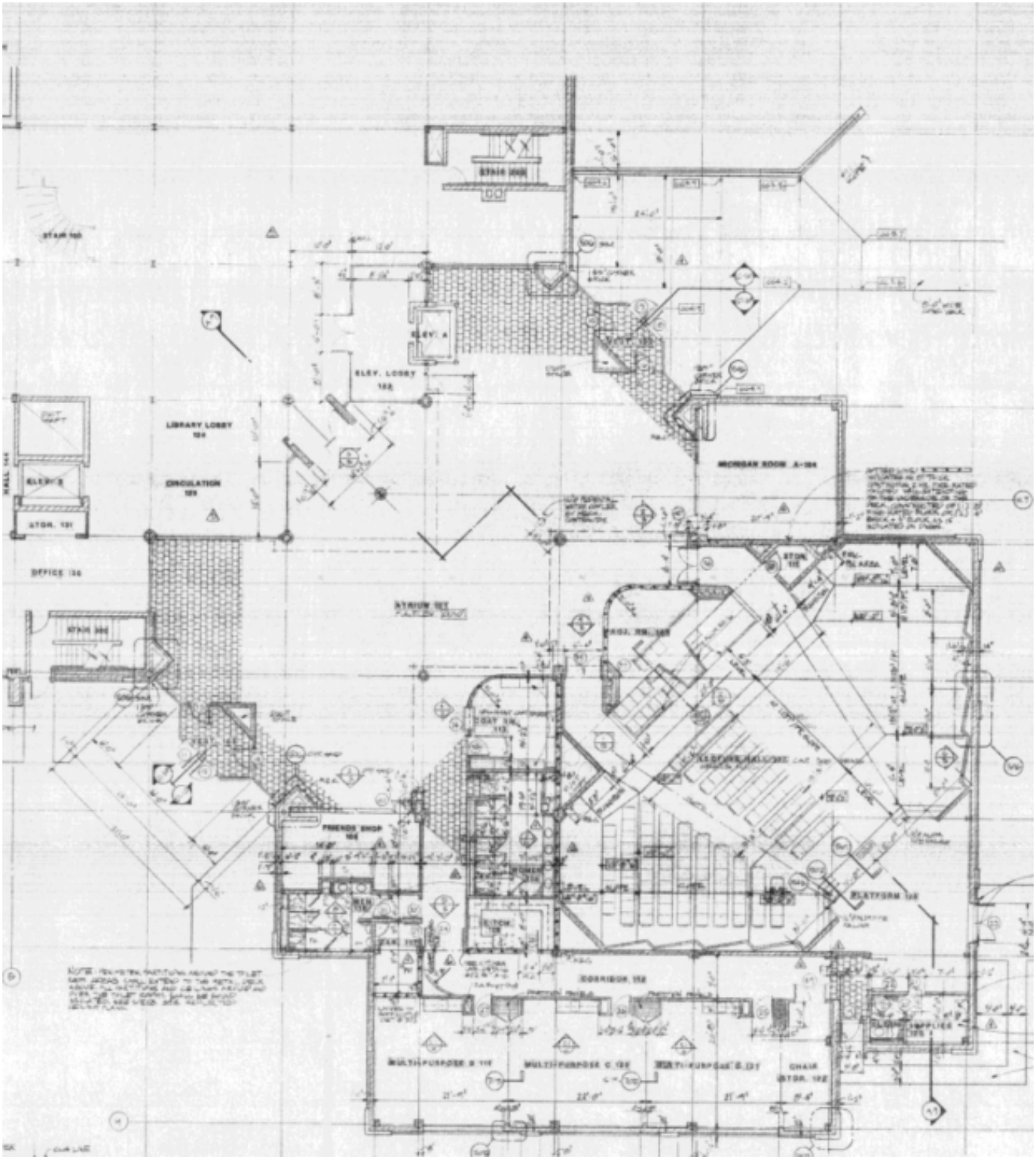
Building 04 – Livonia Civic Center Library

Basement Floor Plan:



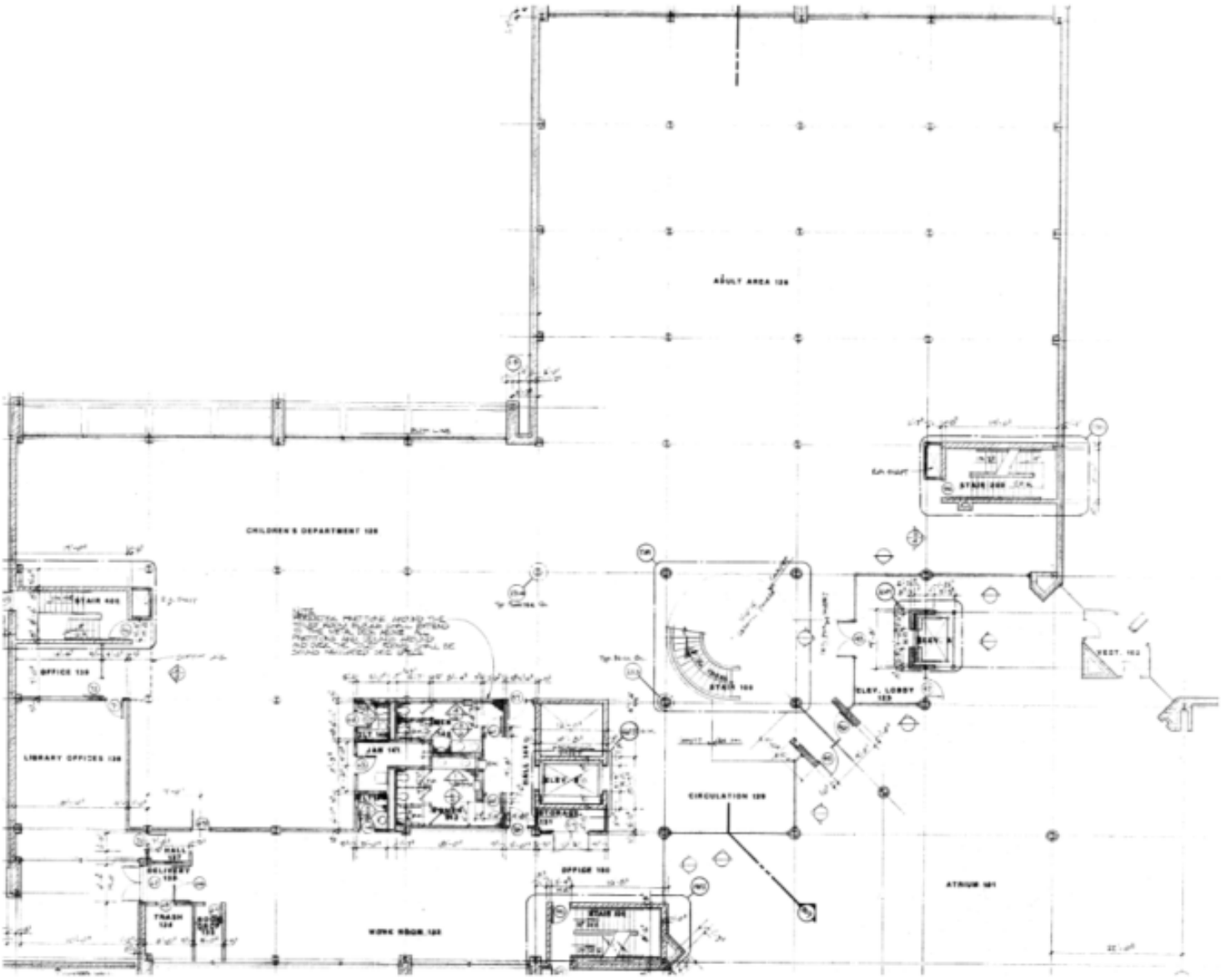
Building 04 – Livonia Civic Center Library

1st Floor Plan (Lecture Hall):



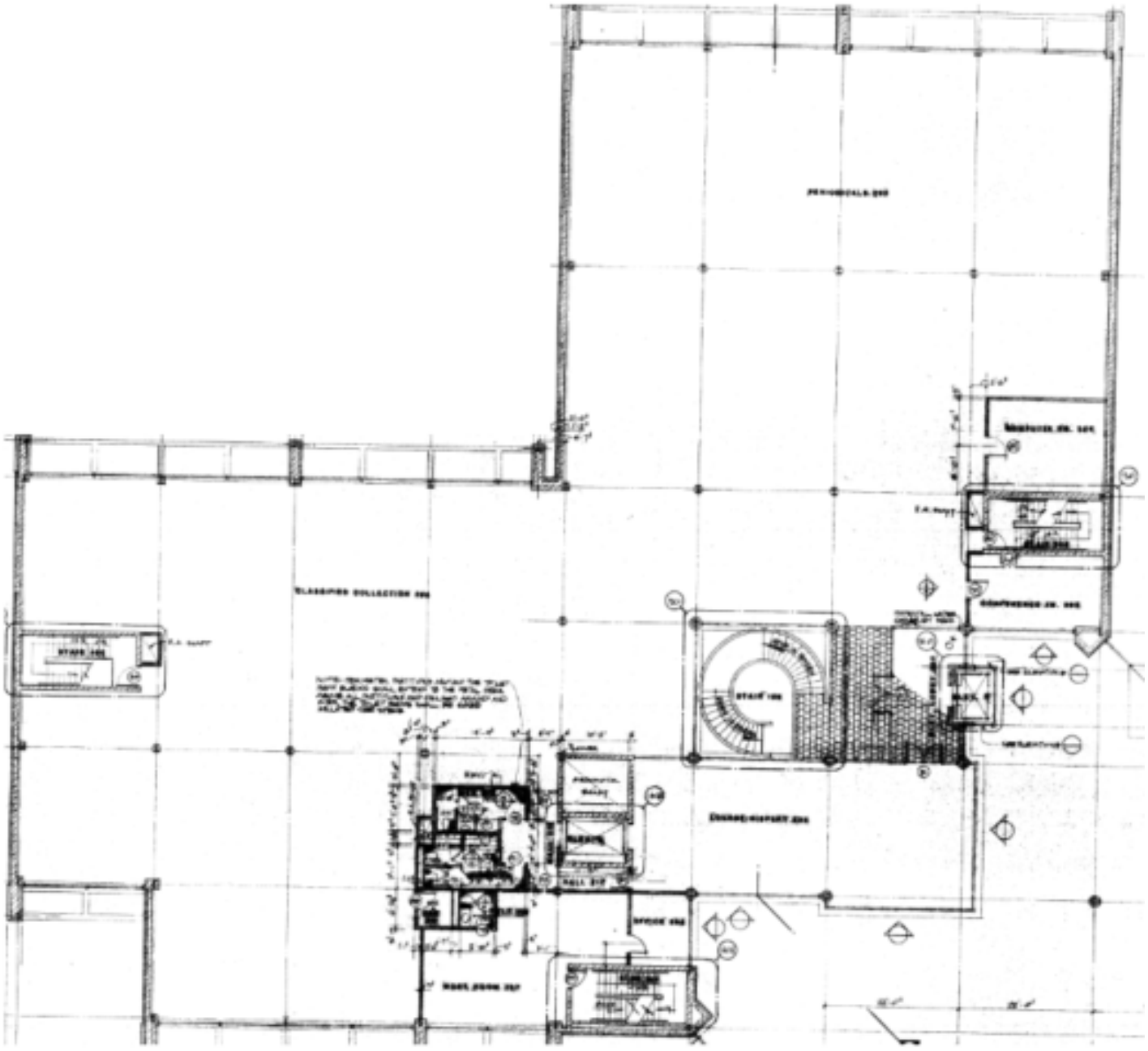
Building 04 – Livonia Civic Center Library

1st Floor Plan:



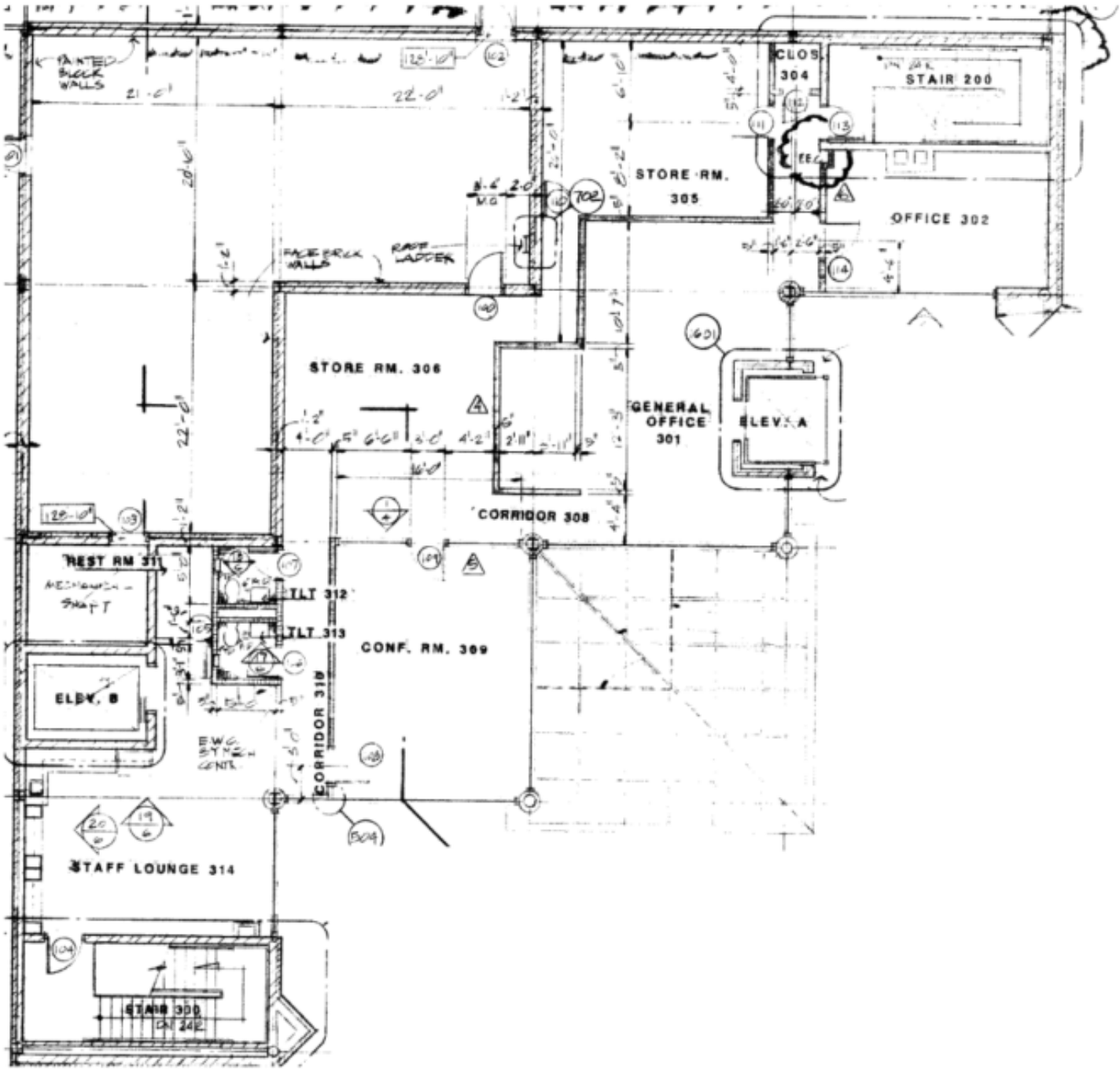
Building 04 – Livonia Civic Center Library

2nd Floor Plan:



Building 04 – Livonia Civic Center Library

3rd Floor Plan:



Building 04 – Livonia Civic Center Library

Summary of Budgets:

Civic Center Library						Cost Data			
Building SF	64,000					Specification Factor =		Cost Escalation Factors	
						Geographic Factor =		1.08	1.30	1.48
						Cost Escalation Factor =				
Program Area	Quantity Per Unit	Unit	# of Units	Total Units	As % of Total Cost	Critical Needs Cost (1 - 3 years)	Deferrable Maintenance Cost (4 - 6 years)	Future Need Cost (7 - 10 years)
1.0 SITE								
Paving								
Pavement and Base Reconstruction	82,387	SF	1	82,387	4.86%	$0	$694,028	$0
Selective Sidewalk & Curb Replacement	1	Allowance	1	1	0.44%	$48,384	$0	$0
Sealcoating/Re-striping	82,387	SF	1	82,387	0.24%	$26,693	$0	$0
Landscaping								
Improve Landscaping	1	Allowance	1	1	0.74%	$81,000	$0	$0
Utilities								
Catch Basin / Manholes	4	EA	1	4	0.18%	$0	$25,160	$0
Misc. Utility Repairs	1	Allowance	1	1	1.47%	$0	$210,600	$0
Misc.								
Monument Sign - Powered & Electronic Display	1	EA	1	1	0.49%	$54,000	$0	$0
SITE SUBTOTAL					**8.42%**	**$210,077**	**$929,788**	**$0**
2.0 BUILDING ENVELOPE								
Windows								
Replace Exterior Window Systems	1	Allowance	1	1	2.46%	$0	$0	$399,600
Re-caulk Windows	1	Allowance	1	1	0.98%	$108,000	$0	$0
Atrium Window Leak Repair- (In Process)	1	Allowance	1	1	6.88%	$756,000	$0	$0
Exterior Walls								
Re-Caulk Expansion Joints- (In Process)	1	Allowance	1	1	0.39%	$43,200	$0	$0
Tuckpointing- (In Process)	1	Allowance	1	1	0.98%	$108,000	$0	$0
Clean Limestone, Masonry and Retaining Wall- (In Process)	1	Allowance	1	1	1.23%	$135,000	$0	$0
Paint Exposed Steel Where Paint is Peeling	1	Allowance	1	1	0.74%	$81,000	$0	$0
Exterior Doors								
Exterior Hollow Metal Doors/Frames/Hardware- Single Door	3	EA	1	3	0.09%	$9,720	$0	$0
Exterior Hollow Metal Doors/Frames/Hardware- Double Door	1	EA	1	1	0.06%	$6,480	$0	$0
BUILDING ENVELOPE SUBTOTAL					**13.81%**	**$1,247,400**	**$0**	**$399,600**
3.0 INTERIOR/FINISHES								
Interior Doors & Hardware								
Replace Interior Doors & Hardware	114	EA	1	114	4.48%	$492,480	$0	$0
Walls & Partitions								
Misc. Drywall Repairs	1	Allowance	1	1	0.39%	$21,600	$0	$31,968
Ceilings								
Remove Existing & Install New Acoustic Tile Ceiling	64,000	SF	1	64,000	5.35%	$0	$763,776	$0
Flooring								
Remove & Replace Flooring - Carpet	50,000	SF	1	50,000	4.92%	$540,000	$0	$0
Remove & Replace Flooring in Attrium- Hard Tile	1	Allowance	1	1	0.74%	$81,000	$0	$0
Windows								
Remove & Replace Window Treatments	1	Allowance	1	1	0.44%	$0	$63,180	$0
Paint								
Paint - Interior	64,000	SF	1	64,000	1.57%	$0	$224,640	$0
Signage								
Replace Interior Signage	64,000	SF	1	64,000	0.25%	$0	$35,942	$0
Restrooms								
Renovate - Toilet Room (Single / Staff)	5	EA	1	5	0.83%	$0	$117,936	$0
Renovate - Toilet Room (Group)	6	EA	1	6	4.42%	$0	$631,800	$0
Casework & Countertops								
Replace Misc. Casework/Millwork	1	Allowance	1	1	1.23%	$135,000	$0	$0
INTERIOR/FINISHES SUBTOTAL					**24.63%**	**$1,270,080**	**$1,837,274**	**$31,968**
4.0 PLUMBING SYSTEMS								
Fire Protection								
Add / Modify Fire Suppression System for Improvements	1	Allowance	1	1	0.10%	$10,800	$0	$0
Equipment & Fixtures								
Existing Lochinvar Water Heater; Serial # 1915114512800, 2012	1	EA	1	1	0.08%	$0	$0	$12,787
Provide Bottle Filler Drinking Fountains	4	EA	1	4	0.26%	$29,030	$0	$0
PLUMBING SYSTEMS SUBTOTAL					**0.44%**	**$39,830**	**$0**	**$12,787**
5.0 HVAC SYSTEMS								
Equipment								
Existing Apex Boiler, Serial # 65750249, 2020 (Sidewalk Radiant Heating)	1	EA	1		0.00%	$0	$0	$0
Existing Raypak Boiler, Serial #	1	EA	1	1	1.60%	$175,392	$0	$0
Existing Raypak Boiler, Serial #	1	EA	1	1	1.60%	$175,392	$0	$0
Replace Boiler Pumps	3	EA	1	3	0.25%	$27,216	$0	$0
Existing Trane Airfoil Fan, Serial # K87C09323, 1987	1	EA	1	1	1.47%	$162,000	$0	$0
Existing BAC Chiller, Serial # 0151933401-01-01 (In Progress)	1	EA	1	1	7.37%	$810,000	$0	$0
Replace Exhaust Fans	5	EA	1	5	0.19%	$0	$0	$31,329
Other HVAC								
Air and Water Balance	64,000	SF	1	64,000	0.19%	$20,736	$0	$0
Commissioning	64,000	SF	1	64,000	0.13%	$13,824	$0	$0
Temperature Controls	64,000	SF	1	64,000	1.76%	$193,536	$0	$0
HVAC SYSTEMS SUBTOTAL					**14.56%**	**$1,578,096**	**$0**	**$31,329**

Building 04 – Livonia Civic Center Library

Summary of Budgets:

Civic Center Library					Cost Data			
Building SF	64,000				Specification Factor =		Cost Escalation Factors	
					Geographic Factor =		1.08	1.30	1.48
					Cost Escalation Factor =				
Program Area	Quantity Per Unit	Unit	# of Units	Total Units	As % of Total Cost	Critical Needs Cost (1 - 3 years)	Deferrable Maintenance Cost (4 - 6 years)	Future Need Cost (7 - 10 years)
6.0 ELECTRICAL SYSTEMS								
Power								
Power for IT Equipment & Upgrades	1	Allowance	1	1	0.25%	$0	$0	$39,960
Power for new HVAC	1	Allowance	1	1	0.55%	$60,480	$0	$0
Lighting								
Replace Lighting with LED's (New OS, Switching, etc.)	64,000	SF	1	64,000	4.59%	$0	$655,949	$0
Replace Exterior Wall Packs	12	EA	1	12	0.10%	$10,886	$0	$0
ELECTRICAL SYSTEMS SUBTOTAL					**5.49%**	**$71,366**	**$655,949**	**$39,960**
7.0 SECURITY								
Security								
Security Allowance - Cameras / Surveillance	1	Allowance	1	1	0.00%	$0	$0	$55,944
Security Allowance - Access Controls	1	Allowance	1	1	0.00%	$0	$0	$55,944
SECURITY SYSTEMS SUBTOTAL					**0.69%**	**$0**	**$0**	**$111,888**
8.0 ABATEMENT								
Abatement								
Abatement Allowance	1	Allowance	1	1	1.10%	$120,960	$0	$0
ABATEMENT SUBTOTAL					**1.10%**	**$120,960**	**$0**	**$0**
9.0 FURNITURE & EQUIPMENT								
General Furniture								
FFE Allowance (Including Book Shelves)	1	Allowance	1	1	7.37%	$270,000	$351,000	$399,600
FURNITURE & EQUIPMENT SUBTOTAL					**7.37%**	**$270,000**	**$351,000**	**$399,600**
SOFT COSTS								
Building Infrastructure Improvement Total:					76.52%	$4,807,810	$3,774,011	$1,027,132
Project Contingency:	10.00%				6.91%	$453,781	$342,301	$62,753
Permits, Testing & Printing:	2.50%				1.90%	$124,790	$94,133	$17,257
Professional Fees & Costs:	9.00%				7.65%	$501,917	$378,612	$69,410
Construction Manager Fee & Costs:	9.00%				7.02%	$460,474	$347,350	$63,679
PROJECT TOTAL					**100.00%**	**$6,348,772**	**$4,936,406**	**$1,240,231**

Building 04 – Livonia Civic Center Library

Photos:















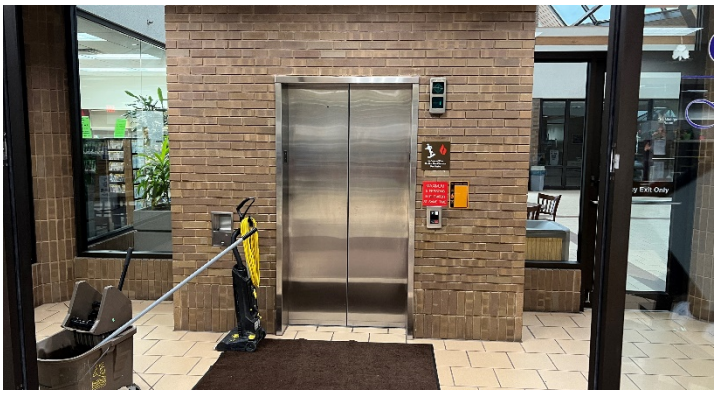


Building 04 – Livonia Civic Center Library

Photos:

















Building 04 – Livonia Civic Center Library

Photos:



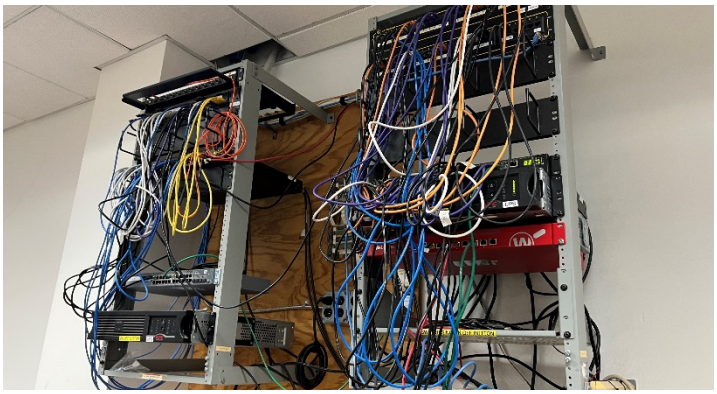














Building 04 – Livonia Civic Center Library

Photos:































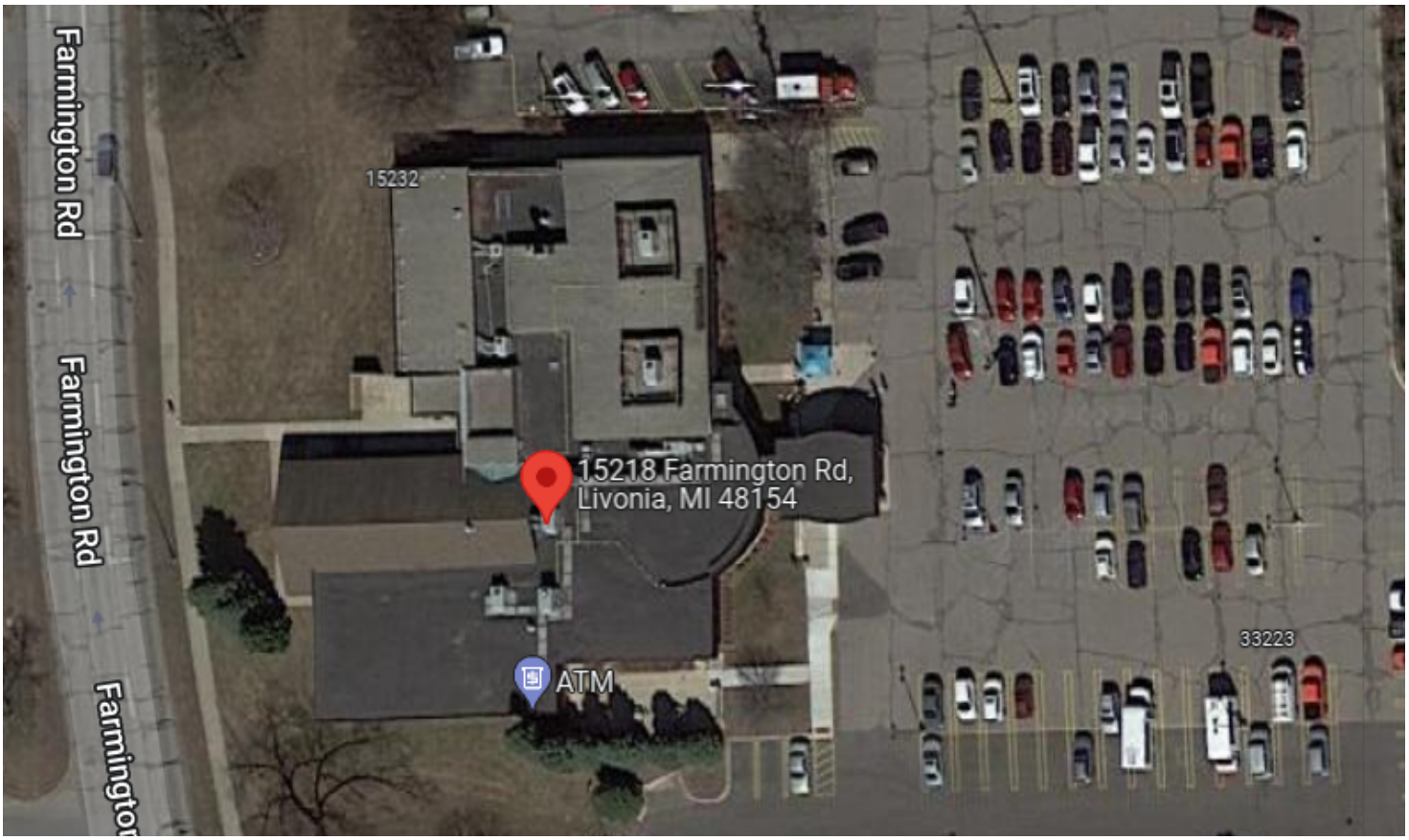


Building 05 – Livonia Civic Center Park Senior Center & Transit Office



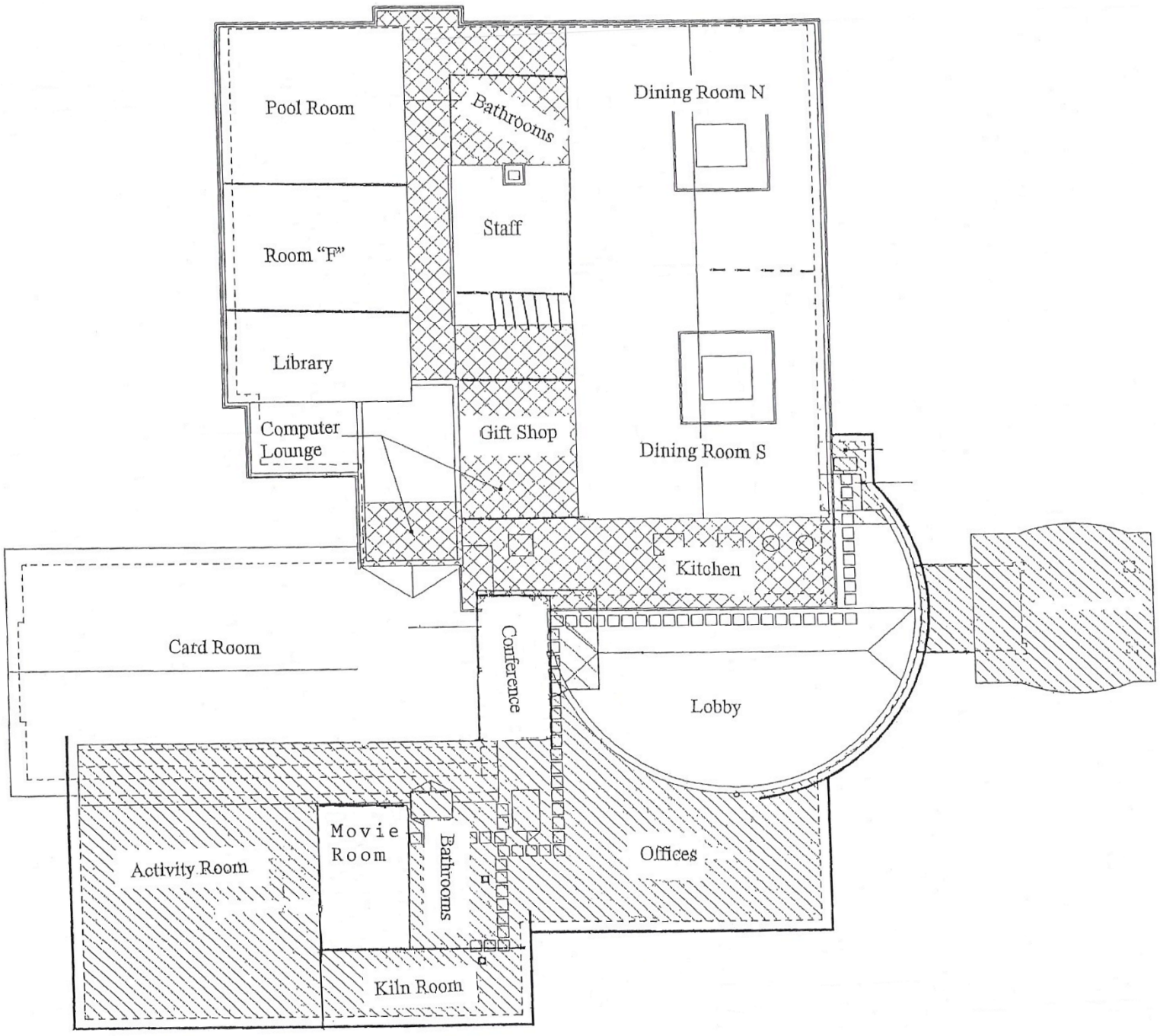
Address:	15218 Farmington Rd. Livonia MI 48154
Year Built:	1964 Additions: 1984 Lobby, 2001 Offices
Square Footage:	25,000
Site Area:	1.99 acres
Parking Spaces:	135
Stories:	1
Basement:	Yes
Elevator(s):	No
Exterior Façade:	Brick
Roof:	Shingled and EPDM
Fire Protection:	None

Site Plan:



Building 05 – Livonia Civic Center Park Senior Center & Transit Office

1st Floor Plan:



Building 05 – Livonia Civic Center Park Senior Center & Transit Office

Summary of Budgets:

Senior Center/Community Transit									
Building SF	25,000		Cost Data Specification Factor =				Cost Escalation Factors	1.08	1.30	1.48
			Geographic Factor =							
			Cost Escalation Factor =							
Program Area	Quantity Per Unit	Unit	# of Units	Total Units	As % of Total Cost	Critical Needs Cost (1 - 3 years)	Deferrable Maintenance Cost (4 - 6 years)	Future Need Cost (7 - 10 years)
1.0 SITE								
Paving								
Pavement and Base Reconstruction	83,000	SF	1	83,000	7.67%	$537,840	$0	$0
Replace Concrete Approach	1,000	SF	1	1,000	0.22%	$15,768	$0	$0
Selective Sidewalk & Curb Replacement	1	Allowance	1	1	0.77%	$54,000	$0	$0
Site Amenities								
Site Amenities - Bike Racks / Benches / Picnic Tables / Trash Receptacles / Etc.	1	Allowance	1	1	0.38%	$0	$0	$39,960
Landscaping								
Improve Landscaping	1	Allowance	1	1	0.46%	$0	$0	$47,952
Utilities								
Catch Basin / Manholes	3	EA	1	3	0.23%	$16,200	$0	$0
Misc. Utility Repairs	1	Allowance	1	1	1.54%	$108,000	$0	$0
Misc.								
Internally Lit Monument Sign w/ Brick Base	1	EA	1	1	0.77%	$0	$0	$79,920
SITE SUBTOTAL					**12.05%**	**$731,808**	**$0**	**$167,832**
2.0 BUILDING ENVELOPE								
Roofing Work								
Replace Roof (Asphalt Shingle)	3,800	SF	1	3,800	0.47%	$32,832	$0	$0
Replace Roof (EPDM) - .60 Mil/Reinforced/Fully-Adhered	21,000	SF	1	21,000	6.47%	$453,600	$0	$0
Replace Gutters & Downspouts	850	LF	1	850	0.16%	$11,016	$0	$0
Misc. Drainage Repair	1	Allowance	1	1	0.18%	$12,960	$0	$0
Paint Structural Steel for Equipment Screens	1	Allowance	1	1	0.38%	$27,000	$0	$0
Windows								
Replace Exterior Window Systems	1	Allowance	1	1	5.39%	$378,000	$0	$0
Recaulk Windows	1	Allowance	1	1	0.38%	$27,000	$0	$0
Reseal Windows	1	Allowance	1	1	0.15%	$10,800	$0	$0
Exterior Walls								
Re-Caulk Expansion Joints	1	Allowance	1	1	0.23%	$16,200	$0	$0
Tuckpointing	1	Allowance	1	1	0.62%	$43,200	$0	$0
Replace Soffits	1	Allowance	1	1	1.54%	$108,000	$0	$0
Replace Fascia	1	Allowance	1	1	1.54%	$108,000	$0	$0
Exterior Doors								
Exterior FRP Doors/Frames/Hardware - Single Door	5	EA	1	5	0.39%	$27,216	$0	$0
Exterior FRP Doors/Frames/Hardware - Double Door	3	EA	1	3	0.41%	$29,030	$0	$0
BUILDING ENVELOPE SUBTOTAL					**18.32%**	**$1,284,854**	**$0**	**$0**
3.0 INTERIOR/FINISHES								
Interior Doors & Hardware								
Replace Interior Doors & Hardware	45	EA	1	45	2.77%	$194,400	$0	$0
Misc. Drywall Repairs	1	Allowance	1	1	0.15%	$10,800	$0	$0
Ceilings								
Remove Existing & Install New Acoustic Tile Ceiling	25,000	SF	1	25,000	3.27%	$229,500	$0	$0
Flooring								
Remove & Replace Flooring - Carpet	12,500	SF	1	12,500	1.29%	$0	$117,585	$0
Remove & Replace VCT Flooring with LVT	12,500	SF	1	12,500	1.73%	$0	$157,950	$0
Remove & Replace Window Treatments		Allowance		50,000	6.93%	$486,000	$0	$0
Paint								
Paint - Interior	25,000	SF	1	25,000	0.77%	$0	$70,200	$0
Signage								
Replace Interior Signage	25,000	SF	1	25,000	0.15%	$0	$14,040	$0
Restrooms								
Renovate - Toilet Room (Group)	4	Allowance	1	4	1.85%	$129,600	$0	$0
Casework & Countertops								
Replace Misc. Casework/Millwork	1	Allowance	1	1	1.15%	$81,000	$0	$0
INTERIOR/FINISHES SUBTOTAL					**20.07%**	**$1,131,300**	**$359,775**	**$0**
4.0 PLUMBING SYSTEMS								
Fire Protection								
New Fire Suppression System	25,000	SF	1	25,000	1.92%	$135,000	$0	$0
Equipment & Fixtures								
Existing Hot Water Heater: Lochinvar, Serial # 1147A013612, November 2011	1	EA	1	1	0.12%	$0	$11,232	$0
Existing Hot Water Heater: Lochinvar, Serial # EC10347074, March 2008	1	EA	1	1	0.12%	$0	$11,232	$0
Replace Additional Bottle Filling Stations at Existing Drinking Fountains	2	EA	2	4	0.41%	$29,030	$0	$0
Piping								
Replace Piping, Valves & Unions	1	Allowance	1	1	0.38%	$0	$0	$39,960
PLUMBING SYSTEMS SUBTOTAL					**2.97%**	**$164,030**	**$22,464**	**$39,960**

Building 05 – Livonia Civic Center Park Senior Center & Transit Office

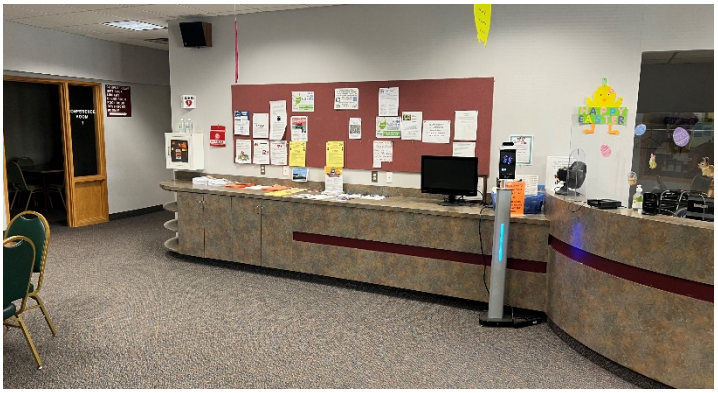
Summary of Budgets:

Senior Center/Community Transit									
Building SF	25,000		Cost Data Specification Factor =				Cost Escalation Factors	1.08	1.30	1.48
			Geographic Factor =							
			Cost Escalation Factor =							
Program Area	Quantity Per Unit	Unit	# of Units	Total Units	As % of Total Cost	Critical Needs Cost (1 - 3 years)	Deferrable Maintenance Cost (4 - 6 years)	Future Need Cost (7 - 10 years)
5.0 HVAC SYSTEMS								
Equipment								
Existing Rooftop Unit: Trane, Serial # 823101169L	1	EA	1	1	0.54%	$37,800	$0	$0
Existing Rooftop Unit: Trane Serial # 8222G4W9H, May 2008	1	EA	1	1	0.54%	$0	$49,140	$0
Existing Rooftop Unit: HyperCore Serial # T09C06177	1	EA	1	1	0.54%	$37,800	$0	$0
Existing Rooftop Unit: Trane Serial # 222100111L, May 2002	1	EA	1	1	0.54%	$37,800	$0	$0
Existing Rooftop Unit: Trane Serial # 162810069L, July 2016		EA		-	0.00%	$0	$0	$0
Existing Rooftop Unit: Trane Serial # 210810277L, Feb 2021	1	EA		-	0.00%	$0	$0	$0
Existing Rooftop Unit: Trane Serial # 113910340L, March 2011	1	EA	1	1	0.54%	$0	$0	$55,944
Existing Rooftop Unit: Trane Serial # 113910354L, 2011	1	EA	1	1	0.54%	$0	$0	$55,944
Add Exhaust Fans (Kilns)	1	EA	1	1	0.08%	$5,400	$0	$0
Piping								
Replace Piping, Valves & Unions	1	Allowance	1	1	0.38%	$0	$0	$39,960
Air and Water Balance	25,000	SF		-	0.00%	$0	$0	$0
Commissioning	25,000	SF	1	25,000	0.08%	$0	$0	$7,992
Temperature Controls	25,000	SF	1	25,000	1.08%	$75,600	$0	$0
HVAC SYSTEMS SUBTOTAL					**4.85%**	**$194,400**	**$49,140**	**$159,840**
6.0 ELECTRICAL SYSTEMS								
Power								
Power for IT Equipment & Upgrades	1	Allowance	1	1	0.31%	$0	$0	$31,968
Replace Existing Electrical Panels	1	Allowance	1	1	0.77%	$0	$0	$79,920
Power for new HVAC	1	Allowance	1	1	0.86%	$0	$0	$89,510
Electrical Wiring Upgrades	1	Allowance	1	1	0.86%	$20,160	$26,208	$29,837
Lighting								
Replace Lighting with LED's (New OS, Switching, etc.)	25,000	SF	1	25,000	2.81%	$197,100	$0	$0
Replace Emergency & Exit Lights	25,000	SF	1	25,000	0.12%	$8,100	$0	$0
Fire Alarm System								
Replace Fire Alarm System	25,000	SF	1	25,000	0.85%	$0	$0	$87,912
Adjustments to Fire Alarm System	1	Allowance	1	1	0.17%	$0	$0	$17,902
ELECTRICAL SYSTEMS SUBTOTAL					**6.75%**	**$225,360**	**$26,208**	**$337,049**
7.0 SECURITY								
Security								
Access Control System (Prox Card Readers)	8	EA	1	8	0.34%	$24,192	$0	$0
Security Allowance - Cameras / Surveillance	1	Allowance	1	1	0.00%	$0	$0	$23,976
Security Allowance	1	Allowance	1	1	0.31%	$21,600	$0	$0
SECURITY SYSTEMS SUBTOTAL					**0.88%**	**$45,792**	**$0**	**$23,976**
8.0 ABATEMENT								
Abatement Allowance	1	Allowance	1	1	0.77%	$54,000	$0	$0
ABATEMENT SUBTOTAL					**0.77%**	**$54,000**	**$0**	**$0**
9.0 FURNITURE & EQUIPMENT								
General Furniture								
FFE Allowance	1	Allowance	1	1	1.54%	$36,000	$46,800	$53,280
Other FF&E								
Renovate Kitchen and Replace Appliances	1	Allowance	1	1	3.46%	$243,000	$0	$0
Existing Walk-in Fridge: Vollrath	1	Allowance	`1	1	0.54%	$37,800	$0	$0
Existing Walk-in Freezer: Vollrath	1	Allowance	1	1	0.54%	$37,800	$0	$0
FURNITURE & EQUIPMENT SUBTOTAL					**6.08%**	**$354,600**	**$46,800**	**$53,280**
10.0 TECHNOLOGY								
Technology								
Misc. Technology Upgrades	25,000	SQFt	1	25,000	4.62%	$324,000	$0	$0
TECHNOLOGY SUBTOTAL					**4.62%**	**$324,000**	**$0**	**$0**
SOFT COSTS								
Building Infrastructure Improvement Total:					77.36%	$4,510,145	$504,387	$781,937
Project Contingency:	10.00%				6.67%	$383,154	$45,759	$72,866
Permits, Testing & Printing:	2.50%				1.83%	$105,367	$12,584	$20,038
Professional Fees & Costs:	9.00%				7.37%	$423,799	$50,613	$80,595
Construction Manager Fee & Costs:	9.00%				6.76%	$388,806	$46,434	$73,940
PROJECT TOTAL					**100.00%**	**$5,811,271**	**$659,776**	**$1,029,377**

Building 05 – Livonia Civic Center Park Senior Center & Transit Office

Photos:

















Building 05 – Livonia Civic Center Park Senior Center & Transit Office

Photos:

















Building 05 – Livonia Civic Center Park Senior Center & Transit Office

Photos:















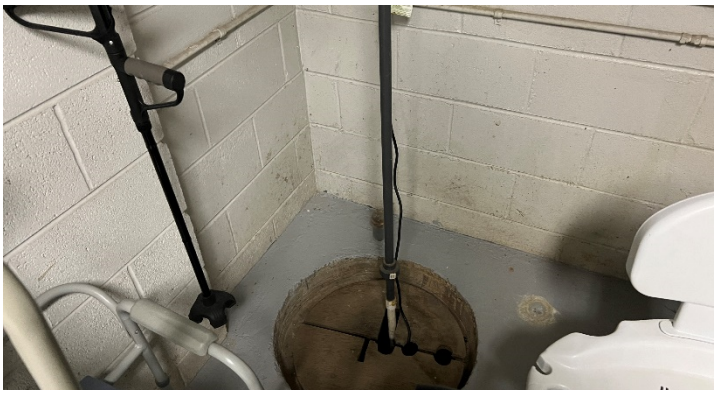


Building 05 – Livonia Civic Center Park Senior Center & Transit Office

Photos:















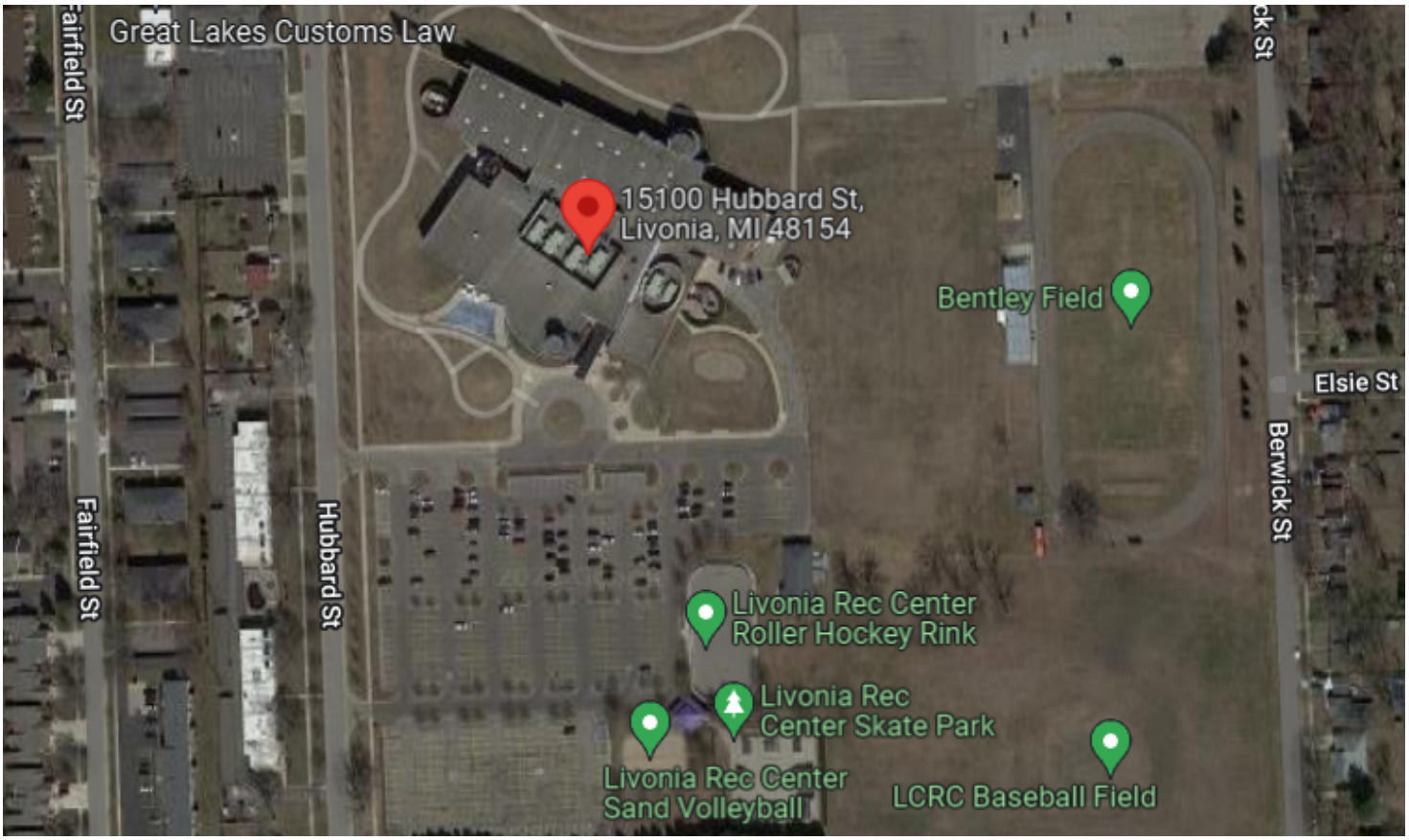


Building 06 – Jack E. Kirksey Livonia Community Recreation Center



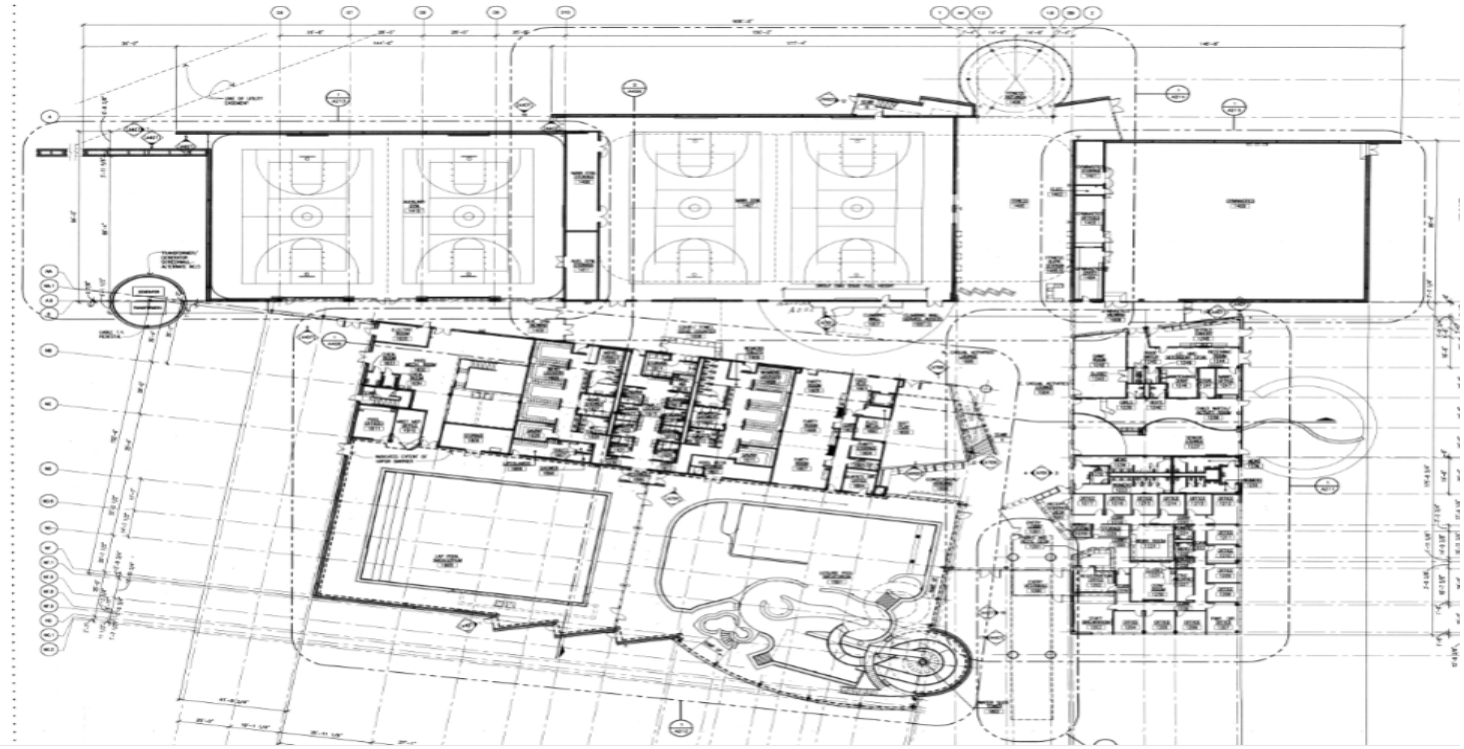
Address:	15100 Hubbard St. Livonia MI 48154
Year Built:	2003
Square Footage:	130,000
Site Area:	Approximately 17 Acres
Parking Spaces:	381
Stories:	2
Basement:	No
Elevator(s):	1
Exterior Façade:	Brick
Roof:	EPDM
Fire Protection:	Fully Sprinkled

Site Plan:

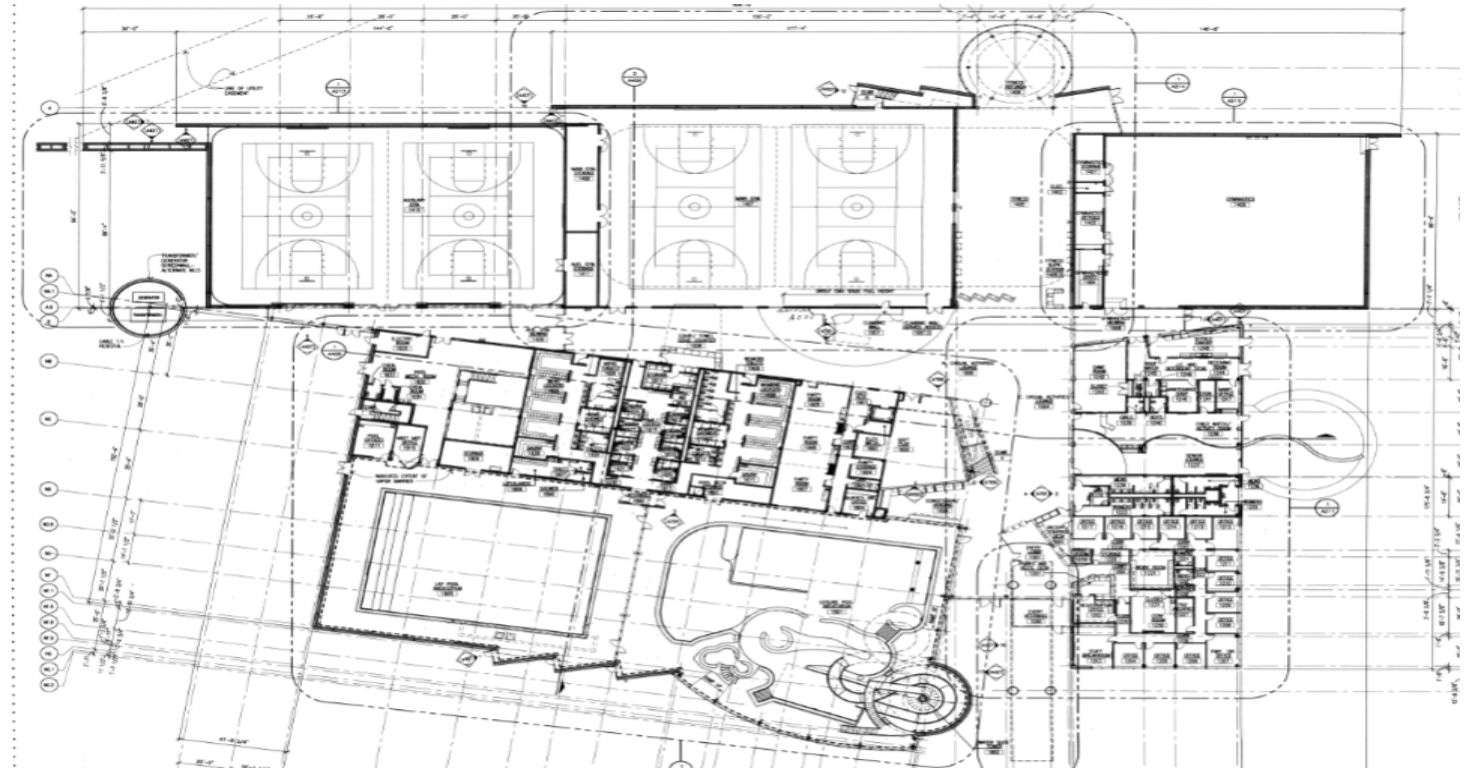


Building 06 – Jack E. Kirksey Livonia Community Recreation Center

1st Floor Plan:



2nd Floor Plan:



Building 06 – Jack E. Kirksey Livonia Community Recreation Center

Summary of Budgets:

Jack E. Kirksey Recreation Center	Building SF 130,000		Cost Data Specification Factor = Geographic Factor = Cost Escalation Factor =			Cost Escalation Factors 1.08	1.30	1.48
Program Area	Quantity Per Unit	Unit	# of Units	Total Units	As % of Total Cost	Critical Needs Cost (1 - 3 years)	Deferrable Maintenance Cost (4 - 6 years)	Future Need Cost (7 - 10 years)
1.0 SITE								
Paving								
Pavement and Base Reconstruction	222352	SF	1	222,352	7.98%	$0	$0	$2,132,445
Selective Sidewalk & Curb Replacement	1	Allowance	1	1	0.09%	$16,200	$0	$0
Sealcoating/Re-striping	222352	SF	1	222,352	0.40%	$72,042	$0	$0
Playground / Play pad								
Provide Synthetic Safety Surfacing on Playground (Kid Quarters)	1	Allowance	1	1	0.18%	$32,400	$0	$0
Landscaping								
Improve Landscaping	1	Allowance	1	1	0.30%	$0	$70,200	$0
Redesign and Replace Illuminated Bollards	1	Allowance	1	1	0.60%	$0	$140,400	$0
Utilities								
Misc. Utility Repairs	1	Allowance	1	1	0.15%	$0	$0	$39,960
Misc.								
Add Power to Outdoor Pavilion	1	Allowance	1	1	0.06%	$0	$0	$15,984
Update Site Signage	1	Allowance	1	1	0.12%	$0	$28,080	$0
SITE SUBTOTAL					**9.87%**	**$120,642**	**$238,680**	**$2,188,389**
2.0 BUILDING ENVELOPE								
Roofing Work								
Replace Roof (EPDM) - .60 Mil/Reinforced/Fully-Adhered	110000	SF	1	80,000	16.74%	$0	$3,931,200	$0
Windows								
Recaulk Windows	1	Allowance	1	1	0.15%	$0	$0	$39,960
Exterior Walls								
Re-Caulk Expansion Joints	1	Allowance	1	1	0.04%	$8,100	$0	$0
Tuckpointing	1	Allowance	1	1	0.45%	$0	$105,300	$0
BUILDING ENVELOPE SUBTOTAL					**17.39%**	**$8,100**	**$4,036,500**	**$39,960**
3.0 INTERIOR/FINISHES								
Walls & Partitions								
Misc. Drywall Repairs	1	Allowance	1	1	0.06%	$10,800	$0	$0
Ceilings								
Remove Existing & Install New Acoustic Tile Ceiling	14,000	SF	1	14,000	0.71%	$0	$167,076	$0
Flooring								
Remove & Replace Flooring - Carpet (Offices + Kid Quarters)	5,500	SF	1	5,500	0.22%	$39,798	$0	$0
Remove & Replace Flooring - Carpet (Gymnastics) Done in 2020	9,800	SF	1	9,800	0.39%	$0	$0	$104,951
Remove & Replace Flooring - Carpet (1st and 2nd Floor Cardio) Done in 2019	8,800	SF	1	8,800	0.35%	$0	$0	$94,242
Windows								
Remove & Replace Window Treatments	1	Allowance	1	1	0.39%	$0	$0	$103,896
Paint								
Paint - Interior	130,000	SF	1	130,000	1.55%	$93,600	$121,680	$138,528
Restrooms								
Renovate - Toilet Room (Single / Staff)	2	EA	1	2	0.20%	$0	$0	$53,706
Renovate - Toilet Room (Group)	6	EA	1	6	3.01%	$0	$0	$805,594
Gym / Pool Equipment								
Replace ADA Lift	1	Allowance	1	1	0.09%	$0	$21,060	$0
Casework & Countertops								
Replace Misc. Casework/Millwork	1	Allowance	1	1	1.20%	$0	$140,400	$159,840
Other								
Renovate Tree Fort	1	Allowance	1	1	2.99%	$540,000	$0	$0
INTERIOR/FINISHES SUBTOTAL					**11.17%**	**$684,198**	**$450,216**	**$1,460,756**
4.0 PLUMBING SYSTEMS								
Fire Protection								
New Fire Suppression System	130,000	SF	1	130,000	3.89%	$702,000	$0	$0
Equipment & Fixtures								
Existing Lochinvar Hot Water Heater, Serial # 1934116042349,	1	EA	1	1	0.05%	$0	$0	$12,787
Existing Lochinvar Hot Water Heater, Serial #	1	EA	1	1	0.05%	$0	$0	$12,787
Replace Flush Valves & Faucets	1	Allowance	1	1	0.07%	$4,032	$5,242	$5,967
Piping								
Replace Piping, Valves & Unions	1	Allowance	1	1	0.15%	$0	$0	$39,960
Pool								
Pool - Preventative Maintenance (grout, acid wash, etc.)	1	Allowance	1	1	0.36%	$0	$0	$95,904
Misc. Pool Equipment Replacement ($25K/Year)	10	Allowance	1	10	1.49%	$90,000	$117,000	$133,200
PLUMBING SYSTEMS SUBTOTAL					**6.09%**	**$796,032**	**$122,242**	**$309,557**

Building 06 – Jack E. Kirksey Livonia Community Recreation Center

Summary of Budgets:

Jack E. Kirksey Recreation Center	Building SF 130,000		Cost Data Specification Factor = Geographic Factor = Cost Escalation Factor =			Cost Escalation Factors 1.08	1.30	1.48
Program Area	Quantity Per Unit	Unit	# of Units	Total Units	As % of Total Cost	Critical Needs Cost (1 - 3 years)	Deferrable Maintenance Cost (4 - 6 years)	Future Need Cost (7 - 10 years)
5.0 HVAC SYSTEMS								
Equipment								
Existing Cleaver Brooks Boiler Serial # OL101674, 2002 (10,000,000 BTU)	1	EA	1	1	3.59%	$0	$0	$959,040
Existing Cleaver Brooks Boiler Serial # OL101673, 2002 (10,000,000 BTU)	1	EA	1	1	3.59%	$0	$0	$959,040
Existing Trane Air Handling Unit- 2002	1	EA	1	1	0.90%	$0	$210,600	$0
Existing Trane Air Handling Unit- 2002	1	EA	1	1	0.90%	$0	$210,600	$0
Existing Trane Air Handling Unit- 2002	1	EA	1	1	0.90%	$0	$210,600	$0
Existing Trane Air Handling Unit- 2002	1	EA	1	1	0.90%	$0	$210,600	$0
Existing Trane Air Handling Unit- 2002	1	EA	1	1	0.90%	$0	$210,600	$0
Existing Trane Air Handling Unit- 2002	1	EA	1	1	0.90%	$0	$210,600	$0
Existing Evapco Chiller, Serial # T020199, 2002	1	EA	1	1	2.39%	$0	$0	$639,360
Replace Exhaust Fans	8	EA	1	8	0.19%	$0	$0	$50,126
Replace Misc. HVAC Equipment	1	Allowance	1	1	2.01%	$0	$0	$537,062
Piping								
Replace Piping, Valves & Unions	1	Allowance	1	1	0.15%	$0	$0	$39,960
Air and Water Balance	130,000	SF	1	130,000	0.23%	$0	$54,756	$0
Commissioning	130,000	SF	1	130,000	0.16%	$0	$36,504	$0
Temperature Controls	130,000	SF	1	130,000	2.18%	$0	$511,056	$0
HVAC SYSTEMS SUBTOTAL					**19.86%**	**$0**	**$1,865,916**	**$3,184,588**
6.0 ELECTRICAL SYSTEMS								
Power								
Power for IT Equipment & Upgrades	1	Allowance	1	1	0.21%	$0	$0	$55,944
Replace Existing Electrical Panels	1	Allowance	1	1	0.30%	$0	$0	$79,920
Power for new HVAC	1	Allowance	1	1	0.33%	$0	$78,624	$0
Miscellaneous Power Allowance	130,000	SF	1	130,000	0.31%	$0	$0	$83,117
Lighting								
Replace Lighting with LED's (New OS, Switching, etc.)	130,000	SF	1	130,000	5.67%	$0	$1,332,396	$0
Replace Exterior Wall Packs	20	EA	1	20	0.10%	$18,144	$0	$0
Fire Alarm System								
Adjustments to Fire Alarm System	1	Allowance	1	1	0.07%	$12,096	$0	$0
ELECTRICAL SYSTEMS SUBTOTAL					**7.00%**	**$30,240**	**$1,411,020**	**$218,981**
7.0 SECURITY								
Security								
Security Allowance - Cameras / Surveillance	1	Allowance	1	1	0.00%	$0	$0	$79,920
Security Allowance - Access Controls	1	Allowance	1	1	0.00%	$0	$0	$79,920
SECURITY SYSTEMS SUBTOTAL					**0.60%**	**$0**	**$0**	**$159,840**
9.0 FURNITURE & EQUIPMENT								
General Furniture								
FFE Allowance	1	Allowance	1	1	1.20%	$72,000	$93,600	$106,560
FURNITURE & EQUIPMENT SUBTOTAL					**1.20%**	**$72,000**	**$93,600**	**$106,560**
10.0 TECHNOLOGY								
Technology								
Recable all IT Wiring	1	Allowance	1	1	2.39%	$432,000	$0	$0
TECHNOLOGY SUBTOTAL					**2.39%**	**$432,000**	**$0**	**$0**
SOFT COSTS								
Building Infrastructure Improvement Total:					75.56%	$2,143,212	$8,218,174	$7,668,631
Project Contingency:	10.00%				7.20%	$163,921	$812,457	$756,207
Permits, Testing & Printing:	2.50%				1.98%	$45,078	$223,426	$207,957
Professional Fees & Costs:	9.00%				7.96%	$181,310	$898,641	$836,424
Construction Manager Fee & Costs:	9.00%				7.30%	$166,339	$824,441	$767,361
PROJECT TOTAL					**100.00%**	**$2,699,860**	**$10,977,139**	**$10,236,580**

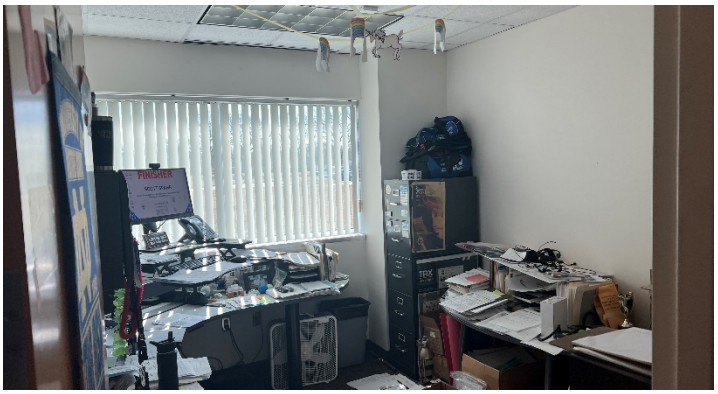
Building 06 – Jack E. Kirksey Livonia Community Recreation Center

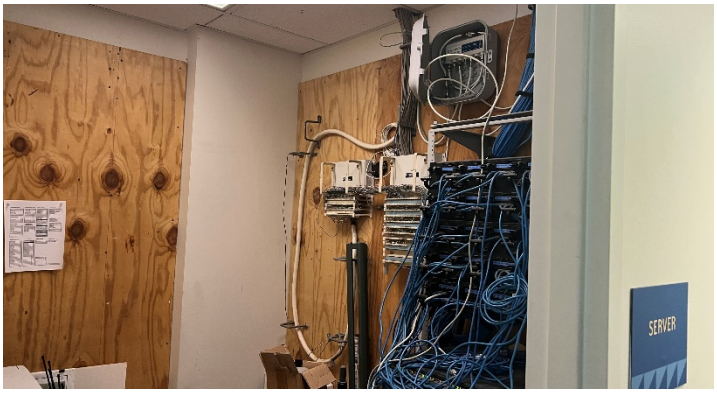
Photos:





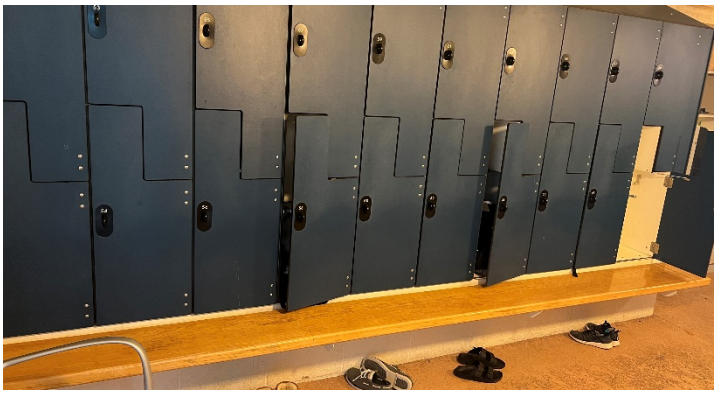






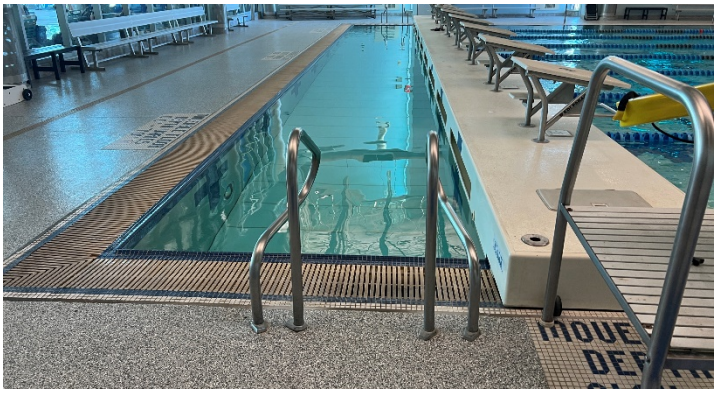






Building 06 – Jack E. Kirksey Livonia Community Recreation Center

Photos:

















Building 06 – Jack E. Kirksey Livonia Community Recreation Center

Photos:










Building 06 – Jack E. Kirksey Livonia Community Recreation Center

Photos:

















Building 07 – Livonia Housing Commission



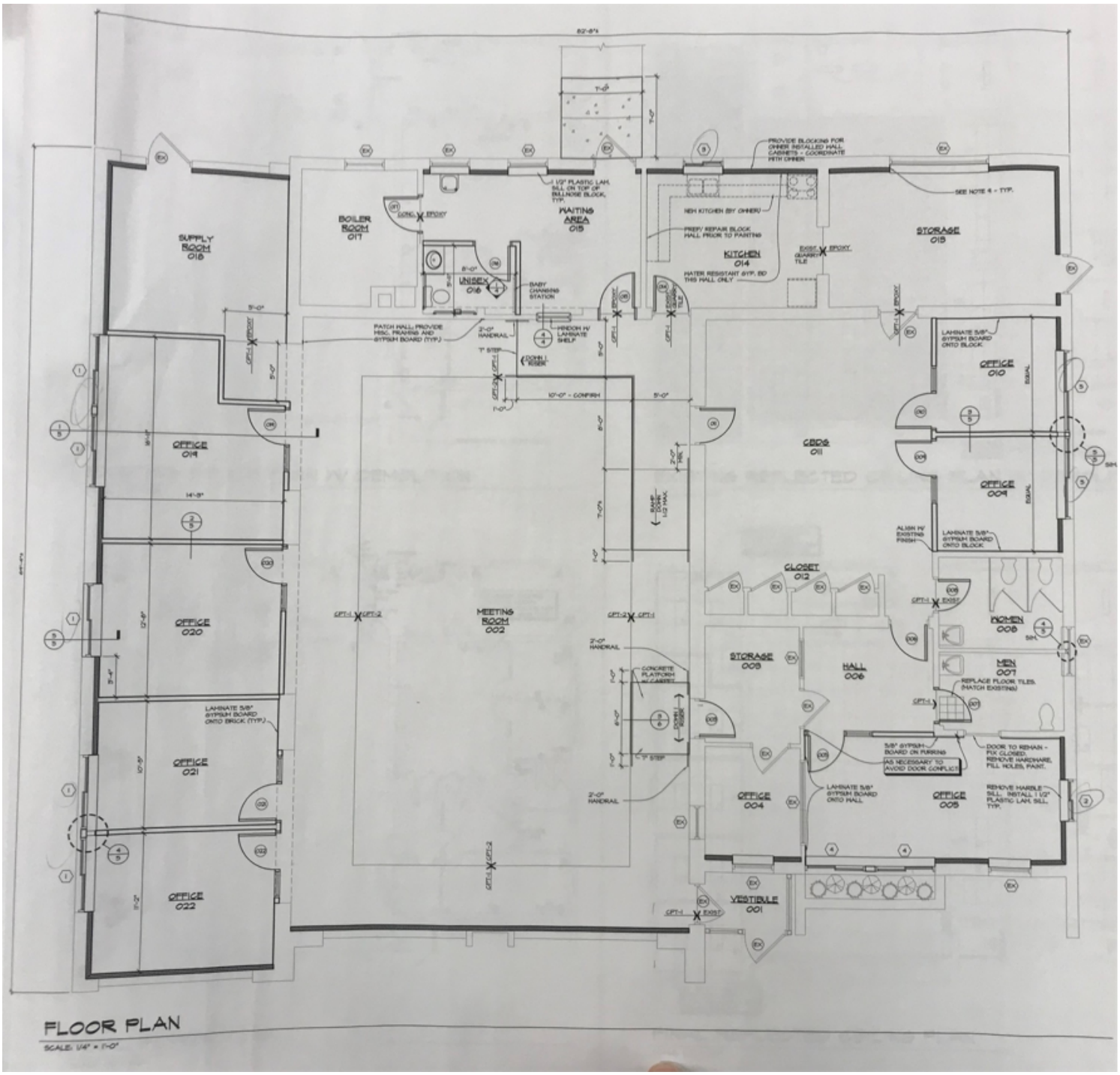
Address:	10800 Farmington Rd. Livonia MI 48150
Year Built:	~1966
Square Footage:	5,660
Site Area:	9.98 Acres
Parking Spaces:	54
Stories:	1
Basement:	No
Elevator(s):	No
Exterior Façade:	Brick
Roof:	EPDM
Fire Protection:	None

Site Plan:



Building 07 – Livonia Housing Commission

1st Floor Plan:



Building 07 – Livonia Housing Commission

Summary of Budgets:

Housing Commission									
Building SF	5,660		Cost Data Specification Factor = Geographic Factor = Cost Escalation Factor =			Cost Escalation Factors	1.08	1.30	1.48
Program Area	Quantity Per Unit	Unit	# of Units	Total Units	As % of Total Cost	Critical Needs Cost (1 - 3 years)	Deferrable Maintenance Cost (4 - 6 years)	Future Need Cost (7 - 10 years)	
1.0 SITE									
Paving									
Pavement and Base Reconstruction	33000	SF	1	33,000	17.87%	$213,840	$0	$0	
Selective Sidewalk & Curb Replacement	1	Allowance	1	1	0.90%	$10,800	$0	$0	
Sealcoating/Re-striping	33000	SF	1	33,000	0.89%	$0	$0	$15,824	
Landscaping									
Improve Landscaping	1	Allowance	1	1	0.90%	$10,800	$0	$0	
Utilities									
Misc. Utility Repairs	1	Allowance	1	1	0.45%	$0	$7,020	$0	
Monument Sign - Powered & Electronic Display	1	EA	1	1	4.51%	$54,000	$0	$0	
SITE SUBTOTAL					**25.54%**	**$289,440**	**$7,020**	**$15,824**	
2.0 BUILDING ENVELOPE									
Roofing Work									
Misc. Roof Repairs	1	Allowance	1	1	0.90%	$0	$14,040	$0	
Windows									
Re-caulk Windows	1	Allowance	1	1	0.63%	$7,560	$0	$0	
Exterior Walls									
Re-Caulk Expansion Joints	1	Allowance	1	1	1.35%	$16,200	$0	$0	
Tuckpointing	1	Allowance	1	1	2.26%	$27,000	$0	$0	
Exterior Doors									
Exterior Hollow Metal Doors/Frames/Hardware- Single Door	3	EA	1	3	0.81%	$9,720	$0	$0	
BUILDING ENVELOPE SUBTOTAL					**5.96%**	**$60,480**	**$14,040**	**$0**	
3.0 INTERIOR/FINISHES									
Ceilings									
Remove Existing & Install New Acoustic Tile Ceiling	5,660	SF	1	5,660	4.34%	$51,959	$0	$0	
Flooring									
Remove & Replace Flooring - Carpet	5,660	SF	1	5,660	3.42%	$40,956	$0	$0	
Paint									
Paint - Interior	5,660	SF	1	5,660	0.77%	$9,169	$0	$0	
Restrooms									
Renovate - Toilet Room (Single / Staff)	1	EA	1	1	0.90%	$0	$14,040	$0	
Casework & Countertops									
Replace Misc. Casework/Millwork	1	Allowance	1	1	3.16%	$0	$49,140	$0	
INTERIOR/FINISHES SUBTOTAL					**12.59%**	**$102,084**	**$63,180**	**$0**	
4.0 PLUMBING SYSTEMS									
Fire Protection									
New Fire Suppression System	5,660	SF	1	5,660	2.55%	$30,564	$0	$0	
Equipment & Fixtures									
Existing Bradford White Hot Water Heater, Serial # EJ11099631,2008	1	EA	1	1	0.72%	$8,640	$0	$0	
Replace Flush Valves & Faucets	1	Allowance	1	1	0.45%	$0	$0	$7,992	
Piping									
Replace Piping, Valves & Unions	1	Allowance	1	1	0.45%	$0	$0	$7,992	
PLUMBING SYSTEMS SUBTOTAL					**4.18%**	**$39,204**	**$0**	**$15,984**	
5.0 HVAC SYSTEMS									
Equipment									
Existing Trane Roof Top Unit, Serial # 111510840L, 2011	1	EA	1	1	2.26%	$0	$0	$39,960	
Piping									
Replace Piping, Valves & Unions	1	Allowance	1	1	0.45%	$0	$0	$7,992	
Other HVAC									
Air and Water Balance	5,660	SF	1	5,660	0.15%	$0	$0	$2,714	
Commissioning	5,660	SF	1	5,660	0.10%	$0	$0	$1,809	
Temperature Controls	5,660	SF	1	5,660	1.43%	$0	$0	$25,331	
HVAC SYSTEMS SUBTOTAL					**4.39%**	**$0**	**$0**	**$77,807**	
6.0 ELECTRICAL SYSTEMS									
Power for IT Equipment & Upgrades	1	Allowance	1	1	0.72%	$0	$0	$12,787	
Power for new HVAC	1	Allowance	1	1	5.06%	$0	$0	$89,510	
Miscellaneous Power Allowance	5,660	SF	1	5,660	0.20%	$2,445	$0	$0	
Lighting									
Replace Lighting with LED's (New OS, Switching, etc.)	5,660	SF	1	5,660	3.73%	$44,623	$0	$0	
Building Exterior/Site Lighting Allowance	1	Allowance	1	1	1.35%	$16,200	$0	$0	
Fire Alarm System									
Install Fire Alarm System	5,660	SF	1	5,660	1.12%	$0	$0	$19,903	
ELECTRICAL SYSTEMS SUBTOTAL					**12.19%**	**$63,269**	**$0**	**$122,201**	

Building 07 – Livonia Housing Commission

Summary of Budgets:

Housing Commission					Cost Data			
Building SF	5,660				Specification Factor =		Cost Escalation Factors	
					Geographic Factor =		1.08	1.30	1.48
					Cost Escalation Factor =				
Program Area	Quantity Per Unit	Unit	# of Units	Total Units	As % of Total Cost	Critical Needs Cost (1 - 3 years)	Deferrable Maintenance Cost (4 - 6 years)	Future Need Cost (7 - 10 years)
7.0 SECURITY								
Security								
Security Allowance - Cameras / Surveillance	1	Allowance	1	1	0.00%	$16,200	$0	$0
Security Allowance - Access Controls	1	Allowance	1	1	0.00%	$16,200	$0	$0
SECURITY SYSTEMS SUBTOTAL					**2.71%**	**$32,400**	**$0**	**$0**
8.0 ABATEMENT								
Abatement								
Abatement Allowance	1	Allowance	1	1	2.71%	$0	$42,120	$0
9.0 FURNITURE & EQUIPMENT								
General Furniture								
FFE Allowance	1	Allowance	1	1	4.51%	$54,000	$0	$0
Other FF&E								
New Fridge and Freezers Allowance	1	Allowance	1	1	1.35%	$16,200	$0	$0
FURNITURE & EQUIPMENT SUBTOTAL					**5.87%**	**$70,200**	**$0**	**$0**
SOFT COSTS								
Building Infrastructure Improvement Total:					76.14%	$657,076	$126,360	$231,816
Project Contingency:	10.00%				7.03%	$58,688	$12,636	$23,182
Permits, Testing & Printing:	2.50%				1.93%	$16,139	$3,475	$6,375
Professional Fees & Costs:	9.00%				7.77%	$64,913	$13,976	$25,641
Construction Manager Fee & Costs:	9.00%				7.13%	$59,553	$12,822	$23,524
PROJECT TOTAL					**100.00%**	**$856,369**	**$169,270**	**$310,537**

Building 07 – Livonia Housing Commission

Photos:

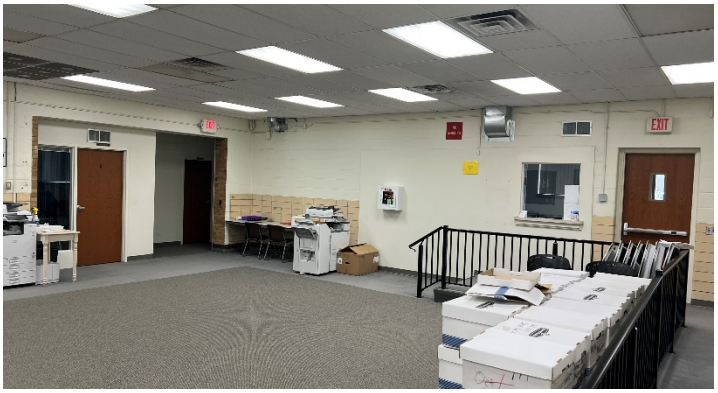
















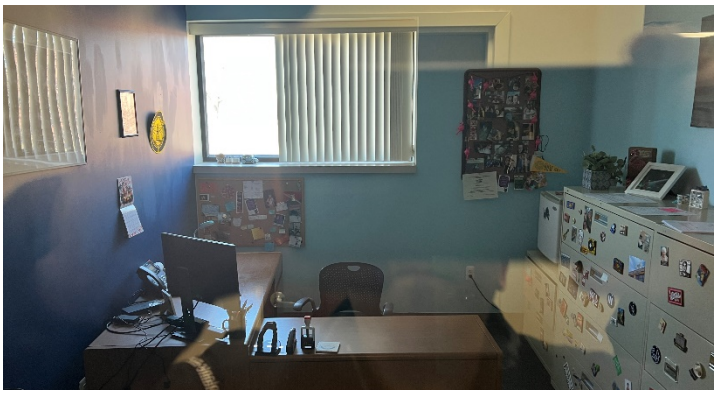
Building 07 – Livonia Housing Commission

Photos:

















Building 07 – Livonia Housing Commission

Photos:















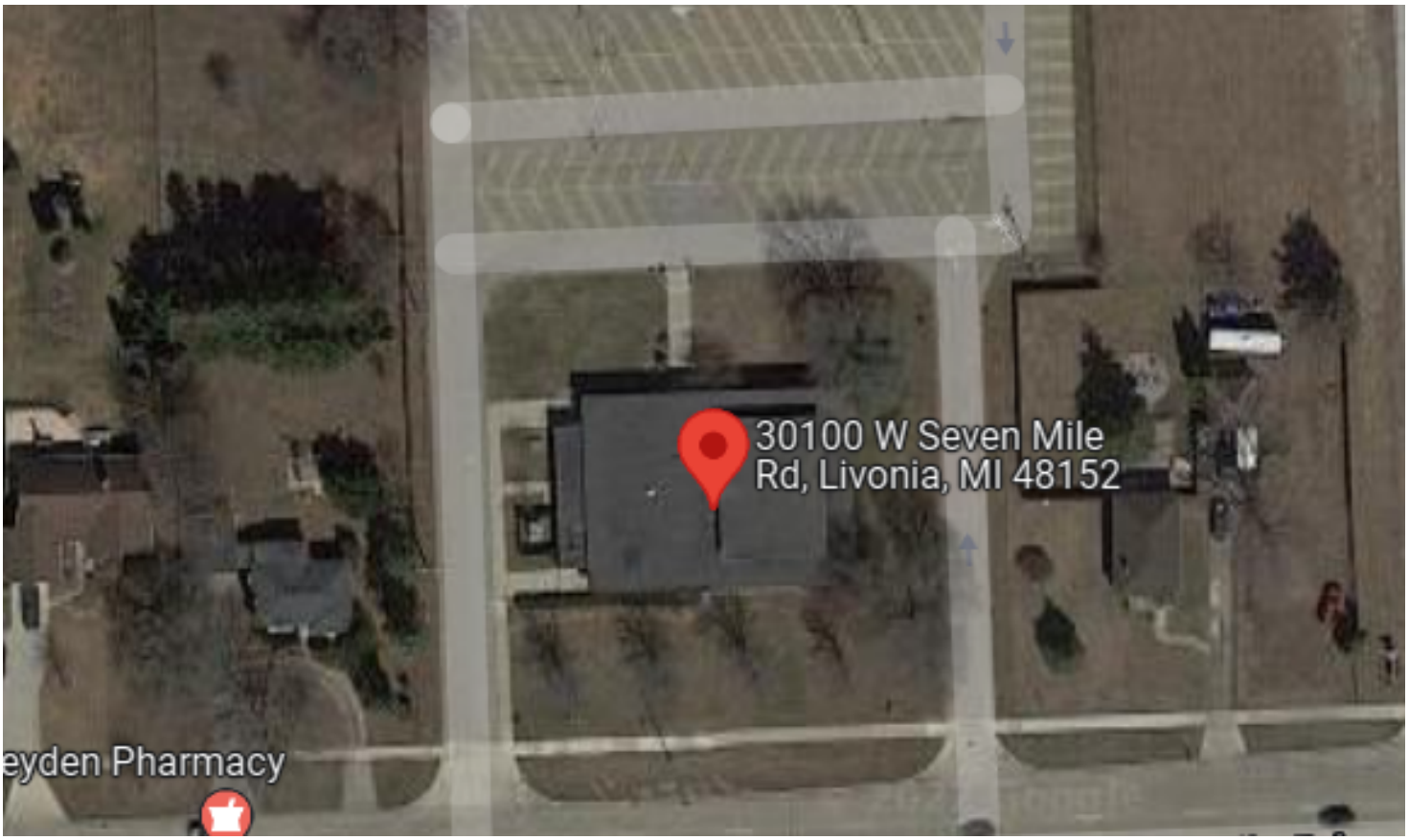


Building 08 – Carl Sandburg Library



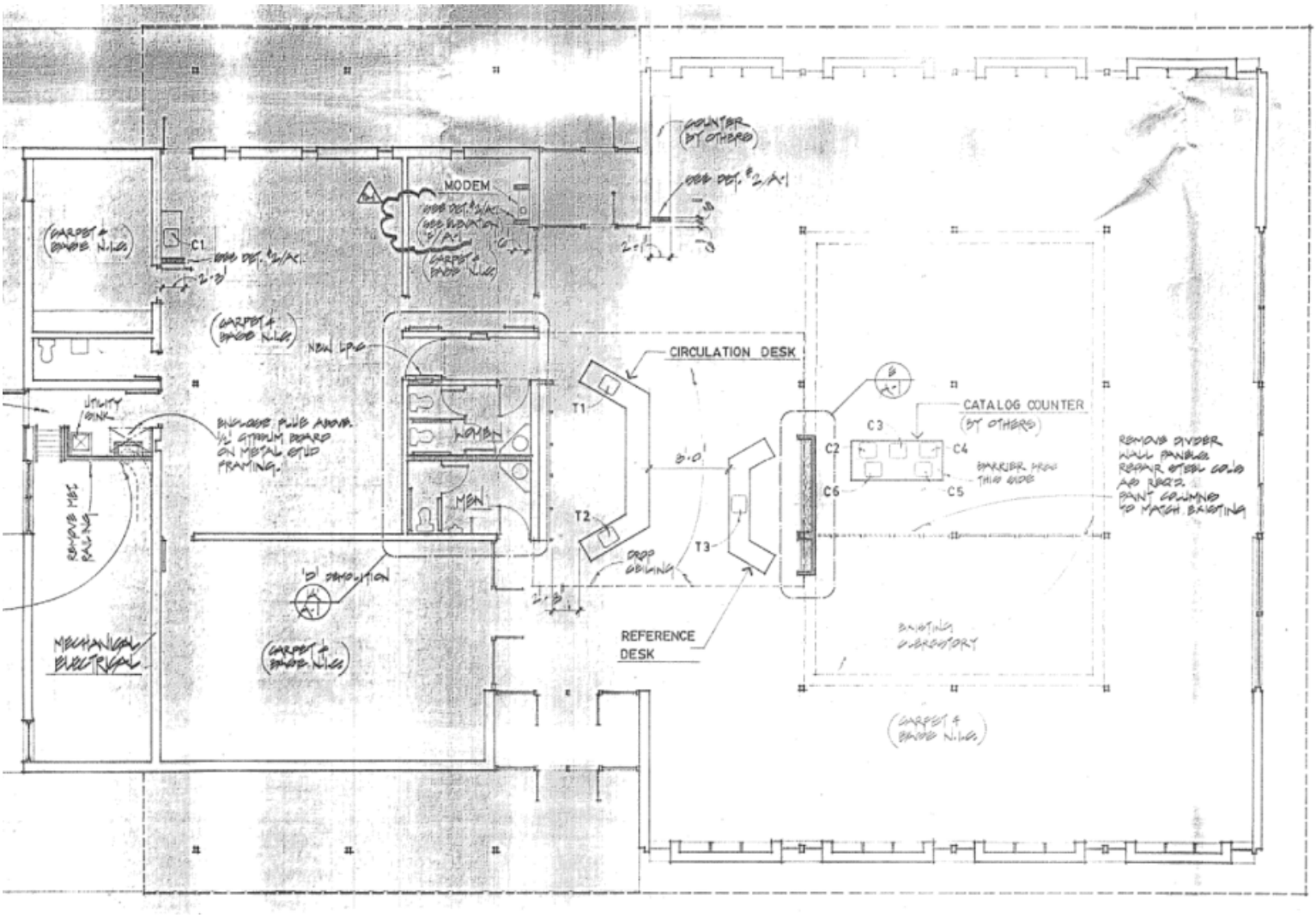
Address:	30100 W. Seven Mile Rd. Livonia MI 48152
Year Built:	1961
Square Footage:	8,600
Site Area:	2.20 Acres
Parking Spaces:	107
Stories:	1
Basement:	Yes
Elevator(s):	No
Exterior Façade:	Brick
Roof:	Tar
Fire Protection:	No

Site Plan:



Building 08 – Carl Sandburg Library

1st Floor Plan:



Building 08 – Carl Sandburg Library

Summary of Budgets:

Carl Sandburg Library									
Building SF	11,000		Cost Data Specification Factor =				Cost Escalation Factors	1.08	1.30	1.48
			Geographic Factor =							
			Cost Escalation Factor =							
Program Area	Quantity Per Unit	Unit	# of Units	Total Units	As % of Total Cost	Critical Needs Cost (1 - 3 years)	Deferrable Maintenance Cost (4 - 6 years)	Future Need Cost (7 - 10 years)
1.0 SITE								
Paving								
Pavement and Base Reconstruction	55,000	SF	1	55,000	13.46%	$0	$463,320	$0
Selective Sidewalk & Curb Replacement	1	Allowance	1	1	0.41%	$10,800	$0	$0
Sealcoating/Re-striping	55,000	SF	1	55,000	0.67%	$17,820	$0	$0
Landscaping								
Improve Landscaping	1	Allowance	1	1	0.41%	$0	$14,040	$0
Utilities								
Catch Basin / Manholes	3	EA	1	3	0.55%	$0	$18,870	$0
Misc. Utility Repairs	1	Allowance	1	1	1.02%	$0	$35,100	$0
Monument Sign - Powered & Electronic Display	1	EA	1	1	2.04%	$54,000	$0	$0
SITE SUBTOTAL					**18.56%**	**$82,620**	**$531,330**	**$0**
2.0 BUILDING ENVELOPE								
Roofing Work								
Replace Roof (EPDM) - .60 Mil/Reinforced/Fully-Adhered- (In Process)	15,000	SF	1	15,000	9.44%	$250,000	$0	$0
Install Roof Access Ladder	1	EA	1	1	0.09%	$2,419	$0	$0
Windows								
Re-caulk Windows	1	Allowance	1	1	0.31%	$8,100	$0	$0
Exterior Walls								
Re-Caulk Expansion Joints	1	Allowance	1	1	0.61%	$16,200	$0	$0
Tuckpointing	1	Allowance	1	1	1.63%	$43,200	$0	$0
Exterior Doors								
Exterior Hollow Metal Doors/Frames/Hardware- Single Door	2	EA	1	2	0.24%	$6,480	$0	$0
BUILDING ENVELOPE SUBTOTAL					**12.33%**	**$326,399**	**$0**	**$0**
3.0 INTERIOR/FINISHES								
Interior Doors & Hardware								
Replace Interior Doors & Hardware	10	EA	1	10	1.63%	$43,200	$0	$0
Ceilings								
Remove Existing & Install New Acoustic Tile Ceiling	3,000	SF	1	3,000	1.04%	$27,540	$0	$0
Flooring								
Remove & Replace Flooring - Carpet	11,000	SF	1	11,000	3.01%	$0	$0	$117,802
Paint								
Paint - Interior	11,000	SF	1	11,000	0.67%	$0	$23,166	$0
Restrooms								
Renovate - Toilet Room (Single / Staff)	1	EA	2	2	1.37%	$36,288	$0	$0
Casework & Countertops								
Replace Misc. Casework/Millwork	1	Allowance	1	1	4.08%	$108,000	$0	$0
INTERIOR/FINISHES SUBTOTAL					**11.80%**	**$215,028**	**$23,166**	**$117,802**
4.0 PLUMBING SYSTEMS								
Fire Protection								
New Fire Suppression System	11,000	SF	1	11,000	2.24%	$59,400	$0	$0
Equipment & Fixtures								
Existing Lochinvar Hot Water Heater, Serial # 1213A012099, 2012	1	EA	1	1	0.33%	$0	$11,232	$0
Replace Flush Valves & Faucets	1	Allowance	1	1	0.46%	$0	$0	$17,902
Provide Bottle Filler Drinking Fountains	1	EA	1	1	0.27%	$7,258	$0	$0
Piping								
Replace Piping, Valves & Unions	1	Allowance	1	1	0.49%	$0	$0	$19,181
PLUMBING SYSTEMS SUBTOTAL					**3.79%**	**$66,658**	**$11,232**	**$37,083**
5.0 HVAC SYSTEMS								
Equipment								
Existing Lochinvar Boiler, Serial #J938512, 1990	1	EA	1	1	3.06%	$81,000	$0	$0
Replace Boiler Pumps	1	EA	1	1	0.34%	$9,072	$0	$0
Existing MagicAire Air Handler Unit, Serial # 940489444, 1994	1	EA	1	1	0.61%	$16,200	$0	$0
Existing MagicAire Air Handler Unit, Serial # 940592687, 1994	1	EA	1	1	0.61%	$16,200	$0	$0
Existing MagicAire Air Handler Unit, Serial # 94059286, 1994	1	EA	1	1	0.61%	$16,200	$0	$0
Existing Trane Chiller, Serial # J94E81342, 1994 (Slated for replacement 2022)	1	EA		-	0.00%	$0	$0	$0
Piping								
Replace Piping, Valves & Unions	1	Allowance	1	1	1.02%	$27,000	$0	$0
Other HVAC								
Air and Water Balance	11,000	SF	1	11,000	0.13%	$3,564	$0	$0
Commissioning	11,000	SF	1	11,000	0.09%	$2,376	$0	$0
Temperature Controls- (In Process)	11,000	SF	1	11,000	1.26%	$33,264	$0	$0
HVAC SYSTEMS SUBTOTAL					**8.35%**	**$221,076**	**$0**	**$0**

Building 08 – Carl Sandburg Library

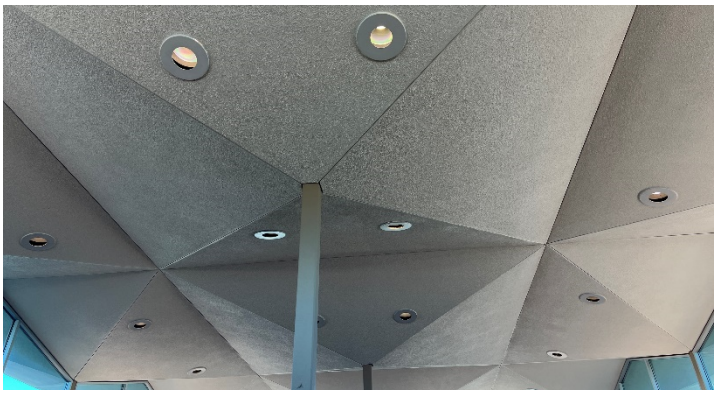
Summary of Budgets:

Carl Sandburg Library									
Building SF	11,000			Cost Data Specification Factor =			Cost Escalation Factors	1.08	1.30	1.48
				Geographic Factor =						
				Cost Escalation Factor =						
Program Area	Quantity Per Unit	Unit	# of Units	Total Units	As % of Total Cost	Critical Needs Cost (1 - 3 years)	Deferrable Maintenance Cost (4 - 6 years)	Future Need Cost (7 - 10 years)
6.0 ELECTRICAL SYSTEMS								
Power								
Power for IT Equipment & Upgrades	1	Allowance	1	1	0.61%	$0	$0	$23,976
Replace Existing Electrical Panels	1	Allowance	1	1	2.04%	$0	$0	$79,920
Power for new HVAC	1	Allowance	1	1	2.28%	$60,480	$0	$0
Miscellaneous Power Allowance- (New Outlets Needed)	11,000	SF	1	11,000	0.18%	$4,752	$0	$0
Panel Capacity Investigations and Re-tagging	1	Allowance	1	1	0.69%	$18,144	$0	$0
Lighting								
Replace Lighting with LED's (New OS, Switching, etc.)	11,000	SF	1	11,000	3.28%	$86,724	$0	$0
Replace Emergency & Exit Lights	11,000	SF	1	11,000	0.13%	$3,564	$0	$0
Building Exterior/Site Lighting Allowance	1	Allowance	1	1	2.28%	$60,480	$0	$0
Fire Alarm System								
Install Fire Alarm System	11,000	SF	1	11,000	0.99%	$26,136	$0	$0
ELECTRICAL SYSTEMS SUBTOTAL					**12.48%**	**$260,280**	**$0**	**$103,896**
7.0 SECURITY								
Security								
Security Allowance - Cameras / Surveillance	1	Allowance	1	1	0.61%	$0	$0	$23,976
Security Allowance - Access Controls	1	Allowance	1	1	0.00%	$0	$0	$23,976
SECURITY SYSTEMS SUBTOTAL					**1.22%**	**$0**	**$0**	**$47,952**
8.0 ABATEMENT								
Abatement								
Abatement Allowance	1	Allowance	1	1	2.45%	$64,800	$0	$0
ABATEMENT SUBTOTAL					**2.45%**	**$64,800**	**$0**	**$0**
9.0 FURNITURE & EQUIPMENT								
General Furniture								
FFE Allowance	1	Allowance	1	1	1.84%	$0	$63,180	$0
New Book Shelves	1	Allowance	1	1	3.06%	$81,000	$0	$0
FURNITURE & EQUIPMENT SUBTOTAL					**4.90%**	**$81,000**	**$63,180**	**$0**
SOFT COSTS								
Building Infrastructure Improvement Total:					75.89%	$1,317,861	$628,908	$306,733
Project Contingency:	10.00%				7.10%	$123,686	$56,573	$30,673
Permits, Testing & Printing:	2.50%				1.95%	$34,014	$15,558	$8,435
Professional Fees & Costs:	9.00%				7.85%	$136,806	$62,574	$33,927
Construction Manager Fee & Costs:	9.00%				7.20%	$125,510	$57,407	$31,126
PROJECT TOTAL					**100.00%**	**$1,737,877**	**$821,019**	**$410,894**

Building 08 – Carl Sandburg Library

Photos:










Building 08 – Carl Sandburg Library

Photos:

















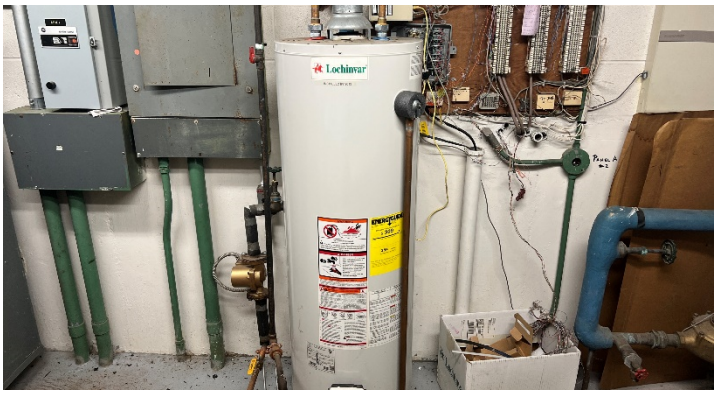
Building 08 – Carl Sandburg Library

Photos:



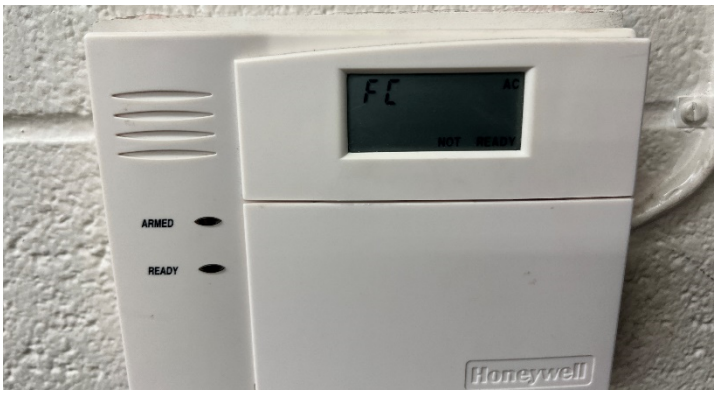


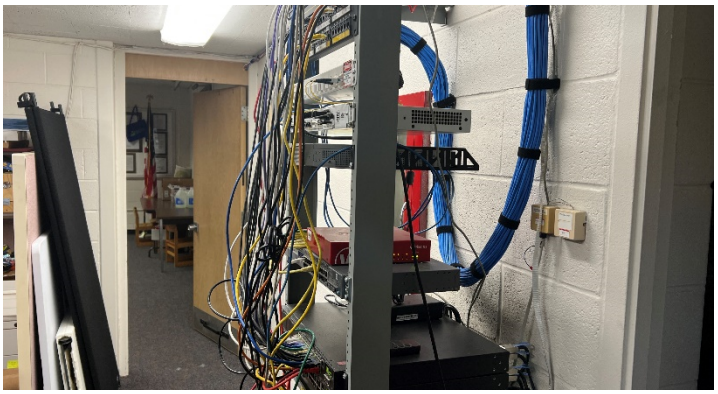












Building 08 – Carl Sandburg Library

Photos:







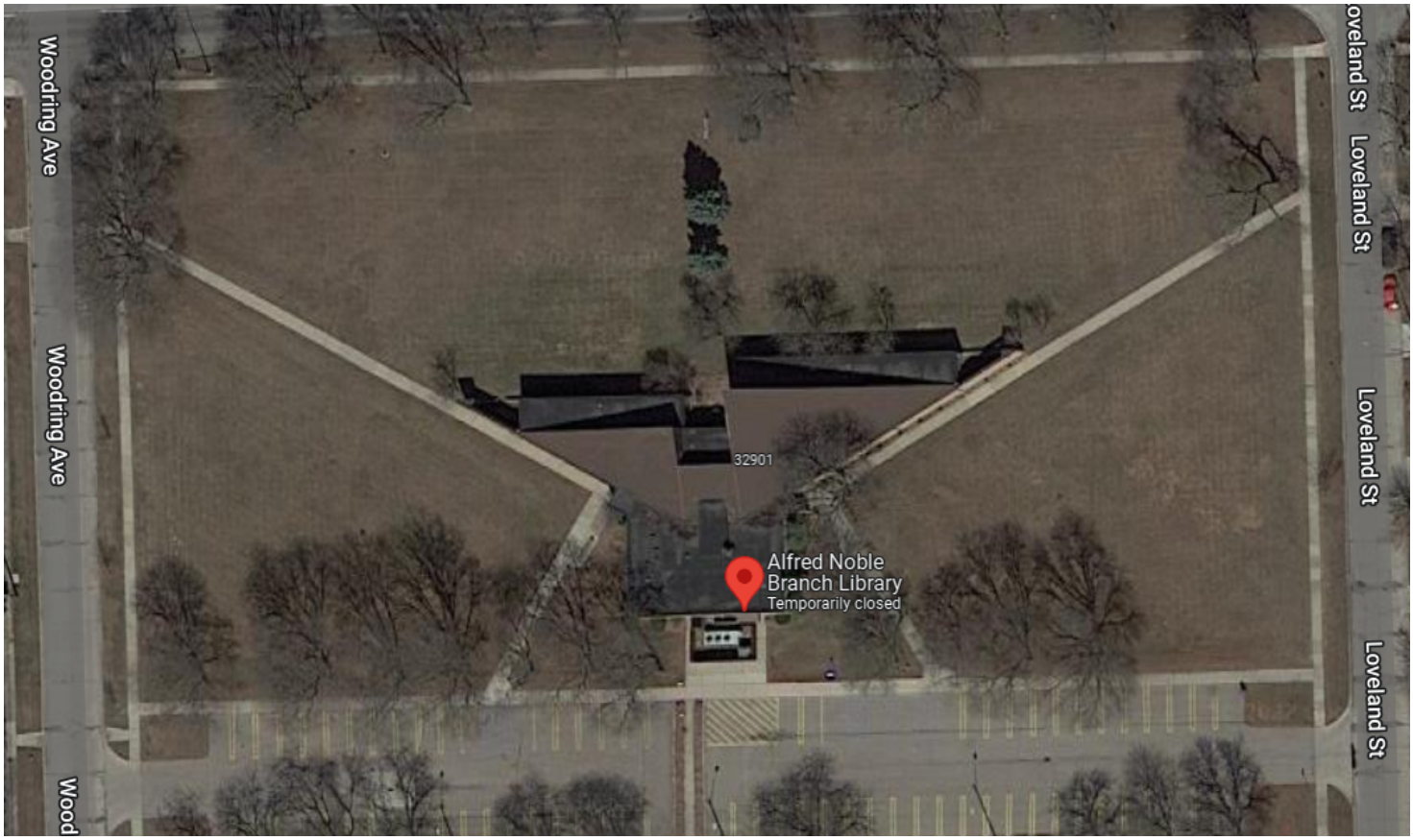



Building 09 – Alfred Noble Branch Library



Address:	32901 Plymouth Rd. Livonia MI 48150
Year Built:	1967
Square Footage:	12,175
Site Area:	4.84 Acres
Parking Spaces:	81
Stories:	1
Basement:	Yes
Elevator(s):	No
Exterior Façade:	Brick
Roof:	EPDM & Shingles
Fire Protection:	No

Site Plan:



Building 09 – Alfred Noble Branch Library

Summary of Budgets:

Alfred Noble Branch Library									
Building SF	16,000			Cost Data Specification Factor = Geographic Factor = Cost Escalation Factor =			Cost Escalation Factors	1.08	1.30	1.48
Program Area	Quantity Per Unit	Unit	# of Units	Total Units	As % of Total Cost	Critical Needs Cost (1 - 3 years)	Deferrable Maintenance Cost (4 - 6 years)	Future Need Cost (7 - 10 years)
1.0 SITE								
Demolition								
Building Demolition (Non-Abated)	16000	SF	1	16,000	47.44%	$164,160	$0	$0
Paving								
Pulverize Existing Parking Lot	32,000	SF	1	32,000	5.99%	$20,736	$0	$0
Landscaping								
Landscape Restoration	85000	SF	1	85,000	21.22%	$73,440	$0	$0
SITE SUBTOTAL					**74.65%**	**$258,336**	**$0**	**$0**
SOFT COSTS								
Building Infrastructure Improvement Total:					74.65%	$258,336	$0	$0
Project Contingency:	10.00%				7.47%	$25,834	$0	$0
Permits, Testing & Printing:	2.50%				2.05%	$7,104	$0	$0
Professional Fees & Costs:	9.00%				8.26%	$28,574	$0	$0
Construction Manager Fee & Costs:	9.00%				7.58%	$26,215	$0	$0
PROJECT TOTAL					**100.00%**	**$346,062**	**$0**	**$0**

Building 09 – Alfred Noble Branch Library

Photos:










Building 09 – Alfred Noble Branch Library

Photos:













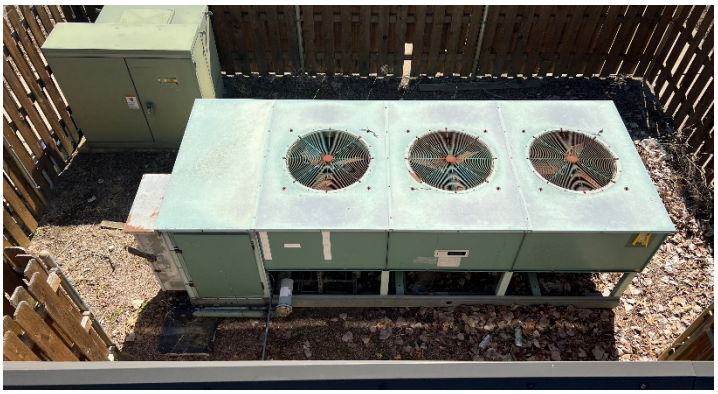




Building 09 – Alfred Noble Branch Library

Photos:







Building 10 – City Wide Technology

Summary of Budgets:

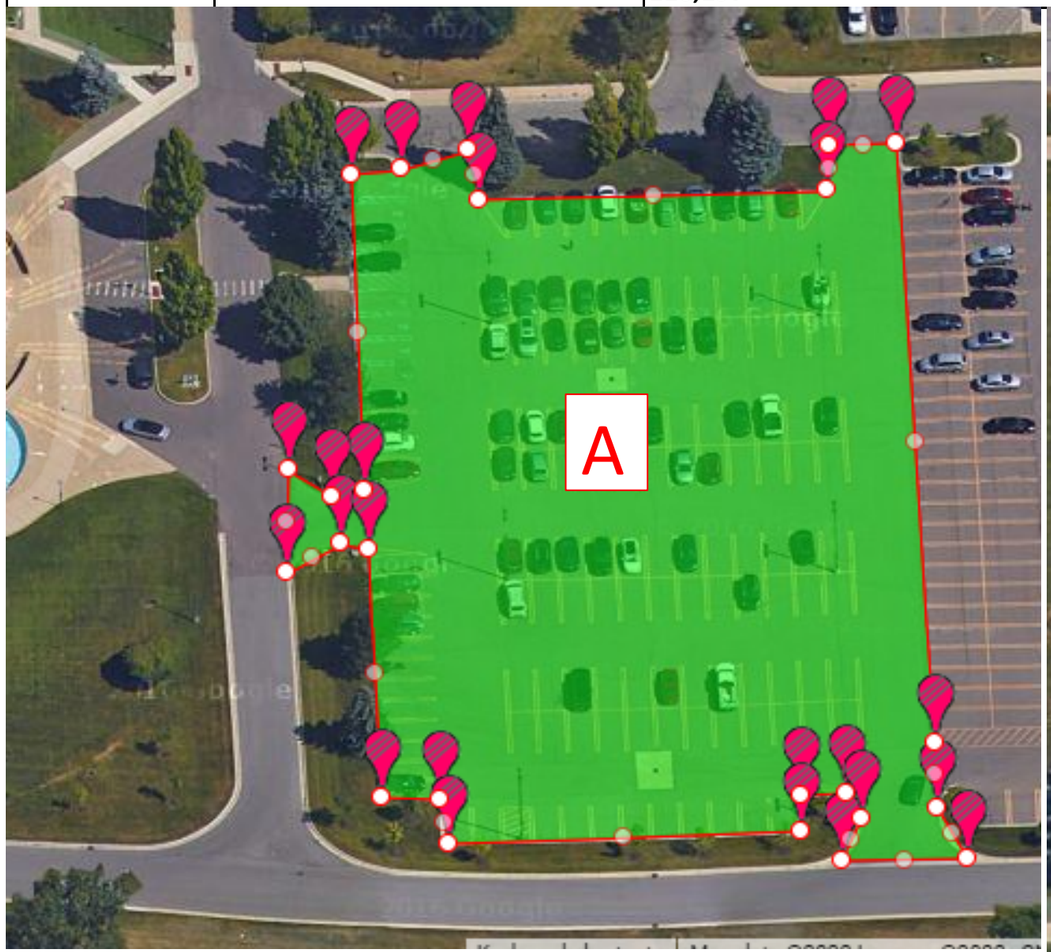
City Wide - Technology								
Building SF -			Cost Data Specification Factor = Geographic Factor = Cost Escalation Factor =			Cost Escalation Factors 1.08	1.30	1.48
Program Area	Quantity Per Unit	Unit	# of Units	Total Units	As % of Total Cost	Critical Needs Cost (1 - 3 years)	Deferrable Maintenance Cost (4 - 6 years)	Property Enhancement Cost (7 - 10 years)
10.0 TECHNOLOGY								
Technology								
Run Fiber To All Buildings (In Process)	10	EA	1	10	37.33%	$360,000	$468,000	$532,800
Upgrade Wireless Networks	1	Allowance	1	1	18.66%	$540,000	$0	$0
Electronic Time Keeping System	1	Allowance	1	1	18.66%	$540,000	$0	$0
TECHNOLOGY SUBTOTAL					**74.65%**	**$1,440,000**	**$468,000**	**$532,800**
SOFT COSTS								
Building Infrastructure Improvement Total:					74.65%	$1,440,000	$468,000	$532,800
Project Contingency:	10.00%				7.47%	$144,000	$46,800	$53,280
Permits, Testing & Printing:	2.50%				2.05%	$39,600	$12,870	$14,652
Professional Fees & Costs:	9.00%				8.26%	$159,275	$51,764	$58,932
Construction Manager Fee & Costs:	9.00%				7.58%	$146,124	$47,490	$54,066
PROJECT TOTAL					**100.00%**	**$1,928,999**	**$626,925**	**$713,730**

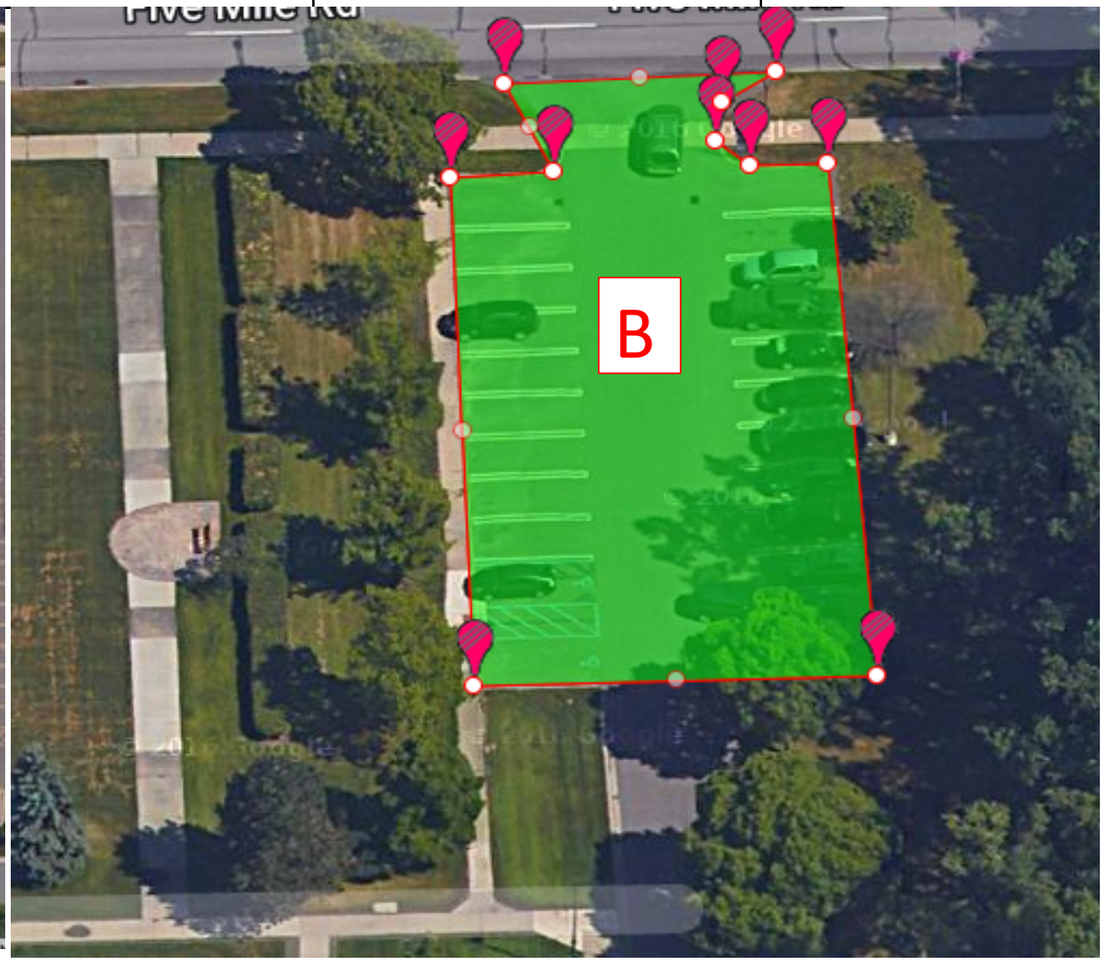


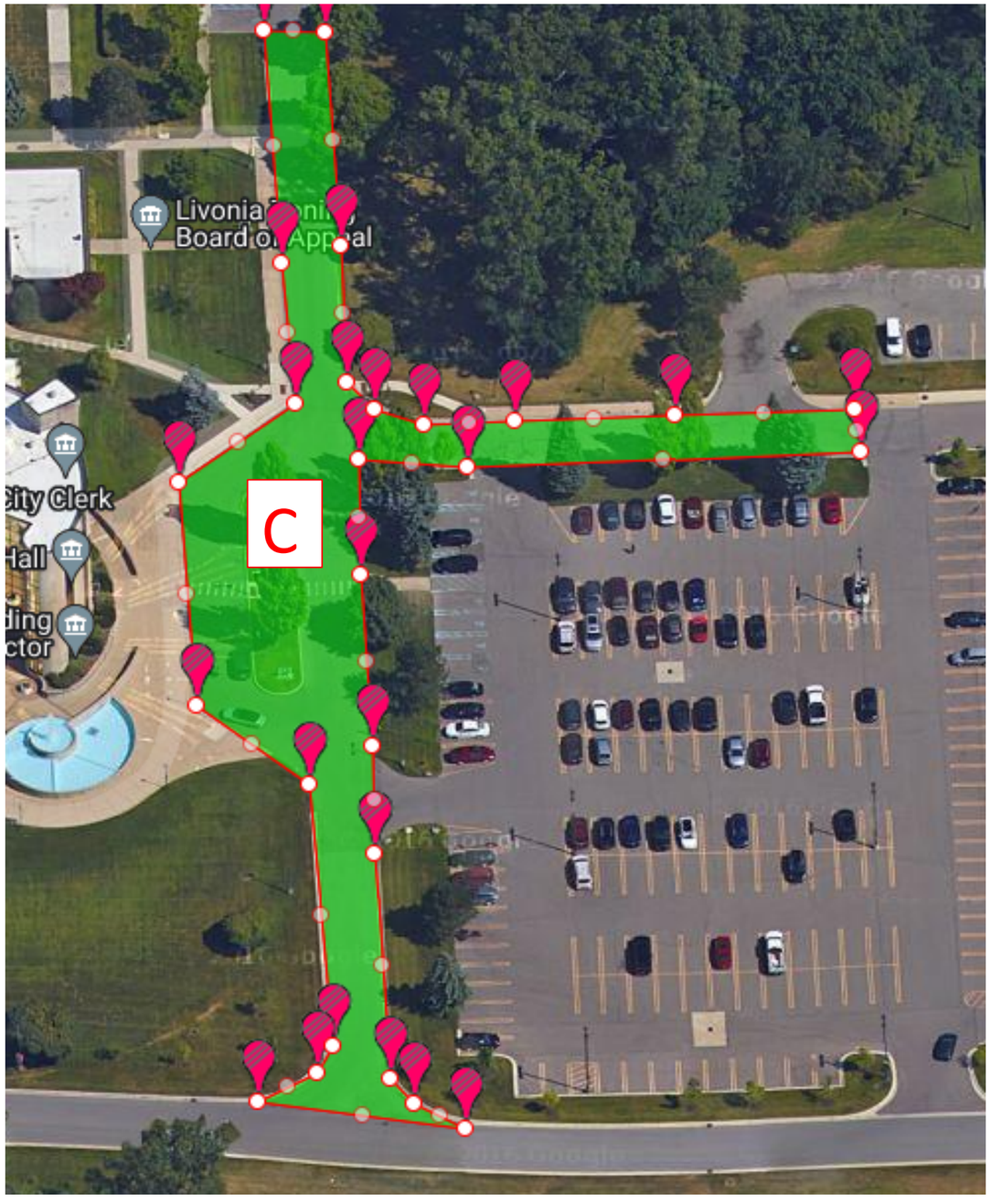
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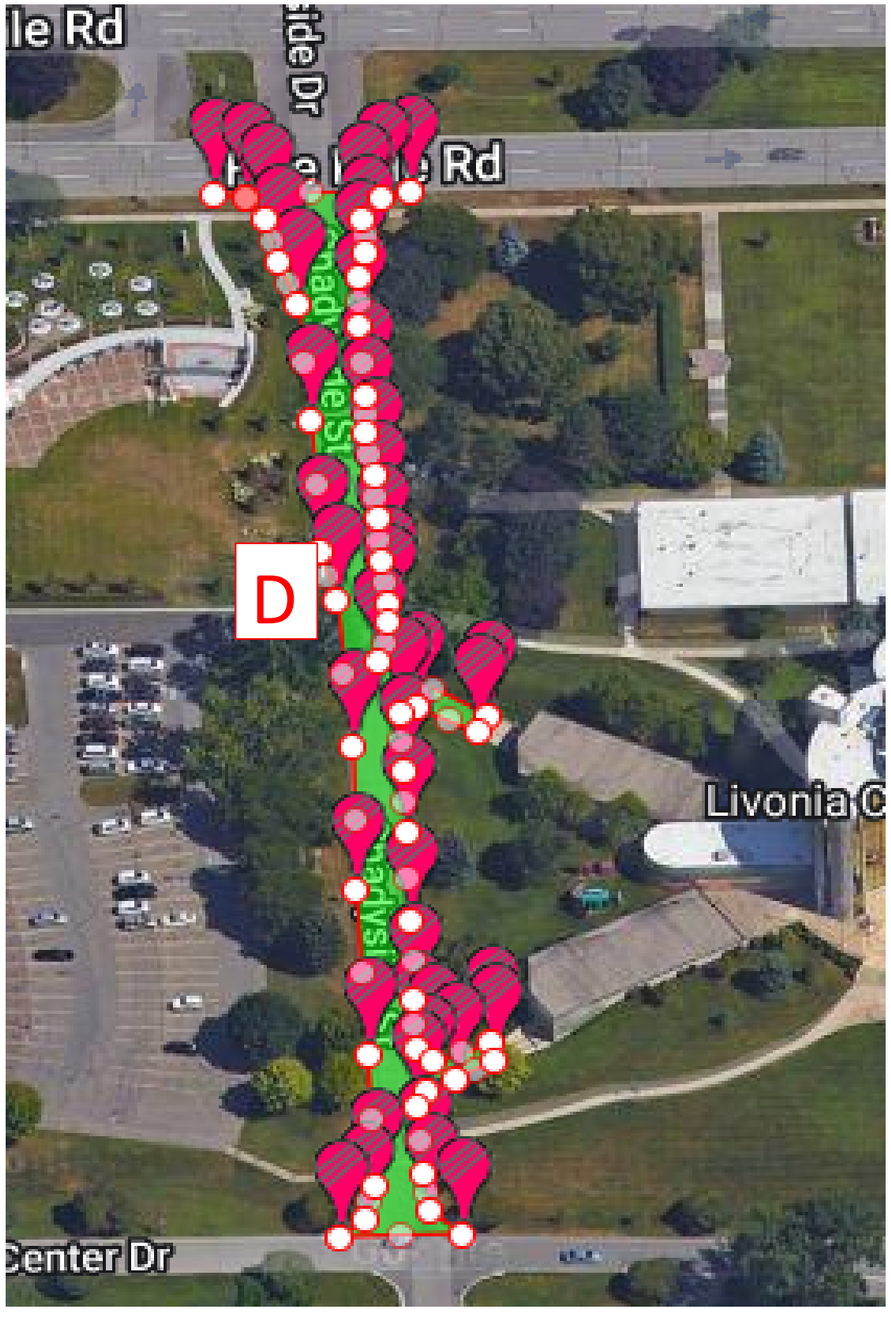
Parking Lot Take-Offs

Bldg. No.	Name	Address	
1	City Hall	33000 Civic Center Drive, Livonia, MI 48154	
Parking Area	**Material**	**Sq.ft.**	**Notes**
A	Asphalt	59,369	
B	Asphalt	9,156	
C	Asphalt	22,225	Island removed from total
D	Asphalt	19,447	
TOTAL		**110,197**	



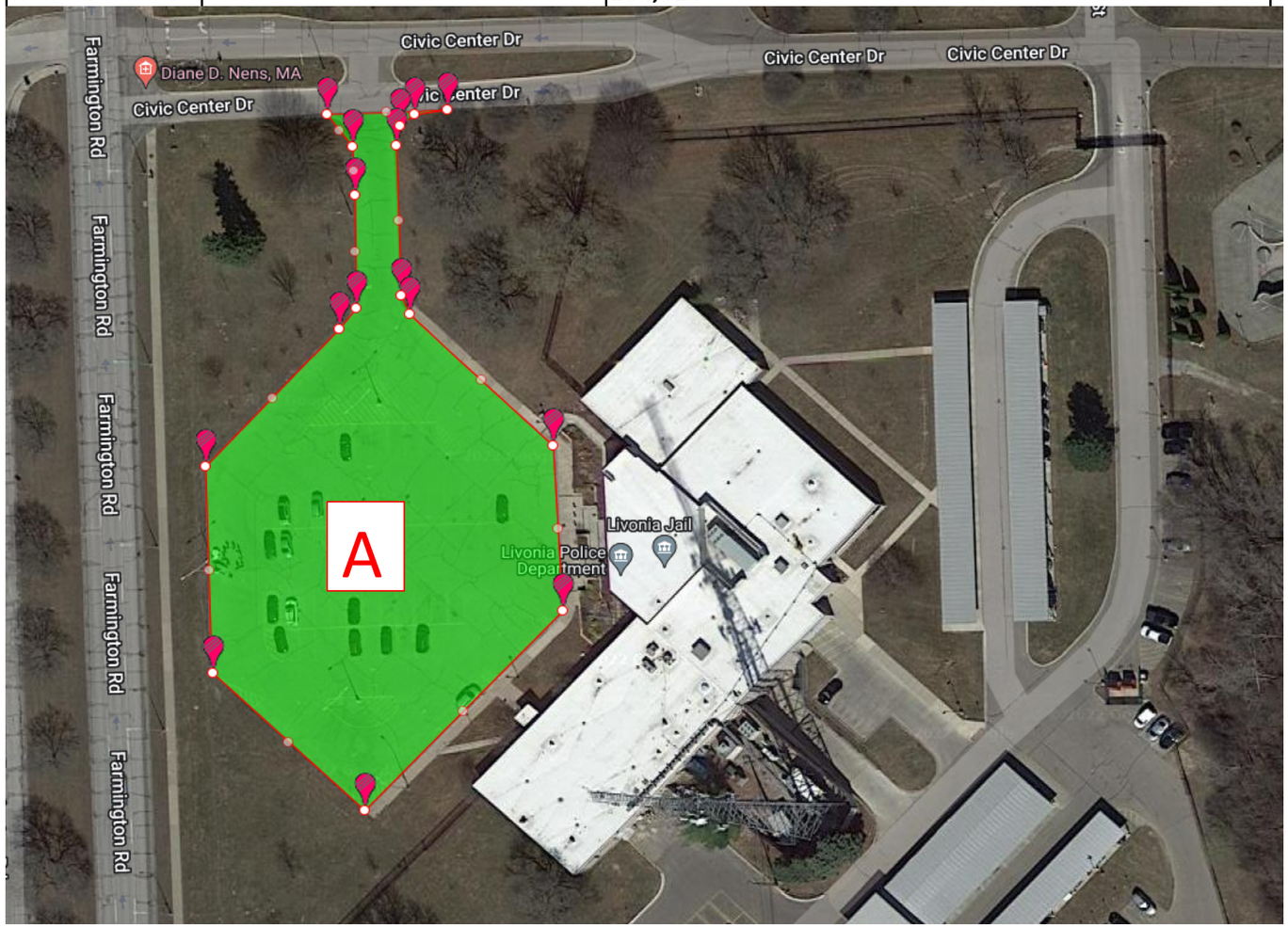


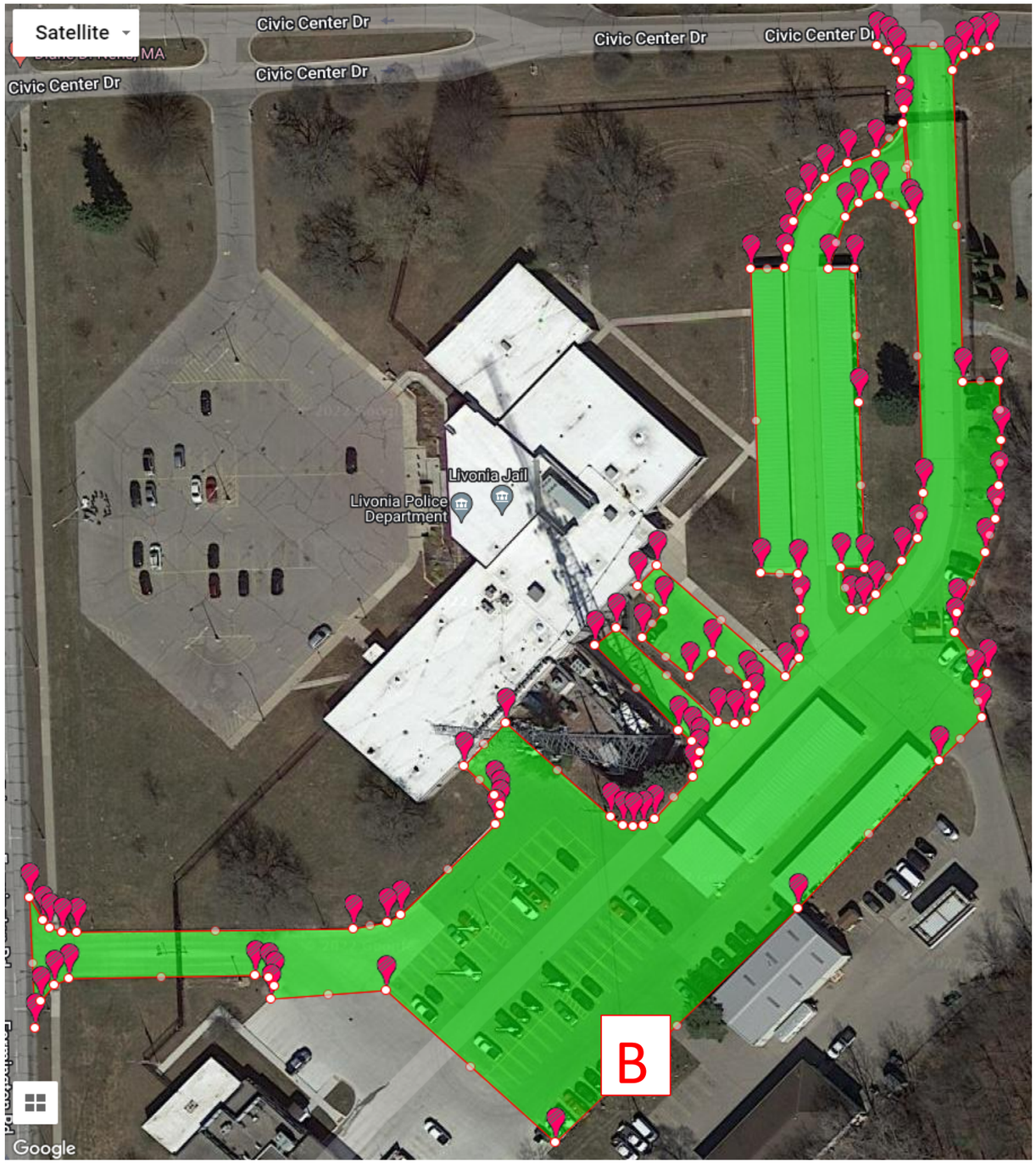

C
Livonia
Board of
City Clerk
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Center Dr

Bldg. No.	Name	Address
1	Police Department	15050 Farmington Rd. Livonia, MI 48154
Parking Area	**Material**	**Sq.ft.**
A	Asphalt	49,165
B	Asphalt	105,749
TOTAL		**154,914**

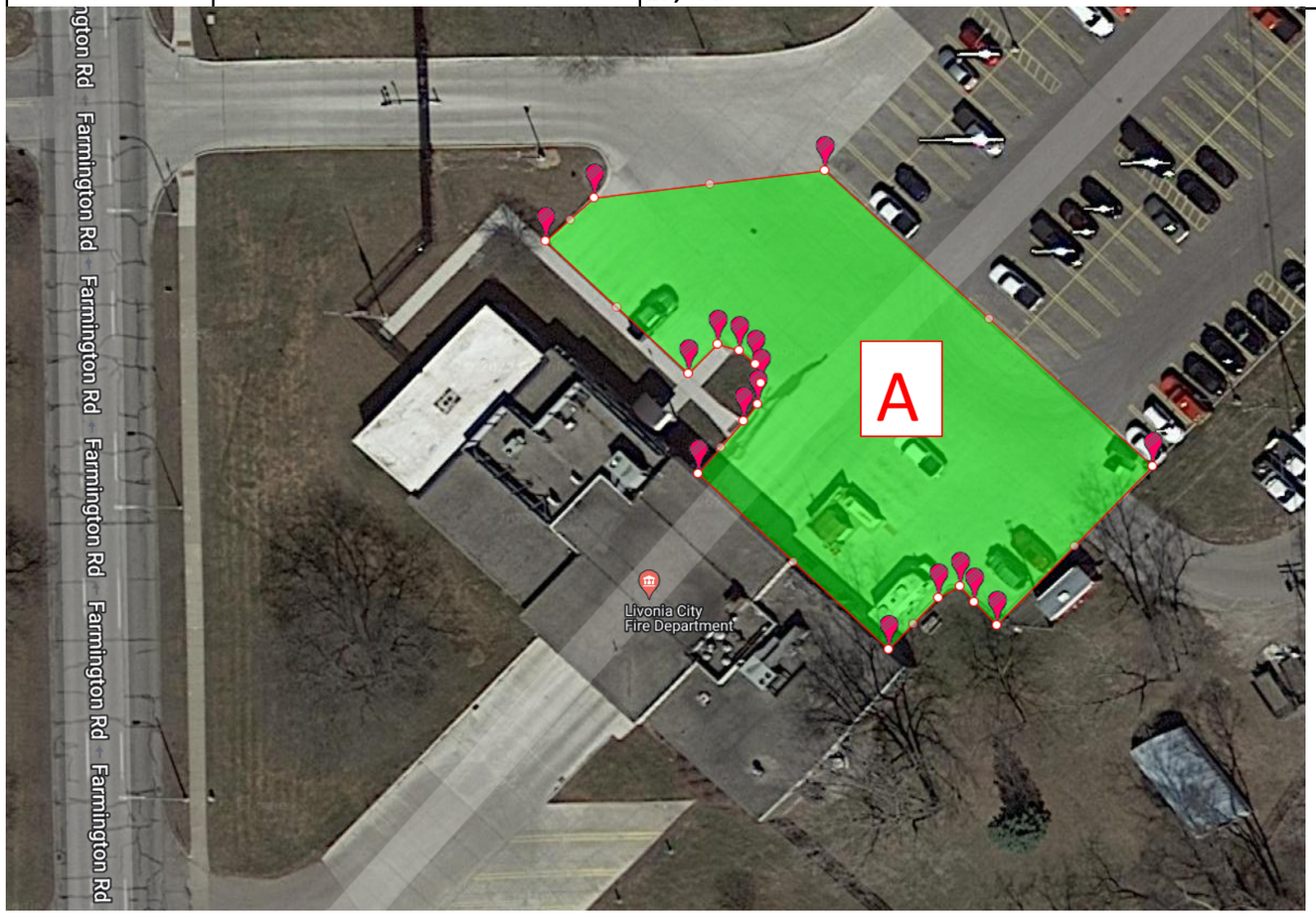
Notes




Satellite
Civic Center Dr
Civic Center Dr
Civic Center Dr
Civic Center Dr
Civic Center Dr
Livonia Jail
Livonia Police Department
B
Google

Bldg. No.	Name	Address
1	Livonia City Fire Department	14910 Farmington Rd. Livonia MI 48154
Parking Area	**Material**	**Sq.ft.**
A	Asphalt	16,365
B	Concrete	11,512
TOTAL		**27,877**

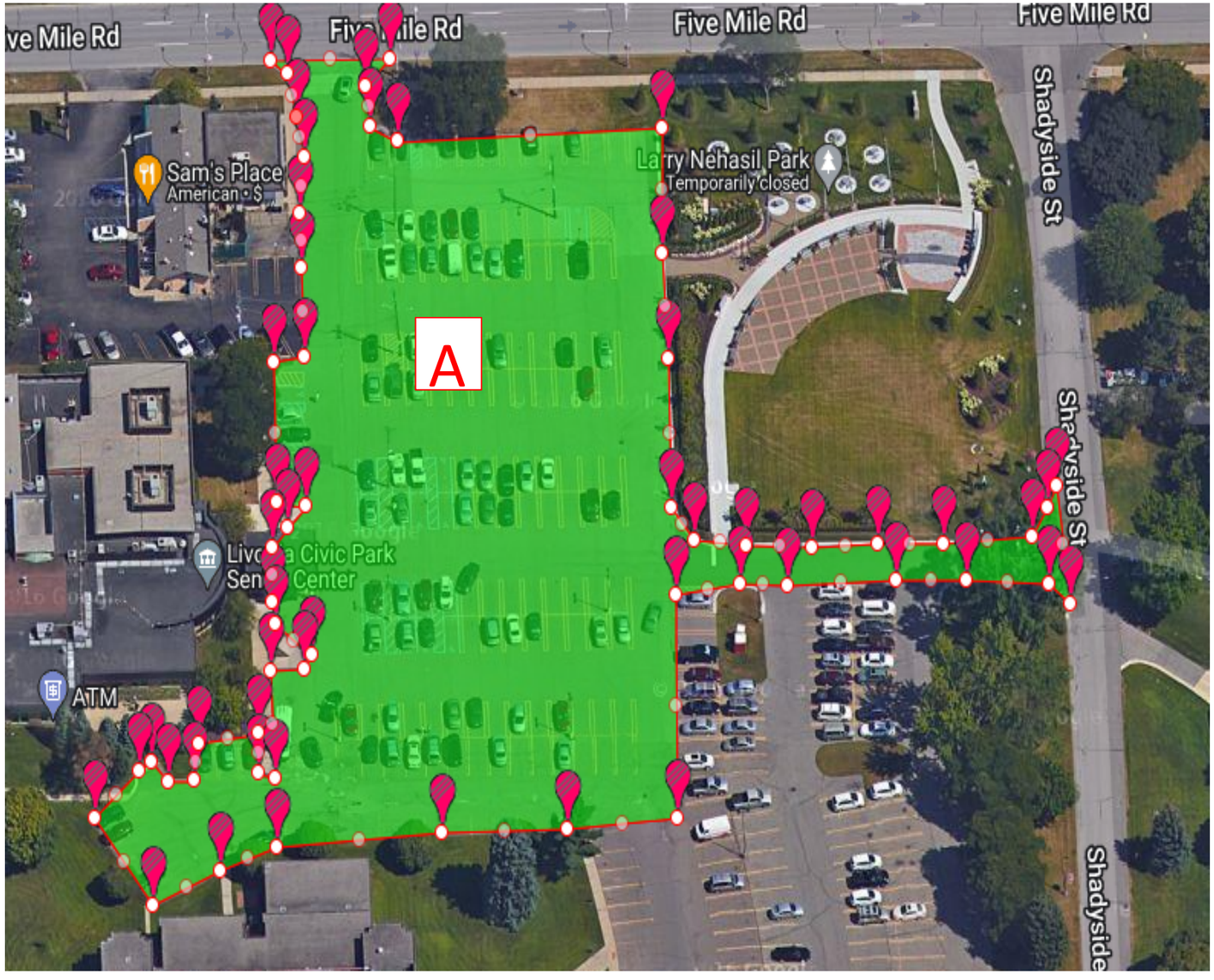
Notes



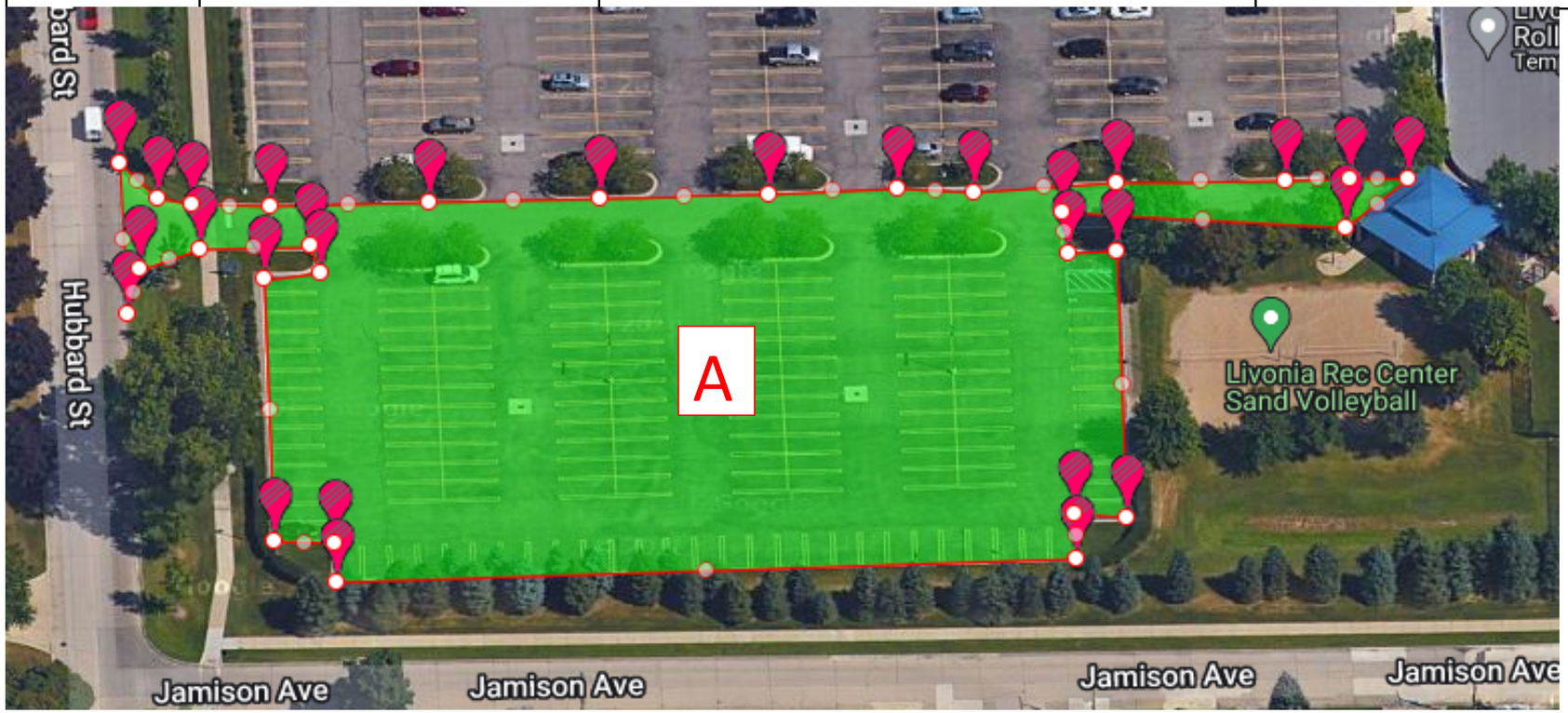
Farmington Rd
Farmington Rd
Farmington Rd
Farmington Rd
Livonia City
Fire Department
B

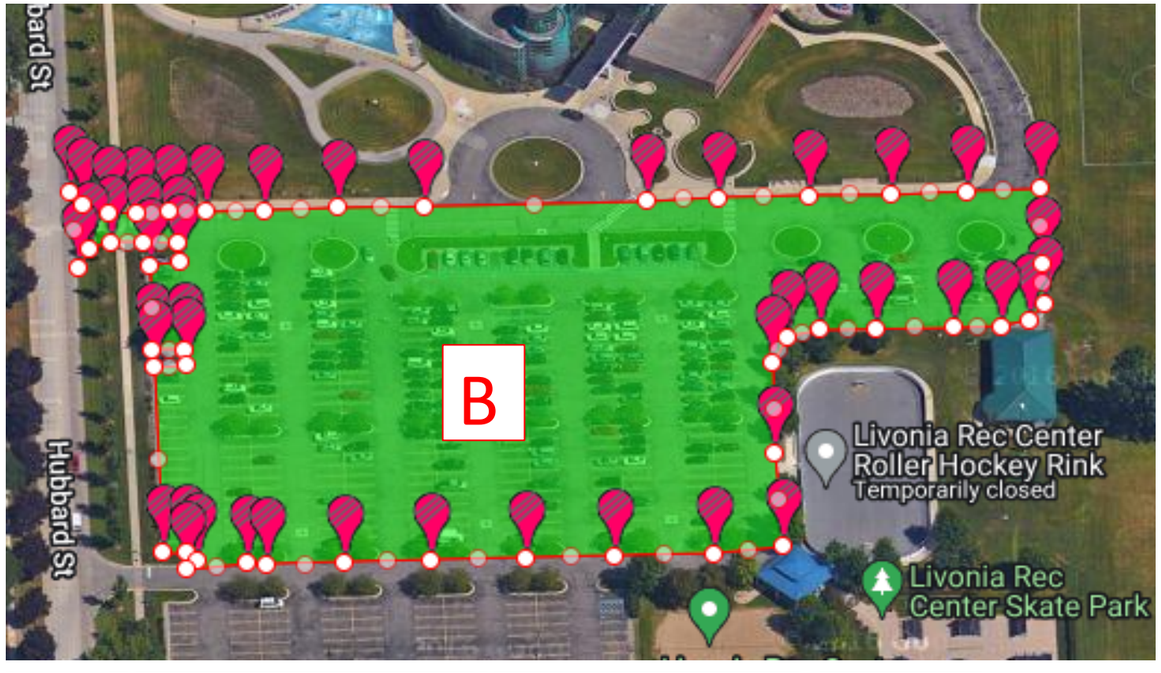
Bldg. No.	Name	Address
1	Senior Center	15218 Farmington Rd. MI 48154
Parking Area	**Material**	**Sq.ft.**
A	Asphalt	82,497
TOTAL		**82,497**

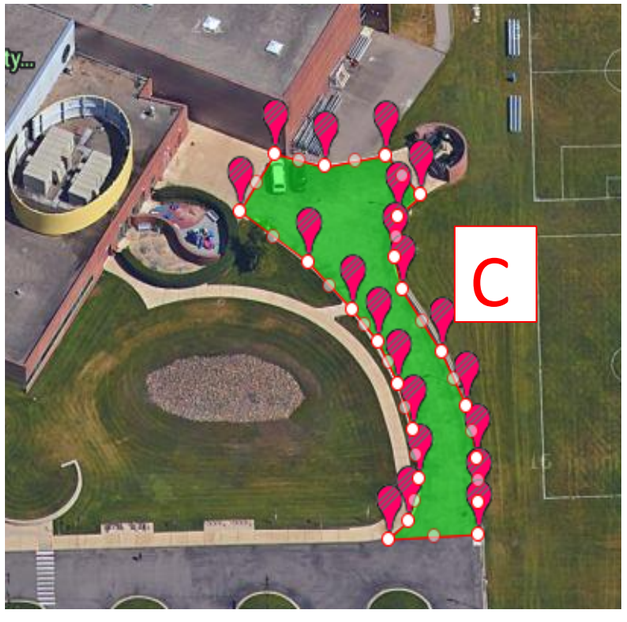
Notes

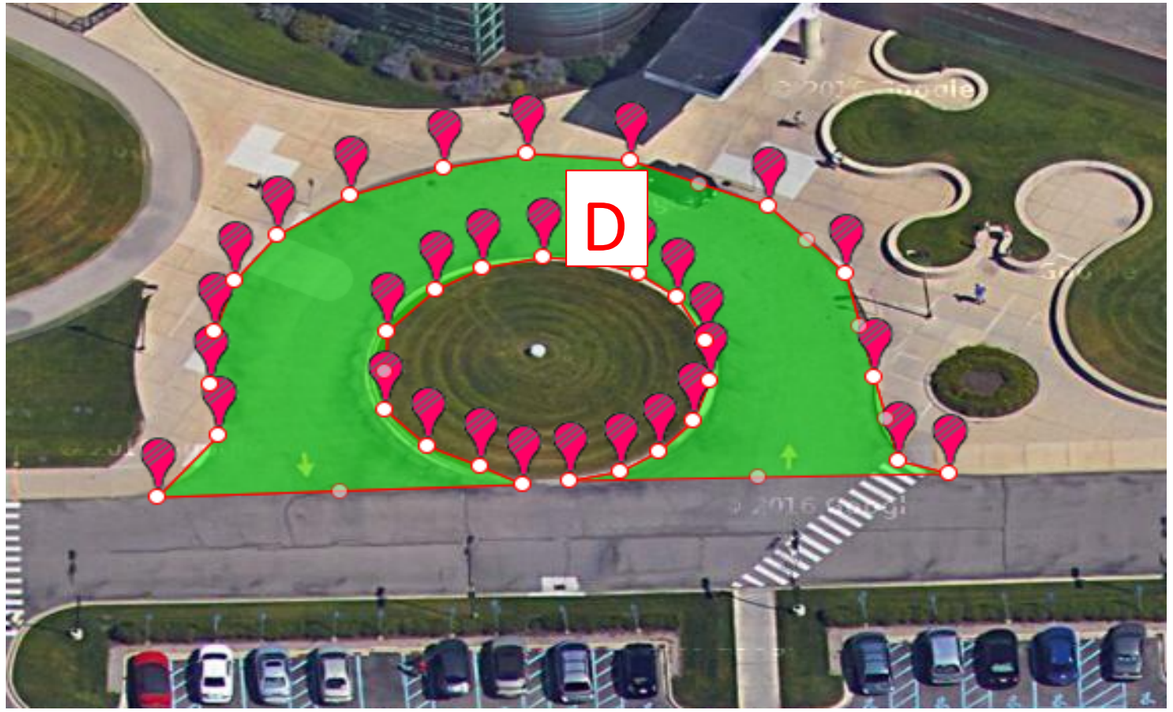


Bldg. No.	Name	Address	
1	Rec Center	15100 Hubbard St. Livonia MI 48154	
Parking Area	**Material**	**Sq.ft.**	**Notes**
A	Asphalt	59,129	Islands removed from total
B	Asphalt	147,576	Islands removed from total
C	Asphalt	9,013	
D	Asphalt	6,634	
TOTAL		**222,352**	




B
Hubbard St
Livonia Rec Center
Roller Hockey Rink
Temporarily closed
Livonia Rec
Center Skate Park

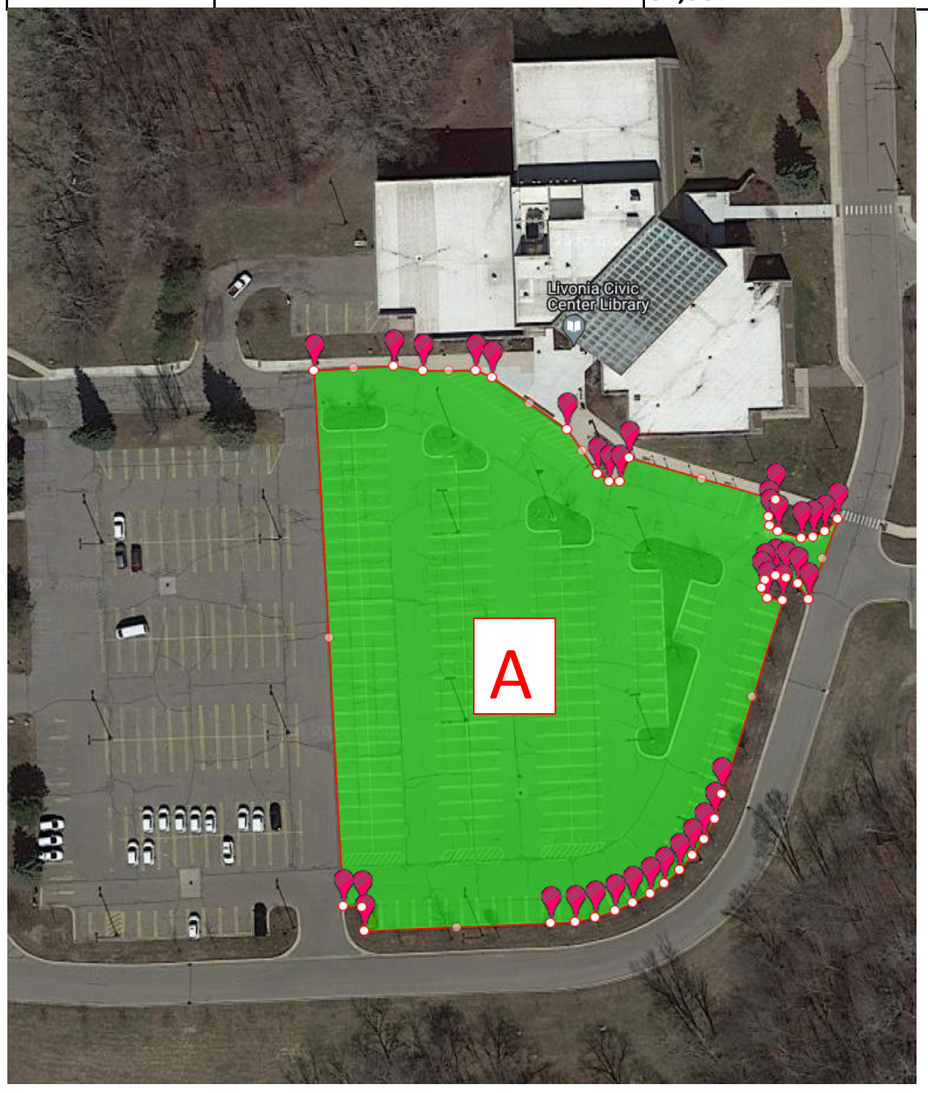

C

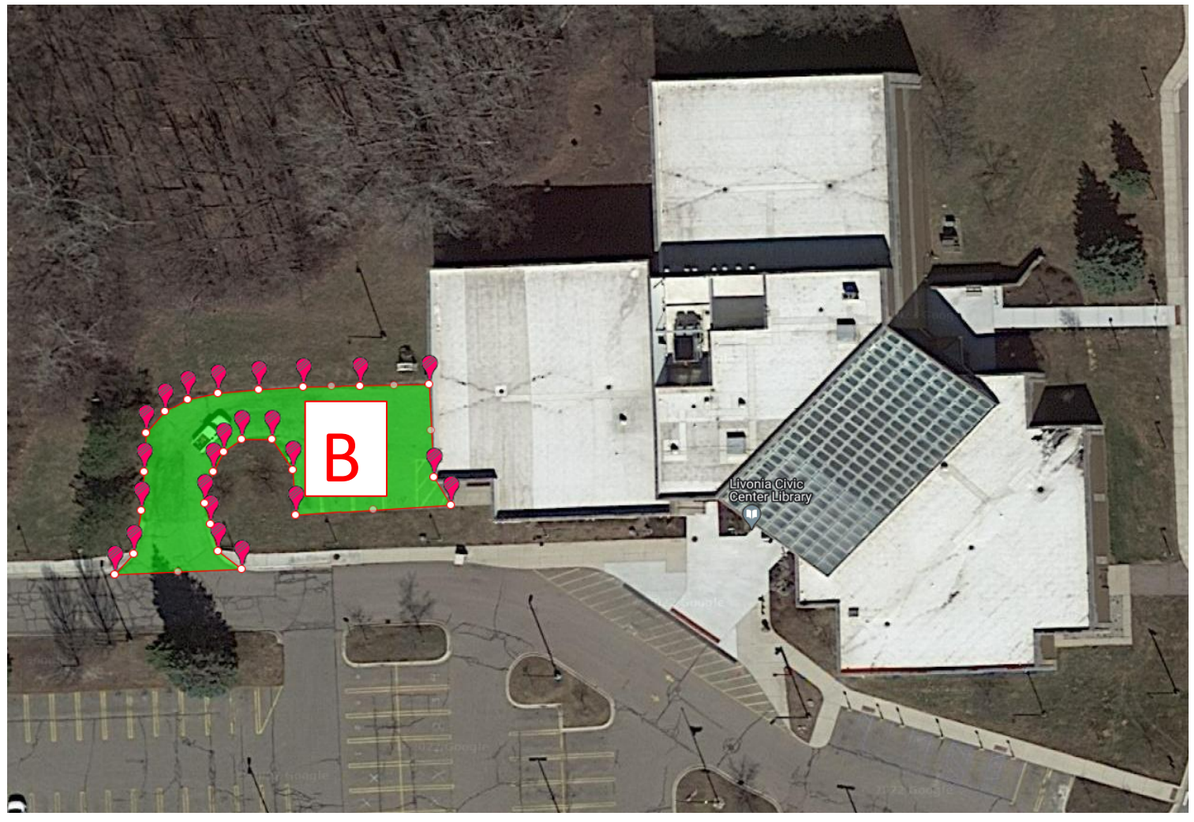

D

Bldg. No.	Name	Address
1	Livonia Civic Center Library	32777 Five Mile Rd. Livonia MI 48154
Parking Area	**Material**	**Sq.ft.**
A	Asphalt	77,118
B	Asphalt	5,269
TOTAL		**82,387**

Notes

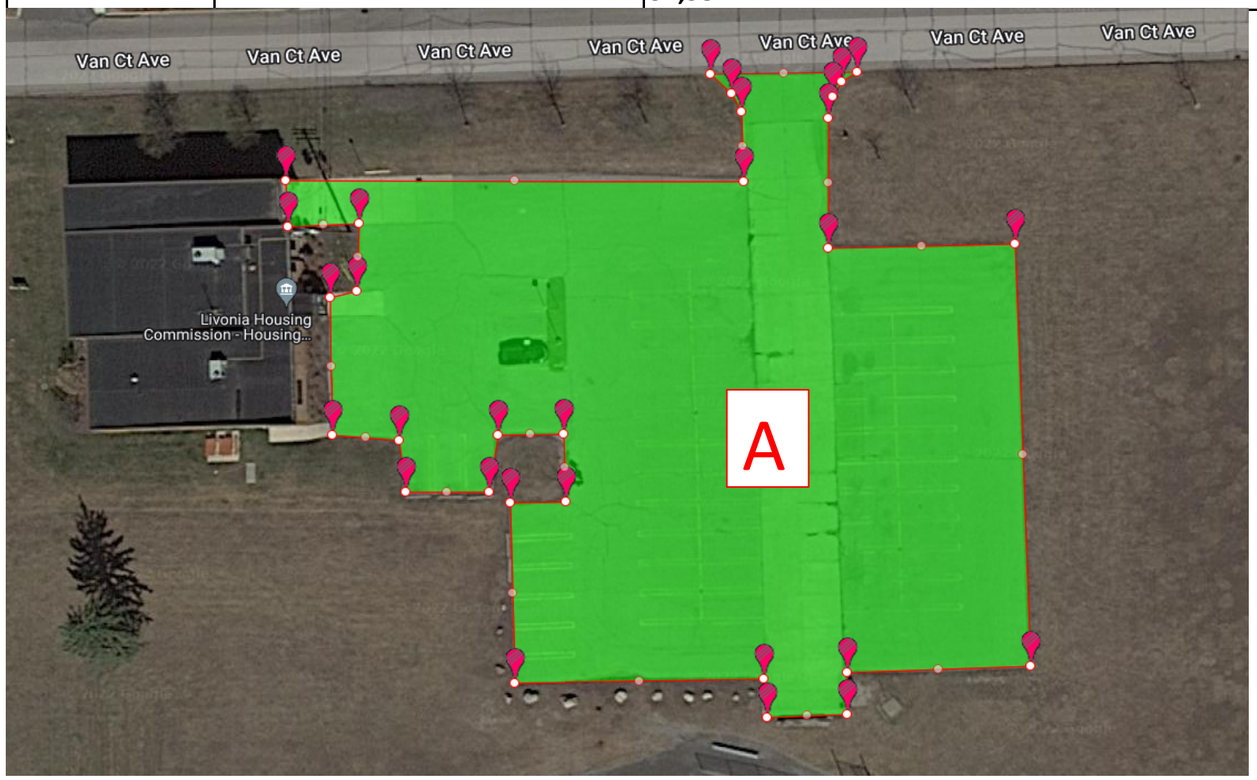
Islands removed from total	2,681
Islands removed from total	835
Islands removed from total	649
Islands removed from total	549
	4,714





Bldg. No.	Name	Address
1	Livonia Housing Commission	10800 Farmington Rd. Livonia MI 48150
Parking Area	**Material**	**Sq.ft.**
A	Asphalt	32,954
TOTAL		**32,954**

Notes



Bldg. No.	Name	Address
1	Carl Sandburg Library	30100 W. Seven Mile Rd. Livonia MI 48152
Parking Area	**Material**	**Sq.ft.**
A	Asphalt	52,073
TOTAL		**52,073**

Notes



Bldg. No.	Name	Address
1	Alfred Noble Branch Library	32901 Plymouth Rd. Livonia MI 48150
Parking Area	**Material**	**Sq.ft.**
A	Asphalt	31,227
TOTAL		**31,227**

Notes





PMCRESA.COM | 248.223.3500

Plante Moran Cresa
3000 Town Center, Suite 100
Southfield, MI 48075



plante moran | cresa

City of Livonia
Facility Condition Assessment and Space Needs Assessment
Preliminary Findings Summary

November 18, 2022

Facility Condition Assessment and Space Needs Assessment Preliminary Findings Summary

Following are Plante Moran Cresa's (PMC) preliminary findings based on the Facility Condition Assessment and Space Needs Assessment PMC recently completed, as well as the City of Livonia Vision 21 Master Plan completed in 2018.



City Center Conceptual Plan from the City of Livonia Vision 21 Master Plan with approximate location of existing facilities overlaid.

City Hall

1. Current facility is approximately 45 years old
2. Many of the existing building systems have reached the end of their useful life
3. Critical Need (1-3 Years) = $12M and Deferrable Maintenance (4-6 Years) = $7.5M
4. Inefficient floor plates and excessive volume
5. Opportunity to reduce required square footage by approximately 7,600 square feet
6. Current building location, aesthetic, and typology does not align with the Vision 21 Master Plan (see snapshot above).

Preliminary Findings Summary

Police Station

1. Current facility is approximately 61 years old (original building) and 36 years old (addition)
2. Many of the existing building systems have reached the end of their useful life
3. Critical Need (1-3 Years) = $8.4M and Deferrable Maintenance (4-6 Years) = $3.3M
4. Inefficient floor plate
5. Lack of natural daylight
6. Lack of gun range and Virtra Simulation Room
7. Opportunity to reduce required square footage by approximately 6,000 square feet
8. Current building location, aesthetic, and typology does not align with the Vision 21 Master Plan (see snapshot above).

Fire Station No. 1

1. Current facility is approximately 55 years old (original building) and 4 years old (addition)
2. Many of the existing building systems have reached the end of their useful life
3. Critical Need (1-3 Years) = $1.3M and Deferrable Maintenance (4-6 Years) = $900K
4. Opportunity to reduce required square footage by approximately 2,400 square feet
5. Current building aesthetic does not reflect modern fire station design standards

Senior Center/Community Transit

1. Current facility is approximately 58 years old (original building), 38 Years old (lobby renovation) and 21 years old (office renovation)
2. Many of the existing building systems have reached the end of their useful life
3. Critical Need (1-3 Years) = $5.8M and Deferrable Maintenance (4-6 Years) = $650K
4. Inefficient floor plan
5. Parking lot safety issues
6. Lack of conference/flex space
7. Current building location, aesthetic, and typology does not align with the Vision 21 Master Plan (see snapshot above).

Recreation Center

1. Current facility is approximately 19 years old
2. Critical Need (1-3 Years) = $2.6M and Deferrable Maintenance (4-6 Years) = $10.9M
3. Some areas are underutilized, while others are overutilized

Housing Commission

1. Current facility is approximately 56 years old
2. Many of the existing building systems have reached the end of their useful life
3. Critical Need (1-3 Years) = $850K and Deferrable Maintenance (4-6 Years) = $170K
4. Opportunity to reduce required square footage by approximately 3,800 square feet

Preliminary Findings Summary

Civic Center Library

1. Current facility is approximately 35 years old
2. Many of the existing building systems are reaching the end of their useful life
3. Critical Need (1-3 Years) = $6.3M and Deferrable Maintenance (4-6 Years) = $4.9M
4. Current building location, aesthetic, and typology does not align with the Vision 21 Master Plan (see snapshot above).

Carl Sandburg Library

1. Current facility is approximately 61 years old
2. Many of the existing building systems have reached the end of their useful life
3. Critical Need (1-3 Years) = $1.7M and Deferrable Maintenance (4-6 Years) = $800K

Alfred Noble Library

1. Current facility is approximately 55 years old
2. Many of the existing building systems have reached the end of their useful life
3. Critical Need (1-3 Years) = $300K (demolition and site prep)

Note:

To assist in the development of recommendations on a building-by-building basis that aligns the City of Livonia Vision 21 Master Plan, PMC suggests the City of Livonia obtain the following information:

1. Detailed space and site programs
2. Highest and best use report
3. Operational costs report
4. Market analysis
5. Library strategic plan



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City of Livonia
Space Needs Assessment

November 1, 2022

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- B - Assessor Affidavit 194

Assumptions and Clarifications

- Existing square footages were calculated from owner furnished drawings and are approximate. PMC did not verify dimensions in field.
- FA = Free Addressing (unassigned offices and workstations).
- AWS = Alternative Work Schedule = 2 to 3 days in office and 2 to 3 days at home (remote). The AWS model assumes Free-Addressing (FA) will be implemented.
- Free-Addressing (FA) is based on 3 seats per 4 FTE
- Modern Workplace Standards (MWS) is based on 200 SF to 250 SF/Seat, in an office setting. For reference, Plante Moran's Southfield office is 180 SF/Seat (seats in offices and workstations). This standard will accommodate:
  - 10'x10' offices
  - 6'x6' workstation
  - Open collaboration areas
  - Wellness Rooms
  - Common Café/Pantry
  - Training Rooms
  - Conference Rooms
  - Huddle and Phone Rooms

Process

- Toured existing facilities
- Reviewed owner provided floor plans
- Distributed a space needs survey to key department heads
- Conducted follow up interviews with department heads to review and validate survey responses
- Documented existing utilization and space deficiencies
- Developed space utilization matrix illustrating:
    - Data Set 1 = Current Full Time Equivalent (FTE), office and workstation count, and square footage.
    - Data Set 2 = Projected (5-years) FTE, office and workstation count that reflects implementing Modern Workplace Standards (MWS), and square footage.
    - Data Set 3 = Projected (5-years) FTE, office and workstation count that reflects implementing Modern Workplace Standards (MWS) and Alternate Work Schedule/Free-Addressing (AWS/FA), and square footage.
- Complied demographic data for similar communities identified by COL
- Complied case study data for facilities similar to those included in this assessment

Process (Continued)

- Developed recommendations for each facility based on the following information:

		Facility							
		City Hall	Police Station	Fire Station	Senior Center	Rec Center	Housing Com.	Civic Center Library	Carl Sandburg Library
Recommendation Criteria	Survey Responses	P	P	P	P	P	P	P	P
	Benefit of Implamenting Modern Workplace Standards	P	S	S	S	S	S	S	S
	Room Reservation + Utilization Data	NA	NA	NA	S	S	NA	NA	NA
	Demographics Comparison	NA	S	S	S	S	NA	S	S
	Case Study Comparison	S	S	S	S	S	NA	S	S

P = Primary consideration
S = Secondary consideration
NA = Not applicable

Recommendations

City Hall:

- Based on the utilization data, the age of this facility, inefficiencies due to the size and shape of the floor plates, PMC recommends the City of Livonia consider relocating City Hall to a new facility. This process should include developing a detailed space/site program, based on Modern Design Standards, to define/validate the space required to accommodate current and future needs; as well as considering the data included in the Facility Condition Assessment, Highest/Best Use report, and the Livonia Vision 21 Master Plan to develop a holistic, long-term solution.

Police Department:

- Based on the utilization data, the age of this facility, inefficiencies due to the shape of the floor plates, and lack of natural daylight, PMC recommends the City of Livonia consider relocating Police Department to a new facility. This process should include developing a detailed space/site program, based on Modern Design Standards, to define/validate the space required to accommodate current and future needs; as well as considering the data included in the Facility Condition Assessment, Highest/Best Use report, and the Livonia Vision 21 Master Plan to develop a holistic, long-term solution.

Fire Station No. 1:

- Based on the utilization data and the age of this facility, PMC recommends the City of Livonia consider relocating Fire Station No. 1 to a new facility. This process should include developing a detailed space/site program, based on Modern Design Standards, to define/validate the space required to accommodate current and future needs; as well as considering the data included in the Facility Condition Assessment, Highest/Best Use report, and the Livonia Vision 21 Master Plan to develop a holistic, long-term solution.

Recommendations (Continued)

Senior Center/Community Transit:

- Consider relocating to a new facility. Locating adjacent to the existing rec center may provide opportunities for shared space program elements.

Recreation Center:

- Consider converting the existing Concession/Vending area to a Teen Zone
- Consider reconfiguring the Entry Lobby and Reception area for improved member/public access and security.
- Consider repurposing the underutilized spectator gallery to accommodate programs that are in high demand (fitness, aerobics, multi-purpose, etc.)
- Consider developing a detailed space program based on Modern Design Standards to define/validate the type, quantity, and size of spaces required to accommodate current and future needs.

Housing Commission:

- Consider consolidating with City Hall

Civic Center Library:

- Consider renovating to create a more efficient layout and address the space deficiencies identified as a result of this assessment.
- Consider consolidating the services/programs currently housed at Carl Sandburg Library.

Recommendations (Continued)

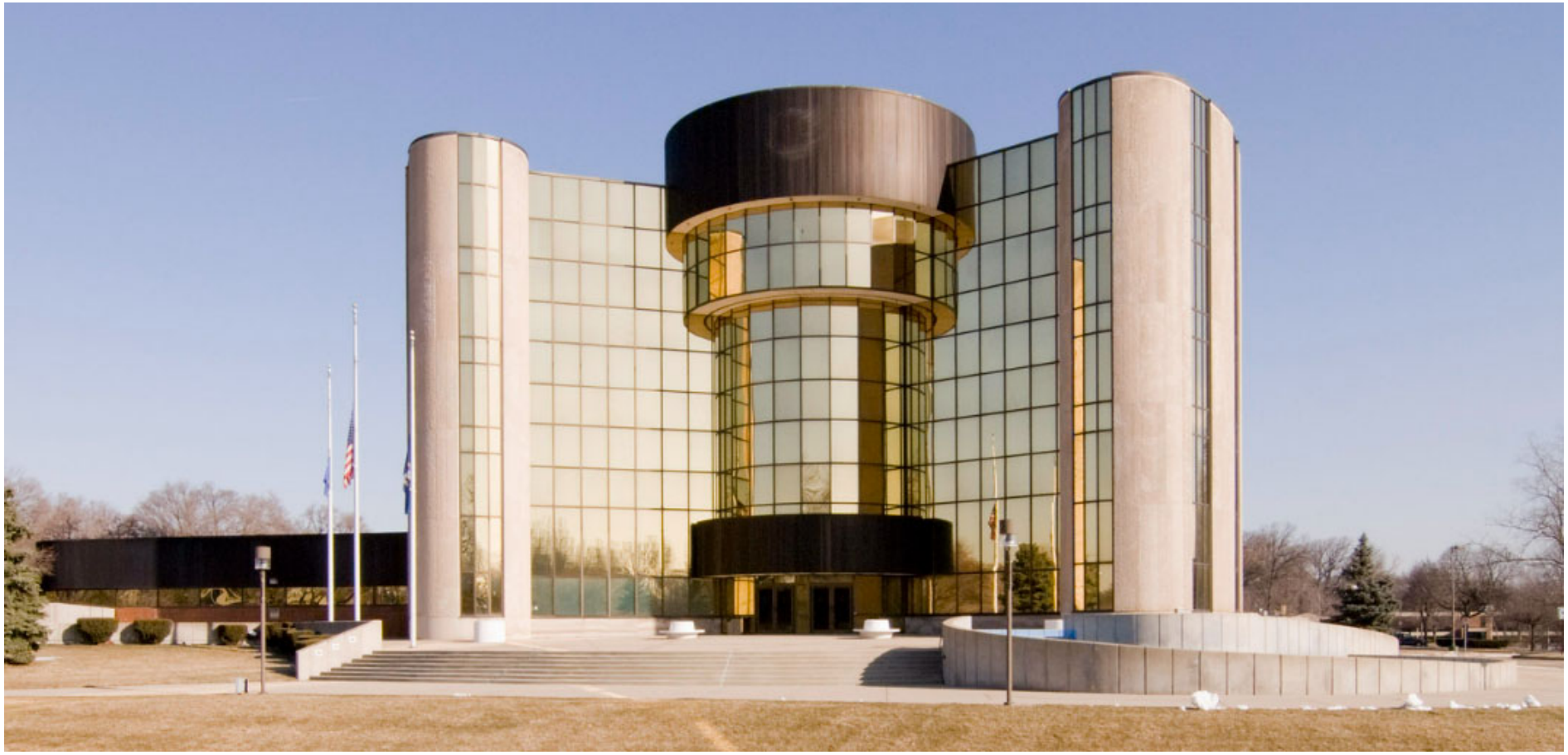
Carl Sandburg Library:

- Consider consolidating with Civic Center Library

Alfred Noble Library:

- Consider demolishing the existing facility.
- Consider conducting a feasibility study to determine the highest and best use of this site.

City Hall



Year Built: 1977 (45 Years Old)

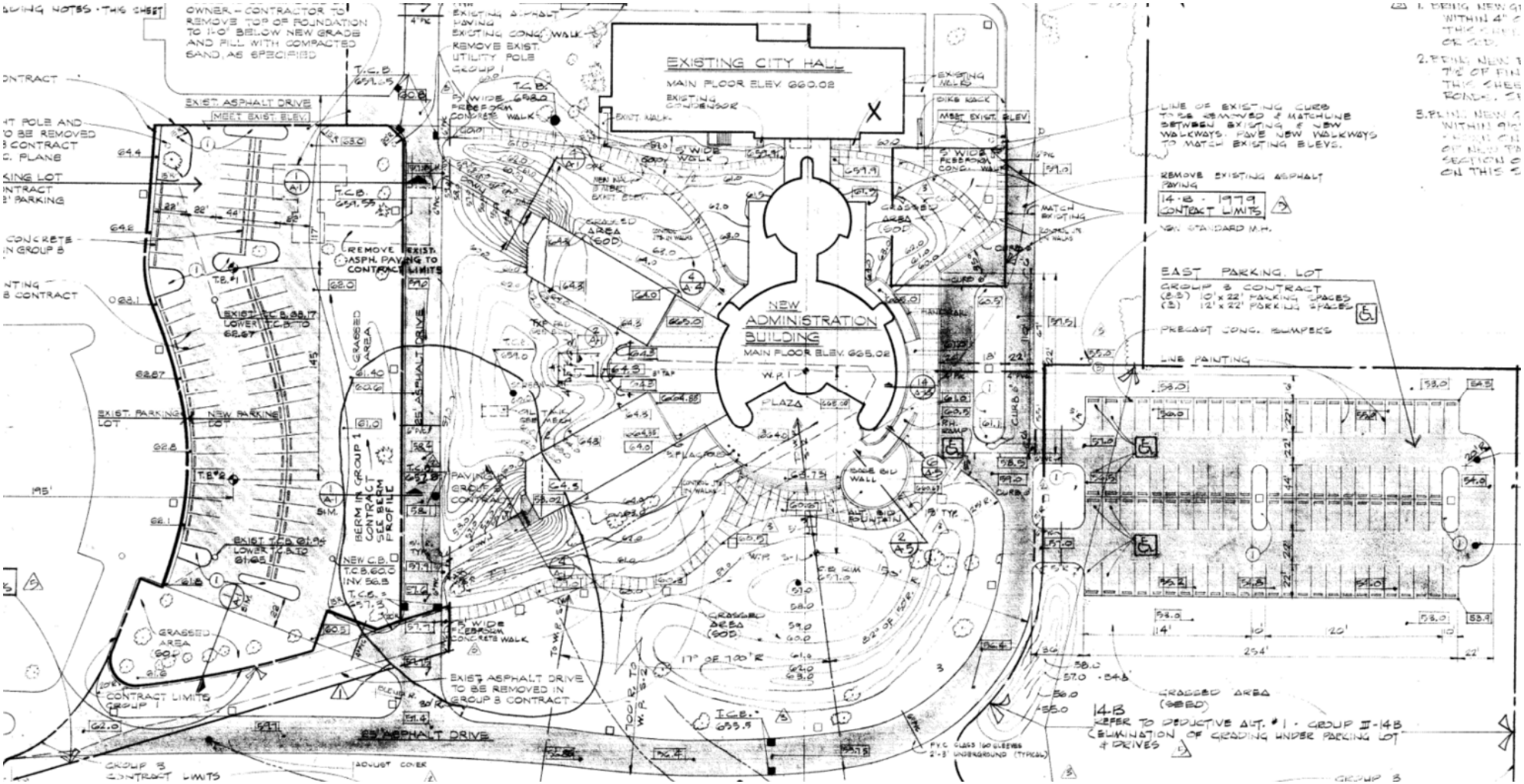
City Hall - Preliminary Findings and Observations

Executive Summary:

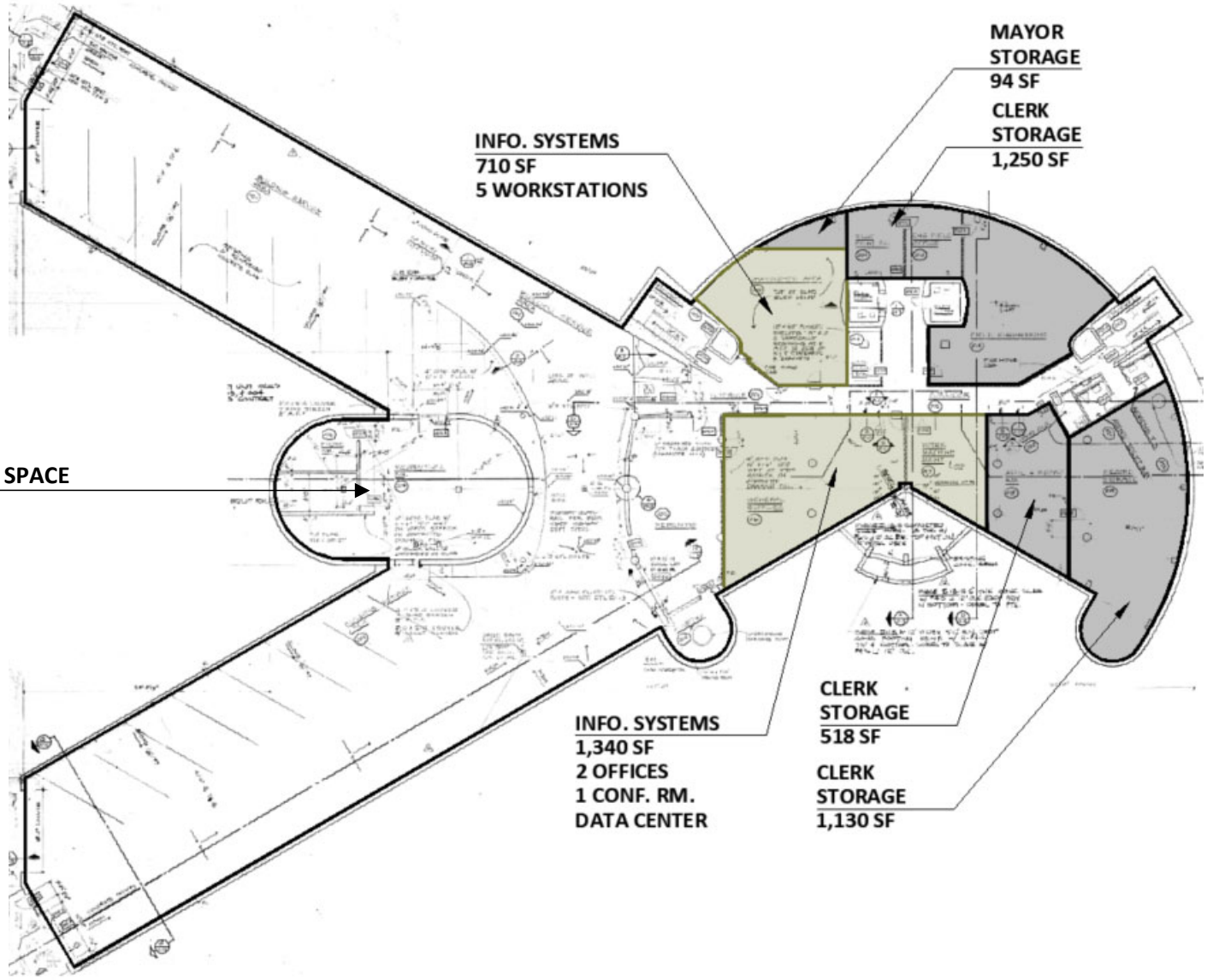
Department (Respondent)	Data Set 1 Current					Data Set 2 Projected 5-years (Implementing Modern Workplace Standards)					Data Set 3 Projected 5-years (Implementing Modern Workplace Standards + Alternate Work Schedule/Free-Addressing)					
	SF	FTE	SF/FTE	Offices	Wkstn.	SF	FTE	SF/FTE	Offices	Wkstn.	SF	FTE	SF/FTE	USF/Seat	Offices	Wkstn.
Total (Common/Non-Office Area)	51,614	0	NA	0	0	51,614	0	NA	0	0	51,614	0	NA	NA	0	0
Total (Office Area)	30,358	112	271	31	81	23,200	116	200	32	84	22,750	116	196	200	31	83
Total (City Hall)	81972	112	732	31	81	74814	116	645	32	84	74364	116	196	200	31	83

1. The shape of building, the small floor plates (approximately 7,500 SF), and the two openings in each floor plate creates space planning inefficiencies.
2. Current space program deficiencies include:
    - Open collaboration areas
    - Wellness Rooms
    - Common Café/Pantry
    - Training Rooms
    - Conference Rooms
3. By implementing MWS and AWS/FA, the current City Hall program could be reduced by approximately 7,600 SF.

City Hall - Site Plan



City Hall – Lower Level Floor Plan (Clerk, Information Systems, Mayor)



TOTAL AREA = 20,370 SF
CLERK = 2,900 SF
INFO SYSTEMS = 2,050 SF
MAYOR = 94 SF

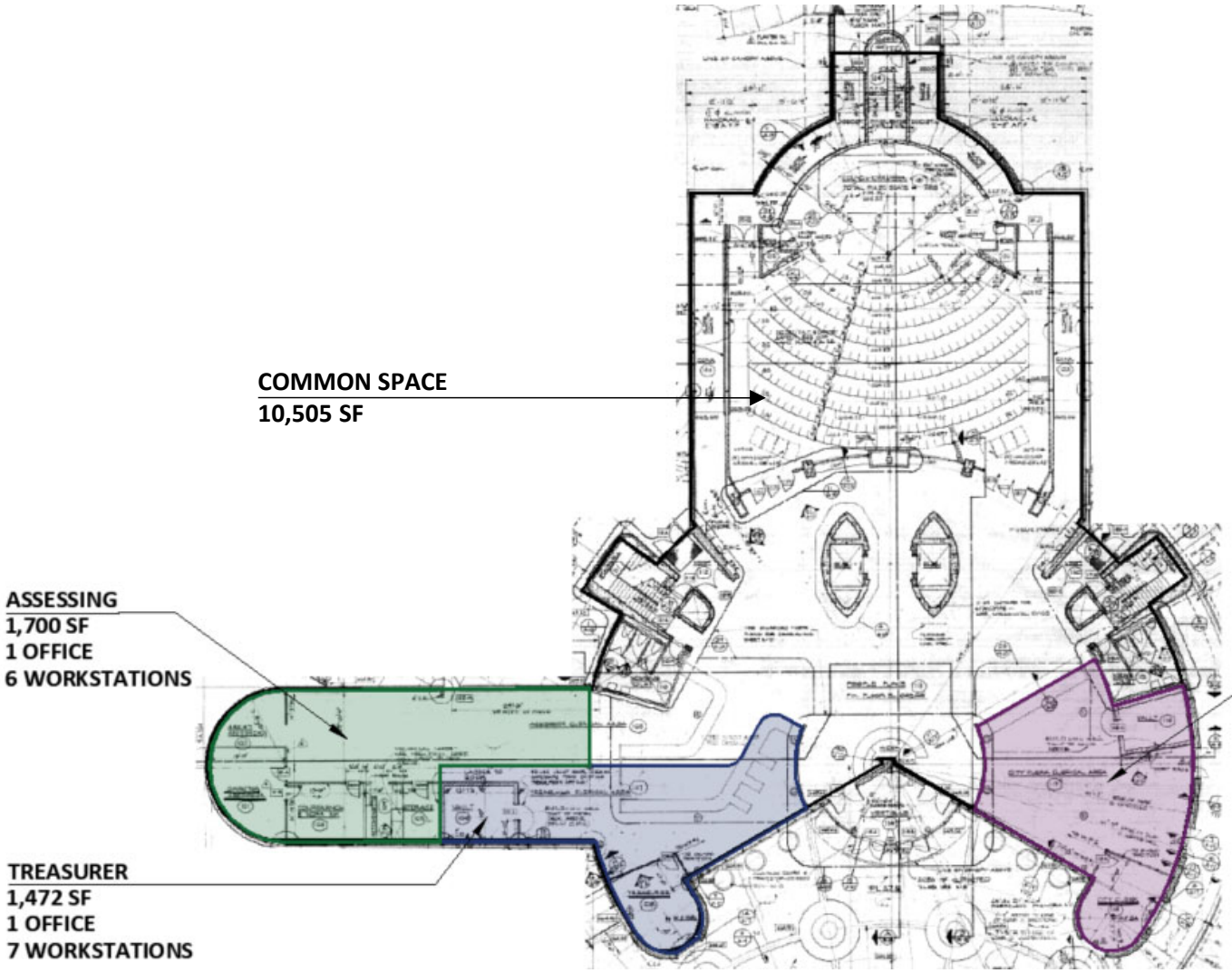
City Hall – Lower Level Preliminary Findings and Observations

Preliminary Findings/Observations:

Floor	Department (Respondent)	Data Set 1 Current					Data Set 2 Projected 5-years (Implementing Modern Workplace Standards)					Data Set 3 Projected 5-years (Implementing Modern Workplace Standards + Alternate Work Schedule/Free-Addressing)						Readiness + Willingness to Adopt AWS Model
		SF	FTE	SF/FTE	Offices	Wkstn.	SF	FTE	SF/FTE	Offices	Wkstn.	SF	FTE	SF/FTE	USF/Seat	Offices	Wkstn.	
Lower Level	Common Area	15326	0	NA	0	0	15326	0	NA	0	0	15326	0	NA	NA	0	0	NA
	Clerk (Susan Nash)	2900	0	NA	0	0	2900	0	NA	0	0	2900	0	NA	NA	0	0	NA
	Information Systems (Casey O'Neil)	2050	6	342	2	4	1200	6	200	2	4	1200	6	200	200	2	4	AWS = Y FA = N
	Mayor (Dave Varga)	94	0	NA	0	0	94	0	NA	0	0	94	0	NA	NA	0	0	NA
	Subtotal (Lower Level)	**20370**	**6**	**3395**	**2**	**4**	**19520**	**6**	**3253**	**2**	**4**	**19520**	**6**	**3253**	**3253**	**2**	**4**	

1. The Data Room is oversized
2. No natural daylight
3. Garage brings in noise and fumes

City Hall - First Floor Plan (Assessing, Clerk, Treasurer)



TOTAL AREA = 15,200
TREASURER = 1,472 SF
CLERK = 1,523 SF
ASSESSING = 1,700 SF

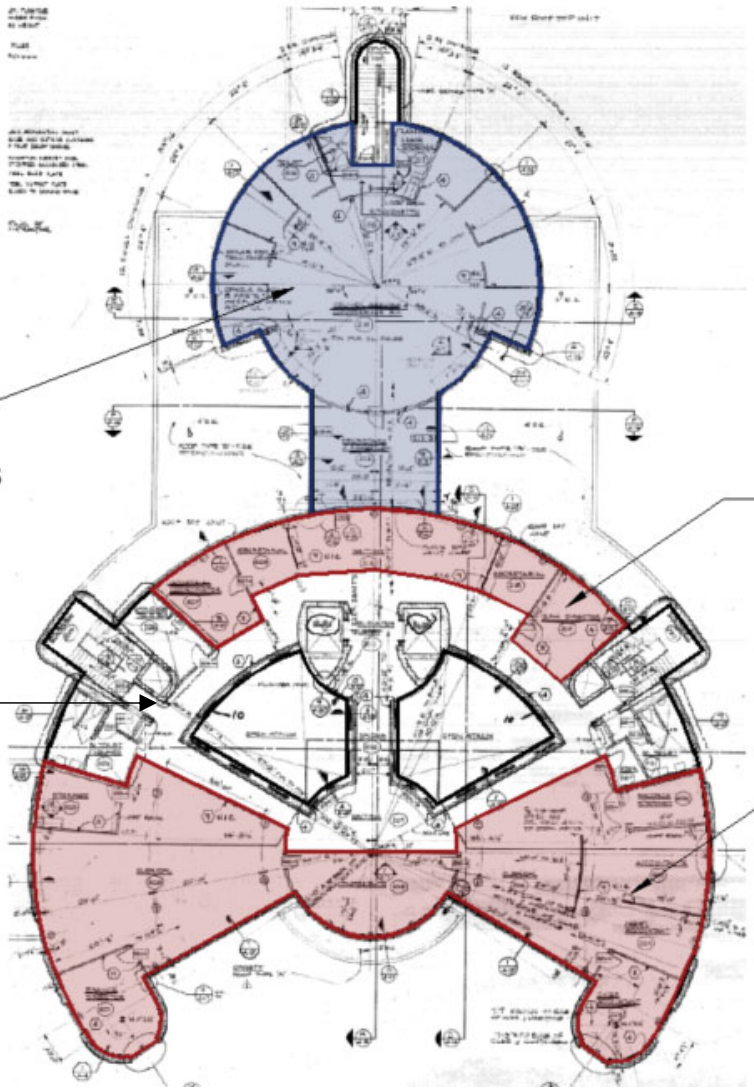
City Hall - First Floor Preliminary Findings and Observations

Preliminary Findings/Observations:

Floor	Department (Respondent)	Data Set 1 Current					Data Set 2 Projected 5-years (Implementing Modern Workplace Standards)					Data Set 3 Projected 5-years (Implementing Modern Workplace Standards + Alternate Work Schedule/Free-Addressing)						Readiness + Willingness to Adopt AWS Model
		SF	FTE	SF/FTE	Offices	Wkstn.	SF	FTE	SF/FTE	Offices	Wkstn.	SF	FTE	SF/FTE	USF/Seat	Offices	Wkstn.	
First Floor	Common Area	10651	0	NA	0	0	10651	0	NA	0	0	10651	0	NA	NA	0	0	NA
	Treasurer (Lynda Scheel)	1472	8	184	1	7	1600	8	200	1	7	1600	8	200	200	1	7	AWS = N FA = N
	Clerk (Susan Nash)	1523	8	190	2	6	1800	9	200	2	7	1800	9	200	200	2	7	AWS = N FA = N
	Assessing (Jacob Liberati)	1700	7	243	1	6	1600	8	200	1	7	1600	8	200	200	1	7	AWS = N FA = N
	Subtotal (First Floor)	**15346**	**23**	**667**	**4**	**19**	**15651**	**25**	**626**	**4**	**21**	**15651**	**25**	**626**	**626**	**4**	**21**	

1. Clerk's office is in multiple locations, efficiencies can be realized by locating elections all on one floor.

City Hall - Second Floor Plan (City Council, Finance)



CITY COUNCIL
2,586 SF
0 OFFICES
2 WORKSTATIONS

COMMON SPACE
3,099 SF

FINANCE
1,006 SF
2 OFFICES
4 WORKSTATIONS

FINANCE
3,384 SF
4 OFFICES
12 WORKSTATIONS

TOTAL AREA = 10,075 SF
FINANCE = 4,390 SF
CITY COUNCIL = 2,586 SF

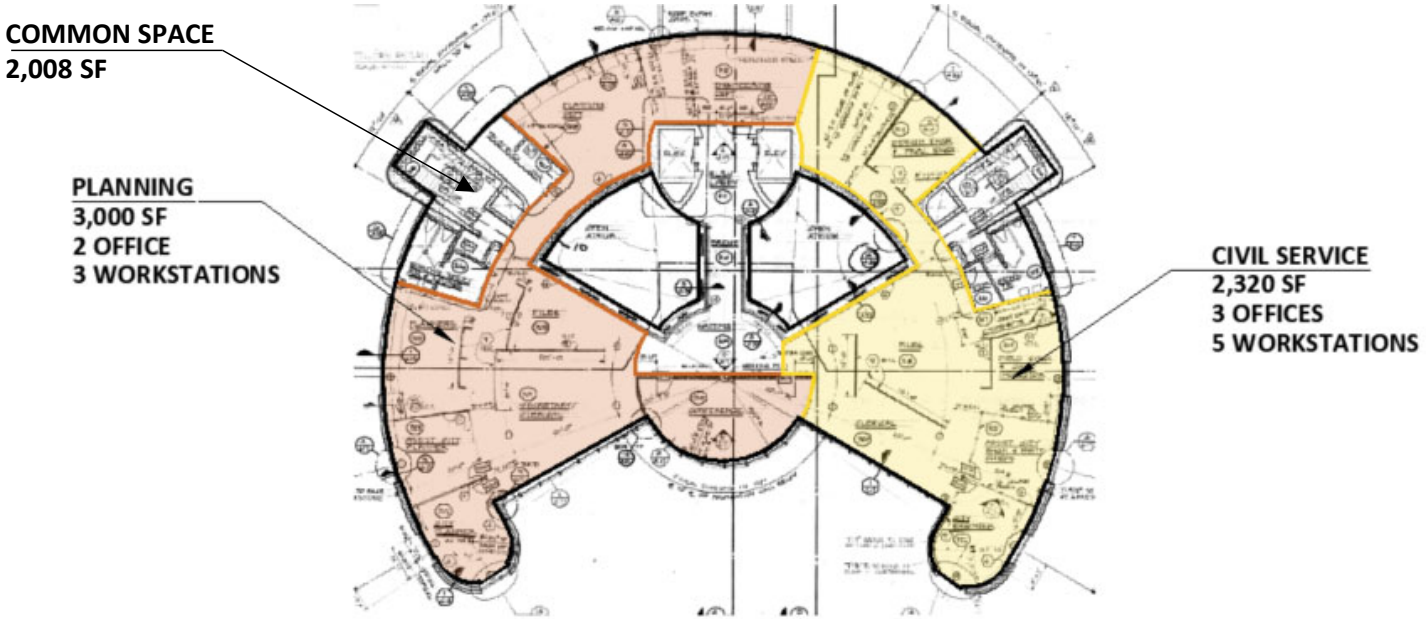
City Hall - Second Floor Preliminary Findings and Observations

Preliminary Findings/Observations:

Floor	Department (Respondent)	Data Set 1 Current					Data Set 2 Projected 5-years (Implementing Modern Workplace Standards)					Data Set 3 Projected 5-years (Implementing Modern Workplace Standards + Alternate Work Schedule/Free-Addressing)						Readiness + Willingness to Adopt AWS Model
		SF	FTE	SF/FTE	Offices	Wkstn.	SF	FTE	SF/FTE	Offices	Wkstn.	SF	FTE	SF/FTE	USF/Seat	Offices	Wkstn.	
Second Floor	Common Area	3099	0	NA	0	0	3099	0	NA	0	0	3099	0	NA	NA	0	0	NA
	Finance (Connie Kumpula)	4,390	18	244	6	12	3600	18	200	7	11	3600	18	200	200	7	11	AWS = Y FA = N
	City Council - Office Area (Sara Kasprowicz)	412	2	206	0	2	400	2	200	0	2	400	2	200	200	0	2	AWS = Y FA = N
	City Council - Chambers (Sara Kasprowicz)	2,174	0	NA	0	0	2,174	0	NA	0	0	2174	0	NA	NA	0	0	AWS = Y FA = N
	Subtotal (Second Floor)	**10075**	**20**	**504**	**6**	**14**	**9273**	**20**	**464**	**7**	**13**	**9273**	**20**	**464**	**464**	**7**	**13**	

1. Water billing currently conducts business on two different floors

City Hall - Third Floor Plan (Civil Service, Planning)



TOTAL AREA = 7,328 SF
PLANNING = 3,000 SF
CIVIL SERVICE = 2,320 SF

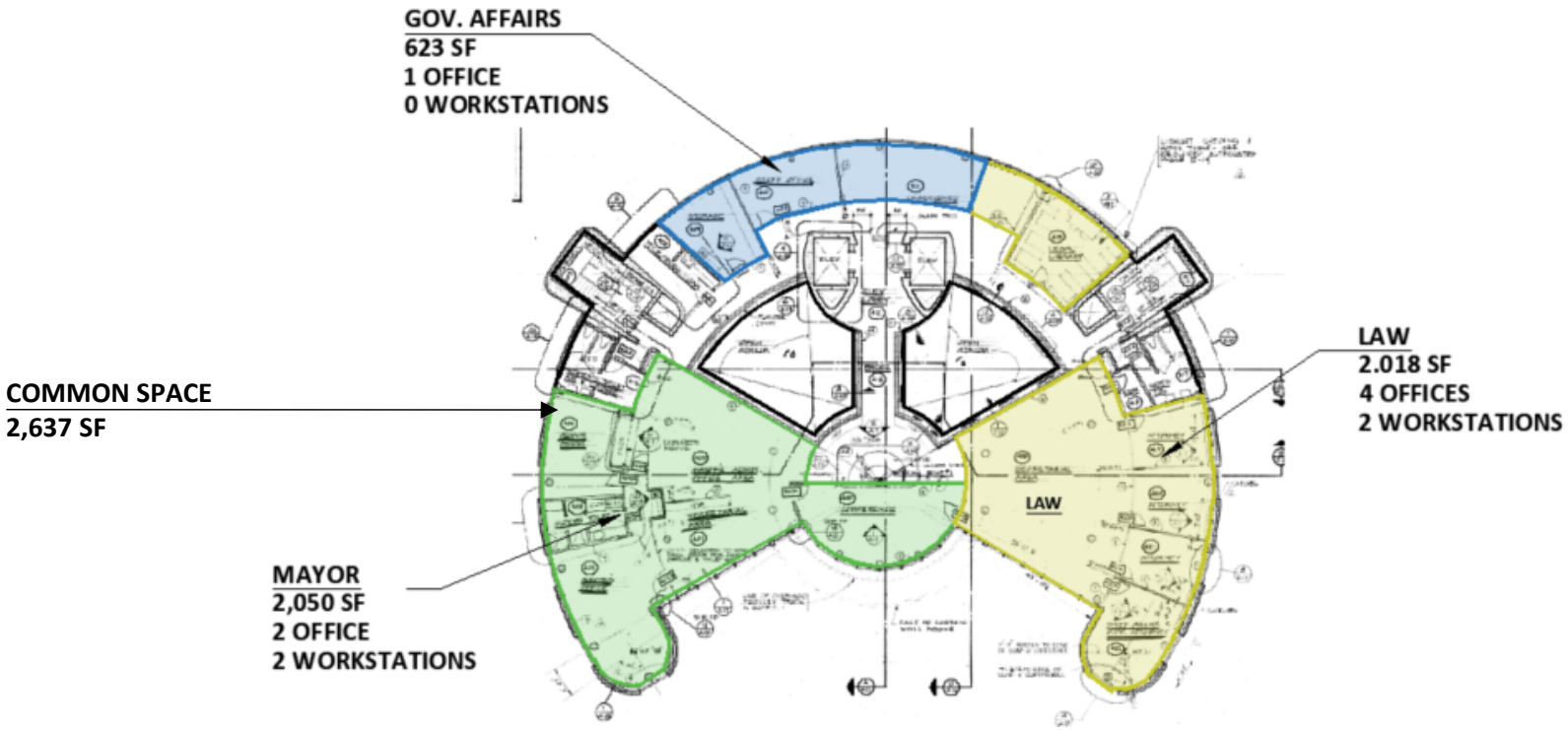
City Hall - Third Floor Preliminary Findings and Observations

Preliminary Findings/Observations:

Floor	Department (Respondent)	Data Set 1 Current					Data Set 2 Projected 5-years (Implementing Modern Workplace Standards)					Data Set 3 Projected 5-years (Implementing Modern Workplace Standards + Alternate Work Schedule/Free-Addressing)						Readiness + Willingness to Adopt AWS Model
		SF	FTE	SF/FTE	Offices	Wkstn.	SF	FTE	SF/FTE	Offices	Wkstn.	SF	FTE	SF/FTE	USF/Seat	Offices	Wkstn.	
Third Floor	Common Area	2008	0	NA	0	0	2008	0	NA	0	0	2008	0	NA	NA	0	0	NA
	Planning (Mark Taormina)	3,000	5	600	2	3	1000	5	200	2	3	1000	5	200	200	2	3	AWS = Y FA = N
	Civil Service (Elizabeth Hallack)	2,320	8	290	3	5	2,000	10	200	3	7	2000	10	200	200	3	7	AWS = Y FA = N
	Subtotal (Third Floor)	**7328**	**13**	**564**	**5**	**8**	**5008**	**15**	**334**	**5**	**10**	**5008**	**15**	**334**	**334**	**5**	**10**	

1. Excess floor space
2. Multi-level building reduces efficiency
3. Planning requested ten feet of counter space to interact with walk-in customers

City Hall - Forth Floor Plan (Gov. Affairs, Law, Mayor)



TOTAL AREA = 7,328 SF
MAYOR = 2,050 SF
LAW = 2,018 SF
GOV. AFFAIRS = 623 SF

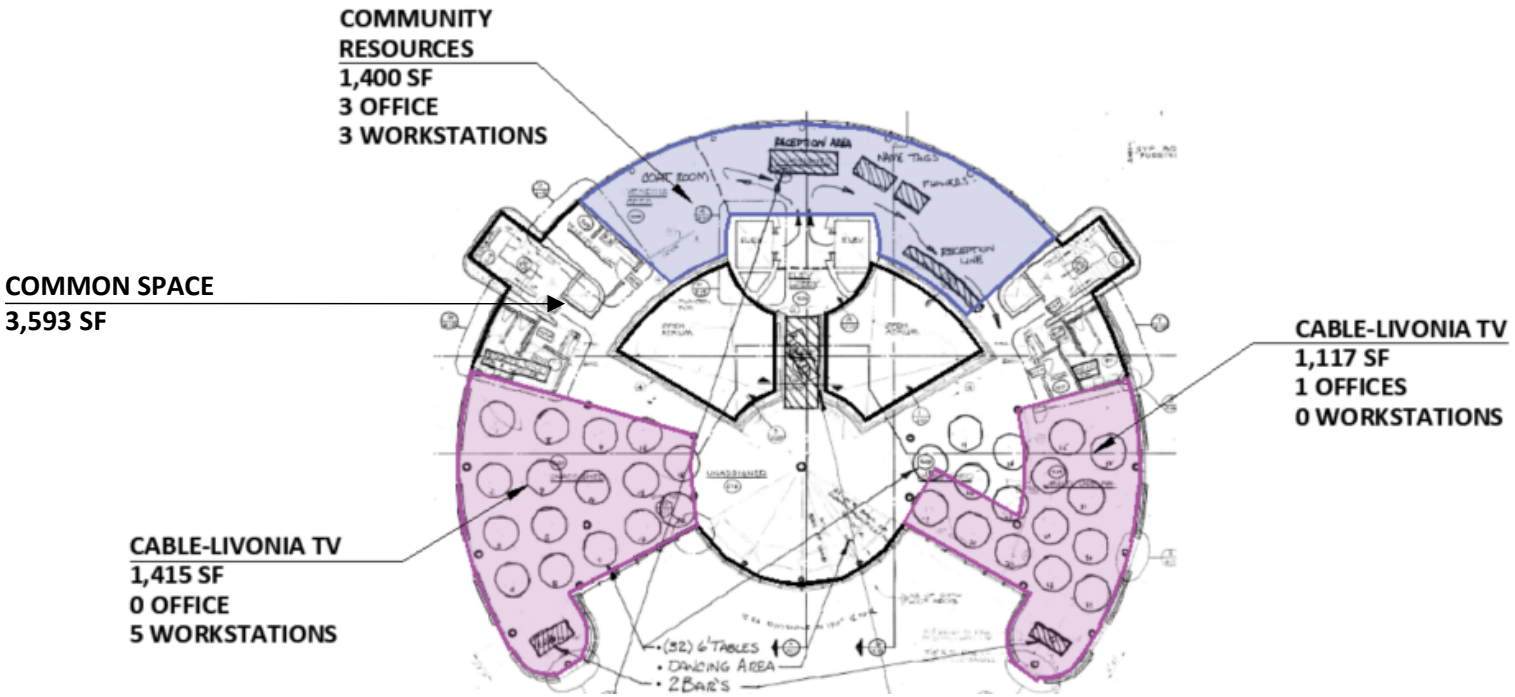
City Hall - Forth Floor Preliminary Findings and Observations

Preliminary Findings/Observations:

Floor	Department (Respondent)	Data Set 1 Current					Data Set 2 Projected 5-years (Implementing Modern Workplace Standards)					Data Set 3 Projected 5-years (Implementing Modern Workplace Standards + Alternate Work Schedule/Free-Addressing)						Readiness + Willingness to Adopt AWS Model
		SF	FTE	SF/FTE	Offices	Wkstn.	SF	FTE	SF/FTE	Offices	Wkstn.	SF	FTE	SF/FTE	USF/Seat	Offices	Wkstn.	
Forth Floor	Common Area	2637	0	NA	0	0	2637	0	NA	0	0	2637	0	NA	NA	0	0	NA
	Mayor (Dave Varga)	2,050	4	513	2	2	800	4	200	2	2	800	4	200	200	2	2	AWS = N FA = N
	Law (Paul Bernier)	2,018	6	336	4	2	1200	6	200	4	2	1200	6	200	200	4	2	AWS = Y FA = N
	Government Affairs (LaShawn Thomas)	623	1	623	1	0	200	1	200	1	0	200	1	200	200	1	0	AWS = N FA = N
	Subtotal (Forth Floor)	**7328**	**11**	**666**	**7**	**4**	**4837**	**11**	**440**	**7**	**4**	**4837**	**11**	**440**	**440**	**7**	**4**	

1. Confidentiality concerns, one more office with at door for Chief of Staff.
2. No Break Room
3. Better flow of office space would be beneficial
4. Space is too large

City Hall - Fifth Floor Plan (Cable TV, Community Resources)



TOTAL AREA = 7,525 SF
COMMUNITY
RESOURCES = 1,400 SF
CABLE TV = 2,532 SF

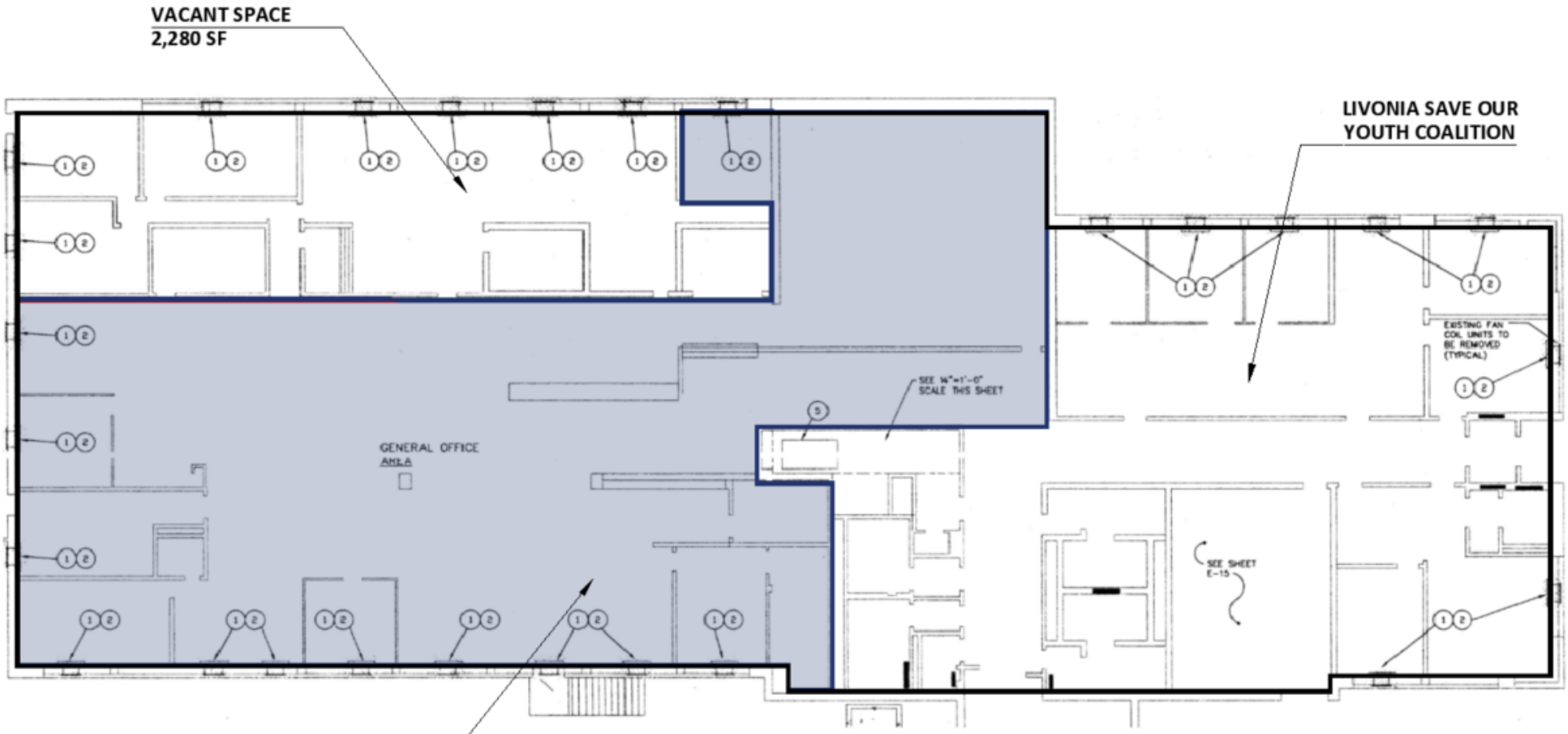
City Hall - Fifth Floor Preliminary Findings and Observations

Preliminary Findings/Observations:

Floor	Department (Respondent)	Data Set 1 Current					Data Set 2 Projected 5-years (Implementing Modern Workplace Standards)					Data Set 3 Projected 5-years (Implementing Modern Workplace Standards + Alternate Work Schedule/Free-Addressing)						Readiness + Willingness to Adopt AWS Model
		SF	FTE	SF/FTE	Offices	Wkstn.	SF	FTE	SF/FTE	Offices	Wkstn.	SF	FTE	SF/FTE	USF/Seat	Offices	Wkstn.	
Fifth Floor	Common Area	3593	0	NA	0	0	3593	0	NA	0	0	3593	0	NA	NA	0	0	NA
	Community Resources (Josh Sabo)	1,400	9	156	4	5	1800	9	200	4	5	1350	9	150	200	3	4	AWS = Y FA = Y
	Cable-Livonia TV Office Area (Mike DiFazio)	800	4	200	1	3	800	4	200	1	3	800	4	200	200	1	3	AWS = Y FA = N
	Cable-Livonia TV Studio Areas (Mike DiFazio)	1,732	0	NA	0	0	1,732	0	NA	0	0	1732	0	NA	NA	0	0	AWS = Y FA = N
	Subtotal (Fifth Floor)	**7525**	**13**	**579**	**5**	**8**	**7925**	**13**	**610**	**5**	**8**	**7475**	**13**	**575**	**695**	**4**	**7**	

1. Space between Gallery and Livonia TV is underutilized
2. The Gallery, which is one of the City's signature meeting spaces, is generally outdated
3. Staff area is quite small, offices with storage would be beneficial
4. A proper sound booth would improve audio quality
5. A larger area for shoots would be beneficial
6. More storage so gear does not have to be stored off-site

City Hall - Annex Floor Plan(Building/Inspection)



TOTAL AREA = 14,000 SF
BUILDING & INSPECTION = 6,600 SF

City Hall - Annex Preliminary Findings and Observations

Preliminary Findings/Observations:

Floor	Department (Respondent)	Data Set 1 Current					Data Set 2 Projected 5-years (Implementing Modern Workplace Standards)					Data Set 3 Projected 5-years (Implementing Modern Workplace Standards + Alternate Work Schedule/Free-Addressing)						Readiness + Willingness to Adopt AWS Model
		SF	FTE	SF/FTE	Offices	Wkstn.	SF	FTE	SF/FTE	Offices	Wkstn.	SF	FTE	SF/FTE	USF/Seat	Offices	Wkstn.	
Annex	Common Area	7400	0	NA	0	0	7400	0	NA	0	0	7400	0	NA	NA	0	0	NA
	Building & Inspection (Jerome Hanna)	6,600	26	254	2	24	5200	26	200	2	24	5200	26	200	200	2	24	AWS = N FA = N
	Subtotal (Annex)	**14000**	**26**	**538**	**2**	**24**	**12600**	**26**	**485**	**2**	**24**	**12600**	**26**	**485**	**485**	**2**	**24**	

1. The building is original city hall office circa 1950.
2. Lack of large meeting rooms and customer waiting area.
3. Annex is not connected to City Hall generator. Power outages and surges are frequent.

City Hall – Case Study

City Hall – Case Study

Client: City of Royal Oak

Location: Royal Oak, MI

Population (2020): 58,211

Area: approximately 27,500 SF

Completion date: 2020

Construction cost: $12,200,000 (443$/SF)

AE: Krieger Klatt



City Hall – Case Study

We were honored to have the opportunity to design both the exterior and interior of the new city hall in Royal Oak. The building was part of the City Center project, which included a five-story office building, a new police station, and a new central park. The old city hall was worn down and inefficient, so fiscally, it made more sense to build a new one and move it across the street to allow for the full development to become an anchor to the residents and visitors of the city. The interior was designed to be open and flexible to allow combined departments to be together. The building is also more secure and energy-efficient. The exterior intended to be traditional, which the city requested, and we designed to add touches of history to the new home of city hall.

City Hall – Case Study



City Hall – Case Study



City Hall – Case Study



City Hall – Case Study



City Hall – Case Study



City Hall – Case Study



City Hall – Case Study

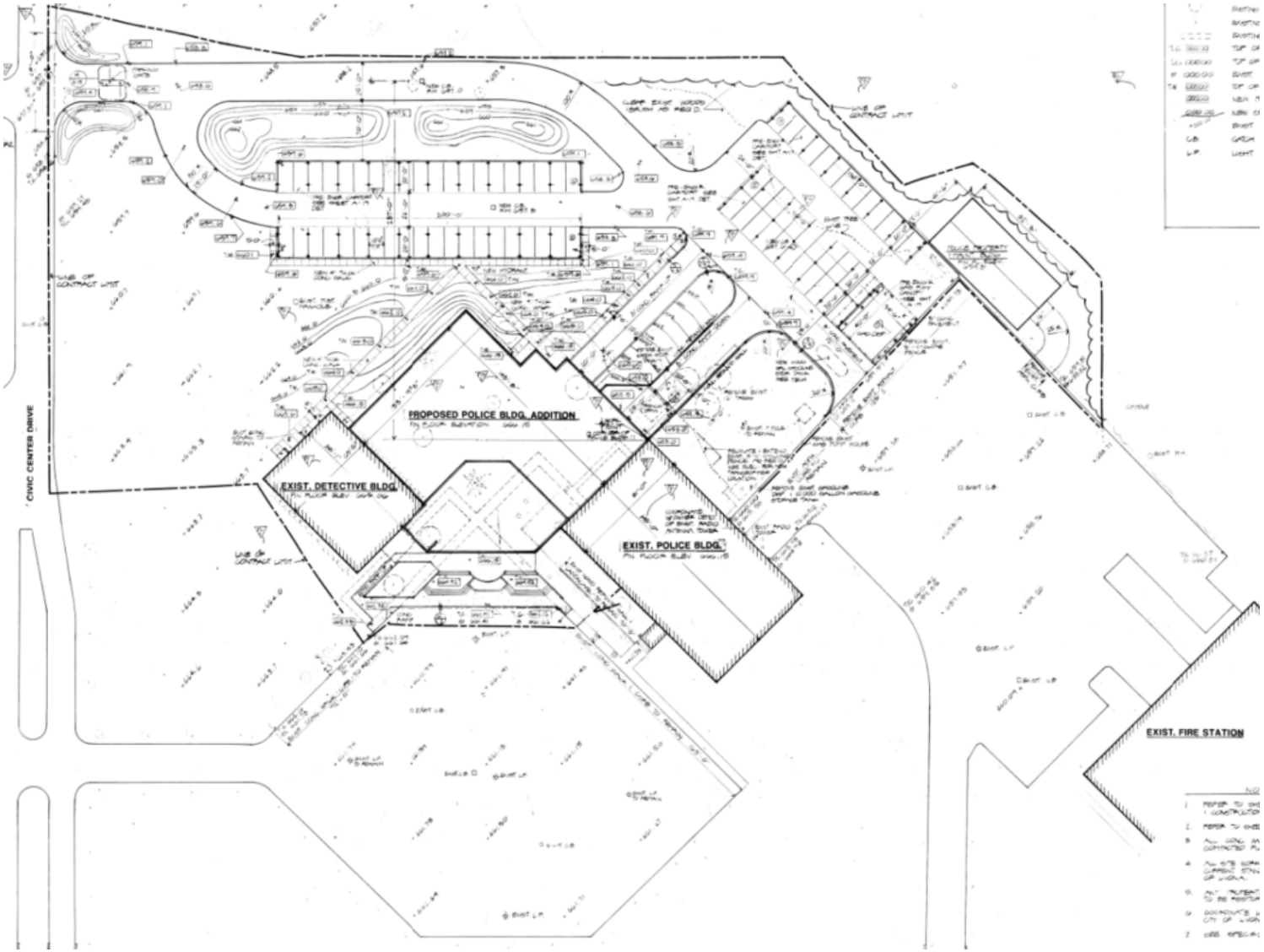


Police Department

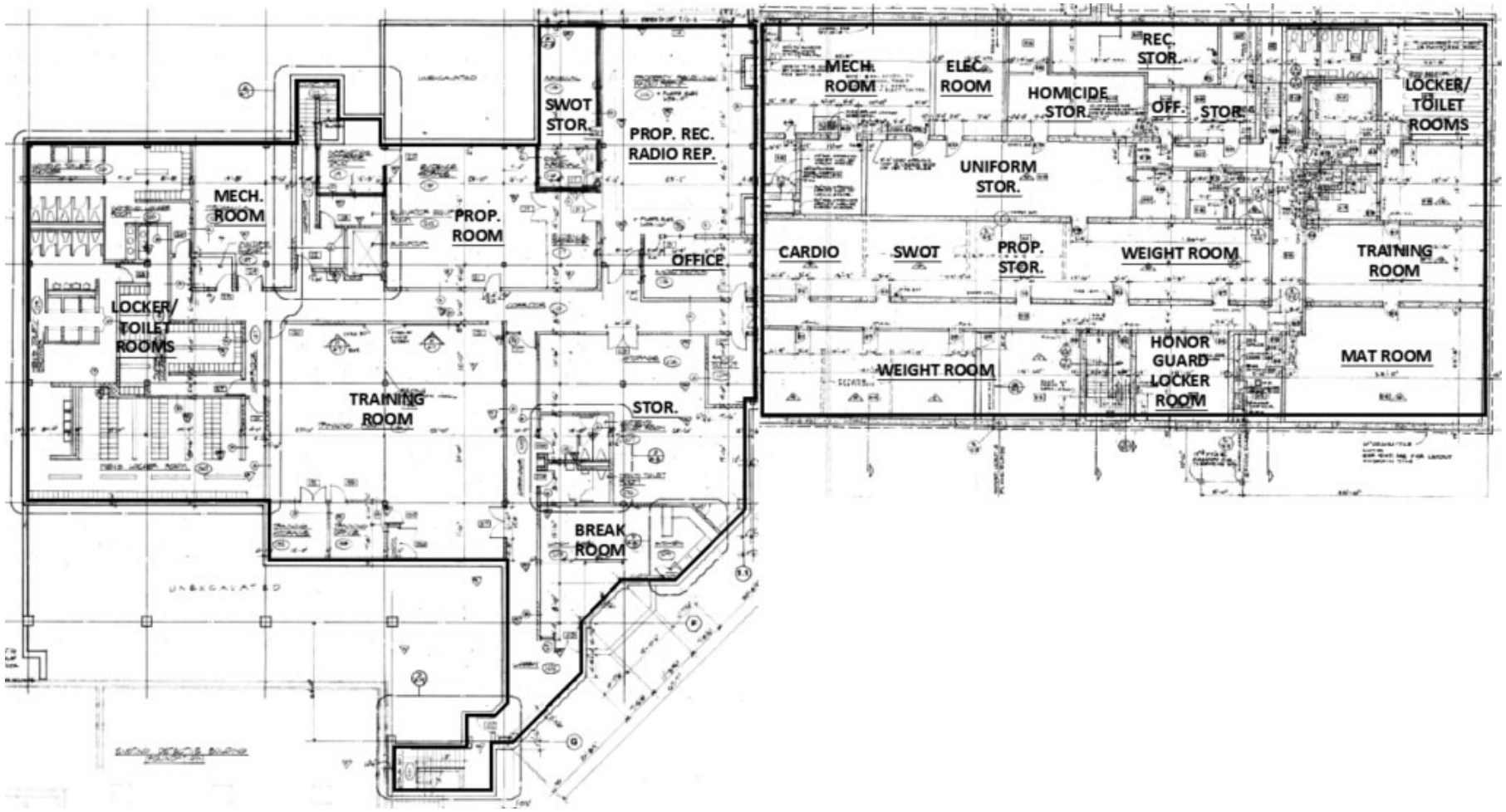


Year Built: Original building = 1961 (61 Years Old), Addition = 1986 (36 Years Old)

Police Department - Site Plan

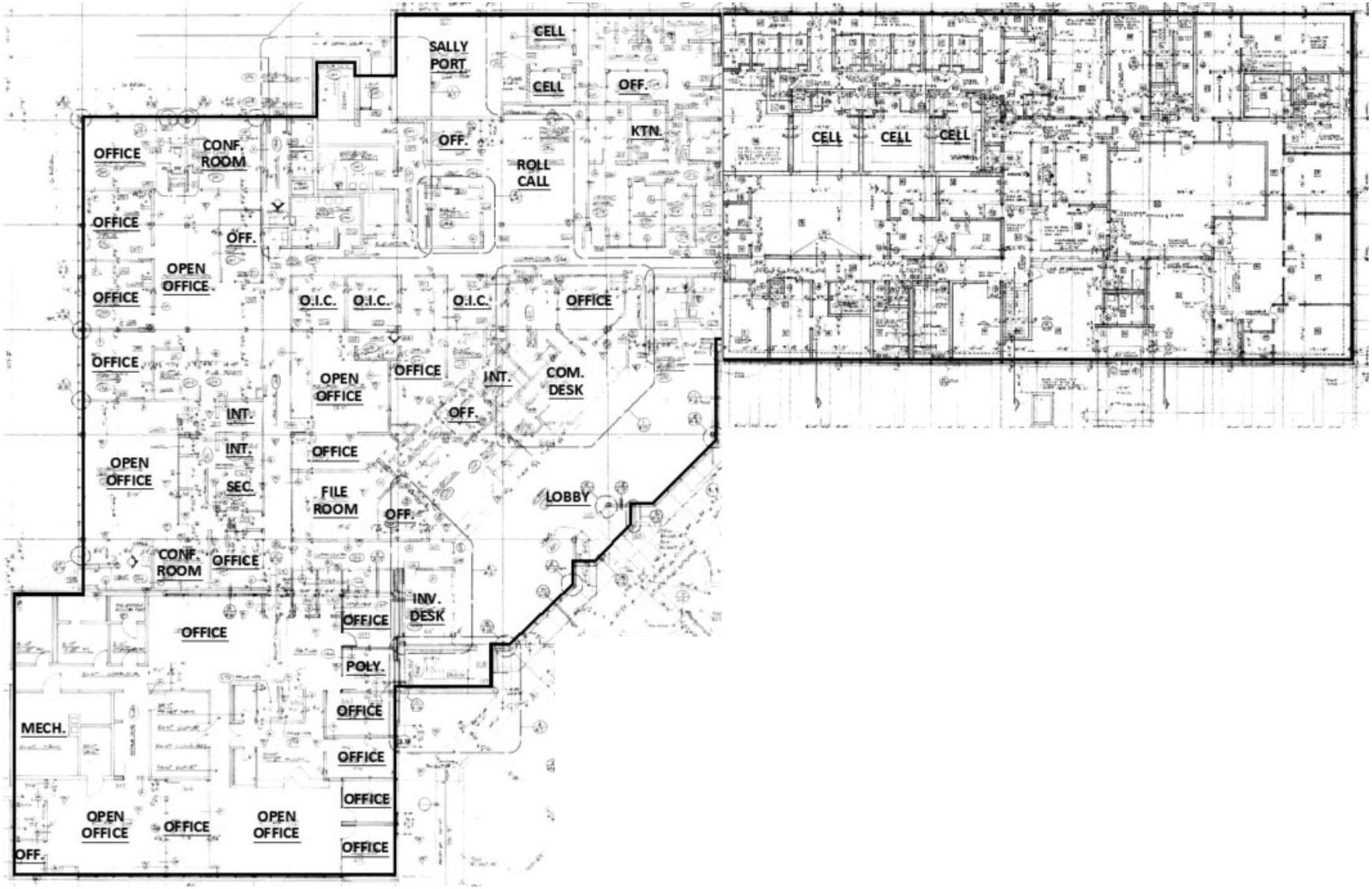


Police Department – Lower Level Floor Plan



TOTAL AREA = 25,200 SF

Police Department - First Floor Plan



Police Department - Preliminary Findings and Observations

Preliminary Findings/Observations:

Floor	Department (Respondent)	Data Set 1 Current					Data Set 2 Projected 5-years (Implementing Modern Workplace Standards)					Data Set 3 Projected 5-years (Implementing Modern Workplace Standards + Alternate Work Schedule/Free-Addressing)						Readiness + Willingness to Adopt AWS Model
		SF	FTE	SF/FTE	Offices	Wkstn.	SF	FTE	SF/FTE	Offices	Wkstn.	SF	FTE	SF/FTE	USF/Seat	Offices	Wkstn.	
Lower Level	Police Department (Lt. Eric Marcotte)	25221	2	12611	2	0	25221	2	12611	2	0	25221	2	12611	12611	2	0	AWS = N FA = N
	Subtotal (Lower Level)	**25221**	**2**	**12611**	**2**	**0**	**25221**	**2**	**12611**	**2**	**0**	**25221**	**2**	**12611**	**12611**	**2**	**0**	
First Floor	Police Department Office Area (Lt. Eric Marcotte)	23600	55	429	25	30	17600	88	200	32	56	17600	88	200	200	32	56	AWS = N FA = N
	Police Department Back-of-House Area (Lt. Eric Marcotte)	11475	0	NA	0	0	11475	0	NA	0	0	11475	0	NA	NA	0	0	AWS = N FA = N
	Subtotal (First Floor)	**35075**	**55**	**638**	**25**	**30**	**29075**	**88**	**330**	**32**	**56**	**29075**	**88**	**330**	**330**	**32**	**56**	
	Total (Police Department)	**60296**	**57**	**1058**	**27**	**30**	**54296**	**90**	**603**	**34**	**56**	**54296**	**90**	**603**	**603**	**34**	**56**	

1. The previous addition/renovation to connect the original detective building and police station resulted in an oddly shaped floor plate, creating space planning inefficiencies.
2. Lack of natural daylight (especially on lower level)
3. By implementing MWS and AWS/FA, the current Police Station program could be reduced by approximately 6,000 SF.

Police Department - Preliminary Findings and Observations

4. The following program elements were requested (square footage for these spaces, approximately 4,100 SF) is not reflected in the matrix above):
   - Computer Lab/Training Room (20 seats) = 300 SF
   - CSU (2x existing) = 200 SF
   - Larger Female Locker Room = 300 SF
   - Break Room = 240 SF
   - Report Writing Area = 180 SF
   - Conference Rooms = 480 SF
   - Gun Range = 1,800 SF
   - Virtra Simulator Room = 600 SF

Demographic Comparison:

City	Population	Area (Square Miles)	Population Density (People per SM)	% of Population Age 65+	No. of Library Facilities	Library Area (SF	No. of Police Stations	Police Station Area (SF)	No. of Fire Stations	Fire Station Area (SF) - Main Station	No. of Rec Center Facilities	Rec Center Area (SF)	No. of Senior Center Facilities	Senior Center Area (SF)
Livonia	95535	35.70	2676	20.6%	2	71470	1	55275	5	12500	1	129300	1	20780
Novi	66243	30.24	2191	14.1%	1	55000	1	41000	4	12500	1	NA	0	NA
Rochester Hills	76028	32.80	2318	17.6%	1	70000	1	16000	5	13171	0	NA	1	90000
Farmington Hills	83292	33.27	2504	20.4%	1	43288	1	30000	5	19000	1	146000	1	68000
Canton	98620	36.11	2731	14.8%	1	53500	1	33200	3	16202	1	92800	1	2200

Notes:

1. The demographic information above was referenced from the U.S. Census Bureau
2. Rochester Hills is serviced by the Oakland County Sheriff's office
3. None of the facilities referenced above accommodate shared services (i.e. police/fire, Rec/Senior Center)

Police Department – Case Study

Client: Michigan City

Location: Michigan City, IN

Population (2020): 32,075

Area: 42,000 SF

Completion date: 2017

Construction cost: $13,000,000 ($309/SF)

AE: American StructurePoint



Police Department – Case Study

In partnership with the Michigan City Police Department, American Structurepoint's Architecture + Interiors Group designed this state-of-the-art law enforcement facility to provide a long-term public safety solution for officers, to promote energy efficiency, and to improve the quality of life in the Eastport neighborhood. These strategies create a gateway to the city that becomes a neighborhood landmark for revitalization.

The new police station was strategically located on the site of the former Eastport Elementary School for its central location and proximity to Cleveland Park. An investment of $13 million, the 42,000 square foot building is a catalyst for redevelopment along Michigan Boulevard. Replacing an outdated, 50-year-old station, the move also opens a valuable piece of property near Lake Michigan for redevelopment.

AWARDS
2018 AIA Indiana Design Awards - Citation Award, Project Cost Greater Than $1 Million Category

Police Department – Case Study



Police Department – Case Study



Police Department – Case Study



Police Department – Case Study



Police Department – Case Study



Police Department – Case Study



Police Department – Case Study



Police Department – Case Study

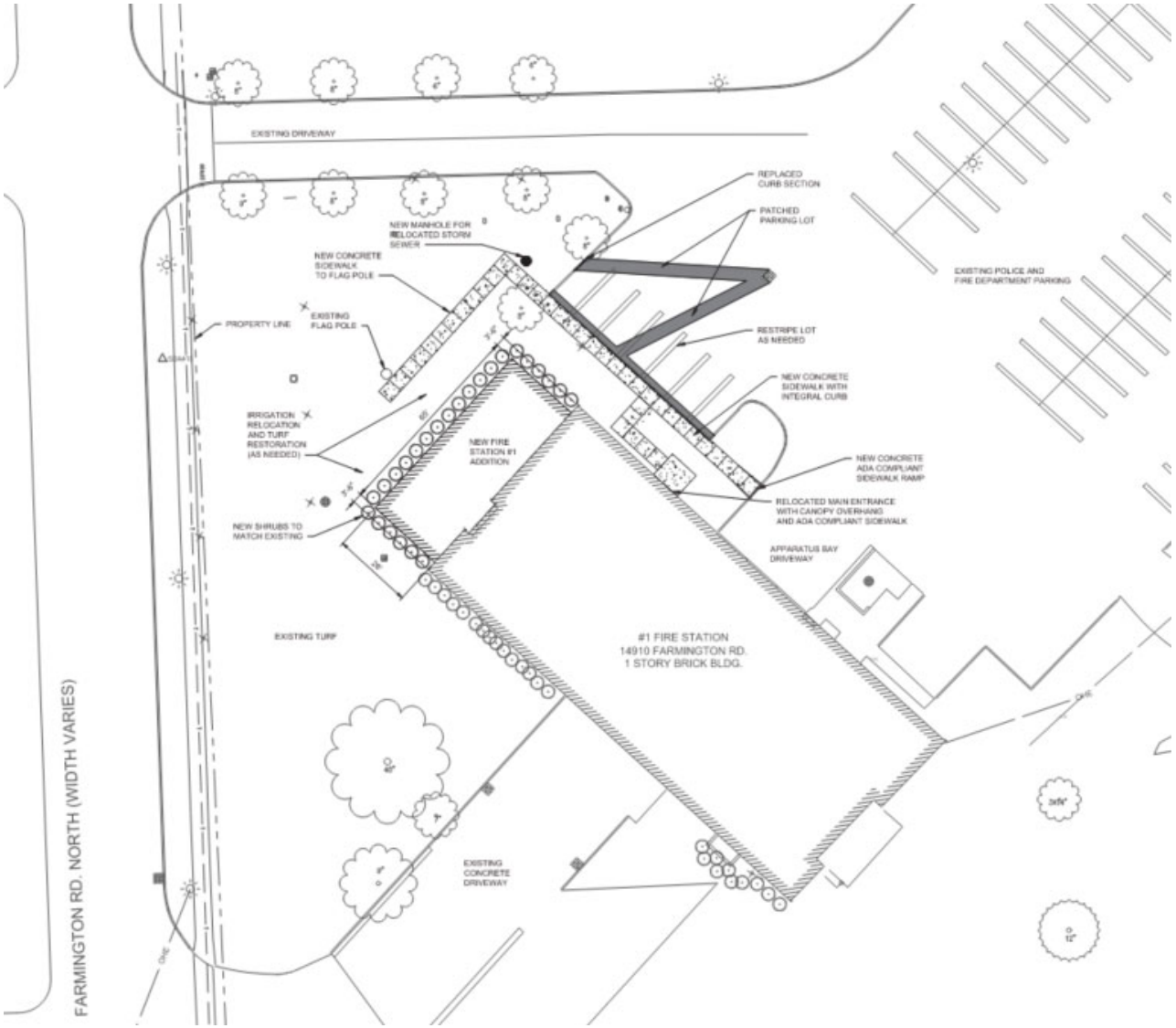


Fire Department No. 1

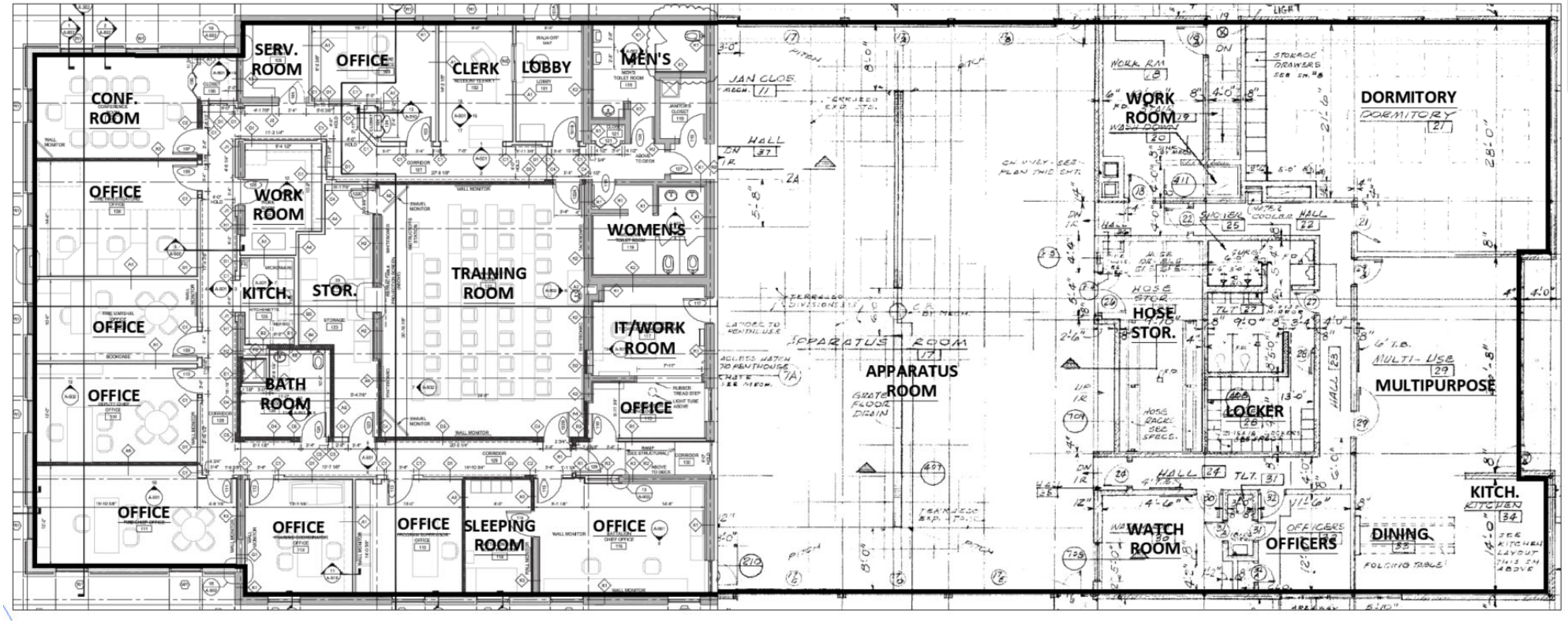


Year Built: Original = 1967 (55 Years Old), Addition = 2018 (4 Years Old)

Fire Department No. 1 - Site Plan



Fire Department No. 1 - First Floor Plan



TOTAL AREA = 12,500 SF

Fire Department No. 1 - Preliminary Findings and Observations

Preliminary Findings/Observations:

Floor	Department (Respondent)	Data Set 1 Current					Data Set 2 Projected 5-years (Implementing Modern Workplace Standards)					Data Set 3 Projected 5-years (Implementing Modern Workplace Standards + Alternate Work Schedule/Free-Addressing)						Readiness + Willingness to Adopt AWS Model
		SF	FTE	SF/FTE	Offices	Wkstn.	SF	FTE	SF/FTE	Offices	Wkstn.	SF	FTE	SF/FTE	USF/Seat	Offices	Wkstn.	
First Floor	Fire Department Office Area (John Unsworth)	5654	11	514	8	3	2200	11	200	8	3	2200	11	200	200	8	3	AWS = N FA = N
	Fire Department Back-of-House Area (John Unsworth)	6983	0	NA	0	0	6983	0	NA	0	0	6983	0	NA	NA	0	0	
	Subtotal (First Floor)	**12637**	**11**	**1149**	**8**	**3**	**9183**	**11**	**835**	**8**	**3**	**9183**	**11**	**835**	**835**	**8**	**3**	

1. The following program elements were requested (square footage for these spaces, approximately 980 SF) is not reflected in the matrix above):
   - Additional beds (4) = 480 SF
   - Storage (office) = 100 SF
   - Storage (currently off site) = 200 SF
   - Secured Evidence Room = 200 SF
2. Site circulation can be improved
3. The main public entrance is difficult to identify
4. By implementing MWS and AWS/FA, the current Fire Station program could be reduced by approximately 2,400 SF (including the additional spaces referenced in item 1 above).

Fire Department No. 1 - Preliminary Findings and Observations

Demographic Comparison:

City	Population	Area (Square Miles)	Population Density (People per SM)	% of Population Age 65+	No. of Library Facilities	Library Area (SF)	No. of Police Stations	Police Station Area (SF)	No. of Fire Stations	Fire Station Area (SF) - Main Station	No. of Rec Center Facilities	Rec Center Area (SF)	No. of Senior Center Facilities	Senior Center Area (SF)
Livonia	95535	35.70	2676	20.6%	2	71470	1	55275	5	12500	1	129300	1	20780
Novi	66243	30.24	2191	14.1%	1	55000	1	41000	4	12500	1	NA	0	NA
Rochester Hills	76028	32.80	2318	17.6%	1	70000	1	16000	5	13171	0	NA	1	90000
Farmington Hills	83292	33.27	2504	20.4%	1	43288	1	30000	5	19000	1	146000	1	68000
Canton	98620	36.11	2731	14.8%	1	53500	1	33200	3	16202	1	92800	1	2200

Notes:

1. The demographic information above was referenced from the U.S. Census Bureau
2. Rochester Hills is serviced by the Oakland County Sheriff's office
3. None of the facilities referenced above accommodate shared services (i.e. police/fire, Rec/Senior Center)

Fire Department - Case Study

Client: Commerce Township

Location: Commerce Township, MI

Population (2020): 43,058

Area: 12,460 SF

Completion date: 2021

Project cost: $5,500,000 ($441/SF)

AE: A3C



Fire Department - Case Study

Commerce Township Fire Department built three new Fire Stations (#1, #2, #4) in the late 1990's to provide better service to the rapidly developing Township. The fourth station was not replaced or upgraded at that time. Fire Station #3 will replace this existing fire station in the same location providing much needed improvement for the department with a new and larger facility ready to take on the continuing growth and needs of the area.

The new station is designed with 4 long bays for apparatus and vehicles with associated decontamination, workrooms, storage and fitness spaces. Separated from the apparatus bay, for the safety of the staff, are the areas consisting of the watch room and offices, dorm rooms, kitchen, dining, day room, separate laundry, toilet and locker rooms. Private toilet, showers and dorm rooms ensure privacy for a more diverse staff.

The building's vernacular was designed to remain consistent with the surrounding architecture. Durable and easily cleanable materials are utilized throughout to ensure the station serves its occupants and the community for a long time to come. The station is planned to provide for the safety of the fire fighters with exhaust removal systems, and separation of 'clean' and 'dirty' rooms ensuring contaminates to not cross from one side to the other.

Fire Department - Case Study



Fire Department - Case Study



Fire Department - Case Study



1 BUILDING ELEVATION - WEST
SCAL 1/8" = 1'-0"
E:



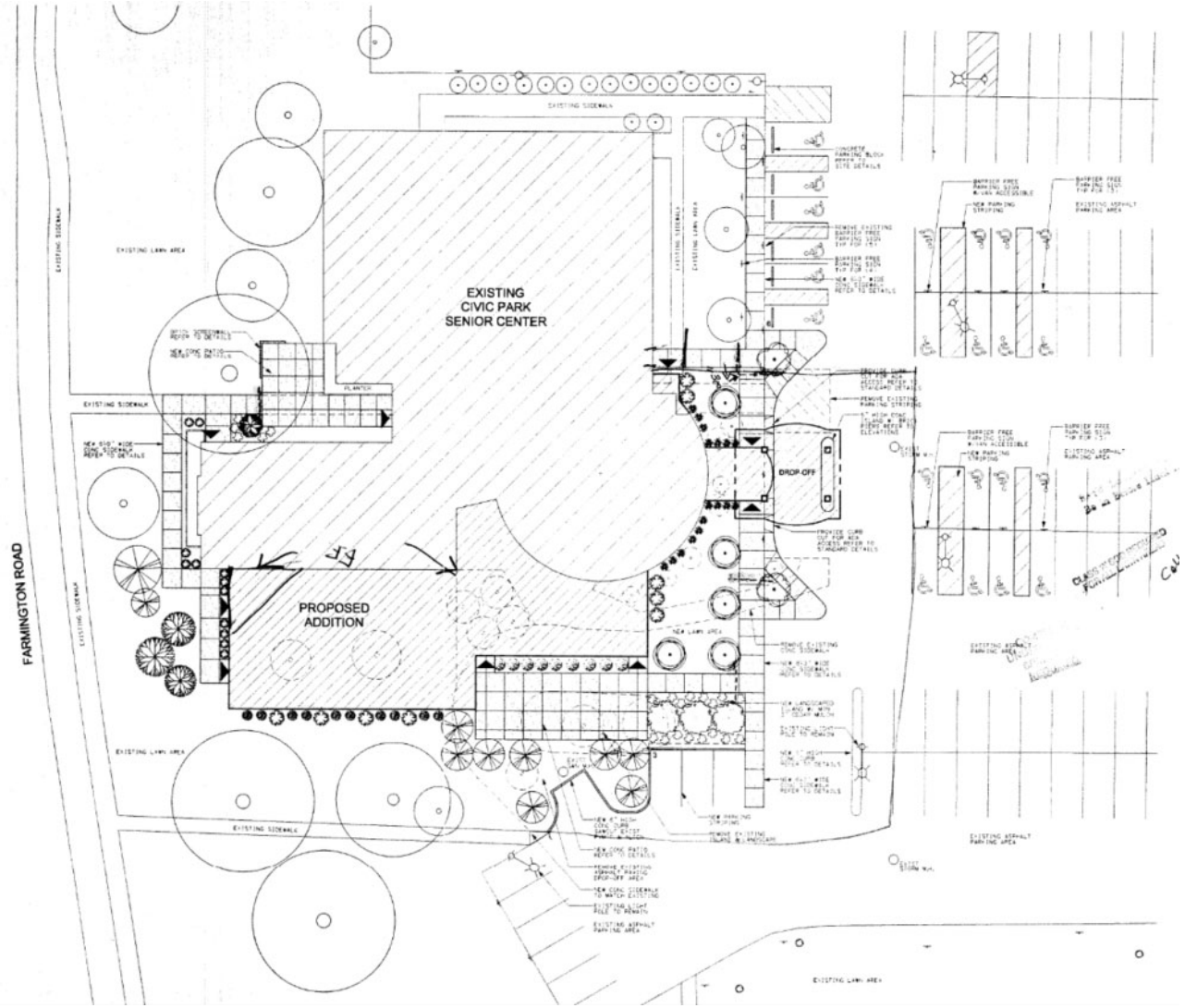
2 BUILDING ELEVATION - EAST
SCAL 1/8" = 1'-0"
E:

Senior Center/Community Transit

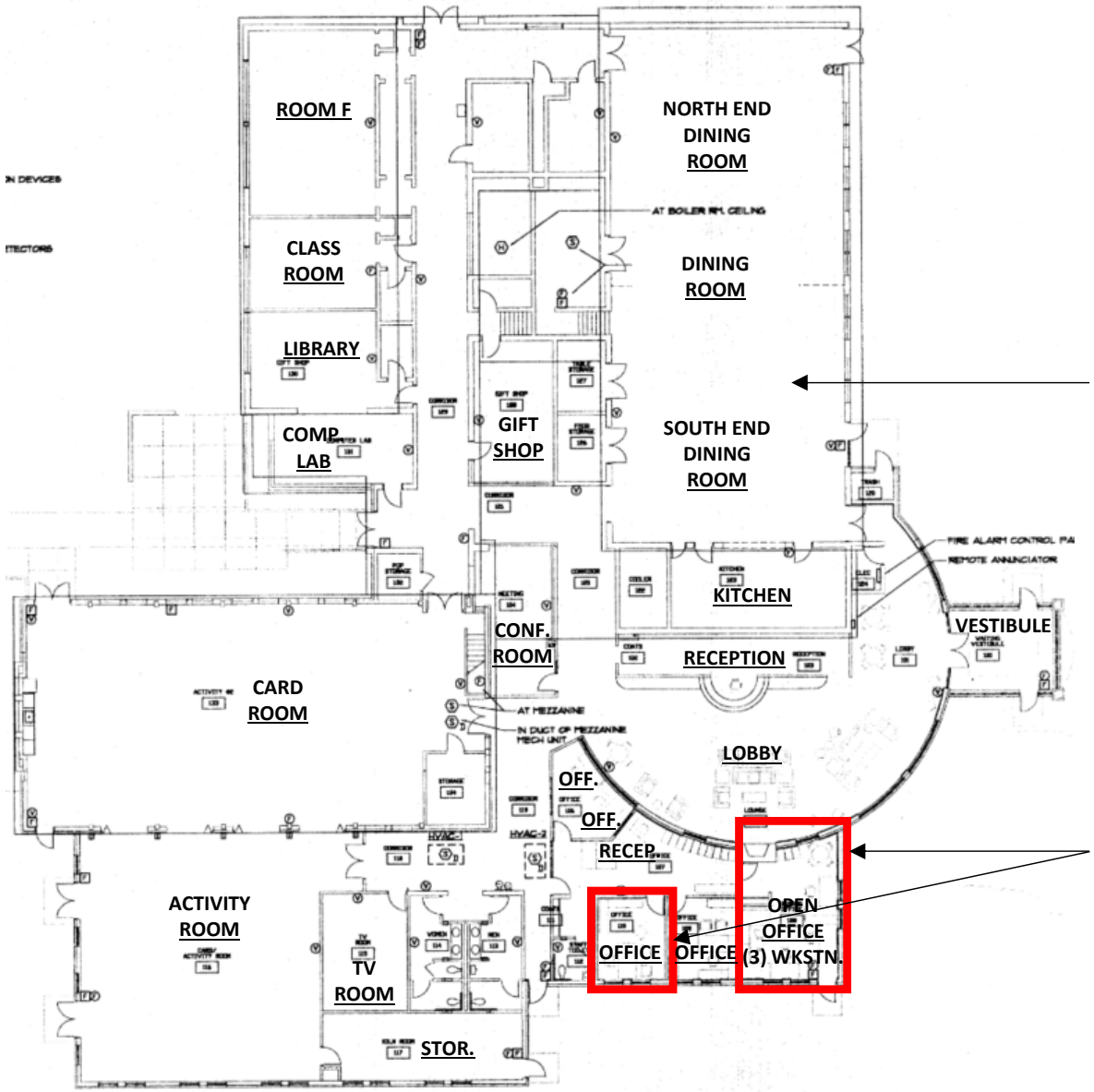


Year Built: 1964/1984 (lobby renovation)/2001 (office area renovation) (58/38/21 Years Old)

Senior Center/Community Transit - Site Plan



Senior Center/Community Transit - First Floor Plan



TOTAL NET SQUARE FEET = APPROXIMATELY 20,780

Senior Center - Utilization Analysis

Time	Activity Room	Card Room	Conference Room	Lobby	Movie Room	N Dining Room	S Dining Room	Pool Room
8:30 AM						Table Tennis		
9:00 AM	Art Class					Table Tennis	Fitness Class	Open Play
9:30 AM	Art Class	Card Games	Class	Games		Table Tennis	Fitness Class	Open Play
10:00 AM	Art Class	Card Games	Class	Games		Table Tennis		Open Play
10:30 AM	Art Class	Card Games	Class	Games		Table Tennis	Fitness Class	Open Play
11:00 AM	Art Class	Card Games	Class	Games		Table Tennis	Fitness Class	Open Play
11:30 AM				Games		Table Tennis	Fitness Class	Open Play
12:00 PM	Card Games	Card Games				Lunch	Bingo	Open Play
12:30 PM	Card Games	Card Games		Games		Lunch	Bingo	Open Play
1:00 PM	Card Games	Card Games		Games		Lunch	Bingo	Open Play
1:30 PM	Card Games	Card Games		Games			Bingo	Open Play
2:00 PM	Card Games	Card Games		Games		Fitness Class	Bingo	Open Play
2:30 PM	Card Games	Card Games		Games		Fitness Class	Bingo	Open Play
3:00 PM	Card Games	Card Games		Games				Open Play
3:30 PM	Card Games	Card Games		Games				Open Play
4:00 PM	Card Games	Card Games		Games				Open Play
4:30 PM								Open Play
5:00 PM								

Senior Center - Utilization Analysis

Time	Activity Room	Card Room	Conference Room	Lobby	Movie Room	N Dining Room	S Dining Room	Pool Room
Room Availability (Hours per day)	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
Room Utilization (Hours per day)	7	6.5	2	6.5	0	6	5.5	8
Percent Utilized	82%	76%	24%	76%	0%	71%	65%	94%

Room Size (SF)	1740	2700	290	1260		1730	1730	684
Occupant Load Factor (NSF/OCC)	50	15	15	50	NA	15	15	50
Max Occupants	35	180	19	25	NA	115	115	14
Average Class Size	50	40	10	20	NA	70	25	2

Notes:
1. Assembly (gaming floors) = 11 GSF
2. Assembly (without fixed seats, chairs only, not fixed) = 7 NSF
3. Assembly (without fixed seats, standing space) = 5 NSF
4. Assembly (without fixed seats, tables and chairs) = 15 NSF
5. Exercise Rooms = 50 GSF

Senior Center - Preliminary Findings and Observations

Preliminary Findings/Observations:

Floor	Department (Respondant)	Data Set 1 Current					Data Set 2 Projected 5-years (Implementing Modern Workplace Standards)					Data Set 3 Projected 5-years (Implementing Modern Workplace Standards + Alternate Work Schedule/Free-Addressing)						Readiness + Willingness to Adopt AWS Model
		SF	FTE	SF/FTE	Offices	Wkstn.	SF	FTE	SF/FTE	Offices	Wkstn.	SF	FTE	SF/FTE	USF/Seat	Offices	Wkstn.	
First Floor	Parks + Recreation Office Area (Karl Peters)	800	5	160	3	2	1200	6	200	4	2	1200	6	200	200	4	2	AWS = Y FA = N
	Parks + Recreation Back-of-House Area (Karl Peters)	19438	0	NA	0	0	19438	0	NA	0	0	19438	0	NA	NA	0	0	
	Community Transit (Brandie Isaacson)	542	4	136	1	3	800	4	200	1	3	800	4	200	200	1	3	AWS = N FA = N
	First Floor Subtotals	**20780**	**9**	**2309**	**4**	**5**	**21438**	**10**	**2144**	**5**	**5**	**21438**	**10**	**2144**	**2144**	**5**	**5**	

Senior Center/Community Transit -Preliminary Findings and Observations

1. Space is broken up, no storage, too many hallways. No reception at entry point, making it difficult for visitors to navigate the space. Not enough handicapped parking. Many rooms are too small.
2. Parking lot is used for Senior Center visitors and busses, creating a pedestrian safety hazard.
3. The following program elements were requested (square footage for these spaces, approximately 1,890 SF) is not reflected in the matrix above):
    - Conference Room (40 occupants) = 600 SF
    - Flex Space (150 occupants) = 1,050
    - Break Room (Community Transit) = 240 SF

Demographic Comparison:

City	Population	Area (Square Miles)	Population Density (People per SM)	% of Population Age 65+	No. of Library Facilities	Library Area (SF)	No. of Police Stations	Police Station Area (SF)	No. of Fire Stations	Fire Station Area (SF) - Main Station	No. of Rec Center Facilities	Rec Center Area (SF	No. of Senior Center Facilities	Senior Center Area (SF)
Livonia	95535	35.70	2676	20.6%	2	71470	1	55275	5	12500	1	129300	1	20780
Novi	66243	30.24	2191	14.1%	1	55000	1	41000	4	12500	1	NA	0	NA
Rochester Hills	76028	32.80	2318	17.6%	1	70000	1	16000	5	13171	0	NA	1	90000
Farmington Hills	83292	33.27	2504	20.4%	1	43288	1	30000	5	19000	1	146000	1	68000
Canton	98620	36.11	2731	14.8%	1	53500	1	33200	3	16202	1	92800	1	2200

Notes:

1. The demographic information above was referenced from the U.S. Census Bureau
2. Rochester Hills is serviced by the Oakland County Sheriff's office
3. None of the facilities referenced above accommodate shared services (i.e. police/fire, Rec/Senior Center)

Senior Center – Case Study

Client: Hadley Senior Center

Location: Hadley, MA

Area: 10,350 SF

Completion date: 2021

Project cost: $4,650,000 ($449/SF)

AE: EDM

Contractor: Forish Construction Co



Senior Center – Case Study

EDM designed a new senior center located in the historic district of the Town of Hadley. The center is single-story building with approximately 10,350 SF of usable space.

Located along the Connecticut River, Hadley is known for their agricultural roots, which inspired the exterior design of the building. Large, gable forms with a covered front porch give the building a “farm-like” feel, while also taking cues from local municipal architecture. The functional spaces will likely include reception area, commercial grade kitchen, dining area, administration offices, conference room, gathering area, exercise rooms, nurse’s office, classrooms and outdoor area with seating.

The building was located on a single parcel of Town owned land that shared outdoor space with a new town library building that was being designed and constructed in parallel with the senior center. The design teams from each project worked together to create a single parcel site design that fit within the Town’s masterplan guidelines, creating a campus-like set-up to the site.

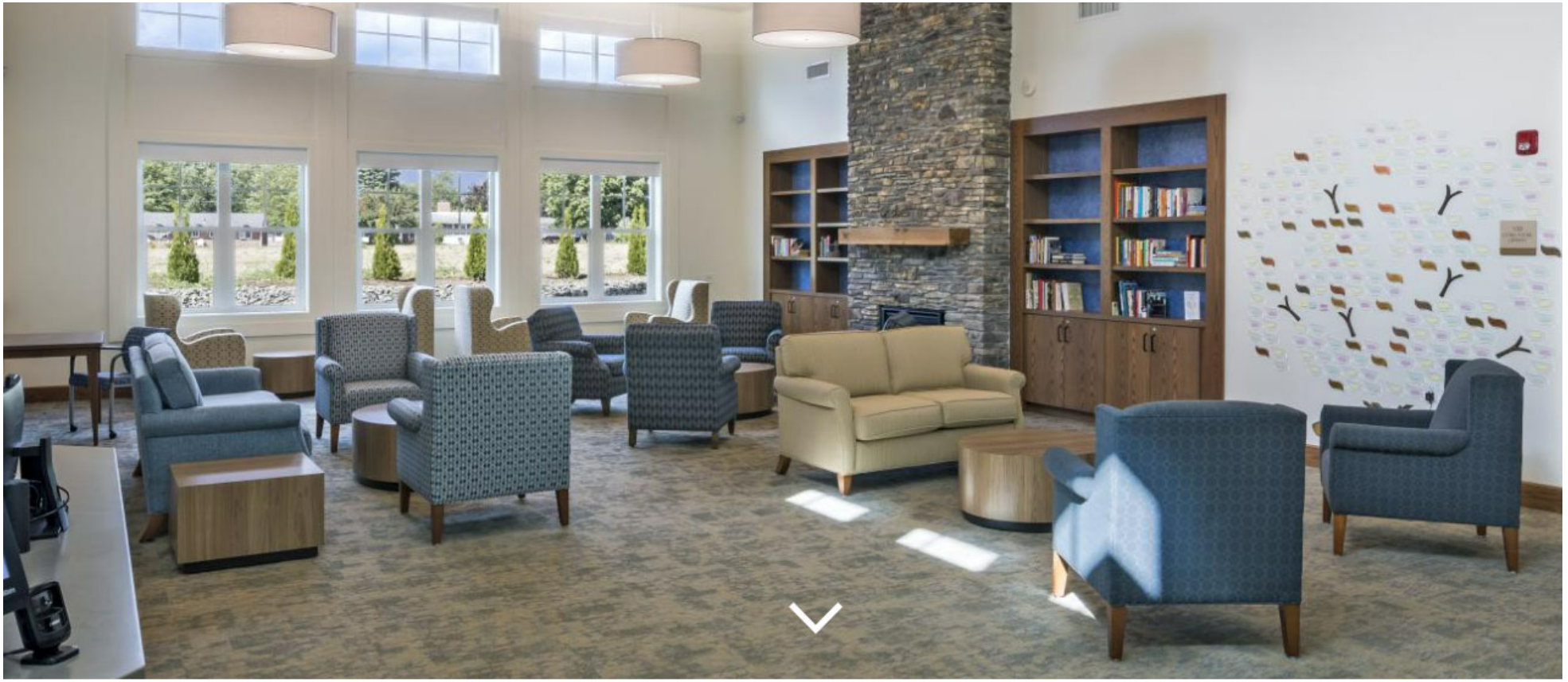
Senior Center – Case Study



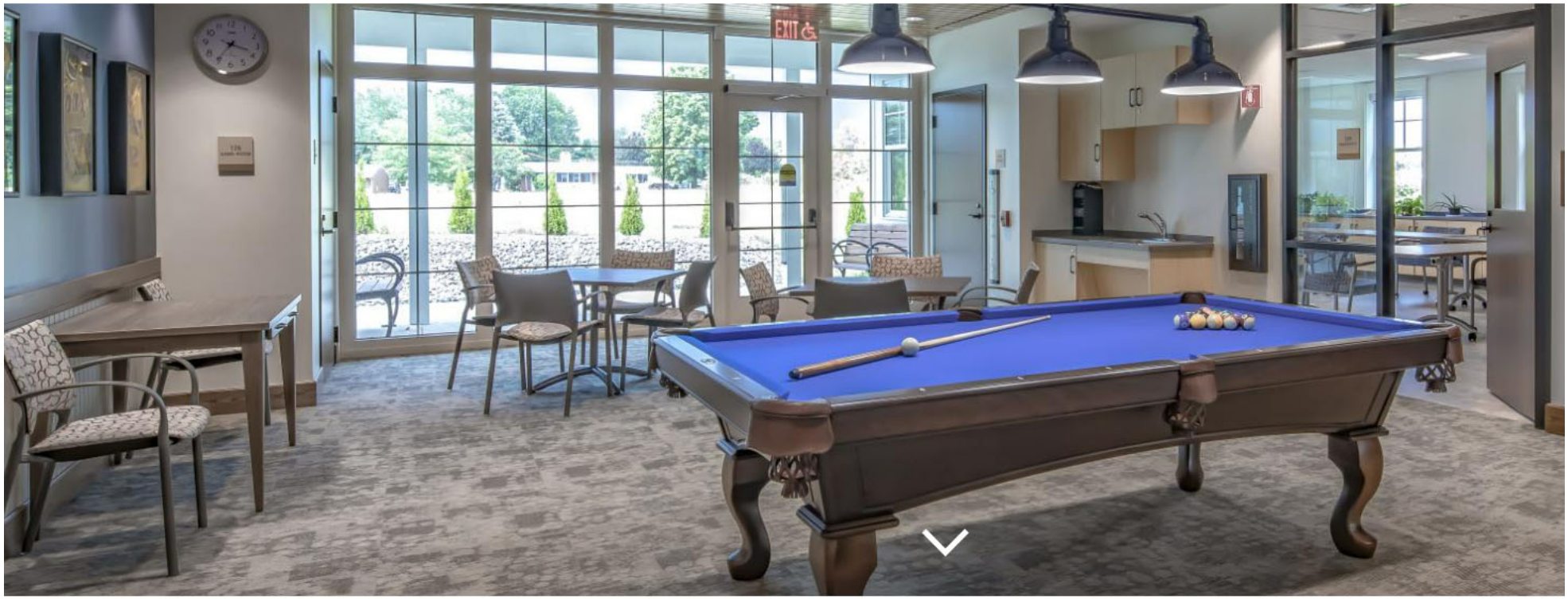
Senior Center – Case Study



Senior Center – Case Study



Senior Center – Case Study

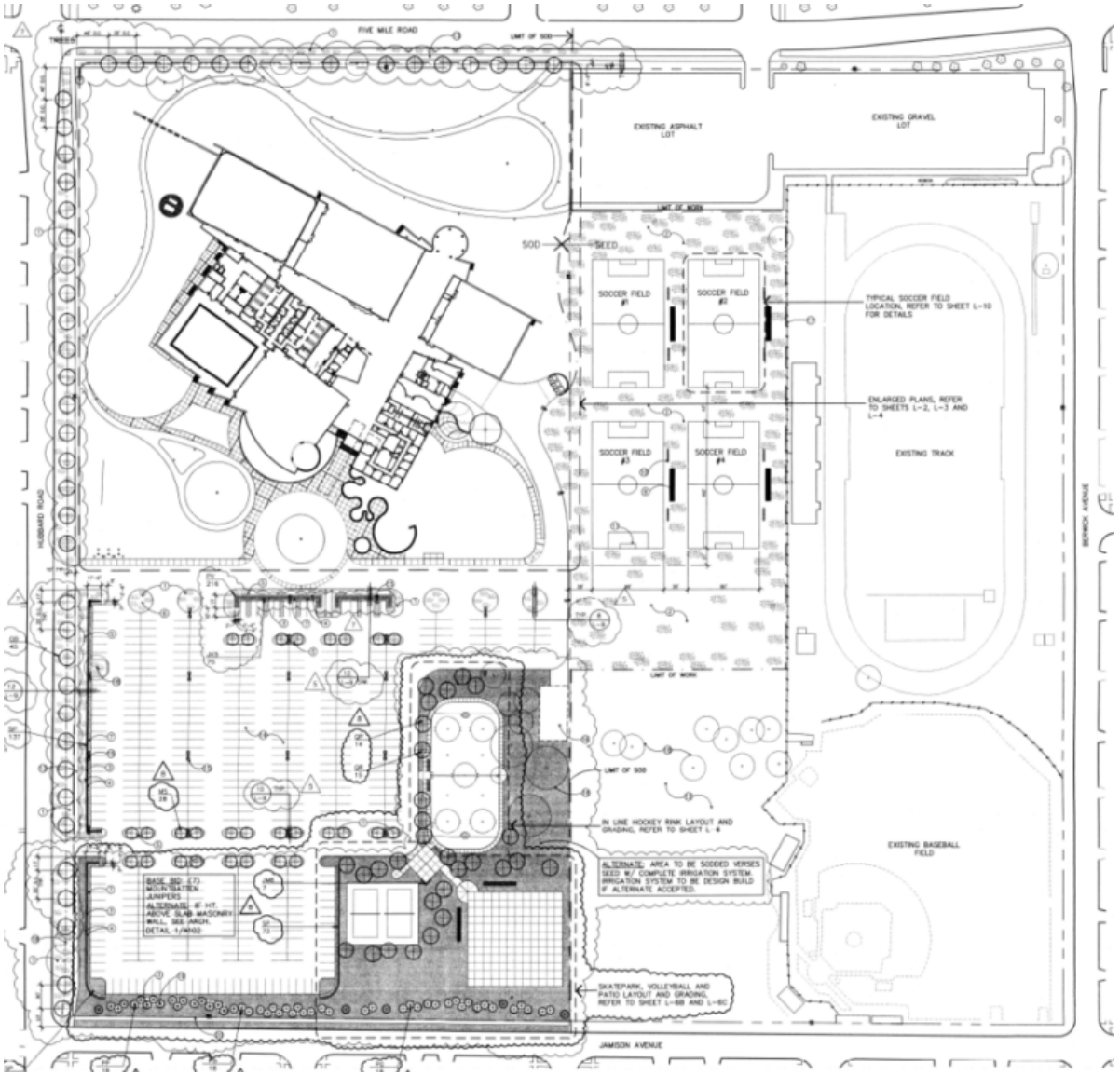


Rec Center

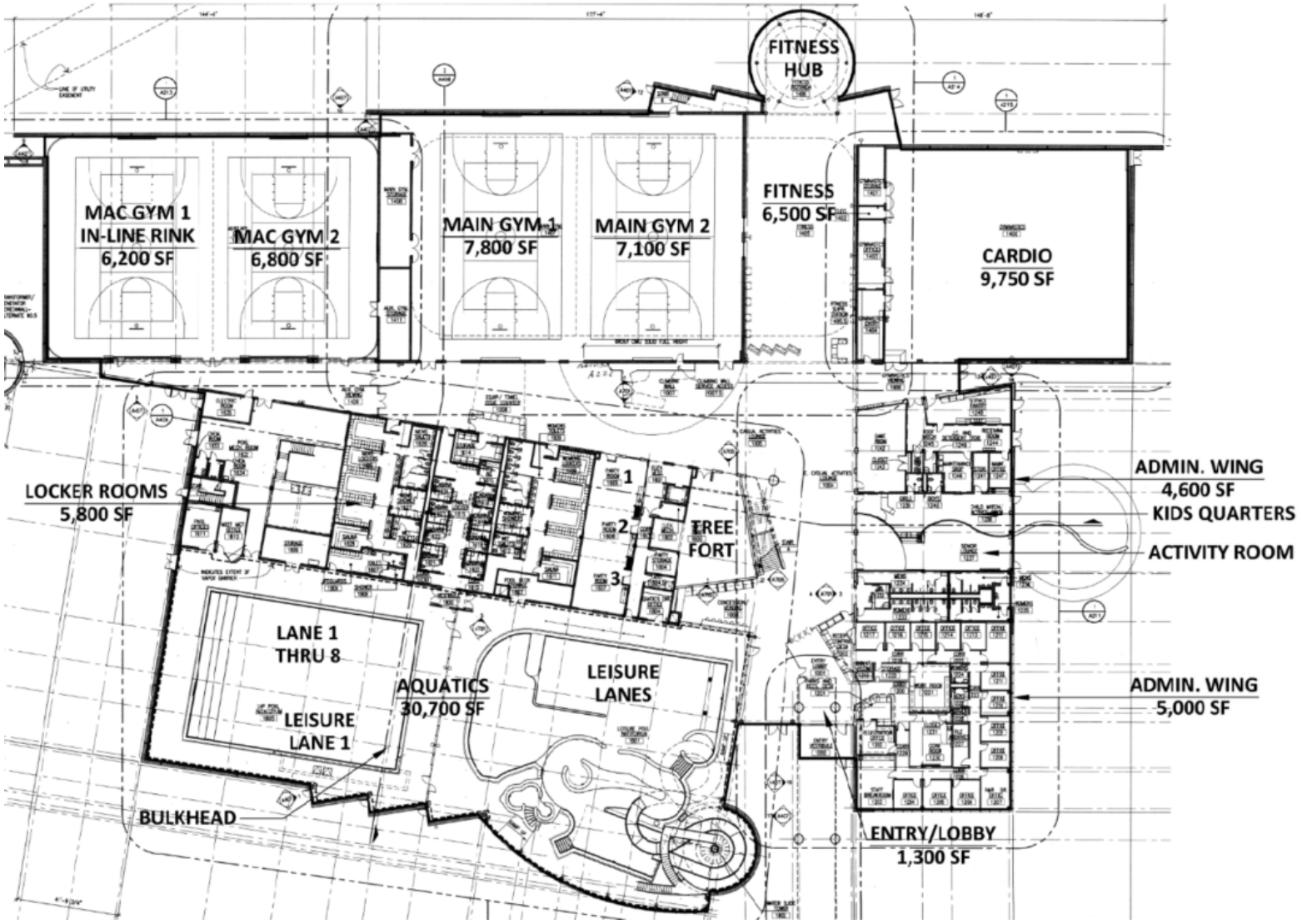


Year Built: 2003 (19 Years Old)

Rec Center - Site Plan

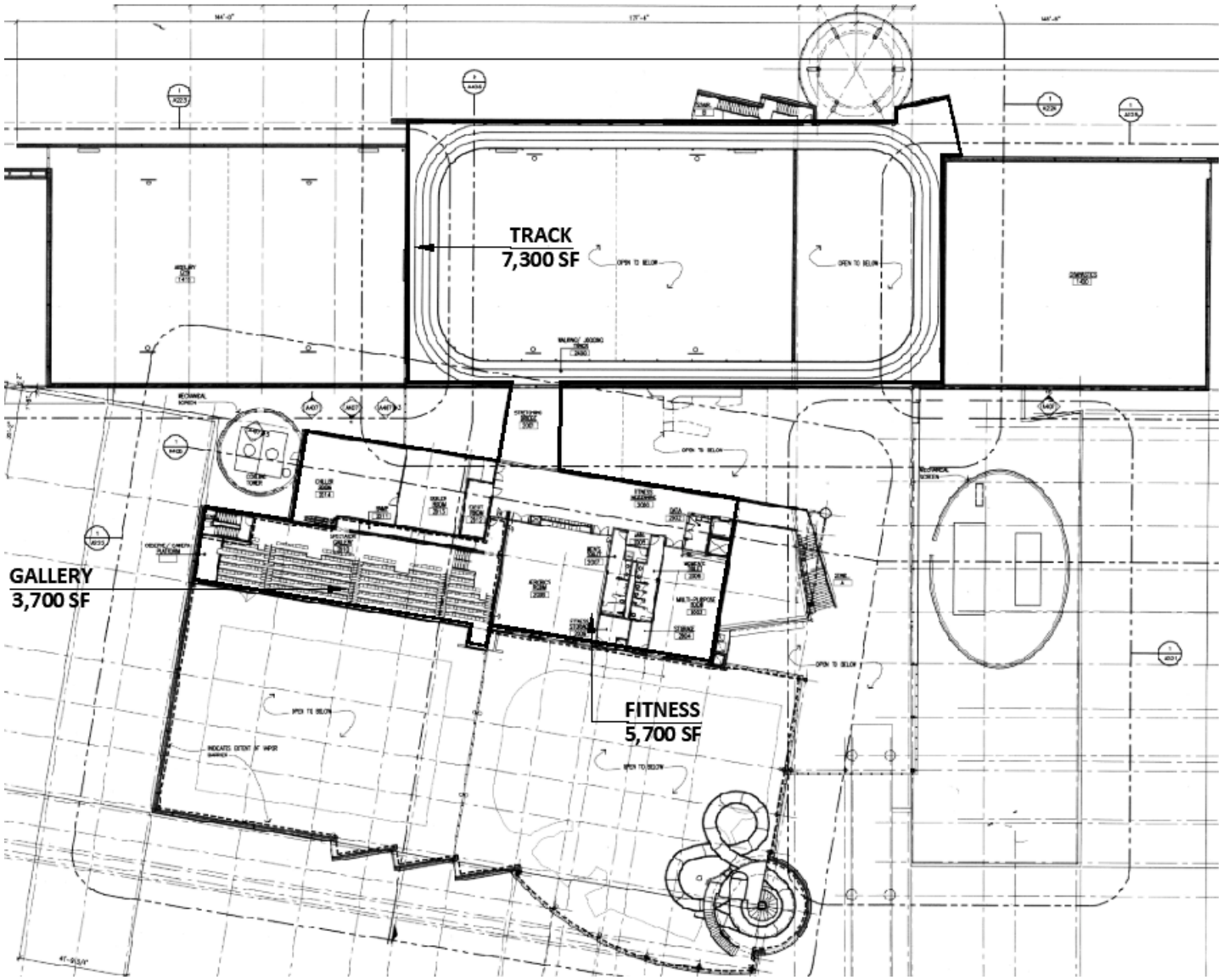


Rec Center - First Floor Plan



TOTAL AREA = 109,800 SF

Rec Center - Second Floor Plan



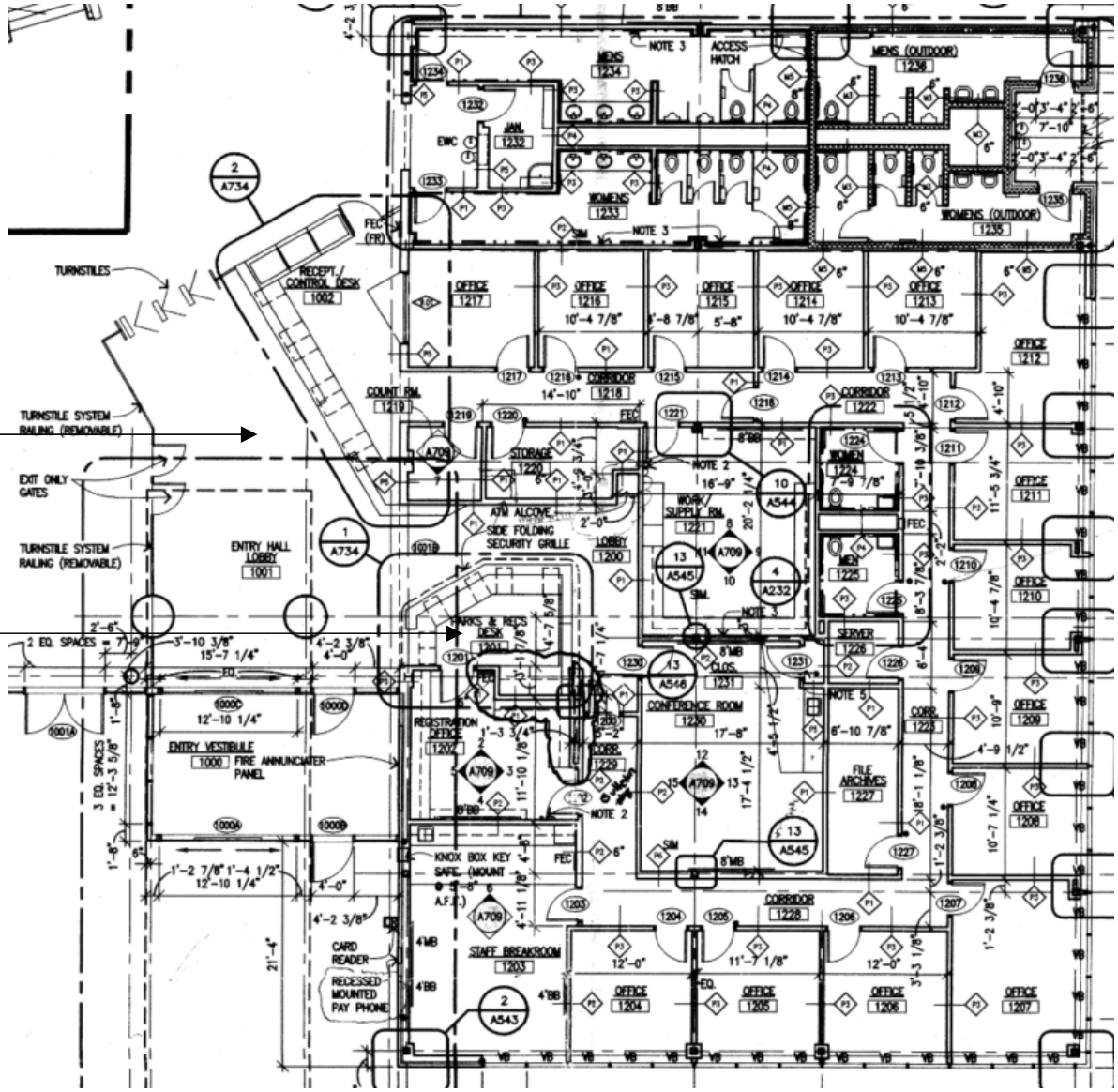
TOTAL AREA = 19,500 SF

Rec Center - First Floor – Admin. Wing and Lobby

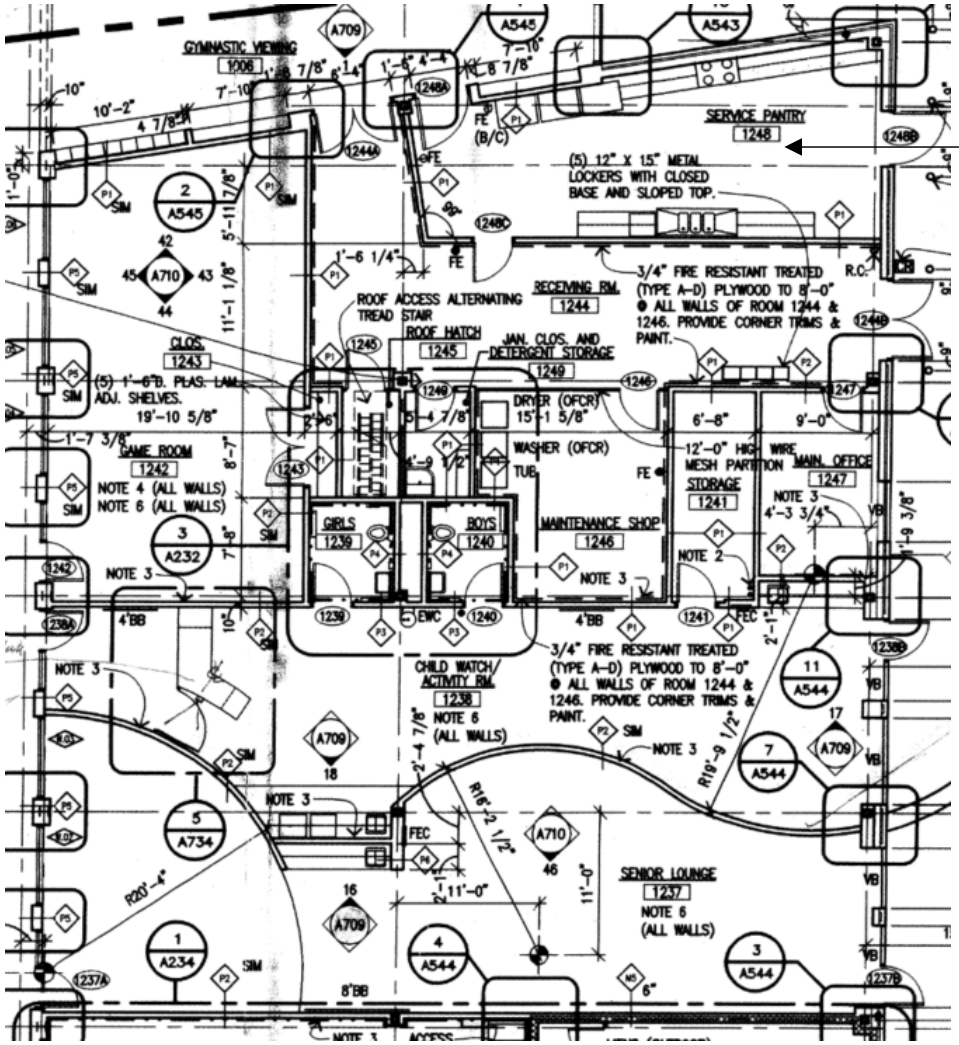
CONCESSIONS AND VENDING AREA IS UNDERUTILIZED. CONSIDER CONVERTING TO A TEEN ZONE.

RECONFIGURE ENTRY LOBBY AND RECEPTION FOR BETTER PUBLIC/MEMBER ACCESS

PARKS + REC RECEPTION IS UNDERUTILIZED.

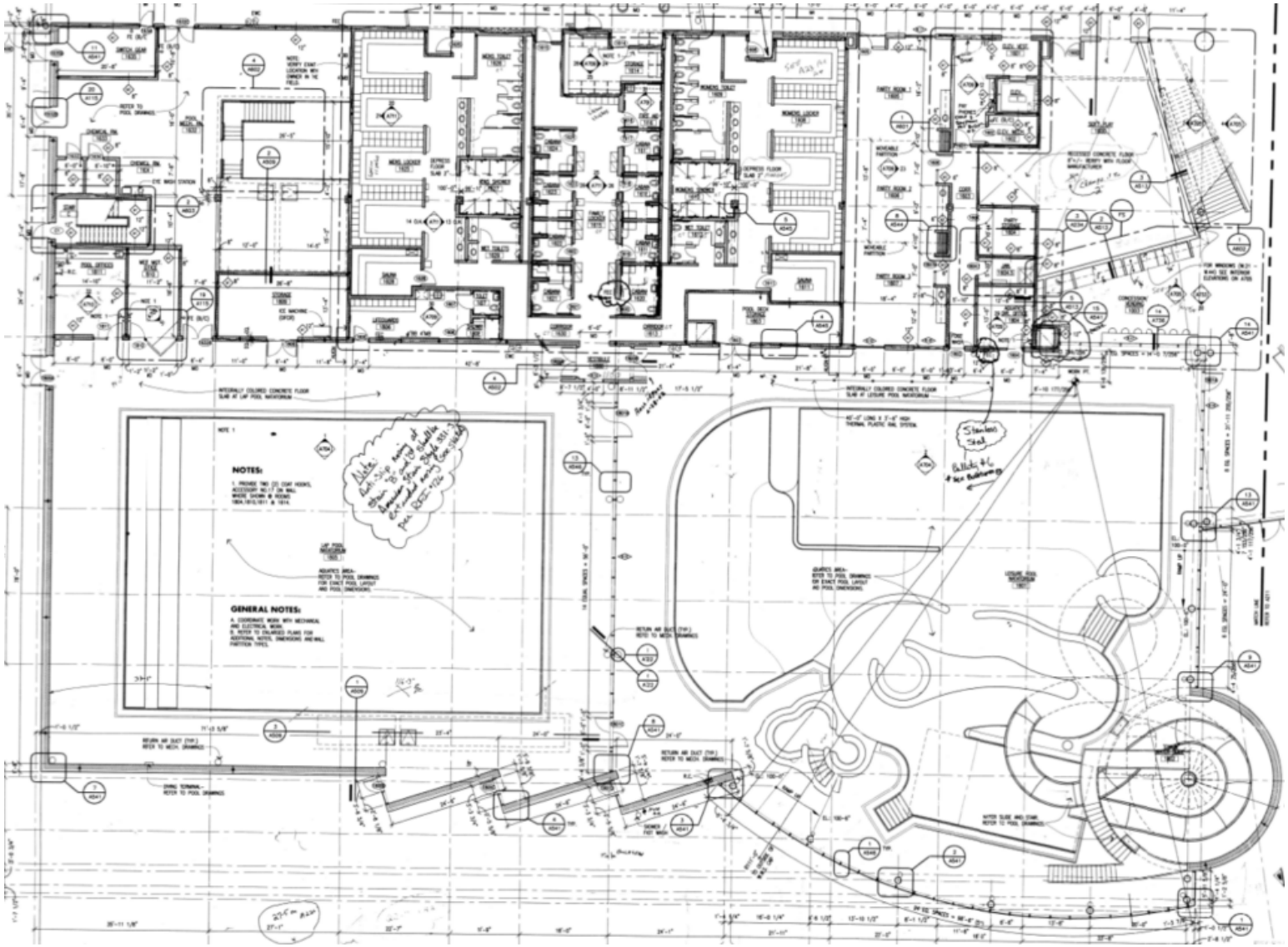


Rec Center - First Floor– Admin. Wing

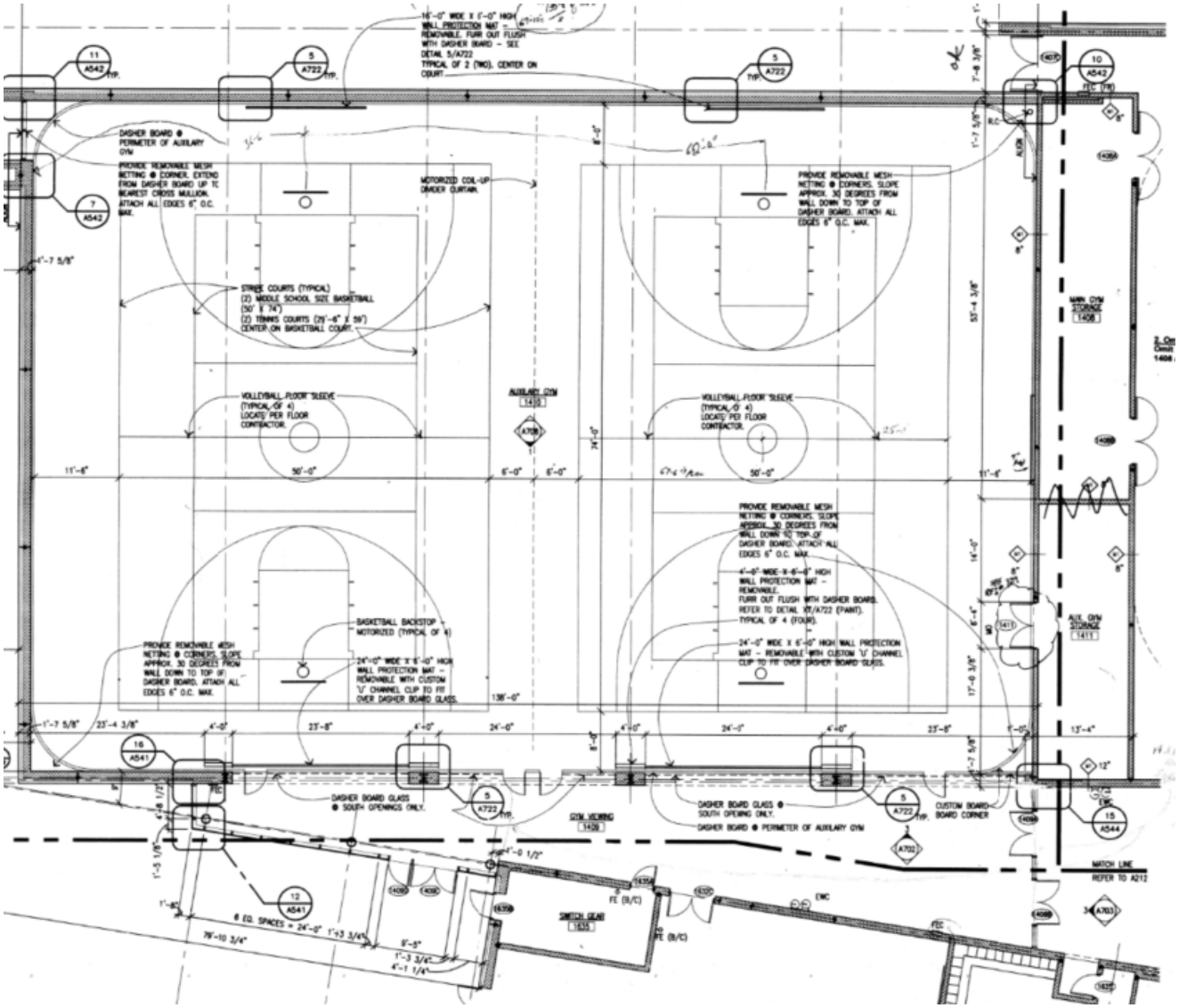


SERVICE PANTRY IS UNDERUTILIZED AS A FULL KITCHEN

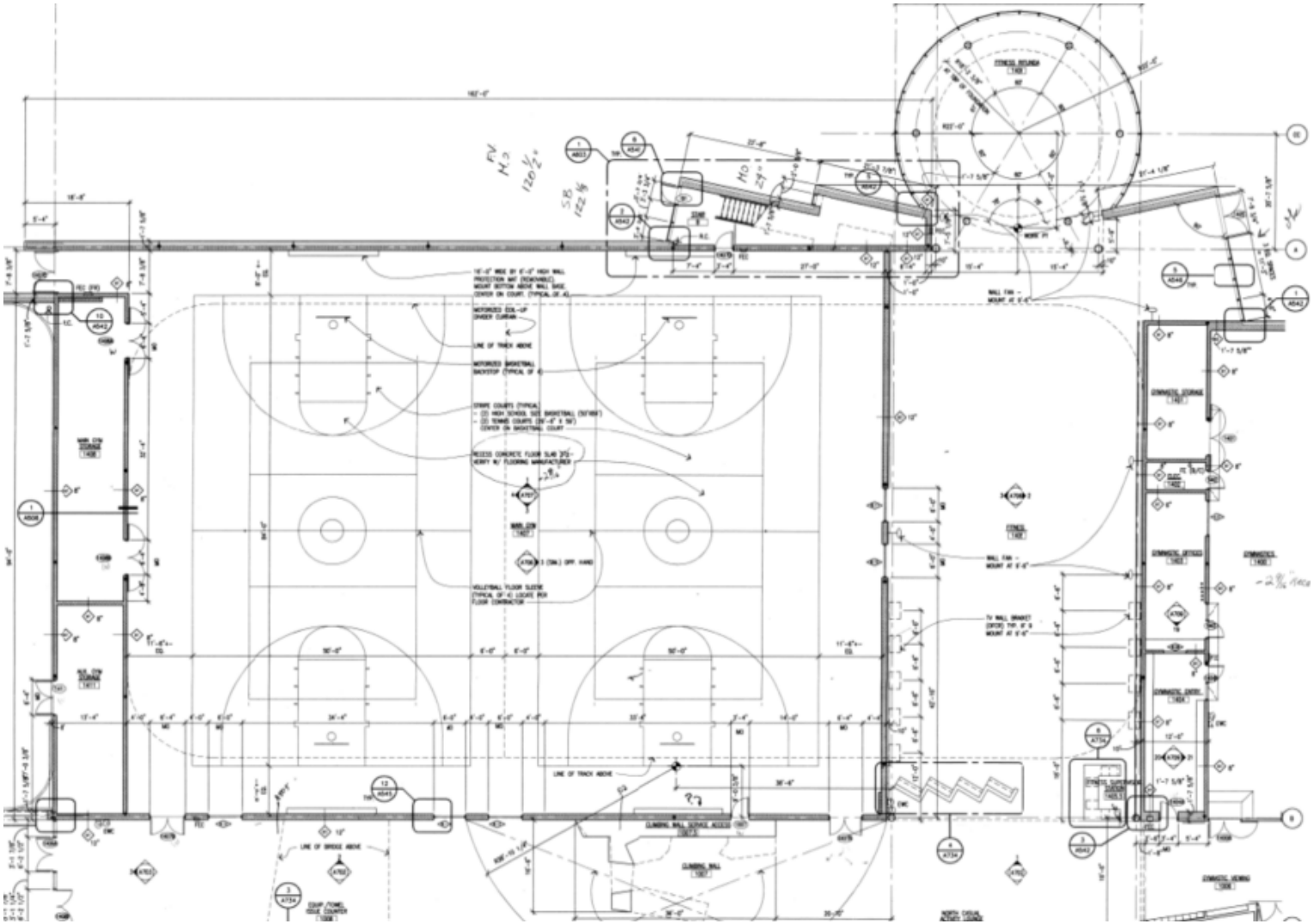
Rec Center - First Floor – Aquatics



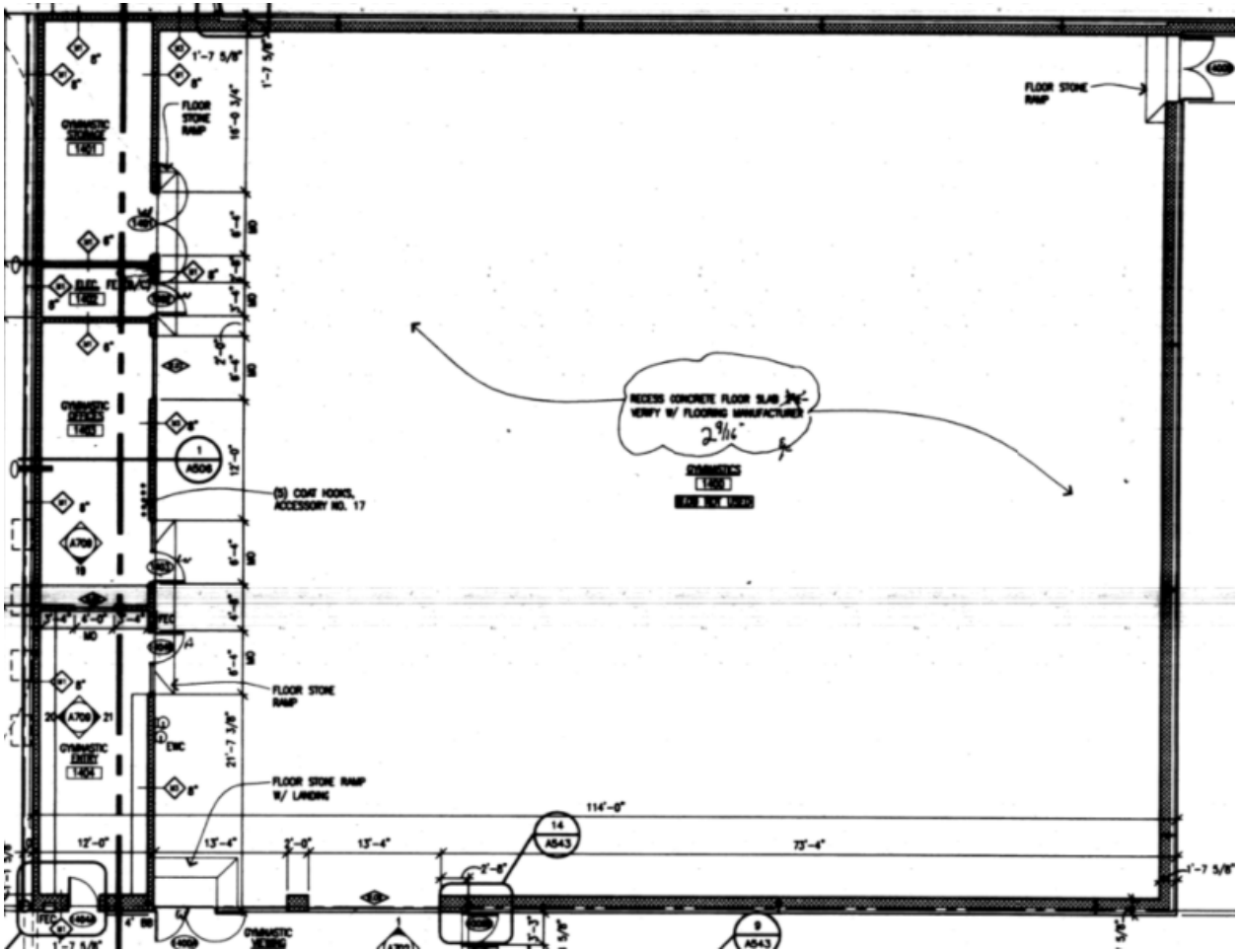
Rec Center - First Floor – Auxiliary Gym



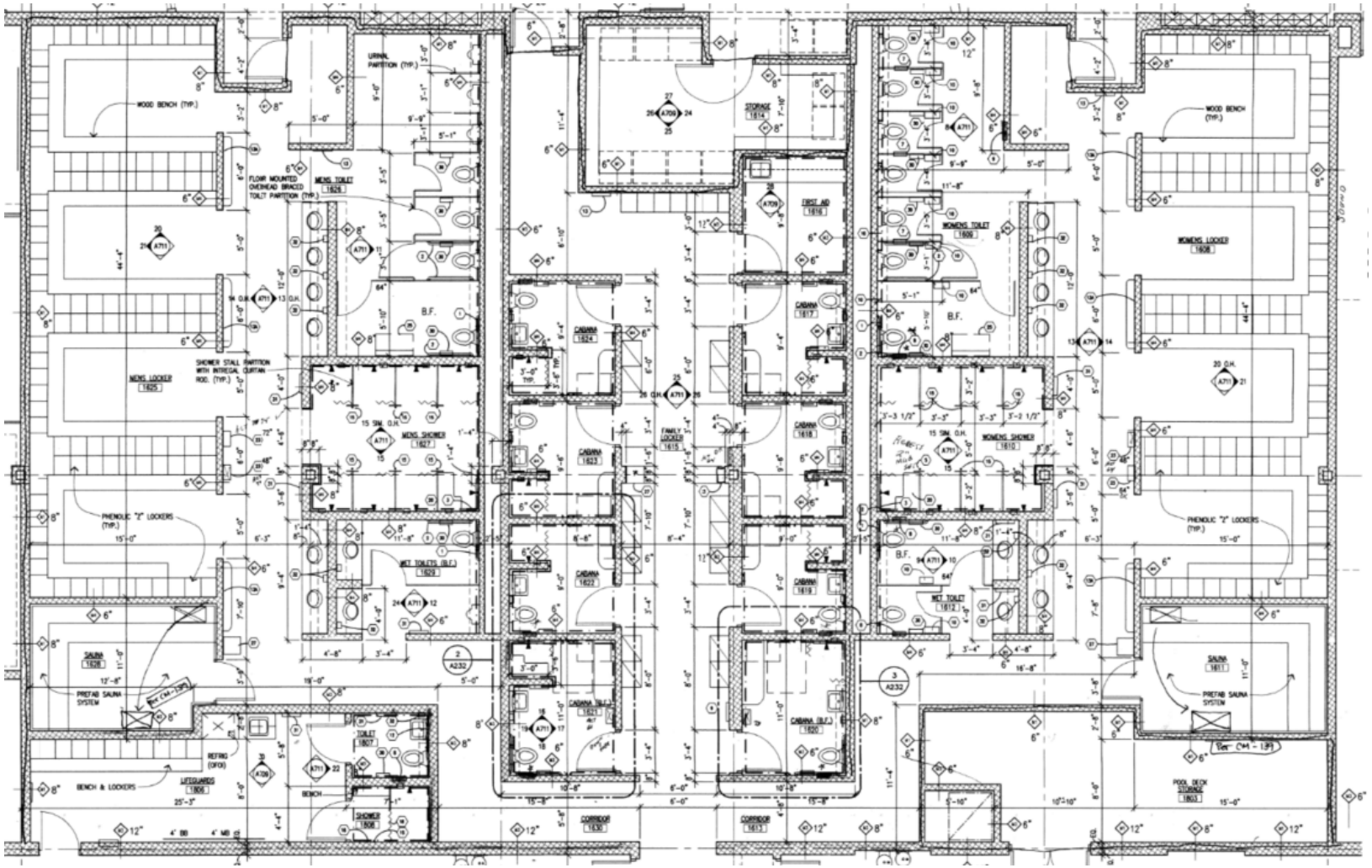
Rec Center - First Floor – Main Gym + Fitness



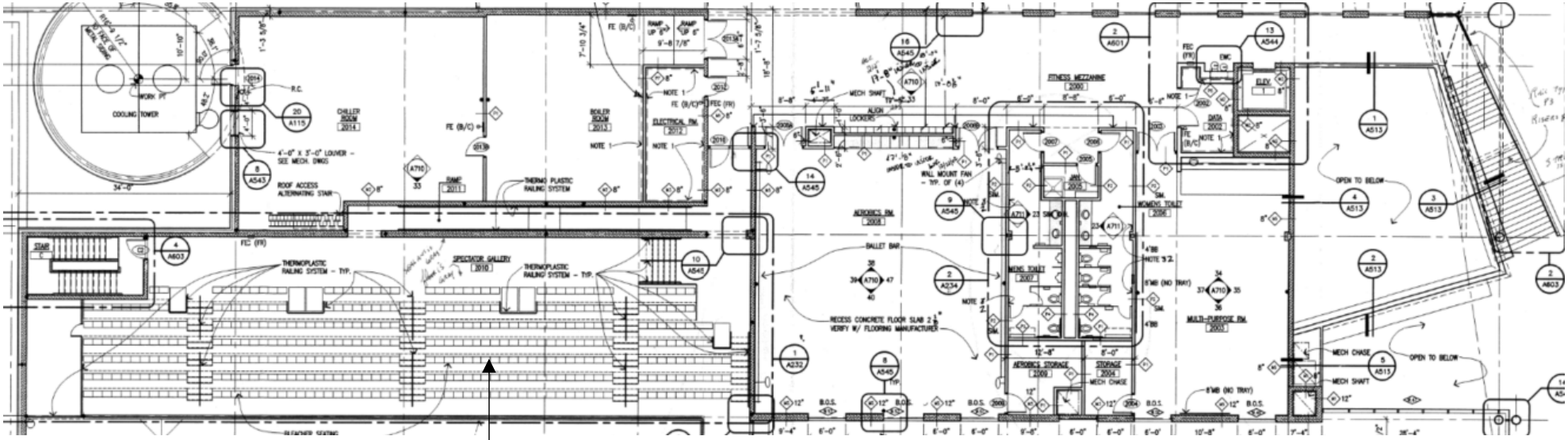
Rec Center - First Floor – Cardio



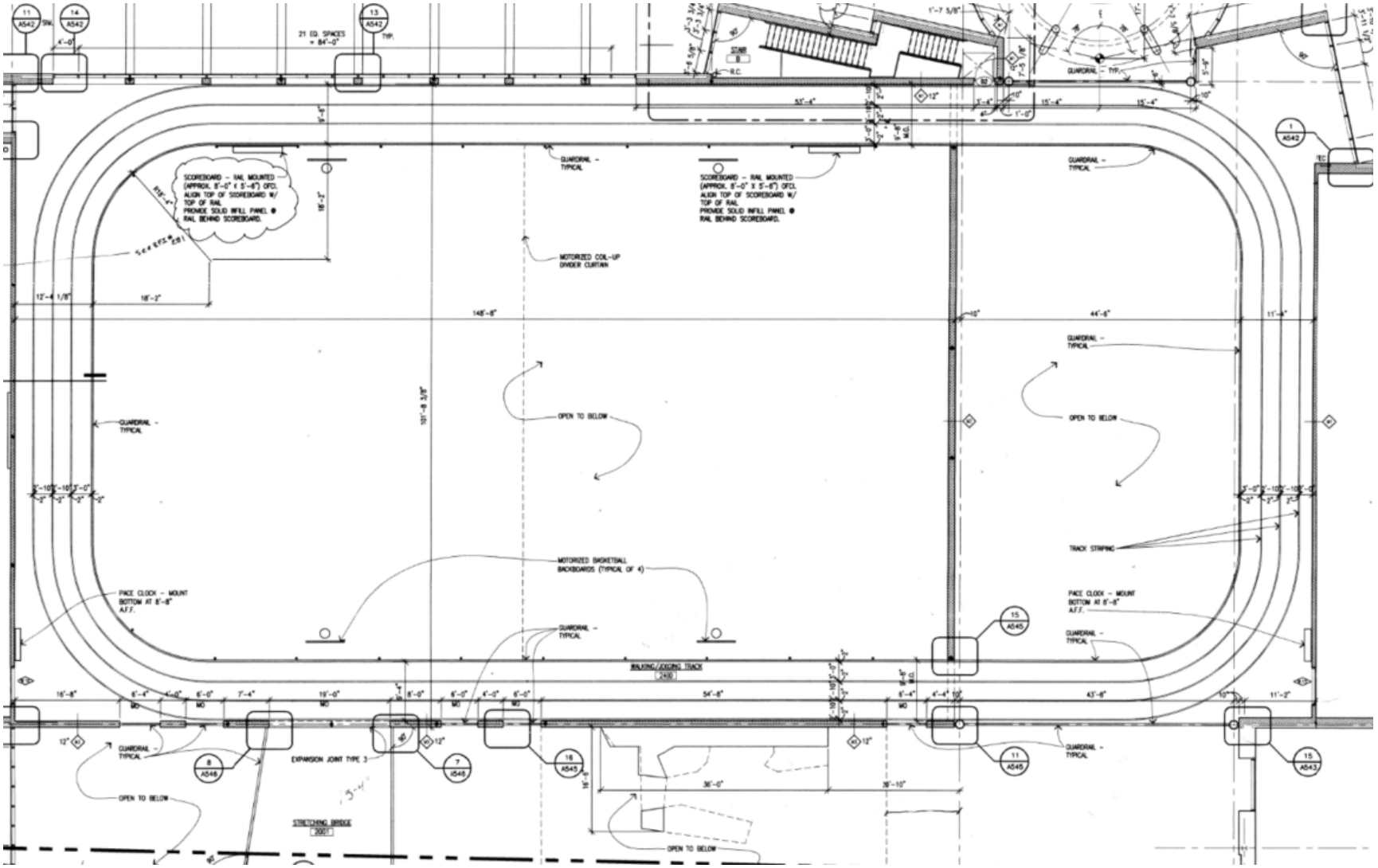
Rec Center - First Floor – Locker Rooms



Rec Center - Second Floor – Gallery + Fitness



Rec Center - Second Floor - Track



Rec Center - Utilization Analysis

Time/Facility	Activity Room	Party Room 1	Party Room 2	Party Room 3	Main 1	Main 2	MAC 1	MAC 2	MPR	Aerobics
5am										
530										
6						Fitness Class		Fitness Class		
630						Fitness Class		Fitness Class		
7										
730										
8										
830		Kids Classes	Kids Classes	Kids Classes						
9		Kids Classes	Kids Classes	Kids Classes				Pickleball	Fitness Class	
930		Kids Classes	Kids Classes	Kids Classes				Pickleball	Fitness Class	
10		Kids Classes	Kids Classes	Kids Classes			Fitness Class	Pickleball		Fitness Class
1030		Kids Classes	Kids Classes	Kids Classes		Fitness Class		Pickleball		Fitness Class
11						Fitness Class	Fitness Class			
1130							Fitness Class			
12										
1230										
1										
130										
2										
230										
3										
330										
4										
430										
5										Fitness Class
530		STEAM	STEAM	STEAM			Sports & Games			Fitness Class
6	Fitness Class	STEAM	STEAM	STEAM		Martial Arts	Sports & Games	Fitness Class	Martial Arts	Fitness Class
630	Fitness Class						Sports & Games	Fitness Class	Martial Arts	Fitness Class
7	Dance	Fitness Class	Fitness Class	Fitness Class			Sports & Games		Martial Arts	Fitness Class
730	Dance	Fitness Class	Fitness Class	Fitness Class			LJAL		Martial Arts	Fitness Class
8	Dance						LJAL	Pickleball		
830	Dance						LJAL	Pickleball		
9							LJAL	Pickleball		
930								Pickleball		
Room Availability during hours of operation (Hours per day)	17	17	17	17	17	17	17	17	17	17
Room Utilization during hours of operation (Hours per day)	3	4.5	4.5	4.5	0	2.5	5.5	6	3	4
Percent of time room is booked during hours of opeation	18%	26%	26%	26%	0%	15%	32%	35%	18%	24%

Rec Center - Utilization Analysis

Time/Facility	Activity Room	Party Room 1	Party Room 2	Party Room 3	Main 1	Main 2	MAC 1	MAC 2	MPR	Aerobics
Room Availability (Hours per day)	17	17	17	17	17	17	17	17	**17**	17
Room Utilization (Hours per day)	3	4.5	4.5	4.5	0	2.5	5.5	6	**3**	4
Percent Utilized	18%	26%	26%	26%	see note 6	see note 6	32%	35%	18%	24%

Room Size (SF)	1160	450	450	450	7000	7000	6200	6200	1040	1700
Occupant Load Factor (NSF/OCC)	50	15	15	15	50	50	50	50	15	50
Max Occupants	23	30	30	30	140	140	124	124	69	34
Average Class Size	8	8	8	8	50	32	18	18	17	19

Notes:
1. Assembly (gaming floors) = 11 GSF
2. Assembly (without fixed seats, chairs only, not fixed) = 7 NSF
3. Assembly (without fixed seats, standing space) = 5 NSF
4. Assembly (without fixed seats, tables and chairs) = 15 NSF
5. Exercise Rooms = 50 GSF
6. Main Gym 1 and 2 are open and available for member use (e.g. pick up basketball) when not programmed.

Rec Center – Preliminary Findings and Observations

Preliminary Findings/Observations:

Floor	Department	Data Set 1 Current					Data Set 2 Projected 5-years (Implementing Modern Workplace Standards)					Data Set 3 Projected 5-years (Implementing Modern Workplace Standards + Alternate Work Schedule/Free-Addressing)						Readiness + Willingness to Adopt AWS Model
		SF	FTE	SF/FTE	Offices	Wkstn.	SF	FTE	SF/FTE	Offices	Wkstn.	SF	FTE	SF/FTE	SF/Seat	Offices	Wkstn.	
First Floor	Parks + Recreation Office Area (Ted Davis)	5000	32	156	14	18	6800	34	200	16	18	5200	34	153	200	12	14	AWS = Y FA = Y
	Parks + Recreation Public Area (Ted Davis)	104800	0	NA	0	0	104800	0	NA	0	0	104800	0	NA	NA	0	0	
	First Floor Subtotals	**109800**	**32**	**3431**	**14**	**18**	**111600**	**34**	**3282**	**16**	**18**	**110000**	**34**	**3235**	**4231**	**12**	**14**	
Second Floor	Parks + Recreation (Ted Davis)	19500	0	NA	0	0	19500	0	NA	0	0	19500	0	NA	NA	0	0	NA
	Second Floor Subtotals	**19500**	**0**	**NA**	**0**	**0**	**19500**	**0**	**NA**	**0**	**0**	**19500**	**0**	**NA**	**NA**	**0**	**0**	
	Total (Rec Center)	**129300**	**32**	**4041**	**14**	**18**	**131100**	**34**	**3856**	**16**	**18**	**129500**	**34**	**3809**	**4981**	**12**	**14**	

1. Existing Concession/Vending area is underutilized. Consider converting to a Teen Zone
2. Entry Lobby + Reception for better public/member access
3. Spectator Gallery is underutilized.

Rec Center – Preliminary Findings and Observations

Demographic Comparison:

City	Population	Area (Square Miles)	Population Density (People per SM)	% of Population Age 65+	No. of Library Facilities	Library Area (SF)	No. of Police Stations	Police Station Area (SF)	No. of Fire Stations	Fire Station Area (SF) Main Station	No. of Rec Center Facilities	Rec Center Area (SF)	No. of Senior Center Facilities	Senior Center Area (SF)
Livonia	95535	35.70	2676	20.6%	2	71470	1	55275	5	12500	1	129300	1	20780
Novi	66243	30.24	2191	14.1%	1	55000	1	41000	4	12500	1	NA	0	NA
Rochester Hills	76028	32.80	2318	17.6%	1	70000	1	16000	5	13171	0	NA	1	90000
Farmington Hills	83292	33.27	2504	20.4%	1	43288	1	30000	5	19000	1	146000	1	68000
Canton	98620	36.11	2731	14.8%	1	53500	1	33200	3	16202	1	92800	1	2200

Notes:

1. The demographic information above was referenced from the U.S. Census Bureau
2. Rochester Hills is serviced by the Oakland County Sheriff's office
3. None of the facilities referenced above accommodate shared services (i.e. police/fire, Rec/Senior Center)

Rec Center - Case Study

Client: O'Connell Athletic Center

Location: West Hartford, CT

Area: 31,277 SF

Completion date: 2021

Construction cost: $14,300,000 ($457/SF)

AE: JCJ Architecture



Rec Center - Case Study

JCJ Architecture is working with the University of Saint Joseph, a private Catholic and recent co-educational college, to renovate and expand the existing O'Connell Athletic Center into a new, energized, central Basketball Arena and athletics venue. The new athletics expansion will also meet the needs of a growing number of students either looking to continue their sports careers or others pursuing degrees in athletic training, sports management or physical education and sports studies.

Rec Center - Case Study



Rec Center - Case Study



Rec Center - Case Study



Rec Center - Case Study



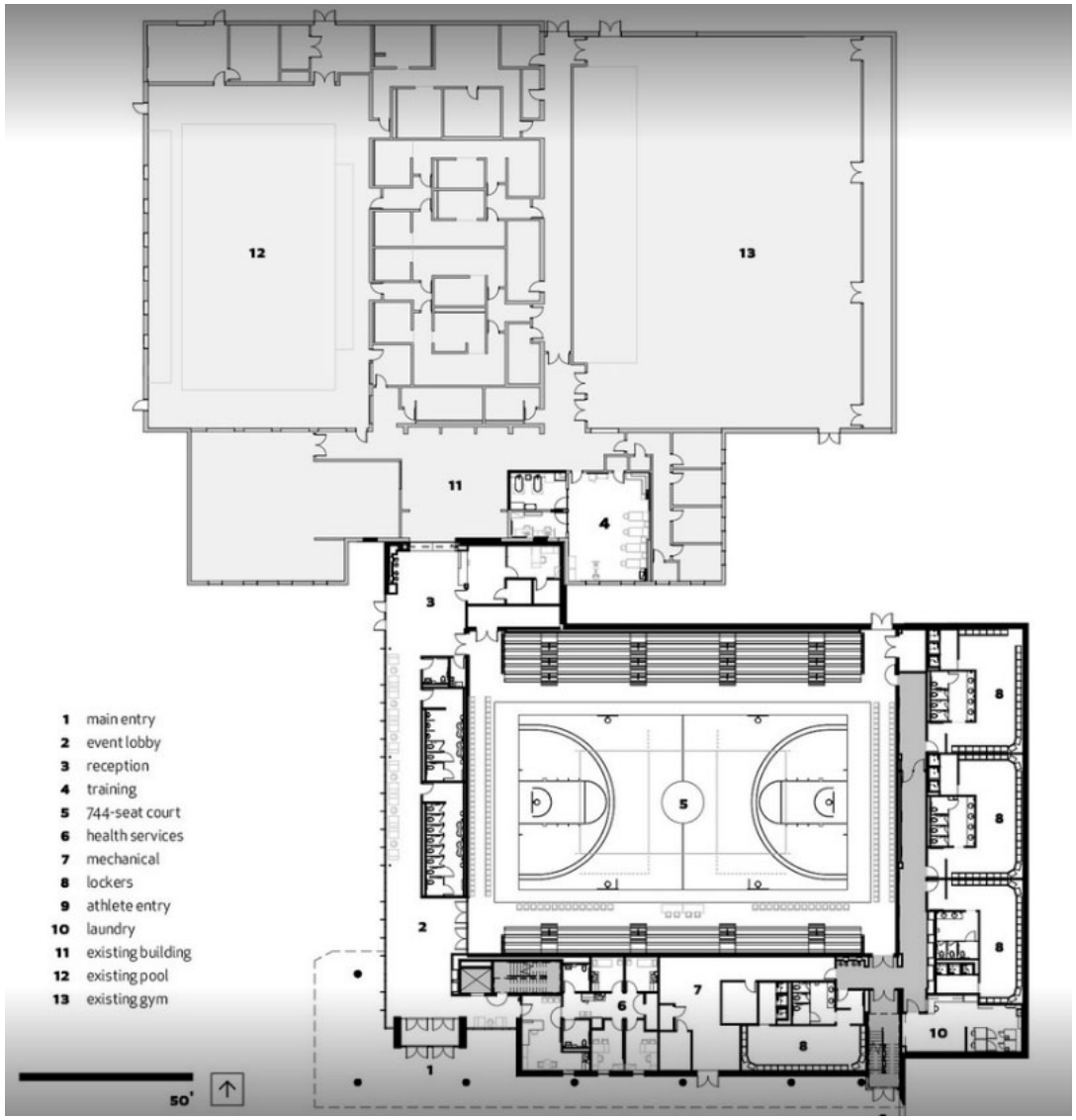
Rec Center - Case Study



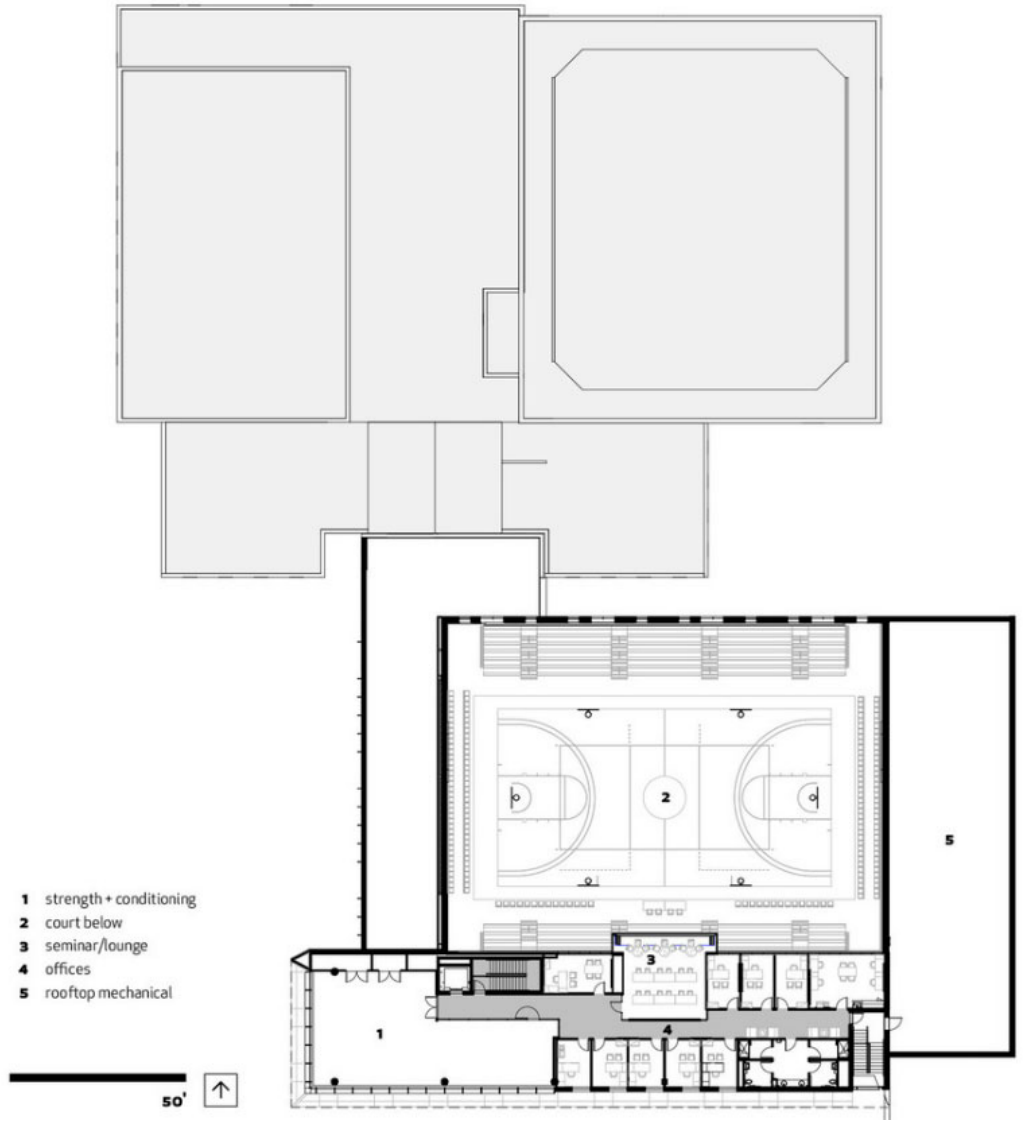
Rec Center - Case Study



Rec Center - Case Study



Rec Center - Case Study

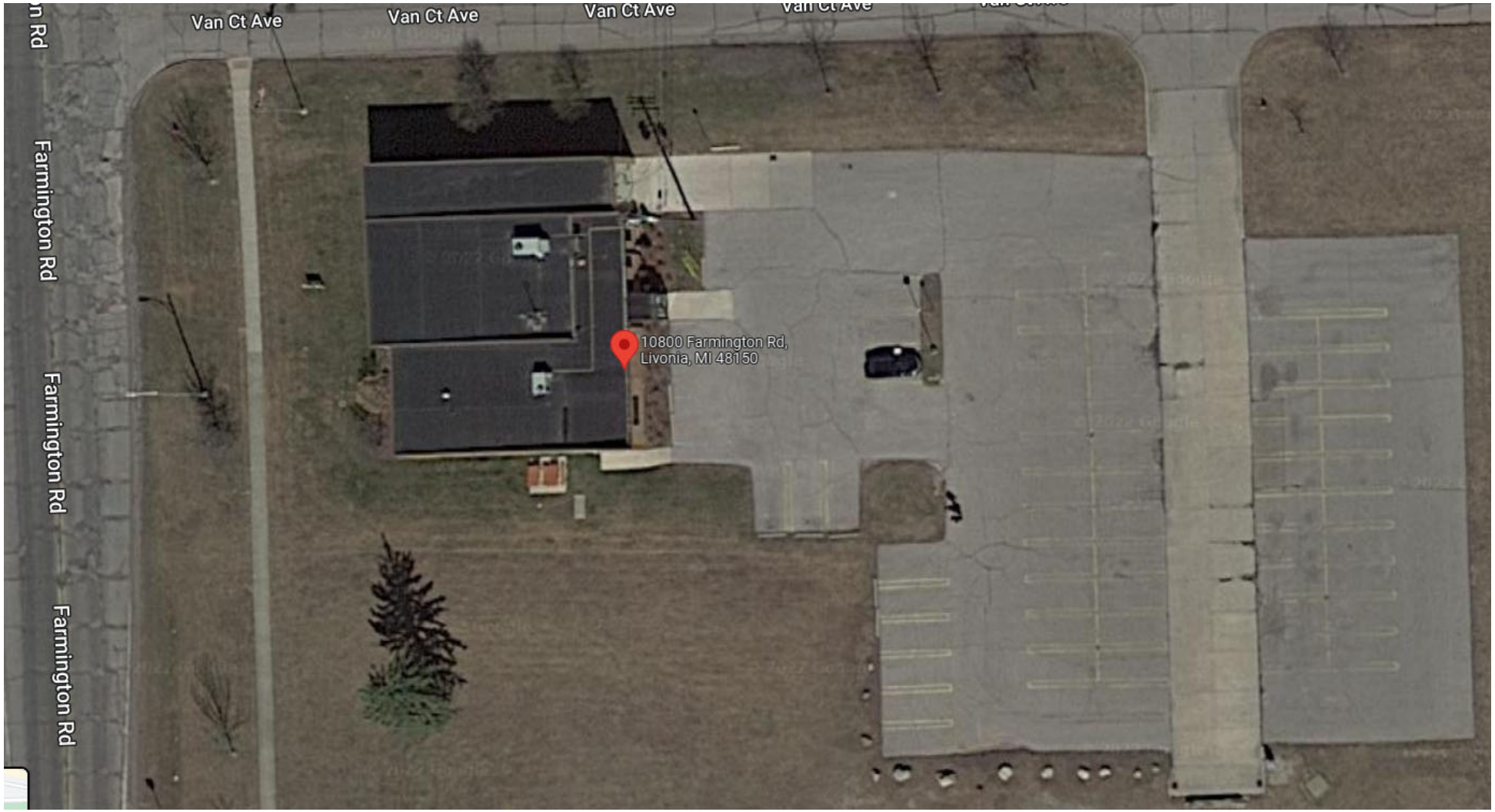


Housing Commission

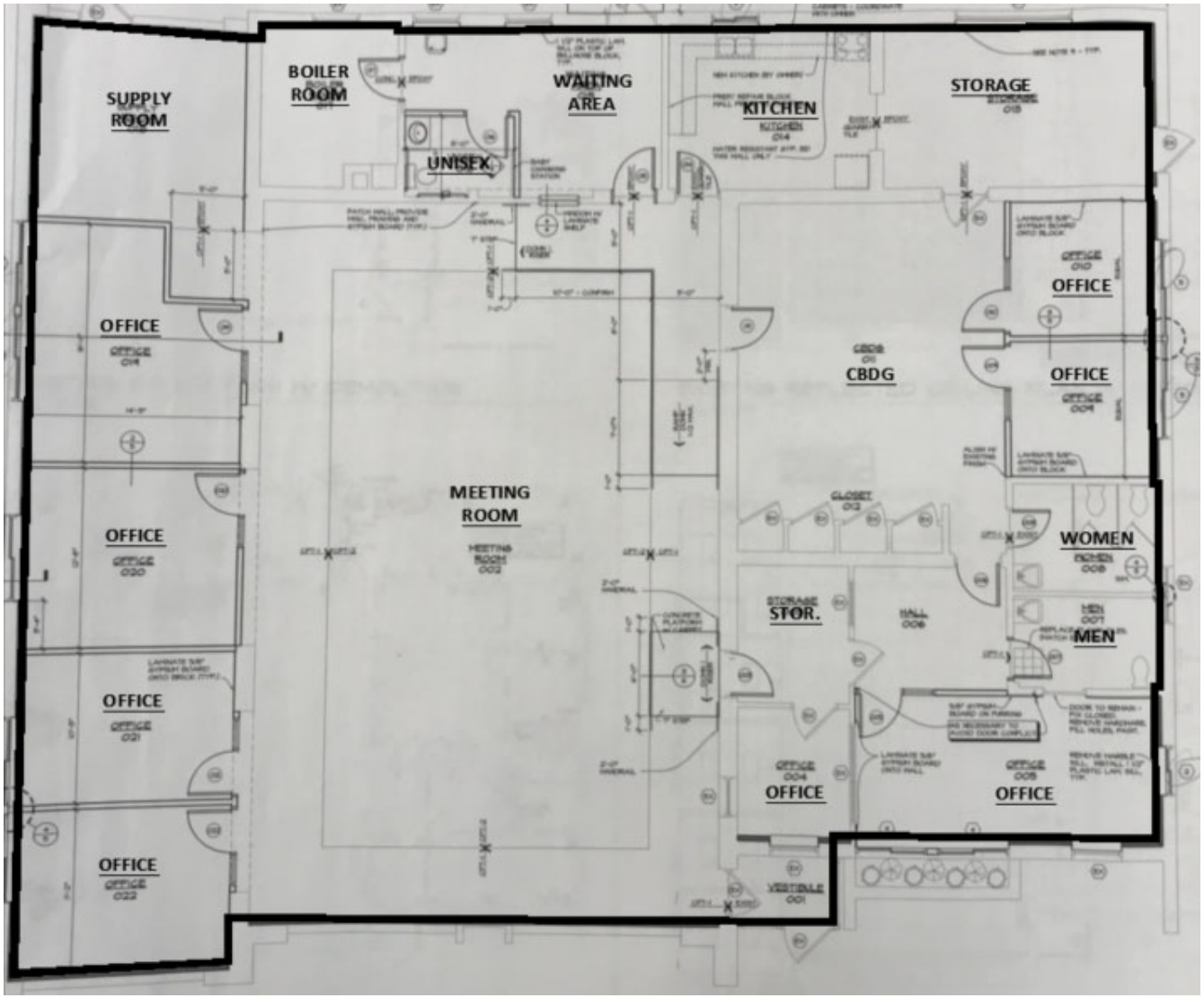


Year Built: 1966 (56 Years Old)

Housing Commission - Site Plan



Housing Commission - First Floor Plan



TOTAL AREA = 5,400 SF

Housing Commission - Preliminary Findings and Observations

Preliminary Findings/Observations:

Floor	Department (Respondent)	Data Set 1 Current					Data Set 2 Projected 5-years (Implementing Modern Workplace Standards)					Data Set 3 Projected 5-years (Implementing Modern Workplace Standards + Alternate Work Schedule/Free-Addressing)						Readiness + Willingness to Adopt AWS Model
		SF	FTE	SF/FTE	Offices	Wkstn.	SF	FTE	SF/FTE	Offices	Wkstn.	SF	FTE	SF/FTE	USF/Seat	Offices	Wkstn.	
Lower Level	Housing Commission (Brandie Isaacson)	5400	8	675	8	0	1600	8	200	8	0	1600	8	200	200	8	0	AWS = N FA = N
	Subtotal (Lower Level)	**5400**	**8**	**675**	**8**	**0**	**1600**	**8**	**200**	**8**	**0**	**1600**	**8**	**200**	**200**	**8**	**0**	

1. Former Fire Station building used for the purpose of Housing commission offices creates inefficiencies within the floor plan layout.
2. Conference Room (formerly the fire apparatus garage bay) is largely oversized.

Civic Center Library

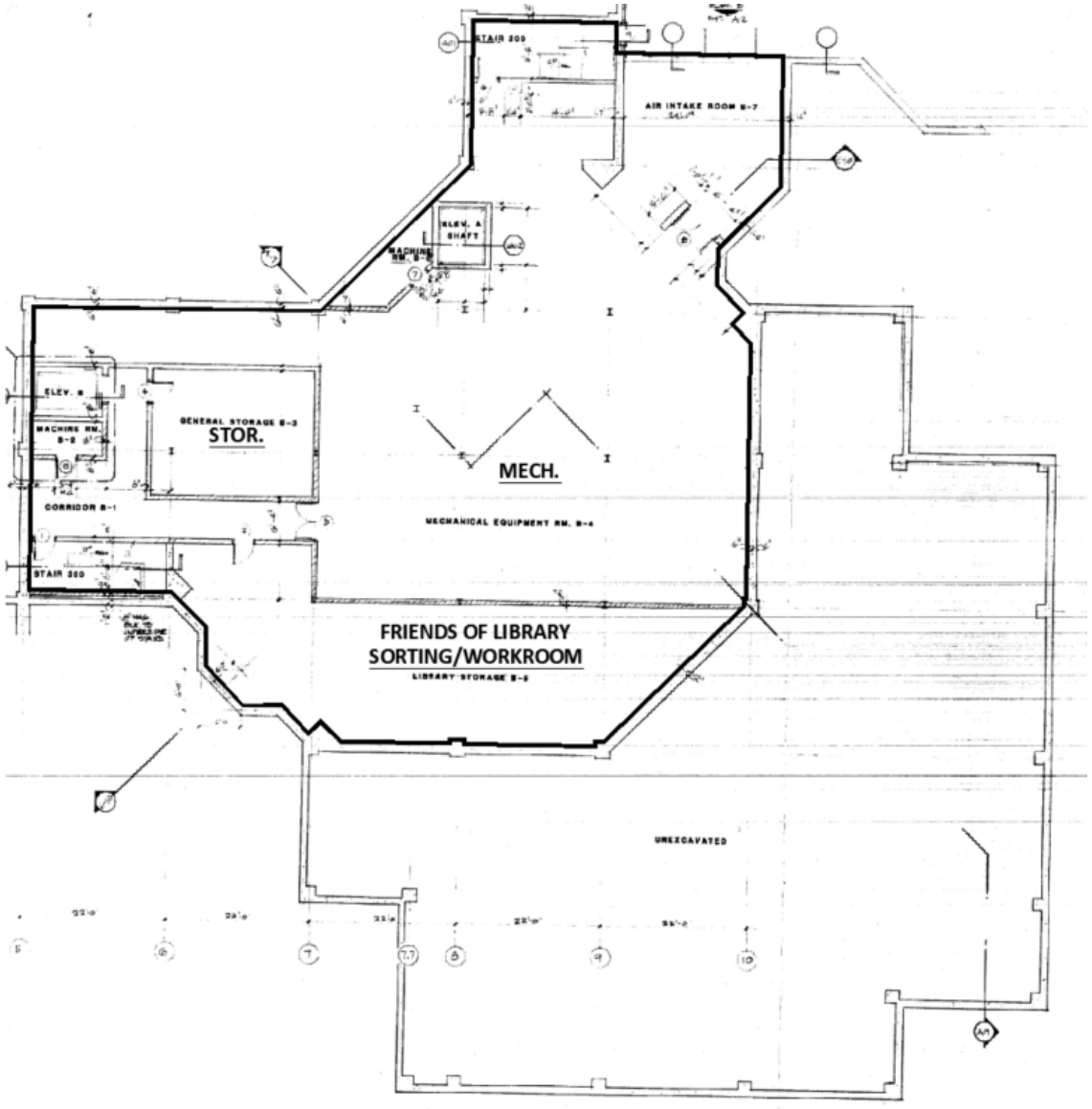


Year Built: 1987 (35 Years Old)

Civic Center Library - Aerial Photo

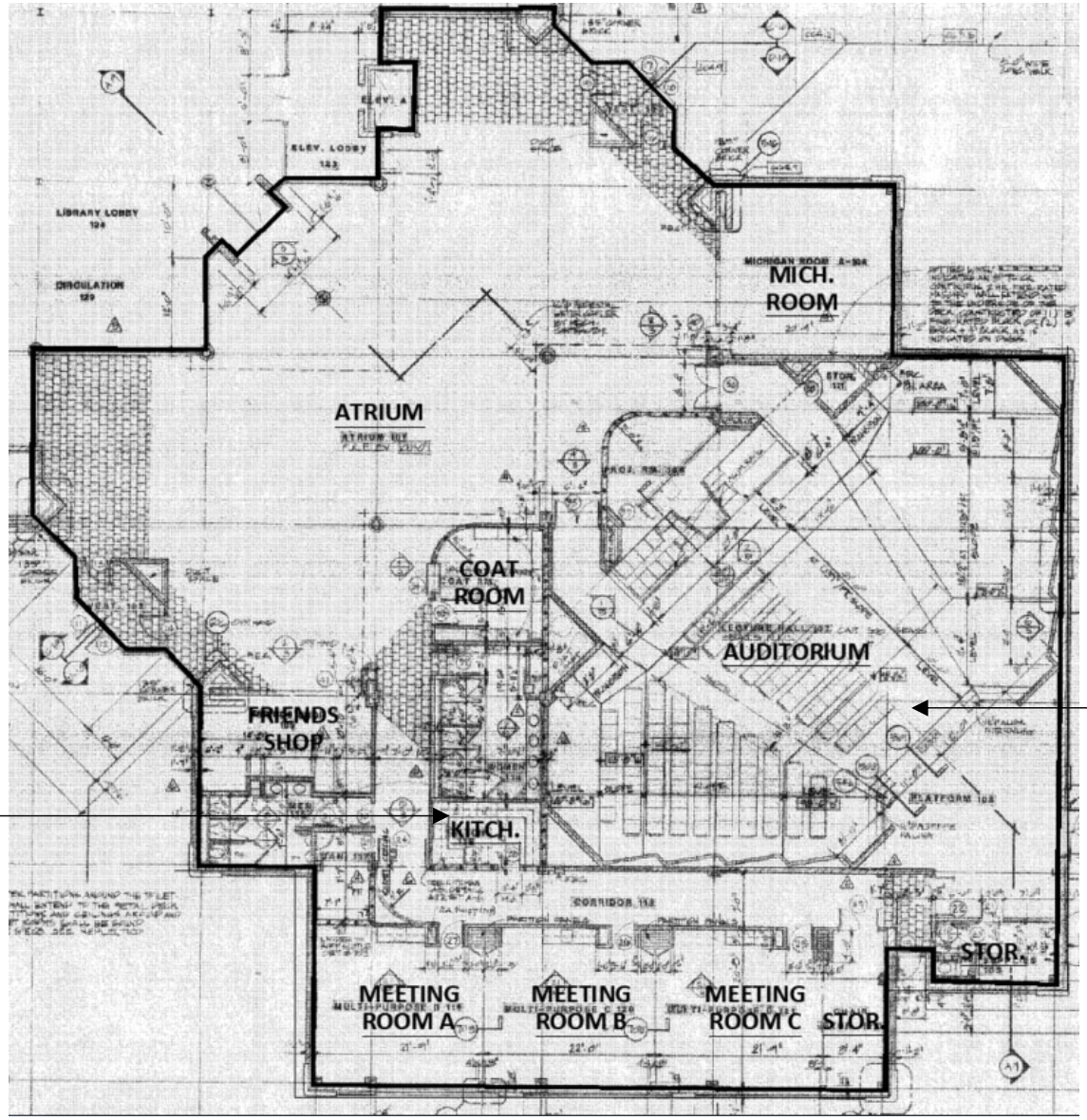


Civic Center Library - Lower-Level Floor Plan



TOTAL AREA = 8,300 SF

Civic Center Library - First Floor Plan (Lecture Hall)

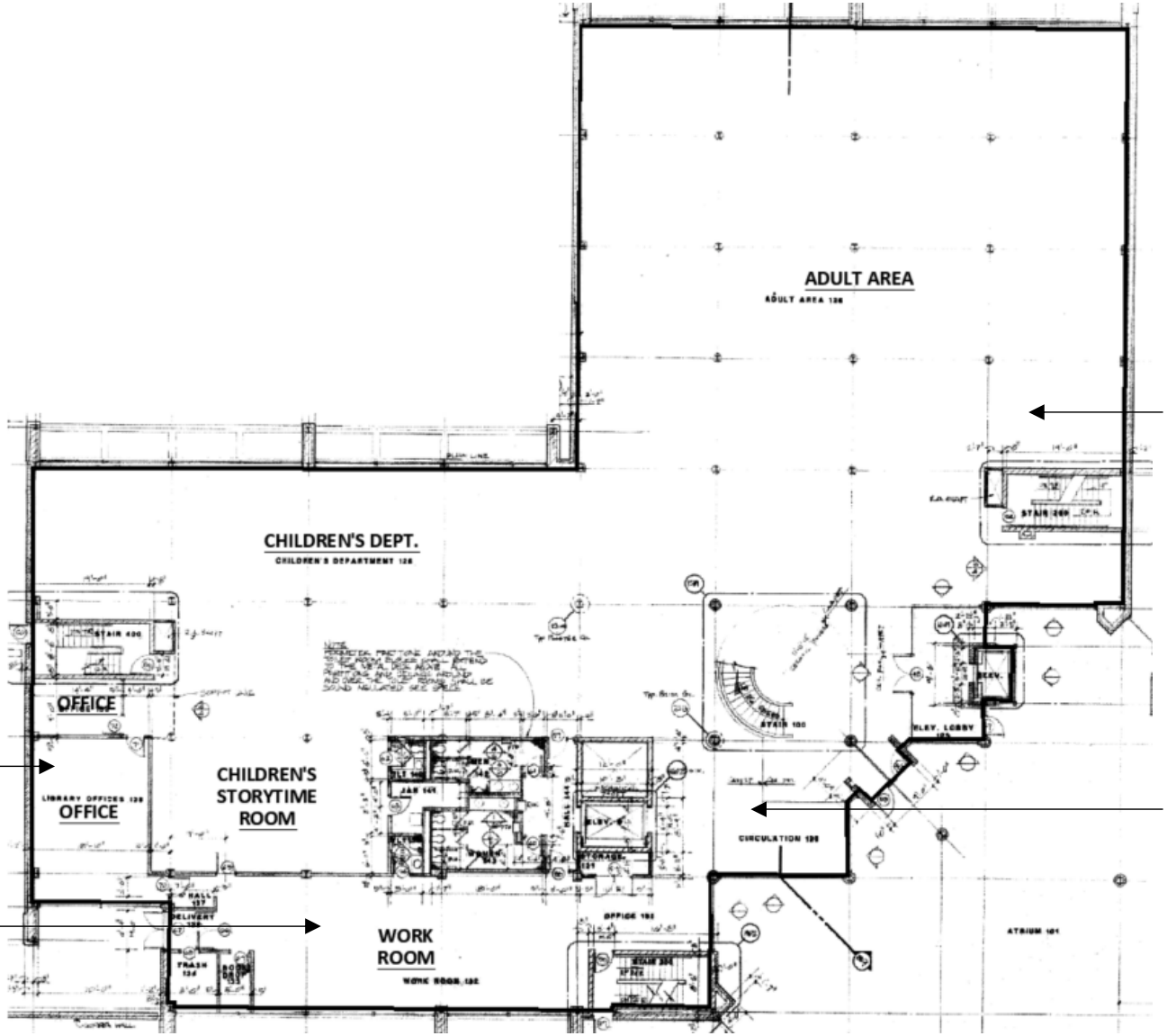


KITCHEN IS TOO SMALL

AUDITORIUM IS CURRENTLY UNDERUTILIZED DUE TO COVID RESTRICTIONS

TOTAL AREA = 13,300 SF

Civic Center Library - First Floor Plan



2 FTE
3 WKSTN

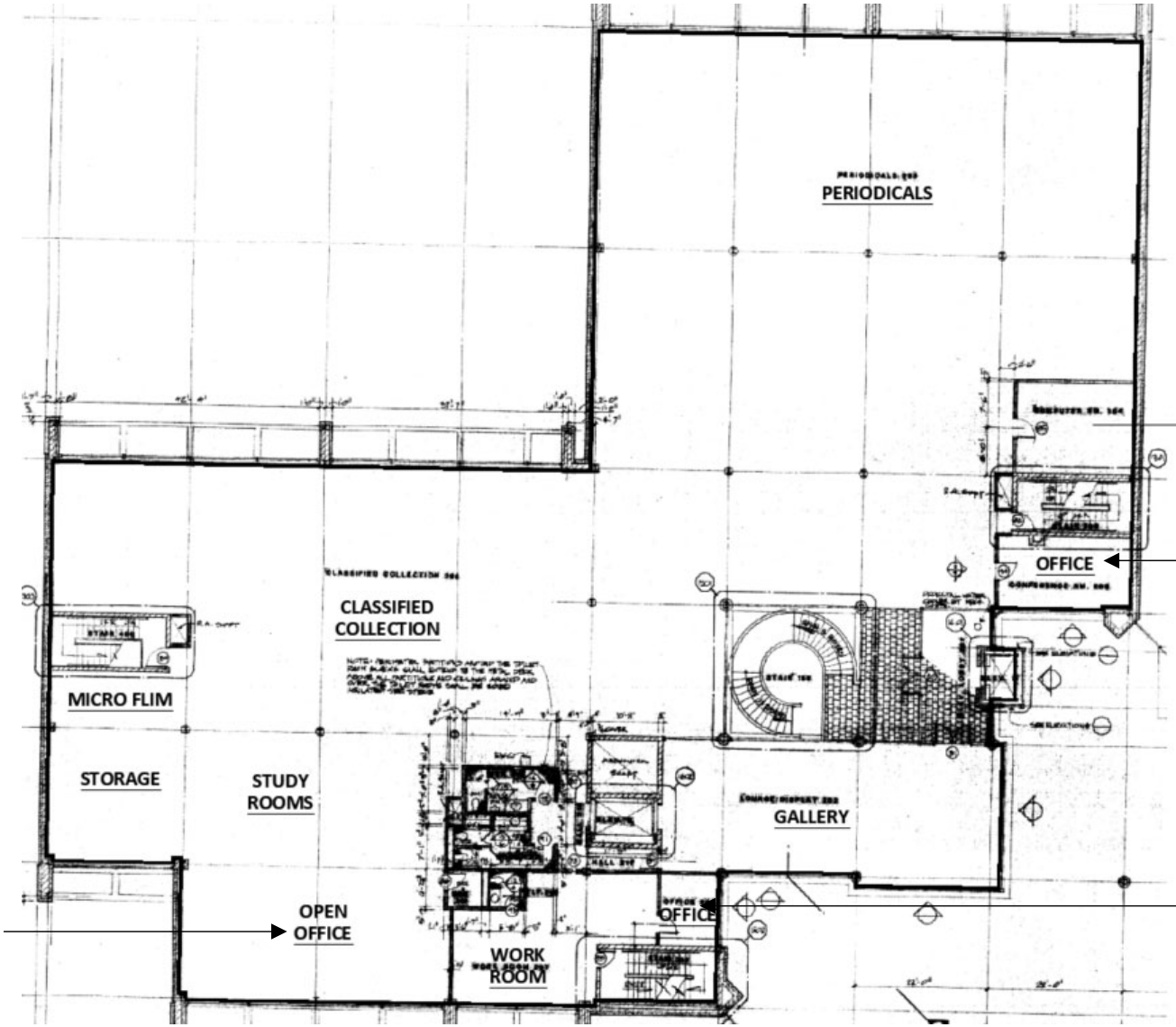
3 FTE
4 WKSTN

2 -3 FTE

10 FTE
12 WKSTN

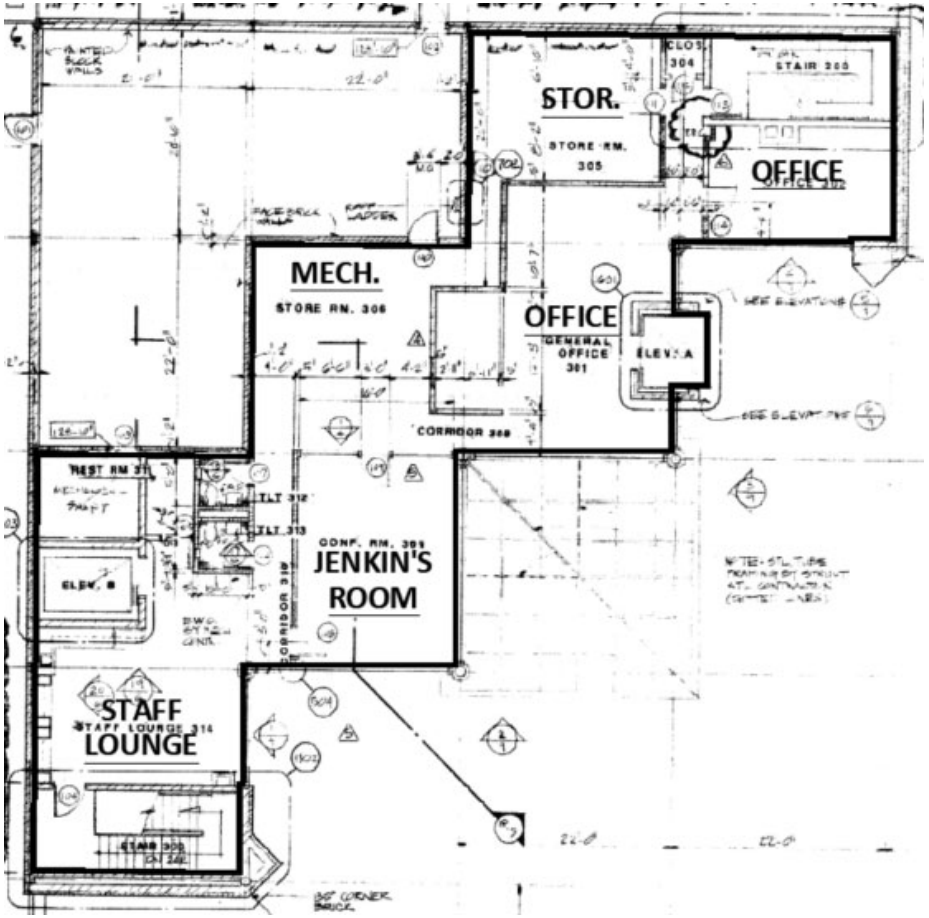
TOTAL AREA = 19,000 SF

Second Floor Plan



TOTAL AREA = 19,400 SF

Civic Center Library - Third Floor Plan



TOTAL AREA = 3,320 SF

Civic Center Library - Utilization Analysis

	Meeting Room A							Meeting Room B							Meeting Room C							Michigan Room						
	Mon.	Tue.	Wed.	Thur.	Fri.	Sat.	Sun.	Mon.	Tue.	Wed.	Thur.	Fri.	Sat.	Sun.	Mon.	Tue.	Wed.	Thur.	Fri.	Sat.	Sun.	Mon.	Tue.	Wed.	Thur.	Fri.	Sat.	Sun.
9:00 AM	R	R	R	LP	LP	R		R	R	LP	LP	LP	R		R	R	LP	R	LP	R		R	LP	R	R	LP	R	
9:30 AM	R	R	R	LP	LP	R		R	R	LP	LP	LP	R		R	R	LP	R	LP	R		R	LP	R	R	LP	R	
10:00 AM	R	R	R	LP	LP	R		R	R	LP	LP	LP	R		R	R	LP	R	LP	R		R	LP	R	R	LP	R	
10:30 AM	R	R	R	LP	LP	R		R	R	LP	LP	LP	R		R	R	LP	R	LP	R		R	LP	R	R	LP	R	
11:00 AM	R	R	R	LP	LP	R		R	R	LP	LP	LP	R		R	R	LP	R	LP	R		R	LP	R	R	LP	R	
11:30 AM	R	R	R	LP	LP	R		R	R	LP	LP	LP	R		R	R	LP	R	LP	R		R	LP	R	R	LP	R	
12:00 PM	R	R	R	LP	LP	R		R	R	LP	LP	LP	R		R	R	LP	R	LP	R		R	LP	R	R	LP	R	
12:30 PM	R	R	R	LP	LP	R		R	R	LP	LP	LP	R		R	R	LP	R	LP	R		R	LP	R	R	LP	R	
1:00 PM	R	R	R	LP	LP	R	R	R	R	LP	LP	LP	R		R	R	LP	R	LP	R		R	LP	R	R	LP	R	R
1:30 PM	R	R	R	LP	LP	R	R	R	R	LP	LP	LP	R		R	R	LP	R	LP	R		R	LP	R	R	LP	R	R
2:00 PM	R	R	R	LP	LP	R	R	R	R	LP	LP	LP	R		R	R	LP	R	LP	R		R	LP	R	R	LP	R	R
2:30 PM	R	R	R	LP	LP	R	R	R	R	LP	LP	LP	R		R	R	LP	R	LP	R		R	LP	R	R	LP	R	R
3:00 PM	R	R	R	LP	LP	R	R	R	R	LP	LP	LP	R		R	R	LP	R	LP	R		R	LP	R	R	LP	R	R
3:30 PM	R	R	R	LP	LP	R	R	R	R	LP	LP	LP	R		R	R	LP	R	LP	R		R	LP	R	R	LP	R	R
4:00 PM	R	R	R	LP	LP	R	R	R	R	LP	LP	LP	R		R	R	LP	R	LP	R		R	LP	R	R	LP	R	R
4:30 PM	R	R	R	LP	LP	R	R	R	R	LP	LP	LP	R		R	R	LP	R	LP	R		R	LP	R	R	LP	R	R
5:00 PM	R	R	R	LP	LP	R	R	R	R	LP	LP	LP	R		R	R	LP	R	LP	R		R	LP	R	R	LP	R	R
5:30 PM	R	R	R	LP				R	R	LP	LP				R	R	LP	R				R	LP	R	R			
6:00 PM	R	R	R	LP				R	R	LP	LP				R	R	LP	R				R	LP	R	R			
6:30 PM	R	R	R	LP				R	R	LP	LP				R	R	LP	R				R	LP	R	R			
7:00 PM	R	R	R	LP				R	R	LP	LP				R	R	LP	R				R	LP	R	R			
7:30 PM	R	R	R	LP				R	R	LP	LP				R	R	LP	R				R	LP	R	R			
8:00 PM	R	R	R	LP				R	R	LP	LP				R	R	LP	R				R	LP	R	R			
8:30 PM	R	R	R	LP				R	R	LP	LP				R	R	LP	R				R	LP	R	R			
9:00 PM	R	R	R	LP				R	R	LP	LP				R	R	LP	R				R	LP	R	R			
9:30 PM																												

Notes:
1. Assembly (gaming floors) = 11 GSF
2. Assembly (without fixed seats, chairs only, not fixed) = 7 NSF
3. Assembly (without fixed seats, standing space) = 5 NSF
4. Assembly (without fixed seats, tables and chairs) = 15 NSF
5. Fixed seating (actual seats installed)
6. LP = Library Program
7. R = Rental
8. PU = Public Use
9. SM = Staff Meeting
10. PM = Public Meeting
11. ST = Storytimes
12. FW = FOL Workshop
13. PA = Proctoring by Appointment

Civic Center Library - Utilization Analysis

	Meeting Room A							Meeting Room B							Meeting Room C							Michigan Room						
	Mon.	Tue.	Wed.	Thur.	Fri.	Sat.	Sun.	Mon.	Tue.	Wed.	Thur.	Fri.	Sat.	Sun.	Mon.	Tue.	Wed.	Thur.	Fri.	Sat.	Sun.	Mon.	Tue.	Wed.	Thur.	Fri.	Sat.	Sun.
Room Availability (Hours per day)	12	12	12	12	8	8	4	12	12	12	12	8	8	4	12	12	12	12	8	8	4	12	12	12	12	8	8	4
Room Utilization (Hours per day)	12	12	12	12	8	8	4	12	12	12	12	8	8	0	12	12	12	12	8	8	0	12	12	12	12	8	8	4
Percent Utilized	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	100%	100%

Room Size (SF)	438	438	429	502
Occupant Load Factor (NSF/OCC)	15	15	15	15
Max Occupants	29	29	29	33
Average Class Size	24	24	24	24

Civic Center Library - Utilization Analysis

	Auditorium							Atrium							Jenkins Room							Storytime Room							Quiet Study Proctoring Room						
	Mon.	Tue.	Wed.	Thur.	Fri.	Sat.	Sun.	Mon.	Tue.	Wed.	Thur.	Fri.	Sat.	Sun.	Mon.	Tue.	Wed.	Thur.	Fri.	Sat.	Sun.	Mon.	Tue.	Wed.	Thur.	Fri.	Sat.	Sun.	Mon.	Tue.	Wed.	Thur.	Fri.	Sat.	Sun.
9:00 AM	LP	LP	LP	R	LP	LP						PU	PU		SM				SM			ST	ST	ST	ST		LP		PA	PA	PA	PA	PA	PA	
9:30 AM	LP	LP	LP	R	LP	LP						PU	PU		SM				SM			ST	ST	ST	ST		LP		PA	PA	PA	PA	PA	PA	
10:00 AM	LP	LP	LP	R	LP	LP						PU	PU		SM				SM			ST	ST	ST	ST		LP		PA	PA	PA	PA	PA	PA	
10:30 AM	LP	LP	LP	R	LP	LP						PU	PU		SM				SM			ST	ST	ST	ST		LP		PA	PA	PA	PA	PA	PA	
11:00 AM	LP	LP	LP	R	LP	LP						PU	PU		SM				SM			ST	ST	ST	ST		LP		PA	PA	PA	PA	PA	PA	
11:30 AM	LP	LP	LP	R	LP	LP						PU	PU		SM				SM			ST	ST	ST	ST		LP		PA	PA	PA	PA	PA	PA	
12:00 PM	LP	LP	LP	R	LP	LP					LP	PU	PU		SM				SM			ST	ST	ST	ST		LP		PA	PA	PA	PA	PA	PA	
12:30 PM	LP	LP	LP	R	LP	LP					LP	PU	PU		SM												LP		PA	PA	PA	PA	PA	PA	
1:00 PM	LP	LP	LP	R	LP	LP	R	PU	PU	PU	LP	PU	PU	PU	SM	SM/PM	SM/PM										LP		PA	PA	PA	PA	PA	PA	PA
1:30 PM	LP	LP	LP	R	LP	LP	R	PU	PU	PU	LP	PU	PU	PU	SM	SM/PM	SM/PM										LP		PA	PA	PA	PA	PA	PA	PA
2:00 PM	LP	LP	LP	R	LP	LP	R	PU	PU	PU	LP	PU	PU	PU	SM	SM/PM	SM/PM										LP		PA	PA	PA	PA	PA	PA	PA
2:30 PM	LP	LP	LP	R	LP	LP	R	PU	PU	PU		PU	PU	PU	SM	SM/PM	SM/PM										LP		PA	PA	PA	PA	PA	PA	PA
3:00 PM	LP	LP	LP	R	LP	LP	R	PU	PU	PU		PU	PU	PU	SM	SM/PM	SM/PM										LP		PA	PA	PA	PA	PA	PA	PA
3:30 PM	LP	LP	LP	R	LP	LP	R	PU	PU	PU		PU	PU	PU	SM	SM/PM	SM/PM										LP		PA	PA	PA	PA	PA	PA	PA
4:00 PM	LP	LP	LP	R	LP	LP	R	PU	PU	PU		PU	PU	PU	SM	SM/PM	SM/PM										LP		PA	PA	PA	PA	PA	PA	PA
4:30 PM	LP	LP	LP	R	LP	LP	R	PU	PU	PU		PU	PU	PU	SM	SM/PM	SM/PM										LP		PA	PA	PA	PA	PA	PA	PA
5:00 PM	LP	LP	LP	R	LP	LP	R	PU	PU	PU		PU	PU	PU	SM	SM/PM	SM/PM	PM									LP		PA	PA	PA	PA	PA	PA	PA
5:30 PM	LP	LP	LP	R											SM	SM/PM	SM/PM	PM											PA	PA	PA	PA	PA		
6:00 PM	LP	LP	LP	R											SM	SM/PM	SM/PM	PM											PA	PA	PA	PA	PA		
6:30 PM	LP	LP	LP	R											SM	SM/PM	SM/PM	PM											PA	PA	PA	PA	PA		
7:00 PM	LP	LP	LP	R											SM	SM/PM	SM/PM	PM											PA	PA	PA	PA	PA		
7:30 PM	LP	LP	LP	R											SM	SM/PM	SM/PM	PM											PA	PA	PA	PA	PA		
8:00 PM	LP	LP	LP	R											SM	SM/PM	SM/PM	PM											PA	PA	PA	PA	PA		
8:30 PM	LP	LP	LP	R											SM	SM/PM	SM/PM	PM																	
9:00 PM	LP	LP	LP	R											SM	SM/PM	SM/PM	PM																	
9:30 PM																																			

Civic Center Library - Utilization Analysis

	Auditorium							Atrium							Jenkins Room							Storytime Room							Quiet Study Proctoring Room						
	Mon.	Tue.	Wed.	Thur.	Fri.	Sat.	Sun.	Mon.	Tue.	Wed.	Thur.	Fri.	Sat.	Sun.	Mon.	Tue.	Wed.	Thur.	Fri.	Sat.	Sun.	Mon.	Tue.	Wed.	Thur.	Fri.	Sat.	Sun.	Mon.	Tue.	Wed.	Thur.	Fri.	Sat.	Sun.
Room Availability (Hours per day)	12	12	12	12	8	8	4	12	12	12	12	8	8	4	12	12	12	12	8	8	4	12	12	12	12	8	8	4	12	12	12	12	8	8	4
Room Utilization (Hours per day)	12	12	12	12	8	8	4	4	4	4	2	8	8	4	12	8	8	4	3	0	0	3	3	3	3	0	8	0	11	11	11	11	11	8	4
Percent Utilized	100%	100%	100%	100%	100%	100%	100%	33%	33%	33%	17%	100%	100%	100%	100%	67%	67%	33%	38%	0%	0%	25%	25%	25%	25%	0%	100%	0%	92%	92%	92%	92%	138%	100%	100%

Room Size (SF)	4070	4730	360	860	293
Occupant Load Factor (NSF/OCC)	Actual	7	Actual	7	15
Max Occupants	290	676	12	123	20
Average Class Size	290	125	12	40	8

Civic Center Library - Preliminary Findings and Observations

Preliminary Findings/Observations:

Floor	Department (Respondent)	Data Set 1 Current					Data Set 2 Projected 5-years (Implementing Modern Workplace Standards)					Data Set 3 Projected 5-years (Implementing Modern Workplace Standards + Alternate Work Schedule/Free-Addressing)						Readiness + Willingness to Adopt AWS Model
		SF	FTE	SF/FTE	Offices	Wkstn.	SF	FTE	SF/FTE	Offices	Wkstn.	SF	FTE	SF/FTE	USF/Seat	Offices	Wkstn.	
Lower Level	Library Services (Toni LaPorte)	8300	0	NA	0	0	8300	0	NA	0	0	8300	0	NA	NA	0	0	NA
	Subtotal (Lower Level)	**8300**	**0**	**NA**	**0**	**0**	**8300**	**0**	**NA**	**0**	**0**	**8300**	**0**	**NA**	**NA**	**0**	**0**	
First Floor	Library Services (Toni LaPorte)	32300	17	1900	0	19	32300	17	1900	0	19	32300	17	1900	1700	0	19	AWS = N FA = N
	Subtotal (First Floor)	**32300**	**17**	**1900**	**0**	**19**	**32300**	**17**	**1900**	**0**	**19**	**32300**	**17**	**1900**	**1700**	**0**	**19**	
Second Floor	Library Services (Toni LaPorte)	19,400	9	2156	2	12	19,400	9	2156	2	12	19400	9	2156	1386	2	12	AWS = N FA = N
	Subtotal (Second Floor)	**19400**	**9**	**2156**	**2**	**12**	**19400**	**9**	**2156**	**2**	**12**	**19400**	**9**	**2156**	**1386**	**2**	**12**	
Third Floor	Library Administration (Toni LaPorte)	3,320	2	1660	1	2	3,320	2	200	1	2	3320	2	1660	1107	1	2	AWS = N FA = N
	Subtotal (Third Floor)	**3320**	**2**	**1660**	**1**	**2**	**3320**	**2**	**1660**	**1**	**2**	**3320**	**2**	**1660**	**1107**	**1**	**2**	
	Total (Civic Center Library)	**63320**	**28**	**2261**	**3**	**33**	**63320**	**28**	**2261**	**3**	**33**	**63320**	**28**	**2261**	**1759**	**3**	**33**	

Civic Center Library - Preliminary Findings and Observations

Preliminary Findings/Observations:

1. Atrium is heavily used, needs more power/data, needs acoustical improvements
2. Staff workrooms (circulation, children's, and adult) need to be reconfigured and updated for better utilization.
3. Current layout is poor and deters from work efficiency. Built in 1988, the needs of the workers have changed quite a lot.
4. The following program elements were requested (square footage for these spaces, approximately 2,000 SF) is not reflected in the matrix above):
    - Coffee Shop = 500 SF
    - Storage = 200 SF
    - Larger Kitchen = 100 SF
    - Maker Space = 600 SF
    - We-Work Space = 600 SF

Library – Case Study

Client: City of Novi

Location: Novi, MI

Area: 55,000 SF

Completion date: 2011

Construction cost: $14,500,000 ($263/SF)

AE: BEI/Diamon and Schmitt Architects



Library – Case Study

BEI Architects & Engineers, Inc. is currently partnered with Diamond and Schmitt Architects to provide architectural and engineering services for a new two-story 55,000 square foot library for the City of Novi. The new library will replace the existing library, which will be demolished to make room for a new parking lot.

The new library is strategically located on the Novi Civil Center Campus with good visibility from 10 Mile Road.

The new library includes a book drop-off, a fireplace and landscaping, including bio-swales as part of the storm water management plant. It also includes an outdoor patio with views of the adjacent city-owned Fuerst Farm Park and space for a collection of over 180,000 volumes.

Among the many amenities, the new library will include a 200-seat meeting room, 104 computer stations, additional space for patrons, staff and collections, a teen area, Friends of the Novi Public Library used book store and a cafe.

Library – Case Study



Library – Case Study



Library – Case Study



Library – Case Study



Library – Case Study

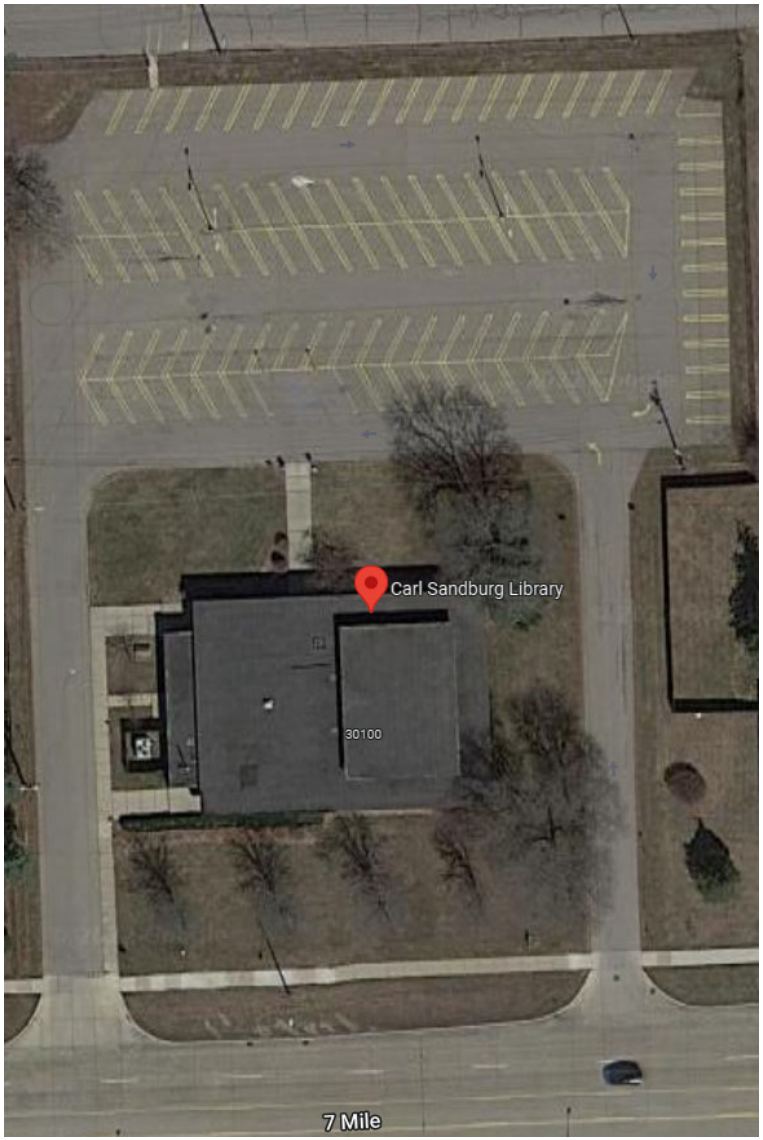


Carl Sandburg Library

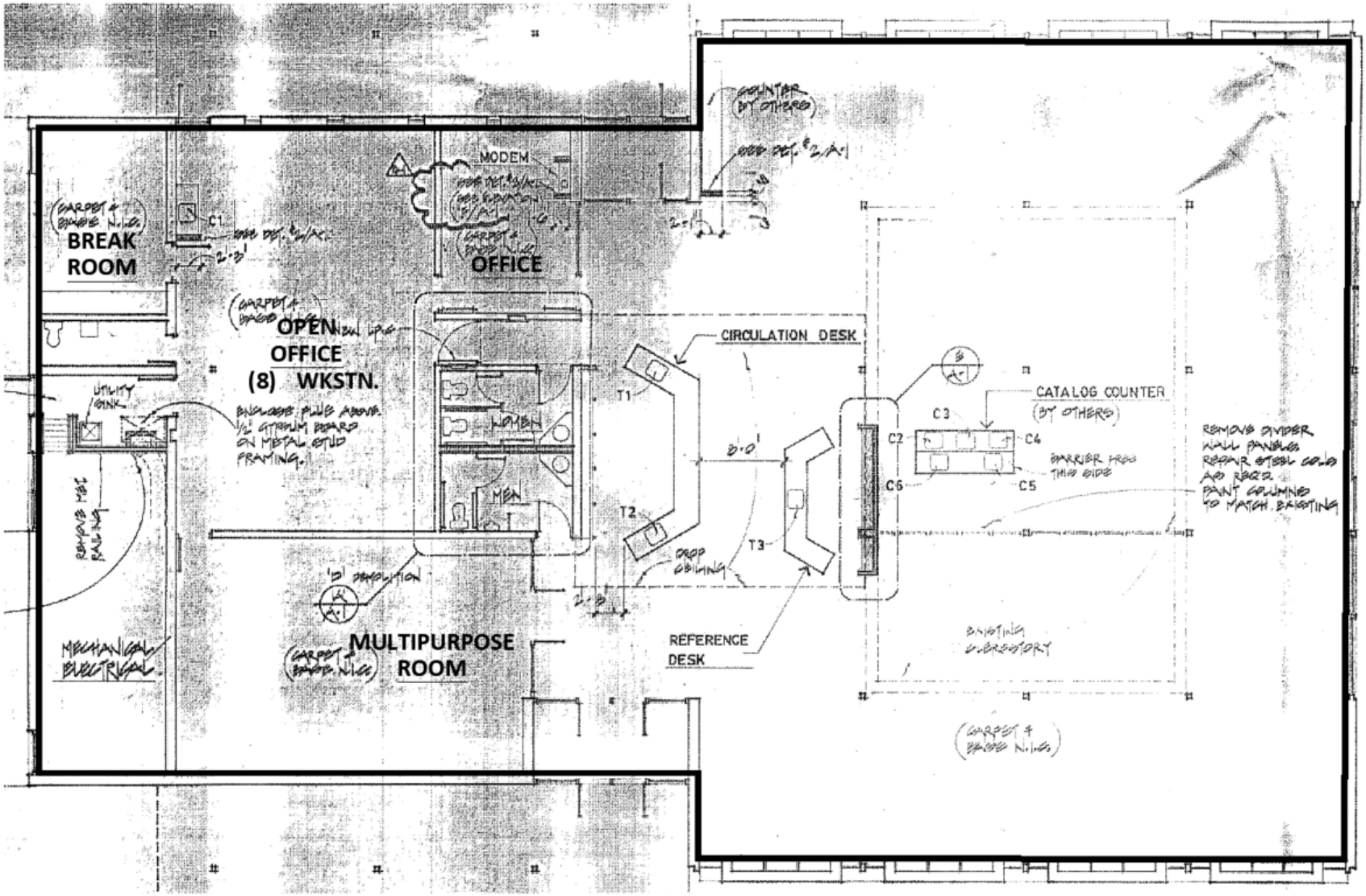


Year Built: 1961 (61 Years Old)

Carl Sandburg Library - Aerial Photo



Carl Sandburg Library - First Floor Plan



TOTAL AREA = 8,150 SF

Carl Sandburg Library - Preliminary Findings and Observations

Preliminary Findings/Observations:

Floor	Department (Respondent)	Data Set 1 Current					Data Set 2 Projected 5-years (Implementing Modern Workplace Standards)					Data Set 3 Projected 5-years (Implementing Modern Workplace Standards + Alternate Work Schedule/Free-Addressing)						Readiness + Willingness to Adopt AWS Model
		SF	FTE	SF/FTE	Offices	Wkstn.	SF	FTE	SF/FTE	Offices	Wkstn.	SF	FTE	SF/FTE	USF/Seat	Offices	Wkstn.	
Lower Level	Carl Sandburg Library Office Area (Jeff Lelek)	2100	9	233	1	8	1800	9	200	1	8	1800	9	200	200	1	8	AWS = N FA = N
	Carl Sandburg Library Public Area (Jeff Lelek)	6050	0	NA	0	0	6050	0	NA	0	0	6050	0	NA	NA	0	0	
	Subtotal (Lower Level)	**8150**	**9**	**906**	**1**	**8**	**7850**	**9**	**872**	**1**	**8**	**7850**	**9**	**872**	**872**	**1**	**8**	

1. Storage is lacking throughout

2. It's a small building, so we are always working to revise, consolidate and find new storage space. A renovation staff space could lead to improvements in these areas.

Client: City of Warren

Location: Warren, MI

Area: 6,640 SF

Completion date: February 2017

Construction cost:$2 ,150,000 ($323/SF)

AE: Partners in Architecture



New 21st Century Library Opens in South Warren

The replacement of the Dorothy M. Busch Branch Library began as part of a library millage passed by the community in 2010. The existing library constructed in 1963 could no longer serve the needs of the community and the building systems were failing. The project included the demolition of the existing 4,700 square foot library and adjacent house in preparation for the new building and expanded site amenities.

The new library was designed with flexibility in mind and integrated technology to accommodate a diverse range of programming and community use. The warm, welcoming and inspirational environment provides dedicated space for children, teens and adults. The library also boasts an abundance of technology accommodations including several computers, presentation equipment and Wi-Fi access. The site was greatly improved with new site circulation, increased parking, fresh landscaping and exterior reading areas. The project was completed in February 2017.


WARREN PUBLIC LIBRARY
DOROTHY M BUSCH BRANCH


WARREN PUBLIC LIBRARY
DOROTHY M BUSCH BRANCH


WARREN PUBLIC LIBRARY
DOROTHY M. BUSCH BRANCH
Library Hours
Mon & Wed 12-8
Tues, Thurs, Friday &
Saturday 9-5




WARREN PUBLIC LIBRARY
DOROTHY M BUSCH BRANCH





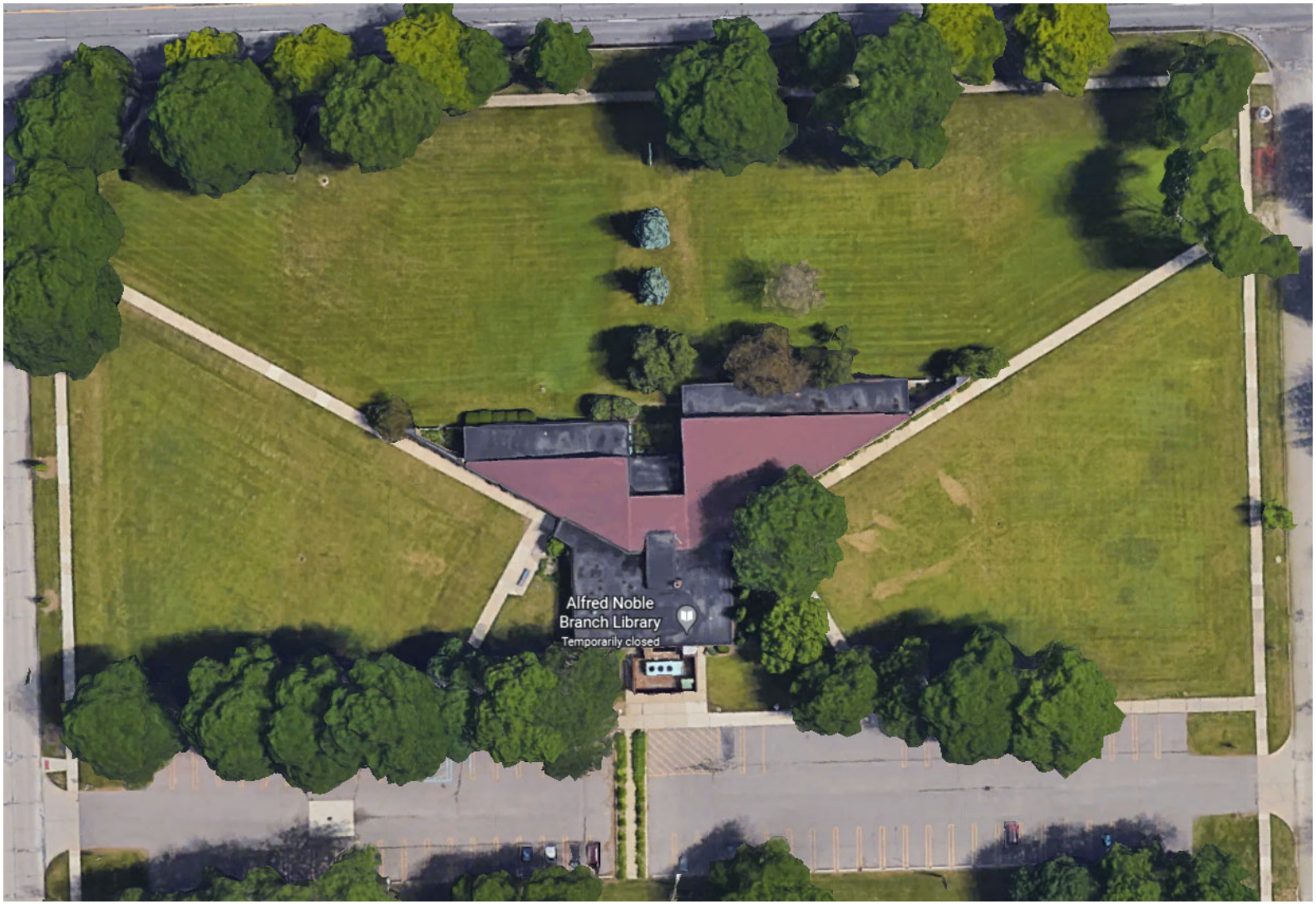

WARREN PUBLIC LIBRARY
DOROTHY M BUSH BRANCH

Alfred Noble Library

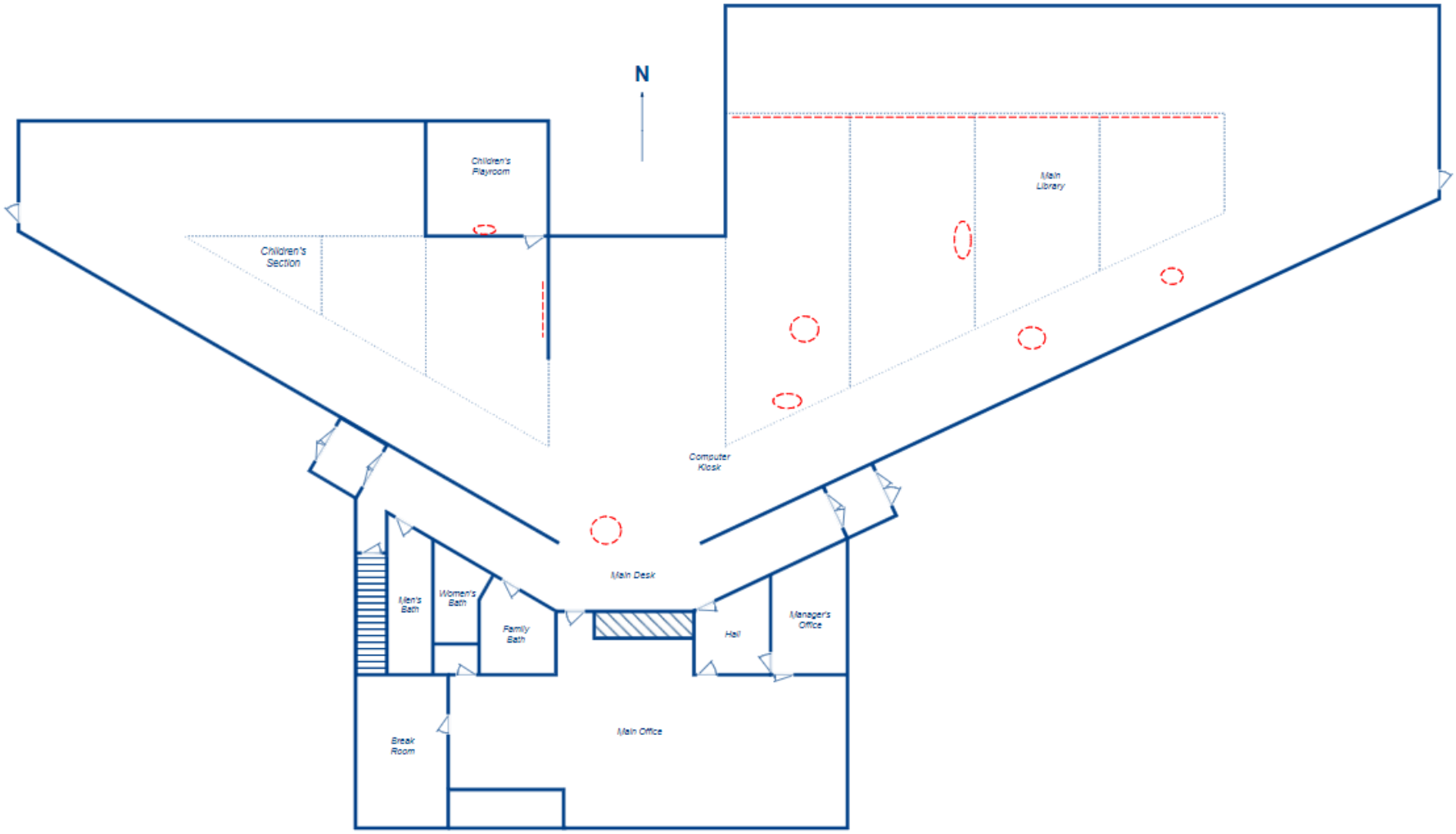


Year Built: 1967 (55 Years Old)

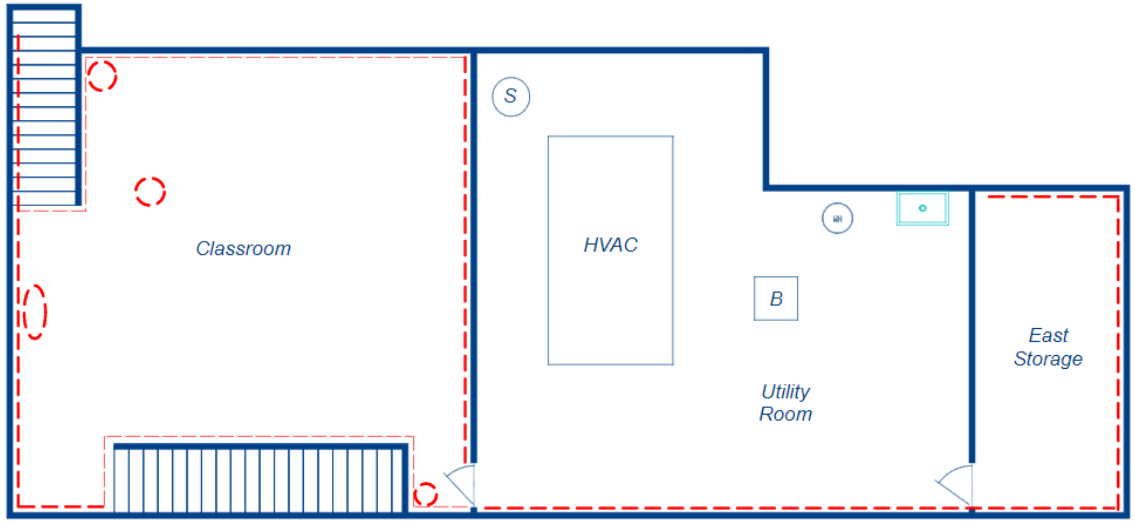
Alfred Noble Library - Aerial Photo



Alfred Noble Library – First Floor Plan



Alfred Noble Library – Basement Floor Plan



Alfred Noble Library - Preliminary Findings and Observations

Preliminary Findings/Observations:

1. Per the Opinion of Costs report published by OHM on March 8, 2021, the cost for building and site demo is $246,000; the cost for building renovations and site improvements is $1,620,000; and the cost for a new building is $6,430,000. See Appendix A for more details.
2. Per the Building Assessment prepared by Jerome Hanna, director of Inspection, on March 8, 2021, that was prompted by previous inspections and concerns about the interior of the structure in late 2019 due to concerns of water infiltration at the time; a limited moisture and microbial assessment was conducted at that time by Mold Quest International. Elevated levels of Penicillium/Aspergillus were noted but no Stachybotrys (black mold) was detected at the time. See Appendix A for more details.
3. Per the Affidavit published by Linda Gosselin, Michigan Master Assessing Officer, on August 23rd, 2021, the property at 32901 Plymouth Road, was found to fit the definition of functional obsolescence. See Appendix B for more details.

Appendix A – OHM Opinion of Costs and Building Assessment by Jerome Hanna

July 8, 2021

Mr. Michael Slater
Finance Director
City of Livonia

RE: Alfred Noble Library Opinion of Costs

Dear Mr. Slater:

In May 2021, OHM Advisors visited the Alfred Noble Library building and completed a walkthrough with City staff. The City of Livonia previously closed the Library in December 2019, due to moisture problems. The purpose of the visit was to review the current condition of the facility and provide the City with our professional opinion of costs for various options the City is currently considering. Additionally, the building assessment report completed by City Inspector Jerome Hanna as well as the limited moisture and microbial assessment report by MQI was provided to us. This information along with original building drawings were utilized to develop three conceptual opinion of costs requested by the City for their use.

Background and Summary

In October, 2019 a limited moisture and microbial assessment was completed by Mold Quest International. With several areas of water infiltration in the building, this assessment provided recommendations based on their limited testing as noted in the report. This report provided several remediation recommendations to be completed at the library. In December of 2019 the library was closed due to these findings and recommendations. Building systems were limited to provide a conditioned space. In March of 2021, a visual inspection of the building was completed by City Inspector Jerome Hanna which identified additional areas of work that should be addressed pertaining to water infiltration, water damage, and microbial growth.

In May 2021, city staff and OHM walked the building to review the current condition of the building and had additional discussions regarding the building condition. These items, as well as the information from previous report findings, were utilized in preparing a high-level conceptual cost analysis for repair work identified in the scope of work assumed below for the building. Additionally, OHM developed a cost opinion to demolish the building and prepare a clean site as well as a cost opinion for a new building of comparable size, use and materials. Below is a summary of these three approaches and associated costs:

Option	Description	Cost
1	Building/Site Demolition	$ 246,000
2	Building Renovation and Site Improvements	$ 1,620,000
3	New Building	$ 6,430,000

A further breakdown of the above costs, including general construction, contingency, design fees, and contractor fees are outlined below in the Opinion of Cost section.

The following lists and photos are references, and provide explanation of the scope of work assumed to be included as part of a possible renovation project:

OHM Advisors®
34000 PLYMOUTH ROAD
LIVONIA, MICHIGAN 48150
T 734.522.6711
F 734.522.6427
OHM-Advisors.com

Exterior

1. Removal and replacement of asphalt shingles – include removal of deteriorated wood decking and replace flashing.
2. Removal and replacement of membrane roofing – provide additional taper and improved drainage, additional provide required minimum flashing heights at perimeter conditions.
3. General tuckpointing of masonry
4. At basement footprint, remove soils at exterior down to foundation and provide new waterproofing.
5. Window seal replacement
6. Re-grading perimeter to provide positive drainage away from building
7. Relocate roof downspout discharges away from building.



Roof ponding, little/no positive slope to scuppers



Roof ponding, little/no positive slop to scuppers. Less then minimal flashing height at transition to roof, failed flashing sealant.



Miscellaneous brick repairs (tuckpointing), miscellaneous general window sealant failures as well as interior wood moisture issues noted in report



Reinstall proper termination of downspouts, regrade low spots that have settled due to water.

Interior

1. Remove and replace drop ceiling tiles
2. Remove and replace wall and door trim
3. Remove and replace drywall – at both walls and ceilings where water damaged.
4. Remove and replace carpeted flooring areas
5. Clean and repaint CMU Block walls
6. Remove and replace any cavity insulation.
7. Replace furnishings
8. Cleaning of entire space to remain – damp wipe and/or HEPA vacuum.
9. Clean HVAC systems and replace filters.
10. Electrical devices, fixtures, or wiring that has been in contact with water should be replaced.



General interior conditions:



Lay-in ceiling, various areas of water damage



Basement, interior wall paint flaking and water infiltration from exterior.



Additional items noted/discussed follow and are considered part of renovation opinion of cost:

1. Replace furnace, it is original to the structure and past its life span.
2. Current restrooms do not provide ADA Accessible fixtures.



Opinion of Cost

Of recent, the current market has been volatile and ever changing as it relates to construction costs. With cost of materials availability and long lead times, labor, and unknown factors, the following opinion of costs have taken into consideration higher than normal contingency value as well as included an escalation markup for both materials and an estimated construction time from starting end of 2021 at the earliest. If additional years are considered, there should be escalation costs added to these numbers between 3-4 annually%.

Demolition of existing building and site clearing

The opinion of cost for demolition of existing building includes demolition of entire building, removal of foundations and infill at basement area, sidewalks and site garden areas to be removed, general infill grading and seeding of area. Parking lot to remain.

No	Description	Cost
1	Building demolition	$ 135,000
2	Basement demo and infill	$ 28,000
3	Site	$ 27,000
4	Subtotal	$ 190,000
5	Contingency (10%)	$ 19,000
6	Escalation (4%)	$ 8,000
7	Testing (5%)	$ 10,000
8	General Conditions/OH&P (10%)	$ 19,000
10	Total	$ 246,000

Renovation of existing building and site improvements

The opinion of costs includes items noted above. Additionally, we have included a 30% contingency with type of renovation work being performed and possible mitigation required as additional areas/materials are exposed. We have also included a 7% contingency that is reflective of the current market conditions for material costs, this could be an anomaly that levels off or maintains itself as a new norm. A testing allowance of 6% is included due to further

assessment of material abatement and existing conditions of materials that should be re-tested as work is completed to confirm all work has been done correctly.

No	Description	Cost
1	Building Renovations	$ 700,000
2	Site work	$ 35,000
3	Furniture	$ 250,000
4	Subtotal	$ 985,000
5	Contingency (30%)	$ 296,000
6	Escalation/Material Contingency (7%)	$ 69,000
7	Testing (6%)	$ 59,000
8	General Conditions/OH&P (10%)	$ 100,000
9	Professional Fees (12%)	$ 111,000
10	Total	$ 1,620,000

New building of similar size and function
The new building cost includes cost for a new 13,500 SF building on a green site.

No	Description	Cost
1	Building	$ 3,700,000
2	Site work	$ 550,000
3	Furniture	$ 250,000
4	Subtotal	$ 4,500,000
5	Contingency (15%)	$ 675,000
6	Escalation/Material Contingency (7%)	$ 315,000
7	Testing (2%)	$ 90,000
8	General Conditions/OH&P (10%)	$ 450,000
9	Professional Fees (9%)	$ 400,000
10	Total	$ 6,430,000

If you have any questions or want to discuss any items in more detail, please do not hesitate to call to review further.

Sincerely,
OHM Advisors

Christopher Ozog, Project Architect

Encl: MQI Report dated October 14, 2019
Building Assessment report dated March 8, 2021

cc: Rhett Gronevelt, OHM Advisors
Jerome Hanna, City of Livonia

MOLD QUEST INTERNATIONAL

9575 Commerce Road
Commerce Township, MI 48382
(866) 665-3783

Client:	Livonia Public Libraries 32777 Five Mile Road Livonia, MI 48154	Project Site:	32901 Plymouth Road Livonia, MI 48150
		Project #:	RMK-19440

MoldQuest International, LLC (MoldQuest) conducted a limited moisture and microbial assessment at 32901 Plymouth Road in Livonia, MI. The assessment followed methods and procedures consistent with good commercial or customary practice. This report is exclusively for the use and benefit of our Client and is not intended for the use or benefit of any other person or entity.

Property Description/History

The subject unit consisted of a one-story library with a partial basement and partial slab-on-grade foundation. Per the Client, roof leaks and basement seepage issues are known to be affecting the structure. Water damage and microbial growth are reported to be visible on building materials in the affected areas. A microbial assessment has been requested.

Purpose/Scope of Investigation

This investigation was performed to evaluate the subject property for the presence of water damage and/or microbial growth. At the request of the Client, the scope of this investigation was limited to non-invasive visual observations and moisture meter testing, plus limited non-viable fungal air sampling to determine if spore aerosolization/cross-contamination issues are indicated. One outdoor air sample was collected to serve as a basis of interpretation for the indoor sample results.

Visual Inspection

- Basement – Classroom
  - Moderate mVOC odor was present.
  - Exterior foundation walls (W/S) exhibit peeling/efflorescence and light microbial growth.
  - Ceiling tiles exhibit intermittent water staining/damage.
  - Ceiling tiles exhibit light/spotty microbial growth.
    - Growth pattern is indicative of an elevated Rh condition over time.
  - Contents (tables/chairs, etc.) exhibit light/spotty microbial growth.
    - Growth pattern is indicative of an elevated Rh condition over time.
  - Lower east wall exhibits light/spotty growth.
- Basement – Utility Room
  - Moderate mVOC odor was present.
  - South foundation wall exhibits efflorescence and light microbial growth due to seepage & elevated Rh.
- Basement – East Storage
  - Moderate mVOC odor was present.
  - N/E/S foundation walls exhibit efflorescence and light microbial growth due to seepage & elevated Rh.
- 1st Floor – East Wing (Adult Section)
  - Ceiling tiles exhibit water damage intermittently due to roof leaks.
  - Efflorescence is present below windows at the NE & NW corners of this wing.
  - Water damage and light microbial growth is present on the north wall drywall in the vaulted ceiling area below the windows (intermittent).
- 1st Floor – West Wing (Children's Section)
  - East wallboard (upper) exhibits water damage just south of kid's playroom.
  - Children's Playroom (at NE corner) ceiling tile at south wall exhibits water staining/damage.
- 1st Floor – Main Desk/Computer Kiosk
  - Ceiling tiles exhibit water staining/damage due to roof leaks.

Moisture Meter Test Results

Materials exceeding 15% saturation (or 300 relative for concrete/cinderblock) were found in the following areas:

- Basement – Classroom
  - Exterior foundation walls throughout basement
  - Floor/slab (all).
- Basement – Utility Room
  - Exterior foundation walls throughout basement
  - Floor/slab (all).
- Basement – East Storage
  - Exterior foundation walls throughout basement
  - Floor/slab (all).
- 1st Floor – All
  - Cinderblock below the windows at the west wing NW corner and east wing NE/NW corners.
  - All other accessible materials measured <13% WME (<300 relative for concrete/block).

Sample Results

Non-Viable Air Samples:

Fungal Group/Genus	E137832-1 Basement West	E137832-2 Basement (E) Utility	E137832-3 1st Floor Main Office	E137832-4 1st Floor Mgr. Office	E137832-12 Outdoor Air
Alternaria	0 /m³	0 /m³	0 /m³	0 /m³	0 /m³
Ascospores	0 /m³	0 /m³	0 /m³	**53 /m³**	**12,300 /m³**
Basidiospores	**480 /m³**	**480 /m³**	**693 /m³**	**320 /m³**	**22,100 /m³**
Chaetomium	0 /m³	0 /m³	0 /m³	0 /m³	0 /m³
Cladosporium	**2,030 /m³**	**1,280 /m³**	**267 /m³**	**53 /m³**	**320 /m³**
Curvularia	0 /m³	0 /m³	0 /m³	0 /m³	**53 /m³**
Ganoderma	**107 /m³**	0 /m³	0 /m³	0 /m³	**160 /m³**
Penicillium/Aspergillus group	**1,280 /m³**	**3,890 /m³**	**160 /m³**	**107 /m³**	0 /m³
Rusts	0 /m³	0 /m³	0 /m³	**53 /m³**	**107 /m³**
Smuts/Periconia/Myxomycetes	0 /m³	0 /m³	0 /m³	**53 /m³**	0 /m³
Stachybotrys	0 /m³	0 /m³	0 /m³	0 /m³	0 /m³
Trichothecium	0 /m³	0 /m³	0 /m³	0 /m³	0 /m³
Pollen	0 /m³	0 /m³	**53 /m³**	0 /m³	0 /m³
Debris Rating	**L**	**L**	**M**	**L**	**L**
Fragments	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
Total Count	**3,900 /m³**	**5,650 /m³**	**1,120 /m³**	**639 /m³**	**35,000 /m³**

Fungal Group/Genus	E137832-5 1st Floor Break Room	E137832-6 1st Floor (W) Children's	E137832-7 1st Floor (C) Desk/Computers	E137832-8 1st Floor (E) Adult Books	E137832-12 Outdoor Air
Alternaria	0 /m³	**53 /m³**	0 /m³	0 /m³	0 /m³
Ascospores	0 /m³	**53 /m³**	0 /m³	**53 /m³**	**12,300 /m³**
Basidiospores	**267 /m³**	**533 /m³**	**320 /m³**	**427 /m³**	**22,100 /m³**
Chaetomium	0 /m³	0 /m³	0 /m³	0 /m³	0 /m³
Cladosporium	**53 /m³**	**53 /m³**	**107 /m³**	**213 /m³**	**320 /m³**
Curvularia	0 /m³	0 /m³	0 /m³	0 /m³	**53 /m³**
Ganoderma	0 /m³	0 /m³	0 /m³	0 /m³	**160 /m³**
Penicillium/Aspergillus group	**533 /m³**	0 /m³	**1,550 /m³**	**160 /m³**	0 /m³
Rusts	**53 /m³**	0 /m³	0 /m³	0 /m³	**107 /m³**
Smuts/Periconia/Myxomycetes	**53 /m³**	**53 /m³**	**107 /m³**	0 /m³	0 /m³
Stachybotrys	0 /m³	0 /m³	0 /m³	0 /m³	0 /m³
Trichothecium	0 /m³	0 /m³	0 /m³	0 /m³	0 /m³
Pollen	0 /m³	0 /m³	0 /m³	0 /m³	0 /m³
Debris Rating	**L**	**L**	**L**	**L**	**L**
Fragments	**VL**	**VL**	**N/A**	**N/A**	**N/A**
Total Count	**959 /m³**	**745 /m³**	**2,080 /m³**	**853 /m³**	**35,000 /m³**

Fungal Group/Genus	E137832-9 1st Floor Main Entrance (W)	E137832-10 1st Floor Men's Bath	E137832-11 1st Floor Family Bath	E137832-12 Outdoor Air
Alternaria	0 /m³	**53 /m³**	0 /m³	0 /m³
Arthrinium	0 /m³	0 /m³	0 /m³	0 /m³
Ascospores	**53 /m³**	0 /m³	0 /m³	**12,300 /m³**
Basidiospores	**480 /m³**	**533 /m³**	**693 /m³**	**22,100 /m³**
Bipolaris/Drechslera group	0 /m³	0 /m³	0 /m³	0 /m³
Cercospora group	0 /m³	0 /m³	0 /m³	0 /m³
Chaetomium	0 /m³	0 /m³	0 /m³	0 /m³
Cladosporium	**1,650 /m³**	**533 /m³**	**267 /m³**	**320 /m³**
Curvularia	0 /m³	0 /m³	0 /m³	**53 /m³**
Epicoccum nigrum	0 /m³	**53 /m³**	0 /m³	0 /m³
Erysiphe/Oidium	0 /m³	0 /m³	0 /m³	0 /m³
Fusarium	0 /m³	0 /m³	0 /m³	0 /m³
Ganoderma	0 /m³	**53 /m³**	0 /m³	**160 /m³**
Helicomyces group	0 /m³	0 /m³	0 /m³	0 /m³
Mitospores	0 /m³	**107 /m³**	0 /m³	0 /m³
Penicillium/Aspergillus group	**4,160 /m³**	**53 /m³**	**747 /m³**	0 /m³
Pestalotiopsis	0 /m³	0 /m³	0 /m³	0 /m³
Polythrincium	0 /m³	0 /m³	0 /m³	0 /m³
Rusts	0 /m³	**53 /m³**	0 /m³	**107 /m³**
Smuts/Periconia/Myxomycetes	**53 /m³**	**53 /m³**	0 /m³	0 /m³
Stachybotrys	0 /m³	0 /m³	0 /m³	0 /m³
Stemphylium	0 /m³	0 /m³	0 /m³	0 /m³
Torula	0 /m³	0 /m³	0 /m³	0 /m³
Trichothecium	0 /m³	0 /m³	0 /m³	0 /m³
Pollen	**53 /m³**	0 /m³	0 /m³	0 /m³
Debris Rating	**M**	**M**	**M**	**L**
Fragments	**VL**	**VL**	**N/A**	**N/A**
Total Count	**6,400 /m³**	**1,490 /m³**	**1,710 /m³**	**35,000 /m³**

IAQ Conclusions

Air samples indicate elevations of the ***Penicillium/Aspergillus*** group relative to the current/measured outdoor count and historic outdoor range data throughout the basement, and in the 1st floor's west entry hall, family bathroom, main desk/computer kiosk area (main library center) and break room.

All other detected fungal groups/genera at all indoor test sites were present at levels which were either (A) similar to or less than the current outdoor count for that group/genus, and/or (B) were within the historic outdoor range for the group/genus, and/or (C) were present at trace* levels only. No "target" organisms (e.g. ***Stachybotrys*** sp. – a.k.a. "black" mold) were detected at any indoor sample site

These sample results indicate that spore aerosolization HAS occurred, resulting in cross-contamination of exposed surfaces/contents in the affected areas.

Containment and Personal Protection

All remediation should be performed under strict containment conditions. IICRC defined Condition 3 work zones should be separated from the remainder of the structure using polyethylene sheeting material (Poly) with a zippered entry/exit point. HVAC vents should be sealed. A negative pressure differential ≥5 Pascals (Pa) should be applied to the containment area(s) via air exhausted directly to the outdoors through a high-volume HEPA filtration unit.

All workers shall don appropriate personal protective equipment, including Tyvek coveralls, respiratory protection (P100), eye protection, and gloves. ***The work zone should remain under containment/vacuum conditions until acceptable PRE/T results are obtained.***

Remediation Recommendations

Basement – Classroom (West):

1. Remove contents (items affected – restoration needed).
2. Remove all drop ceiling tiles.
3. Remove all wall and door side molding/trim.
4. Remove all wallboard.
5. Remove all finish flooring materials (expose slab).
6. Remove any/all exposed wall/joist cavity insulation.
   - Inspect cavity(s). Extend removal until 2' past any visible cavity damage/growth (if present).
7. Wood materials exhibiting water staining/damage or microbial growth should be treated as follows.
   - Remove any material which exhibits evidence of degradation.
   - Discolored wood surfaces should be abrasively cleaned (sanded, dry-ice (cryo) blasted or similar).
8. Scour any/all concrete/cinderblock surfaces exhibiting efflorescence, staining or growth.
9. Verify/dry all remaining materials to <15% WME.
10. HEPA vacuum and/or damp wipe ***all*** exposed surfaces to remove/reduce dust and loose spore counts.

Basement – Utility Room:

1. Remove contents (items affected – restoration needed).
2. Wood materials exhibiting water staining/damage or microbial growth should be treated as follows.
   - Remove any material which exhibits evidence of degradation.
   - Discolored wood surfaces should be abrasively cleaned (sanded, dry-ice (cryo) blasted or similar).
3. Scour any/all concrete/cinderblock surfaces exhibiting efflorescence, staining or growth.
4. Verify/dry all remaining materials to <15% WME.
5. HEPA vacuum and/or damp wipe ***all*** exposed surfaces to remove/reduce dust and loose spore counts.

Basement – East Storage Room:

1. Wood materials exhibiting water staining/damage or microbial growth should be treated as follows.
   - Remove any material which exhibits evidence of degradation.
   - Discolored wood surfaces should be abrasively cleaned (sanded, dry-ice (cryo) blasted or similar).
2. Scour any/all concrete/cinderblock surfaces exhibiting efflorescence, staining or growth.
3. Verify/dry all remaining materials to <15% WME.
4. HEPA vacuum and/or damp wipe ***all*** exposed surfaces to remove/reduce dust and loose spore counts.

1st Floor – West Wing (Children's Area):

1. Remove books (to storage – no cleaning needed).
2. Remove all drop ceiling tiles exhibiting water damage/microbial growth.
3. Remove upper east wallboard (south of children's playroom) to 2' past visible staining/damage.
4. Remove any/all exposed wall/joist cavity insulation.
   - Inspect cavity(s). Extend removal until 2' past any visible cavity damage/growth (if present).
5. Wood materials exhibiting water staining/damage or microbial growth should be treated as follows.
   - Remove any material which exhibits evidence of degradation.
   - Discolored wood surfaces should be abrasively cleaned (sanded, dry-ice (cryo) blasted or similar).
6. Scour any/all concrete/cinderblock surfaces exhibiting efflorescence, staining or growth.
7. Verify/dry all remaining materials to <15% WME.
8. HEPA vacuum and/or damp wipe ***all*** exposed surfaces to remove/reduce dust and loose spore counts.

1st Floor – East Wing (Adult Section):

1. Remove books (to storage – no cleaning needed).
2. Remove all drop ceiling tiles exhibiting water damage/microbial growth.
3. Remove ceiling drywall exhibiting water damage/staining.
4. Remove all wallboard/trim surrounding & below the north side windows in the vaulted ceiling cavity, extending removal down to the lower ceiling as needed until 2' past any visible cavity damage/stainig/growth).
5. Remove any/all exposed wall/joist cavity insulation.
   - Inspect cavity(s). Extend removal until 2' past any visible cavity damage/growth (if present).
6. Wood materials exhibiting water staining/damage or microbial growth should be treated as follows.
   - Remove any material which exhibits evidence of degradation.
   - Discolored wood surfaces should be abrasively cleaned (sanded, dry-ice (cryo) blasted or similar).
7. Scour any/all concrete/cinderblock surfaces exhibiting efflorescence, staining or growth.
8. Verify/dry all remaining materials to <15% WME.
9. HEPA vacuum and/or damp wipe ***all*** exposed surfaces to remove/reduce dust and loose spore counts.

1st Floor – Center (Main Desk/Computer Kiosk):

1. Remove contents (items affected – restoration needed).
2. Remove all drop ceiling tiles exhibiting water damage/microbial growth.
3. HEPA vacuum and/or damp wipe *all* exposed surfaces to remove/reduce dust and loose spore counts.

1st Floor – Break Room/Family Bathroom/West Entry Hall:

1. HEPA vacuum and/or damp wipe *all* exposed surfaces to remove/reduce dust and loose spore counts.

Notes & Other Areas:

1. HVAC system(s) should be cleaned and filter(s) replaced.
2. All exposed contents in affected areas should be treated or discarded per IICRC S520 guidelines.
3. Any/all active water sources must be identified and corrected or damage/growth may recur.
   - Roof/window repairs or replacement should be conducted ASAP.
   - A foundation specialist should be consulted to determine how best to stop or divert basement seepage.
     1. Installation of a "B-Dry" style system or water proofing from the exterior may be needed.
4. Indoor relative humidity (Rh) should be maintained at <50% year-round.
   - Use of a self-draining dehumidifier is REQUIRED in the basement spring through fall.

Post Remediation Evaluation (PRE)

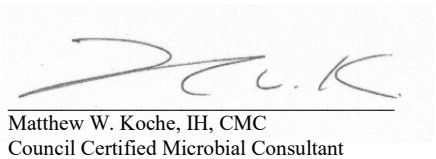
At the completion of the above procedures, all fans (air-movers), dehumidifiers and recirculating HEPA scrubbers should be disabled (intakes should be plugged/wrapped prior to shutting down the units). If IICRC Condition 1 adjacent zones exist, negative air machines (NAM) should remain operating on the "low" setting until acceptable clearance sampling results are obtained. NAM units should exhaust directly to the outdoor air if possible. All cleaned surfaces should remain exposed for evaluation. Opaque coatings should not be applied prior to evaluation as they will hinder the ability of the investigator to perform a thorough clearance investigation.

Clearance confirmation should be performed by a qualified investigator experienced in mold contamination and familiar with recent property history. Prior to collecting any clearance samples, the investigator shall perform a thorough visual inspection and moisture evaluation of the remaining materials within the remediated area. Should any portion of the remediated area be deemed suspect by the investigator based on this evaluation, those areas should be brought to the attention of the remediation contractor, and additional remediation efforts shall be implemented prior to collecting clearance samples. Clearance sampling should be performed to evaluate the effectiveness of the remediation effort. Clearance samples should include, at a minimum, non-viable fungal IAQ testing of the affected (IICRC Condition 2&3) zones. Surface testing (alone) is not sufficient to determine the condition status of the affected space(s).

Limitations

All the professional opinions presented in this report are based solely on the scope of work conducted. The data presented by MoldQuest International, LLC in this report was collected and analyzed using generally accepted industry methods and practices at the time the report was generated. This report is based on limited information obtained at the time of our investigation. No assumptions should be made regarding areas outside of our scope of investigation based on the information contained in this report. No inferences regarding other conditions, locations, or materials, at a later or earlier time may be made based on the contents of this report. No warranty is made.

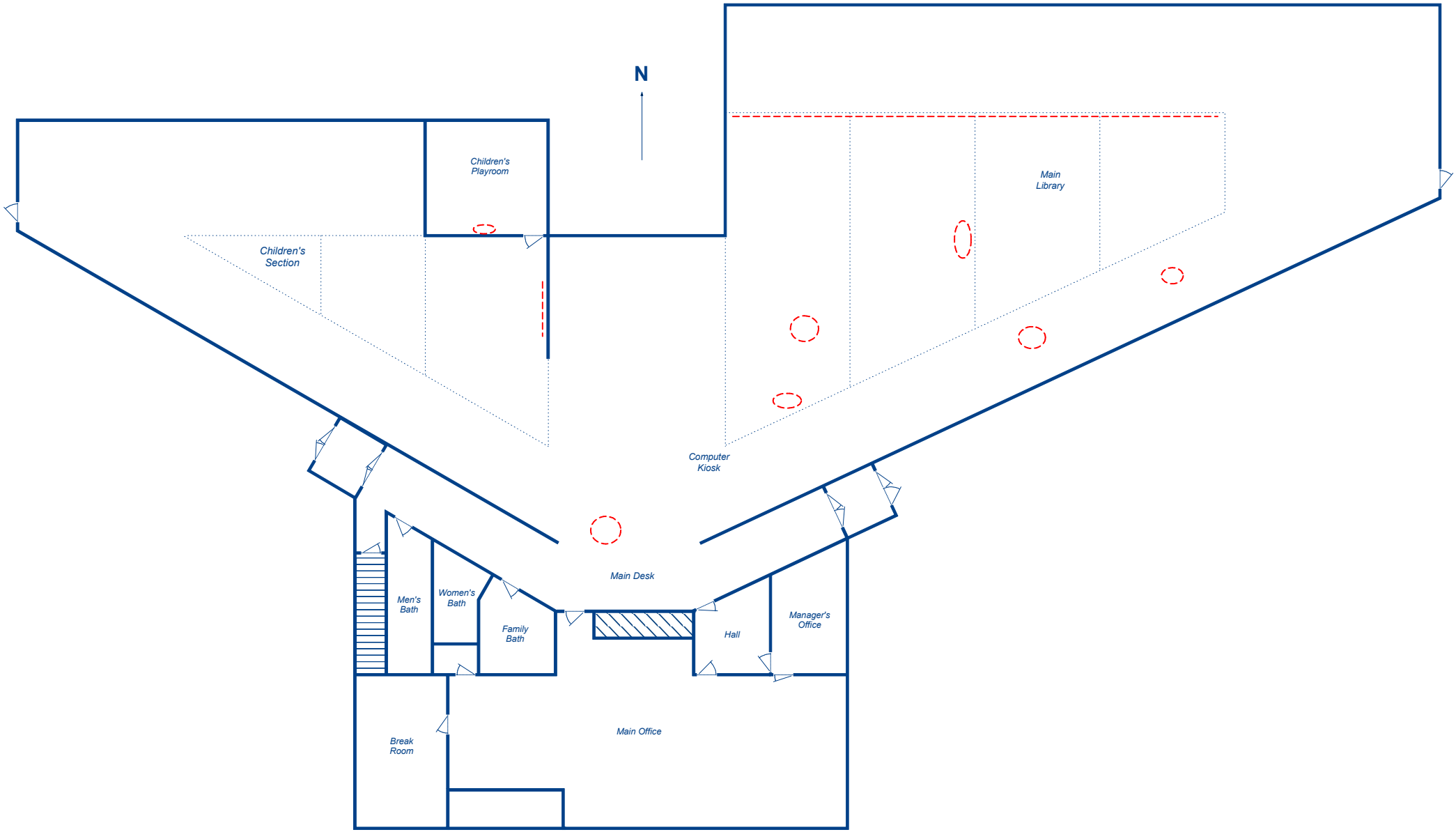
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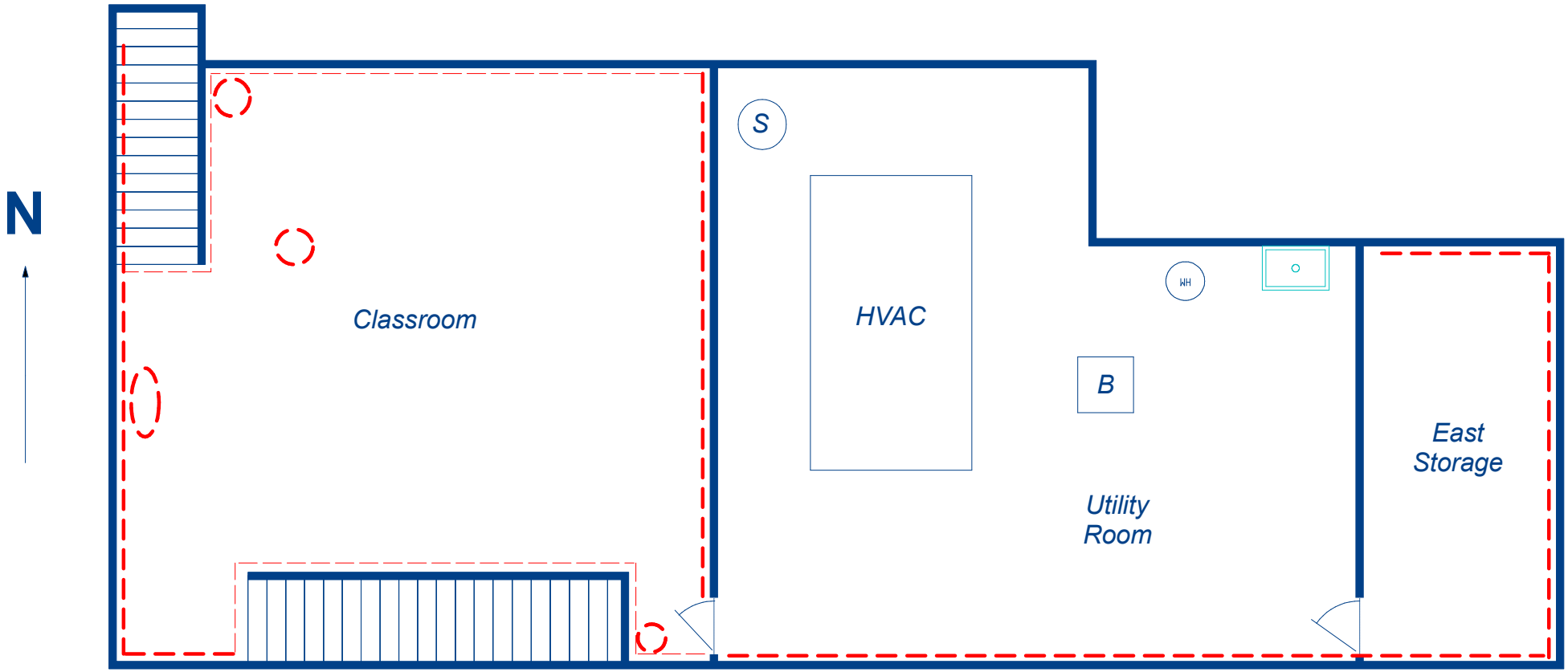
October 14, 2019
Date

*Trace is defined as 1 spore raw count or <50 spores/m^3 extrapolated.
[1]Trace amounts "pass" for "target" organisms at one spore raw count only, if detected at one indoor location only.



* This diagram is for reference purposes only, and may not be exact in dimension or scale. The colored boxes encompass the general area of visible fungal growth and/or water damage, saturation/staining. Solid/Filled boxes indicate inaccessible areas (due to quantity/placement of contents). This diagram is not intended to portray exact remediation boundries.

Figure 1: Floor Plan
With Notes



* This diagram is for reference purposes only, and may not be exact in dimension or scale. The colored boxes encompass the general area of visible fungal growth and/or water damage, saturation/staining. Solid/Filled boxes indicate inaccessible areas (due to quantity/placement of contents). This diagram is not intended to portray exact remediation boundries.

Figure 2: Floor Plan (Basement) With Notes

IMS Laboratory

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Laboratory Report

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MICROBIOLOGY LABS · ISO/IEC 17025:2005 · Accredited Laboratory · AIHA LAP, LLC · AIHAACCREDITEDLABS.ORG · Lab ID # 172958

Project: Library - I **Lab # E137832**

Report Date: 09/23/2019 **Sampled: 09/20/2019** **Received: 09/23/2019** **Analyzed: 09/23/2019**

1 - Laboratory Results

Location: Basement - West

Sample # E137832 - 1

Medium Type: AllergencoD
Serial # 3160070
Exposure: 15.00 l/min. for 5.00 min.
Reporting Limit: 53 Spores/cu. m

Sample Identification	Raw Count	Spores/cu. m	Percent(%)
- Fungi -			
Cladosporium	38	2,030	52.09%
Pen/Asp group	24	1,280	32.85%
Basidiospores	9	480	12.32%
Ganoderma	2	107	2.75%
Total Fungi	73	3,900	100.00%

Background Item	Level
Dust / Debris	Low
Opaque Particles	Very Low

Location: Basement - East (Utility Room)

Sample # E137832 - 2

Medium Type: AllergencoD
Serial # 3160068
Exposure: 15.00 l/min. for 5.00 min.
Reporting Limit: 53 Spores/cu. m

Sample Identification	Raw Count	Spores/cu. m	Percent(%)
- Fungi -			
Pen/Asp group	73	3,890	68.85%
Cladosporium	24	1,280	22.65%
Basidiospores	9	480	8.50%
Total Fungi	106	5,650	100.00%

Background Item	Level
Dust / Debris	Low
Opaque Particles	Very Low

Location: 1F - Main Office

Sample # E137832 - 3

Medium Type: AllergencoD
Serial # 3160075
Exposure: 15.00 l/min. for 5.00 min.
Reporting Limit: 53 Spores/cu. m

Sample Identification	Raw Count	Spores/cu. m	Percent(%)
- Fungi -			
Basidiospores	13	693	61.88%
Cladosporium	5	267	23.84%
Pen/Asp group	3	160	14.29%
Total Fungi	21	1,120	100.00%
- Other -			
Pollen	1	53	100.00%

Background Item	Level
Dust / Debris	Medium
Opaque Particles	Very Low

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Location: 1F - Managers Office

Sample # E137832 - 4

Medium Type: AllergencoD
Serial # 3160073
Exposure: 15.00 l/min. for 5.00 min.
Reporting Limit: 53 Spores/cu. m

Sample Identification	Raw Count	Spores/cu. m	Percent(%)
- Fungi -			
Basidiospores	6	320	50.08%
Pen/Asp group	2	107	16.74%
Ascospores	1	53	8.29%
Cladosporium	1	53	8.29%
Rust	1	53	8.29%
Smuts/Periconia/Myxomycetes	1	53	8.29%
Total Fungi	12	639	100.00%

Background Item	Level
Dust / Debris	Low
Opaque Particles	Very Low

Location: 1F - Break Room

Sample # E137832 - 5

Medium Type: AllergencoD
Serial # 3160080
Exposure: 15.00 l/min. for 5.00 min.
Reporting Limit: 53 Spores/cu. m

Sample Identification	Raw Count	Spores/cu. m	Percent(%)
- Fungi -			
Pen/Asp group	10	533	55.58%
Basidiospores	5	267	27.84%
Cladosporium	1	53	5.53%
Rust	1	53	5.53%
Smuts/Periconia/Myxomycetes	1	53	5.53%
Total Fungi	18	959	100.00%
- Other -			
Hyphal Fragment	1	53	100.00%

Background Item	Level
Dust / Debris	Low
Hyphal Fragments	Very Low
Opaque Particles	Very Low

Location: 1F Main Library West (Childrens)

Sample # E137832 - 6

Medium Type: AllergencoD
Serial # 3160071
Exposure: 15.00 l/min. for 5.00 min.
Reporting Limit: 53 Spores/cu. m

Sample Identification	Raw Count	Spores/cu. m	Percent(%)
- Fungi -			
Basidiospores	10	533	71.54%
Alternaria	1	53	7.11%
Ascospores	1	53	7.11%
Cladosporium	1	53	7.11%
Smuts/Periconia/Myxomycetes	1	53	7.11%
Total Fungi	14	745	100.00%
- Other -			
Hyphal Fragment	3	160	100.00%

- Sample data continued on next page -

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Background Item	Level
Dust / Debris	Low
Hyphal Fragments	Very Low
Opaque Particles	Very Low

Location: 1F - Main Library Center (Computers)

Sample # E137832 - 7

Medium Type: AllergencoD
Serial # 3160081
Exposure: 15.00 l/min. for 5.00 min.
Reporting Limit: 53 Spores/cu. m

Sample Identification	Raw Count	Spores/cu. m	Percent(%)
- Fungi -			
Pen/Asp group	29	1,550	74.38%
Basidiospores	6	320	15.36%
Cladosporium	2	107	5.13%
Smuts/Periconia/Myxomycetes	2	107	5.13%
Total Fungi	39	2,080	100.00%

Background Item	Level
Dust / Debris	Low
Opaque Particles	Very Low

Location: 1F - Main Library East

Sample # E137832 - 8

Medium Type: AllergencoD
Serial # 3160076
Exposure: 15.00 l/min. for 5.00 min.
Reporting Limit: 53 Spores/cu. m

Sample Identification	Raw Count	Spores/cu. m	Percent(%)
- Fungi -			
Basidiospores	8	427	50.06%
Cladosporium	4	213	24.97%
Pen/Asp group	3	160	18.76%
Ascospores	1	53	6.21%
Total Fungi	16	853	100.00%

Background Item	Level
Dust / Debris	Low
Opaque Particles	Very Low

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Location: 1F - Main Entrance / Hall (West)

Sample # E137832 - 9

Medium Type: AllergencoD
Serial # 3160069
Exposure: 15.00 l/min. for 5.00 min.
Reporting Limit: 53 Spores/cu. m

Sample Identification	Raw Count	Spores/cu. m	Percent(%)
- Fungi -			
Pen/Asp group	78	4,160	65.04%
Cladosporium	31	1,650	25.80%
Basidiospores	9	480	7.50%
Ascospores	1	53	0.83%
Smuts/Periconia/Myxomycetes	1	53	0.83%
Total Fungi	120	6,400	100.00%
- Other -			
Hyphal Fragment	1	53	50.00%
Pollen	1	53	50.00%
Total Other	2	106	100.00%

Background Item	Level
Dust / Debris	Medium
Hyphal Fragments	Very Low
Opaque Particles	Very Low

Location: 1F - Men's Bath

Sample # E137832 - 10

Medium Type: AllergencoD
Serial # 3160079
Exposure: 15.00 l/min. for 5.00 min.
Reporting Limit: 53 Spores/cu. m

Sample Identification	Raw Count	Spores/cu. m	Percent(%)
- Fungi -			
Basidiospores	10	533	35.75%
Cladosporium	10	533	35.75%
Mitospores	2	107	7.18%
Alternaria	1	53	3.55%
Epicoccum nigrum	1	53	3.55%
Ganoderma	1	53	3.55%
Pen/Asp group	1	53	3.55%
Rust	1	53	3.55%
Smuts/Periconia/Myxomycetes	1	53	3.55%
Total Fungi	28	1,490	100.00%
- Other -			
Hyphal Fragment	1	53	100.00%

Background Item	Level
Dust / Debris	Medium
Hyphal Fragments	Very Low
Opaque Particles	Very Low

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Location: 1F - Family Bath

Sample # E137832 - 11

Medium Type: AllergencoD
Serial # 3160083
Exposure: 15.00 l/min. for 5.00 min.
Reporting Limit: 53 Spores/cu. m

Sample Identification	Raw Count	Spores/cu. m	Percent(%)
- Fungi -			
Pen/Asp group	14	747	43.76%
Basidiospores	13	693	40.60%
Cladosporium	5	267	15.64%
Total Fungi	32	1,710	100.00%
- Other -			
Pollen	1	53	100.00%

Background Item	Level
Dust / Debris	Medium
Opaque Particles	Very Low

Location: O.D. Reference

Sample # E137832 - 12

Medium Type: AllergencoD
Serial # 3160084
Exposure: 15.00 l/min. for 5.00 min.
Reporting Limit: 53 Spores/cu. m

NOTE: Estimated raw counts on Ascospores and Basidiospores.

Sample Identification	Raw Count	Spores/cu. m	Percent(%)
- Fungi -			
Basidiospores	414	22,100	63.07%
Ascospores	230	12,300	35.10%
Cladosporium	6	320	0.91%
Ganoderma	3	160	0.46%
Rust	2	107	0.31%
Curvularia	1	53	0.15%
Total Fungi	656	35,000	100.00%

Background Item	Level
Dust / Debris	Low
Opaque Particles	Very Low

Analytic Methods and Formulas:

Calculated results may include one more significant figure than is mathematically justified in order to accommodate the client's needs.

IMS Laboratory Analytical Method: 2.2 (method for analyzing spore trap)

Spores per cubic meter is determined by: Total Spore Count x 4000 / (sampling rate x sampling time)

Note that this report may use mold-specific units of measure, such as Spores/cu. m and CFU/cu. m, for Sample Identifications which are not mold. Examples include pollen, fabric and fiberglass fibers, insect particles, and ash. In this context, "CFU" and "Spore" refer to individual pieces of the identified material.

This report has been prepared by IMS Laboratory, LLC at the request of and for the exclusive use of MoldQuest. Read the important terms, conditions, and limitations that apply to this report carefully.

IMS Laboratory, LLC is accredited through the AIHA-LAP, LLC and participates in Environmental Microbiology Proficiency Testing, EMPAT #172958. Data is provided in compliance with AIHA-LAP, LLC policy modules and ISO/IEC 17025 guidelines.

Kathryn C. Langley 09/23/2019

Kathryn C. Langley, Laboratory Manager

This report has been prepared by IMS Laboratory, LLC at the request of and for the exclusive use of MoldQuest. Read the important terms, conditions, and limitations that apply to this report carefully.

2 - Spore Trap Comparison Chart

SAMPLING LOCATIONS

1: Basement - West
2: Basement - East (Utility Room)
3: 1F - Main Office
4: 1F - Managers Office
5: 1F - Break Room
6: 1F Main Library West (Childrens)

Spores per Cubic Meter

Mold Name \ Location #	1	2	3	4	5	6
Alternaria						53
Arthrinium						
Ascospores				53		53
Basidiospores	480	480	693	320	267	533
Bipolaris / Drechslera group						
Chaetomium						
Cladosporium	2,030	1,280	267	53	53	53
Curvularia						
Epicoccum nigrum						
Erysiphe/Oidium						
Fusarium						
Ganoderma	107					
Mitospores						
Pen/Asp group	1,280	3,890	160	107	533	
Pithomyces						
Polythrincium						
Rust				53	53	
Smuts/Periconia/Myxomycetes				53	53	53
Stachybotrys						
Stemphylium						
Torula						
Unknown Fungi						
FUNGAL TOTAL	**3,900**	**5,650**	**1,120**	**639**	**959**	**745**
Hyphal Fragment					53	160
Pollen			53			

Please refer to the Laboratory Results section for additional details.

This report has been prepared by IMS Laboratory, LLC at the request of and for the exclusive use of MoldQuest. Read the important terms, conditions, and limitations that apply to this report carefully.

SAMPLING LOCATIONS

7: 1F - Main Library Center (Computers)
8: 1F - Main Library East
9: 1F - Main Entrance / Hall (West)
10: 1F - Men's Bath
11: 1F - Family Bath
12: O.D. Reference

Spores per Cubic Meter

Mold Name \ Location #	7	8	9	10	11	12
Alternaria				53		
Arthrinium						
Ascospores		53	53			12,300
Basidiospores	320	427	480	533	693	22,100
Bipolaris / Drechslera group						
Chaetomium						
Cladosporium	107	213	1,650	533	267	320
Curvularia						53
Epicoccum nigrum				53		
Erysiphe/Oidium						
Fusarium						
Ganoderma				53		160
Mitospores				107		
Pen/Asp group	1,550	160	4,160	53	747	
Pithomyces						
Polythrincium						
Rust				53		107
Smuts/Periconia/Myxomycetes	107		53	53		
Stachybotrys						
Stemphylium						
Torula						
Unknown Fungi						
FUNGAL TOTAL	**2,080**	**853**	**6,400**	**1,490**	**1,710**	**35,000**
Hyphal Fragment			53	53		
Pollen			53		53	

Please refer to the Laboratory Results section for additional details.

This report has been prepared by IMS Laboratory, LLC at the request of and for the exclusive use of MoldQuest. Read the important terms, conditions, and limitations that apply to this report carefully.

3 - Warranties, Legal Disclaimers, and Limitations

IMS's scope of accreditation through the AIHA-LAP, LLC is for the following FoT(s) / Method(s): Fungal Air - Direct Examination (SOP 2.2 and 2.3); Fungal Bulk - Direct Examination (SOP 2.6); and Fungal Surface - Direct Examination (SOP 2.1).

The study and understanding of molds is a progressing science. Because different methods of sampling, collection and analysis exist within the indoor air quality industry, different inspectors or analysts may not always agree on the mold concentrations present in a given environment. Additionally, the airborne levels of mold change frequently and by large amounts due to many factors including activity levels, weather, air exchange rates (indoors), and disturbance of growth sites. It is possible for report interpretations and ranges of accuracy to vary since comprehensive, generally accepted industry standards do not currently exist for indoor air quality inspections of mold in residential indoor environments. This report is intended to provide an analysis based upon samples taken at the site at the time of the inspection. Mold levels can and do change rapidly, especially if home building materials or contents remain wet for more than 24 hours, or if they are wet frequently. This report is not intended to provide medical or healthcare advice. All allergy or medical-related questions and concerns, including health concerns relating to possible mold exposure, should be directed to a qualified physician. If this report indicates indoor mold levels that are higher than in typical indoor living spaces relative to the outdoor environment, or indicates any findings that are of concern to you, further evaluation by a trained mold professional or a Certified Industrial Hygienist (CIH) may be advisable.

Results pertain only to the samples tested, as received by IMS. Unless otherwise noted in the body of this report, the condition of samples upon receipt was acceptable. Blank samples are reported in the same manner as all other samples. The results are not corrected for contamination.

This report is generated by IMS at the request of, and for the exclusive use of, the IMS client named on this report. Project Name, Project Number, Sampling Date, Sampling Locations and Exposure times and rates have been provided to IMS by the client, and may affect the validity of the results. The analysis of the test samples is performed by IMS. This report applies only to the samples taken at the time, place and location referenced in the report and received by IMS, and to the property and weather conditions existing at that time only. Please be aware, however, that property conditions, inspection findings and laboratory results can and do change over time relative to the original sampling due to changing conditions, the normal fluctuation of airborne mold, and many other factors. IMS does not furnish, and has no responsibility for, the inspector or inspection service that performs the inspection or collects the test samples. It is the responsibility of the end-user of this report to select a properly trained professional to conduct the

This report has been prepared by IMS Laboratory, LLC at the request of and for the exclusive use of MoldQuest. Read the important terms, conditions, and limitations that apply to this report carefully.

inspection and collect appropriate samples for analysis and interpretation. Neither IMS, nor its affiliates, subsidiaries, suppliers, employees, agents, contractors and attorneys ("IMS related party") are able to make and do not make any determinations as to the safety or health condition of a property in this report. The client and client's customer are solely responsible for the use of, and any determinations made from, this report, and no IMS related party shall have any liability with respect to decisions or recommendations made or actions taken by either the client or the client's customer based on the report.

Samples analyzed by IMS are disposed the day that they are analyzed. Storage may be available for a fee with written request at the time the samples are submitted for analysis.

IMS hereby expressly disclaims any and all representations and warranties of any kind or nature, whether express, implied or statutory, related to the testing services or this report including, but not limited to, damages for loss of profit or goodwill regardless of the negligence (either sole or concurrent) of IMS and whether IMS has been informed of the possibility of such damages, arising out of or in connection with IMS's services or the delivery, use, reliance upon or interpretation of test results by client or any third party. In no event will IMS be liable for any special, indirect, incidental, punitive, or consequential damages of any kind regardless of the form of action whether in contract, tort (including negligence), strict product liability or otherwise, arising from or related to the testing services or this report.

IMS accepts no legal responsibility for the purposes for which the client uses the test results. IMS will not be held responsible for the improper selection of sampling devices even if we supply the device to the user. The user of the sampling device has the sole responsibility to select the proper sampler and sampling conditions to insure that a valid sample is taken for analysis. Additionally, neither this report nor IMS makes any express or implied warranty or guarantee regarding the inspection or sampling done by the inspector, the qualifications, training or sampling methodology used by the inspector performing the sampling and inspection reported herein, or the accuracy of any information provided to IMS serving as a basis for this report. The total liability of IMS related to or arising from this report to a client or any third party, whether under contract law, tort law, warranty or otherwise, shall be limited to direct damages not to exceed the fees actually received by IMS from the client for the report. The invalidity or unenforceability, in whole or in part, of any provision, term or condition herein shall not invalidate or otherwise affect the enforceability of the remainder of these provisions, terms and conditions. Client shall indemnify IMS and its officers, directors and employees and hold each of them harmless for any liability, expense or cost, including reasonable attorney's fees, incurred by reason of any third party claim in connection with IMS's services, the test result data or its use by client.

- End of Lab Report Number E137832 -

This report has been prepared by IMS Laboratory, LLC at the request of and for the exclusive use of MoldQuest. Read the important terms, conditions, and limitations that apply to this report carefully.

Building Assessment

Alfred Noble Public Library

32777 Five Mile Road

Livonia, MI 48154



Prepared by:

Jerome Hanna

Director of Inspection

March 8, 2021

Background

Building:	**Alfred Noble Public Library**
Address:	**32901 Plymouth Road, Livonia MI**
Assessment requested by:	**Mayor Brosnan**
Date of Assessment:	**March 8, 2021**
Date of Building Construction:	**1967**
Reason for Request:	**Water infiltration and mold concerns**

Building Description: The Alfred Noble Public Library was designed and constructed as a library in 1967. It is a single-story structure with a partial basement. The construction is masonry walls, concrete floors and flat roof combined with a shingled sloped area. The interior walls are covered with drywall and brick and the ceiling consists of suspended ceiling tiles.

Methods/Results

I performed a visual inspection of building materials for water damage and/or microbial growth and inspection of the exterior for sources of water infiltration.

Discussion

This visit was prompted by previous inspections and concerns about the interior of the structure in late 2019 due to concerns of water infiltration at the time. A limited moisture and microbial assessment was conducted at that time by Mold Quest International. Elevated levels of Penicillium/Aspergillus were

noted but no Stachybotrys (black mold) was detected at the time. The following was observed during this inspection:

- Water-damaged ceiling tiles on the first floor in numerous areas. (Pictures attached)
- Water damaged drywall at the top of the wall in the main area. (Pictures attached)
- Cracks in drywall around windows of the North wall.
- Microbial growth and efflorescence located on basement walls. (Pictures attached)
- Paint has flaked off along large portions of the basement walls due to water damage. (Pictures attached)
- Mechanical equipment shows rust due to high levels of moisture.
- Stains on basement floor from previous standing water.
- Brick and mortar damage around the exterior due to water infiltration. (Pictures attached)

The following conditions are likely contributing to water infiltration into the building.

- Numerous roof leaks in both the sloped roof and the flat roof areas of the structure.
- The windows located on the north elevation appear to have sealant failure allowing moisture to enter the structure.
- Some of the flashing on top of the walls has failed and is allowing moisture behind the brick/block. Mortar is deteriorating which in turn allows more moisture to penetrate the wall.
- The grade has settled around the foundation and does not provide positive drainage away from the building. (Pictures attached)
- Roof drains are discharging directly at the foundation walls. (Pictures attached)

Conclusions/Recommendations

In view of the findings at the time of the visit, the following minimum improvements are needed to bring the building back to safe occupancy:

1. Mold remediation should be performed by a certified mold remediation contractor.

2. Water-damaged/mold-colonized building materials should be removed.

3. Foundation walls should be waterproofed. This should comprise of excavating the soil from around the exterior foundation and repairing/ waterproofing the block foundation.

4. Roof should be replaced including any damaged sheathing and insulation.

5. Relocate downspouts to discharge away from the foundation. Sidewalk would need to be removed and replaced to accomplish this.

6. Repair damaged brick and mortar around the exterior.

7. Replace flashing and sealant around exterior windows.

8. Clean and sanitize duct work.

9. Furnace should be replaced. It is original to the structure and is past its life span.

10. Any electrical devices, fixtures or wiring that has been in contact with water should be replaced.

11. The estimated cost of the repairs and remediation listed above could be close to half the estimated cost for new construction. For a more precise estimate, a qualified firm should be hired to conduct a construction cost assessment.



Figure 1 damaged brick and mortar from water



Figure 2 Brick and mortar damaged from water infiltration



Figure 3 Basement wall



Figure 4 basement wall



Figure 5 Basement wall



Figure 6 Basement wall



Figure 7 Basement wall



Figure 8 Basement wall



Figure 9 Basement wall



Figure 10 Suspended ceiling main floor



Figure 11 Suspended ceiling main floor



Figure 12 Suspended ceiling main floor



Figure 13 Suspended ceiling main floor



Figure 14 Suspended ceiling main floor



Figure 15 Downspouts south side



Figure 16 Downspout north side



Figure 17 Downspout north side



Figure 18 Grade settled along foundation



Figure 19 Grade settled along foundation



Figure 20 Water damaged drywall main floor



Figure 21 Furnace in basement rusting from high moisture content

Appendix B – Assessor Affidavit

AFFIDAVIT

State of Michigan, County of Wayne:

I, Linda Gosselin, having first been duly sworn, depose and say:

1. I make this affidavit from my own personal knowledge, and I am competent to testify to the matters set forth herein

2. I currently hold a Michigan Master Assessing Officer (4) and a certified Personal Property Examiner.

3. Redevelopment of the Alfred Noble Library identified by tax parcel 46-134-03-1640-000; 32901 Plymouth Road has been proposed as a Brownfield project. A request for a Brownfield project requires the taxpayers to include with application, an affidavit signed by a Michigan Advanced Assessing Officer (3) or Michigan Master Assessing Officer (4) that states the property is functionally obsolete pursuant to Brown Redevelopment Financing Act 1996 PA 381 as amended.

4. Functionally obsolete property is property that is "unable to adequately perform the function for which it was intended due to a substantial loss in value resulting from factors such as, overcapacity, changes in technology, deficiencies or super adequacies in design, or other similar factors that affect the property itself or the property's relationship with other surrounding property." MCL 125.2652(p) 2002. The Assessor's Manual as authorized by MCL 211.721 defines functional obsolescence as "a loss in value occurring in a structure caused by changes in design, overcapacity, or inadequacy; e.g., high ceilings, old fixtures or cabinets, poor floor plan in residences." 2003 Michigan Assessor Manual, Vol 1, Glossary, p275.

5. On behalf of the City of Livonia, I have reviewed the property at 32901 Plymouth Road, and have found that it fits within the definition of functional obsolescence. The building has deficiencies that render the building unusable in its current state and would require substantial investment to replace the roof, foundation, asphalt parking, mechanical, and electrical. The building also suffers from mold and mildew as a result of water damage. The building does not fully conform to code due to it partially non-ADA compliant. The current design and layout of the building as is, lacks functionality and does not fit the purpose of today's needs.

Dated this 23rd day of August 2021

I declare under penalty of perjury that the foregoing is true and correct.

Linda Gosselin, MMAO (4)

Subscribed and sworn before me

This 23rd day of August 2021

Bonnie Murphy, Notary Public Wayne County

LETTER TO THE LIVONIA CITY COUNCIL

2.

DPW
February 1, 2023

MEETING DATE	PREPARED BY
S013023/R021323/COI030123/R031323	Sara Kasprowicz, Council Office Manager,

AGENDA ITEM

CR 48-23 Subject matter of the construction administration services for the Building Controls System Upgrade Project.

BACKGROUND

Many of our building control systems are antiquated with parts that are no longer commercially available and dial-up access systems that are no longer functioning. The purpose of this project is to provide a building controls interface that allows multiple buildings to be managed from one system, thereby allowing for remote energy management controls. This will also allow for scheduling each building based on occupancy and energy use to optimize demands for heating and cooling. In addition, building occupants will also have better onsite comfort controls in their workspace. We envision this as a multi-phased project with this contract being the first phase including updates to the Police Department Headquarters, Bennett Civic Center Library, Carl Sandburg Branch Library, and the 16th District Courthouse. Future phases would be bid out separately.

The proposed project scope includes connections of existing mechanical equipment to the new system interface, connections of building servers to a new web-based virtual server, and new hardware and software installations for multiple air handling units, heating plants, chiller plants, VAV boxes, temperature sensors and thermostats.

In order to proceed with construction, bid documents were prepared by the Department with assistance from our architect, OHM Advisors, and bid documents were made publicly available on Bid Net Direct (MITN). A bid opening was held on January 10, 2023 and two competitive bids were received. Havel was the lowest qualified bidder at $981,662.00. A copy of the bid proposal, bid tabulation, and recommendation letter from OHM are provided for your consideration.

Additionally, OHM Advisors will remain involved with the project through completion by providing construction administration services. This includes contract administration (tracking quantities, developing estimates,etc.), construction observation (weekly inspection reports), and construction engineering (collection, review, and processing of shop drawing submittals and as-built drawings).

RECOMMENDATION

To discuss the item as presented.

FISCAL CONSIDERATION

ATTACHMENTS

1. COI022223 LTC Subj Matter Bldg Cont Sys Contract
2. S013023 LTC Building Controls System Contract
3. Bldg Ctrl Upgrade - OHM Recommendation
4. Havel Bid Proposal
5. Bldg Ctrl Upgrade - Bid Tab

APPROVED BY

ARCHITECTS. ENGINEERS. PLANNERS.

OHM Advancing Communities℠

February 10, 2023

Mr. Jacob Rushlow, PE
City of Livonia
Assistant Director of Public Works
12973 Farmington Rd.
Livonia, MI 48150

Regarding: Building Controls Upgrades
Proposal for Contract Administration Services

Dear Mr. Rushlow:

The City, with OHM Advisor's assistance, completed the design and bidding activities associated with the Building Controls Upgrades Project, which includes the Civic Center (Bennett) Library, Sandburg Library, 16th District Court, and the Police Department HQ.

The purpose of this project is to provide a control interface that allows multiple buildings to be managed from one system. The final design includes the following major elements: Networked connection of building level servers to a web-based accessible front-end interface with graphical controls diagrams, remote monitoring and setpoint adjustment, removal of all dial-up components, a system where City qualified/trained staff can add controllers, change graphics, and adjust setpoints and schedules, and a system where components are commercially available at wholesale pricing.

It is our understanding that the City would like to move forward with assistance from OHM Advisors for the Contract Administration phase. The work outlined in this phase includes pre-construction meetings, shop drawing review, field visits, review of contractor's closeout documents, and be included in a functional startup with the contractor to ensure the system is operating as designed.

We have prepared the attached Scope of Services, Schedule and Proposed Fees to assist the City with the effort necessary to deliver the improvements. We have based our proposal on the terms and conditions of the current Professional Architectural Services agreement. The proposed project Supplements (A-C) for this project, as well as a draft of the Exhibit A, are included.

We appreciate this opportunity to provide contract administration services to the City.

Sincerely,
OHM Advisors

Rhett Gronevelt, PE
Principal
CC: Chris Ozog, OHM

OHM Advisors
34000 PLYMOUTH ROAD
LIVONIA, MICHIGAN 48150
T 734.522.6711
F 734.522.6427
OHM-Advisors.com

CITY OF LIVONIA

BUILDING CONTROLS UPGRADES

PROJECT UNDERSTANDING

The CITY wishes to implement a control interface that allows multiple buildings to be managed from one system. The buildings identified include the Civic Center (Bennett) Library, Sandburg Library, 16th District Court, and the Police Department HQ. The final design includes the following major elements: Networked connection of building level servers to a web-based accessible front-end interface with graphical controls diagrams, remote monitoring and setpoint adjustment, removal of all dial-up components, a system where City qualified/trained staff can add controllers, change graphics, and adjust setpoints and schedules, and a system where components are commercially available at wholesale pricing.

Architectural services for this project are divided into two (2) phases. Phase 1 includes design and bidding and has been completed. Phase 2 includes contract administration and is the subject of this contract supplement.

PHASE 2: CONTRACT ADMINISTRATION PHASE

The work to be completed under this phase will include the following:

- Conduct pre-construction meeting.
- Attend and conduct project progress meeting – Assume bi-weekly.
- Perform shop drawing review, RFI processing, pay app review and certification, and provide preliminary and final punch list and project acceptance.
- Field visits to be performed based at regular intervals. A written report to be submitted after each field visit to document work progress, current conditions, issues and field discussions with Contractor. Assume 2 per month.
- Review Contractor's Project Closeout documents including review of O&M Manuals, Warranties, and Contractor's As-Built Record Drawings.
- Provide functional startup to ensure the system is operating as designed, users have specified abilities and sequences of operations are functioning in both seasons.

CITY OF LIVONIA

BUILDING CONTROLS UPGRADES

CONSULTANT shall provide services for the Phases and Tasks outlined on Supplement A according to the approximate timeframe below.

It is anticipated that construction would generally begin in April 2023 and be substantially completed within 8 months.

CITY OF LIVONIA

BUILDING CONTROLS UPGRADES

Contract Administration Phase

The CITY agrees to pay the CONSULTANT on an hourly basis, billed monthly, per the attached Rate Schedule from the Contract at the not-to-exceed amount of fifty-five thousand dollars and zero cents ($55,000).

Additional Services

Additional services, if approved by City Council, shall be paid at the current hourly rate schedule or at an agreed upon price between the CITY and CONSULTANT.

Notes

- Invoices shall be submitted monthly.
- Contract Rate Schedule is attached for reference.

City of Livonia
As-Needed Architectural Services
Hourly Rate Schedule
Firm Name:
12/17/2020

	OHM Advisors					
	Hourly Rates					
Position Title	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**
Professional Engineer IV / Architect IV / Senior Interior Designer IV	$ 180.00	$ 180.00	$ 187.00	$ 187.00	$ 194.00	$ 194.00
Professional Engineer III / Architect III / Senior Interior Designer III	$ 165.00	$ 165.00	$ 171.00	$ 171.00	$ 177.00	$ 177.00
Professional Engineer II / Architect II / Senior Interior Designer II	$ 150.00	$ 150.00	$ 156.00	$ 156.00	$ 162.00	$ 162.00
Professional Engineer I / Architect I / Senior Interior Designer I	$ 137.00	$ 137.00	$ 142.00	$ 142.00	$ 147.00	$ 147.00
Project Specialist II	$ 158.00	$ 158.00	$ 164.00	$ 164.00	$ 170.00	$ 170.00
Project Specialist I	$ 130.00	$ 130.00	$ 135.00	$ 135.00	$ 140.00	$ 140.00
Graduate Engineer IV	$ 145.00	$ 145.00	$ 150.00	$ 150.00	$ 156.00	$ 156.00
Graduate Engineer III	$ 135.00	$ 135.00	$ 140.00	$ 140.00	$ 145.00	$ 145.00
Graduate Engineer II	$ 130.00	$ 130.00	$ 135.00	$ 135.00	$ 140.00	$ 140.00
Graduate Engineer I	$ 120.00	$ 120.00	$ 124.00	$ 124.00	$ 128.00	$ 128.00
Graduate Architect III / Landscape Architect III / Interior Designer III	$ 130.00	$ 130.00	$ 135.00	$ 135.00	$ 140.00	$ 140.00
Graduate Architect II / Landscape Architect II / Interior Designer II	$ 110.00	$ 110.00	$ 114.00	$ 114.00	$ 118.00	$ 118.00
Graduate Architect I / Landscape Architect I / Interior Designer I	$ 98.00	$ 98.00	$ 101.00	$ 101.00	$ 105.00	$ 105.00
Technician IV	$ 135.00	$ 135.00	$ 140.00	$ 140.00	$ 145.00	$ 145.00
Technician III	$ 120.00	$ 120.00	$ 124.00	$ 124.00	$ 128.00	$ 128.00
Technician II	$ 100.00	$ 100.00	$ 104.00	$ 104.00	$ 108.00	$ 108.00
Technician I	$ 80.00	$ 80.00	$ 83.00	$ 83.00	$ 86.00	$ 86.00
Engineering / Architectural / Interior Design Aide	$ 65.00	$ 65.00	$ 67.00	$ 67.00	$ 69.00	$ 69.00
Professional Surveyor III	$ 160.00	$ 160.00	$ 166.00	$ 166.00	$ 172.00	$ 172.00
Professional Surveyor II	$ 150.00	$ 150.00	$ 156.00	$ 156.00	$ 162.00	$ 162.00
Professional Surveyor I	$ 135.00	$ 135.00	$ 140.00	$ 140.00	$ 145.00	$ 145.00
Graduate Surveyor	$ 115.00	$ 115.00	$ 119.00	$ 119.00	$ 123.00	$ 123.00
Surveyor III	$ 115.00	$ 115.00	$ 119.00	$ 119.00	$ 123.00	$ 123.00
Surveyor II	$ 108.00	$ 108.00	$ 112.00	$ 112.00	$ 116.00	$ 116.00
Surveyor I	$ 88.00	$ 88.00	$ 91.00	$ 91.00	$ 94.00	$ 94.00
Surveyor Aide	$ 65.00	$ 65.00	$ 67.00	$ 67.00	$ 69.00	$ 69.00
Planner IV	$ 160.00	$ 160.00	$ 166.00	$ 166.00	$ 172.00	$ 172.00
Planner III	$ 140.00	$ 140.00	$ 145.00	$ 145.00	$ 150.00	$ 150.00
Planner II	$ 118.00	$ 118.00	$ 122.00	$ 122.00	$ 126.00	$ 126.00
Planner I	$ 98.00	$ 98.00	$ 101.00	$ 101.00	$ 105.00	$ 105.00
Planner Aide	$ 65.00	$ 65.00	$ 67.00	$ 67.00	$ 69.00	$ 69.00
Graphic Designer	$ 110.00	$ 110.00	$ 114.00	$ 114.00	$ 118.00	$ 118.00
Administrative Support	$ 70.00	$ 70.00	$ 72.00	$ 72.00	$ 74.00	$ 74.00
Clerical Aide	$ 59.00	$ 59.00	$ 61.00	$ 61.00	$ 63.00	$ 63.00
Principal	$ 205.00	$ 205.00	$ 213.00	$ 213.00	$ 221.00	$ 221.00
Sr. Associate	$ 195.00	$ 195.00	$ 202.00	$ 202.00	$ 210.00	$ 210.00
Associate	$ 183.00	$ 183.00	$ 190.00	$ 190.00	$ 197.00	$ 197.00

EXHIBIT A

PROJECT SPECIFIC SCOPE OF SERVICES, PROJECT SCHEDULE, PAYMENTS TO CONSULTANT

The information contained in this Exhibit applies only to the following project:

Project Title:
BUILDING CONTROLS UPGRADES

Dated:_____, 2023

This is an Exhibit to the Professional Architectural Services Contract dated January 1, 2021 between the City of Livonia, and Orchard, Hiltz & McCliment, Inc. (OHM Advisors), whose address is 34000 Plymouth Road, Livonia, MI 48150.

This Exhibit acts as a duly executed written instrument that amends, supplements, modifies, or cancels certain portions of the contract, as provided in Article II. of the contract.

A. SCOPE OF SERVICES

CONSULTANT is requested to provide Contract Administration Phase Services for the proposed improvements in accordance with attached Supplement A, dated February 10, 2023.

B. PROJECT SCHEDULE

The Project Schedule is attached as Supplement B, dated February 10, 2023.

C. PAYMENTS TO CONSULTANT

CONSULTANT shall be paid on an hourly basis up to an amount not-to-exceed fifty-five thousand dollars and zero cents ($55,000) in accordance with the tasks and payment terms on Supplement C, dated February 10, 2023.

In Witness Whereof, the City and Consultant, by and through their duly authorized officers and representatives, have executed this Contract.

In the Presence of:

CITY OF LIVONIA, a Michigan Municipal Corporation

_____

By:_____
Maureen Miller Brosnan, Mayor

_____

By:_____
Susan M. Nash, City Clerk

In the Presence of:

OHM Advisors

_____

By:_____
Rhett A. Gronevelt, PE

Its: Principal

Approved:

_____
Donald R. Rohraff
Director of Public Works

Approved:

_____
Jacob Rushlow, PE
Asst. Director of Public Works

Pursuant to Council Resolution

Approved:

No.:_____

_____
Michael Slater
Director of Finance

Adopted on:_____

Approved:

_____
Paul A. Bernier
Department of Law

On a motion by Councilmember McCullough, supported by Councilmember Bahr and unanimously adopted, it was:

> CR 48-23 RESOLVED, that having considered the request of Councilmember Brandon McCullough at the Study Meeting held January 30, 2023, and the report and recommendation of the Assistant Director of Public Works, dated January 17, 2023, which bears the signatures of the Director of Public Works, the Director of Finance and the City Attorney, and is approved for submission by the Mayor, in connection with the Building Controls System Upgrade Project, the Council does hereby refer this item to the Capital Outlay and Infrastructure Committee for its report and recommendation.

UNFINISHED BUSINESS ITEM 14 (Regular Meeting of February 13, 2023)

Motion by:	**McCullough**
Seconded by:	**Bahr**
ROLL CALL:	
Ayes:	**Morgan, McCullough, McIntyre, Toy, Bahr, Donovic, Jolly**
Nays:	**None**
Absent:	**None**

CITY OF LIVONIA – CITY COUNCIL
MINUTES OF STUDY MEETING HELD JANUARY 30, 2023

Meeting was called to order at 8:00 p.m. by Council President Jim Jolly. Present: Scott Morgan, Brandon McCullough, Kathleen McIntyre, Scott Bahr, Rob Donovic, and President Jim Jolly. Absent: Vice President Laura Toy.

Elected and appointed officials present: Susan Nash, City Clerk; Paul Bernier, City Attorney; David Lear, Assistant City Engineer; Mark Taormina, Director of Planning and Economic Development, Josh Sabo, Director of Communications and Casey O'Neil, Information Systems Director.

Councilmember Morgan led the Pledge of Allegiance.

10. AWARD OF BID AND REQUEST TO AMEND THE CONTRACT WITH OHM ADVISORS AND AUTHORIZATION FOR ADDITIONAL APPROPRIATION: Public Works Division, re: for the construction administration services for the Building Controls System Upgrade Project, from the Capital Projects Fund.

    Jacob Rushlow, Assistant Director of Public Works, presented the request to Council.

    Councilmember McCullough offered a motion to refer this to the Capital Outlay and Infrastructure Committee for review.

    Councilmember Bahr asked when we would see the results of this Capital Needs Assessment.

    Jacob Rushlow indicated a meeting is being scheduled and they will invite Plant Moran and Cressa back to present the information to Council.

    DIRECTION: REFERRED TO CAPITAL OUTLAY AND INFRASTRUCTURE COMMITTEE

LETTER TO THE LIVONIA CITY COUNCIL

10.

DPW
January 17, 2023

MEETING DATE	PREPARED BY
S013023/R021323	Jill Russell, Secretary III,

AGENDA ITEM

AWARD OF BID AND REQUEST TO AMEND THE CONTRACT WITH OHM ADVISORS AND AUTHORIZATION FOR ADDITIONAL APPROPRIATION: Public Works Division, re: for the construction administration services for the Building Controls System Upgrade Project, from the Capital Projects Fund.

BACKGROUND

Many of our building control systems are antiquated with parts that are no longer commercially available and dial-up access systems that are no longer functioning. The purpose of this project is to provide a building controls interface that allows multiple buildings to be managed from one system, thereby allowing for remote energy management controls. This will also allow for scheduling each building based on occupancy and energy use to optimize demands for heating and cooling. In addition, building occupants will also have better onsite comfort controls in their workspace. We envision this as a multi-phased project with this contract being the first phase including updates to the Police Department Headquarters, Bennett Civic Center Library, Carl Sandburg Branch Library, and the 16th District Courthouse. Future phases would be bid out separately.

The proposed project scope includes connections of existing mechanical equipment to the new system interface, connections of building servers to a new web-based virtual server, and new hardware and software installations for multiple air handling units, heating plants, chiller plants, VAV boxes, temperature sensors and thermostats.

In order to proceed with construction, bid documents were prepared by the Department with assistance from our architect, OHM Advisors, and bid documents were made publicly available on Bid Net Direct (MITN). A bid opening was held on January 10, 2023 and two competitive bids were received. Havel was the lowest qualified bidder at $981,662.00. A copy of the bid proposal, bid tabulation, and recommendation letter from OHM are provided for your consideration.

Additionally, OHM Advisors will remain involved with the project through completion by providing construction administration services. This includes contract administration (tracking quantities, developing estimates,etc.), construction observation (weekly inspection reports), and construction engineering (collection, review, and processing of shop drawing submittals and as-built drawings).

RECOMMENDATION

It is the Department's Request that Council take the following actions:

1. Accept the bid and award a construction contract to Havel, a Division of Shambaugh & Son, LP, 21661 Melrose Avenue, Southfield, MI 48075, for all labor, materials, and equipment to complete the Building Controls Upgrades project in an amount not to exceed $981,662.00.

2. Authorize a contract amendment (CR 378-20) with OHM Advisors to perform construction administration services in an amount not to exceed $55,000.00 from budgeted funds.

3. Authorize an expenditure of $646,505 from budgeted funds in account no. 401-000-987-000 and authorize an additional appropriation from the unexpended fund balance of the Capital Projects Fund (401) in the amount of $390,157.

FISCAL CONSIDERATION

Approve expenditure of funds from GL #401-000-987-000 as follows:

Havel	$ 981,662.00
OHM	$ 55,000.00
	$1,036,662.00

ATTACHMENTS

1. S013023 LTC Building Controls System Contract
2. Bldg Ctrl Upgrade - Bid Tab
3. Havel Bid Proposal
4. Bldg Ctrl Upgrade - OHM Recommendation

APPROVED BY



Jacob Rushlow, P.E., Assistant Director of Public Works — Date: January 19, 2023



Don Rohraff, Director of Public Works — Date: January 19, 2023



Michael Slater, Finance Director — Date: January 20, 2023



Paul Bernier, City Attorney — Date: January 20, 2023



Date: January 20, 2023

Maureen Miller Brosnan, Mayor

ARCHITECTS. ENGINEERS. PLANNERS.

OHM Advancing Communities

January 18, 2023

Mr. Jacob Rushlow, P.E. Assistant Director of Public Works
City of Livonia
12973 Farmington Road
Livonia, MI 48150

Re: **Building Controls Upgrades**
Bid Proposal Review

Dear Mr. Rushlow:

Sealed bids for the Building Controls Upgrade project were received by the City Clerk and publicly read aloud on January 10, 2023 via Webex at 10:00 am. Bids were received from two (2) contractors that ranged from $960,991 to $1,695,500 along with associated unit prices and alternates, summary attached. We have reviewed the bids, previous experiences, and references of these two bidders.

Contractor	Total Base Bid	Alternate 1	Total Contract Amount
Havel.	$ 960,991	$ 20,871	$ 981,862
MCMI	$ 1,695,500	$ 42,950	$ 1,738,450

The Architect's estimate of probable construction costs was $750,000. The project scope is to provide a controls front end that connects to existing building controls, allowing for building management to occur from one system. The upgrades involve four sites: Police Station, Civic Center Library, Sandburg Library, and the Court House. Alternate work consists of inclusion of chilled water unit at Civic Center Library.

Based on discussions with Havel's references provided., it appears they are qualified for and capable of performing the work involved with the construction of this project.

If you wish to discuss this evaluation, please call me at 734-466-4475.

Sincerely,
OHM ADVISORS

Christopher Ozog, AIA
Project Manager

OHM Advisors
34000 PLYMOUTH ROAD
LIVONIA, MICHIGAN 48150
T 734.522.6711
F 734.522.6427
OHM-Advisors.com

Document A310™ – 2010

Conforms with The American Institute of Architects AIA Document 310

Bid Bond

CONTRACTOR:
(Name, legal status and address)

Havel, A Division of Shambaugh & Son, L.P.
5870 Carbonmill Dr.
South Bend, IN 46628

SURETY:
(Name, legal status and principal place of business)

Travelers Casualty and Surety Company of America
One Tower Square
Hartford, CT 06183

Mailing Address for Notices
One Tower Square
Hartford, CT 06183

OWNER:
(Name, legal status and address)

City of Livonia
12973 Farmington Road
Livonia, MI 48150

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

BOND AMOUNT: 5% Five Percent of Amount Bid

PROJECT:
(Name, location or address, and Project number, if any)

BUILDING CONTROLS UPGRADE

The Contractor and Surety are bound to the Owner in the amount set forth above, for the payment of which the Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, as provided herein. The conditions of this Bond are such that if the Owner accepts the bid of the Contractor within the time specified in the bid documents, or within such time period as may be agreed to by the Owner and Contractor, and the Contractor either (1) enters into a contract with the Owner in accordance with the terms of such bid, and gives such bond or bonds as may be specified in the bidding or Contract Documents, with a surety admitted in the jurisdiction of the Project and otherwise acceptable to the Owner, for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof; or (2) pays to the Owner the difference, not to exceed the amount of this Bond, between the amount specified in said bid and such larger amount for which the Owner may in good faith contract with another party to perform the work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect. The Surety hereby waives any notice of an agreement between the Owner and Contractor to extend the time in which the Owner may accept the bid. Waiver of notice by the Surety shall not apply to any extension exceeding sixty (60) days in the aggregate beyond the time for acceptance of bids specified in the bid documents, and the Owner and Contractor shall obtain the Surety's consent for an extension beyond sixty (60) days.

If this Bond is issued in connection with a subcontractor's bid to a Contractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

When this Bond has been furnished to comply with a statutory or other legal requirement in the location of the Project, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

Signed and sealed this 9th day of December, 2022.

Havel, A Division of Shambaugh & Son, L.P.
(Principal) *(Seal)*

By: _____
(Title)

_____
(Witness)

Travelers Casualty and Surety Company of America
(Surety) *(Seal)*

By: _____
(Title) Camille Maitland, Attorney-in-Fact

_____
(Witness)

TRAVELERS

Travelers Casualty and Surety Company of America
Travelers Casualty and Surety Company
St. Paul Fire and Marine Insurance Company

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company are corporations duly organized under the laws of the State of Connecticut (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint **Camille Maitland** of **UNIONDALE**, **New York**, their true and lawful Attorney(s)-in-Fact to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed, and their corporate seals to be hereto affixed, this **21st** day of **April, 2021.**

State of Connecticut

City of Hartford ss.

By: _____
Robert L. Raney, Senior Vice President

On this the **21st** day of **April, 2021**, before me personally appeared **Robert L. Raney**, who acknowledged himself to be the Senior Vice President of each of the Companies, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of said Companies by himself as a duly authorized officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission expires the **30th** day of **June, 2026**

_____
Anna P. Nowik, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of each of the Companies, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, **Kevin E. Hughes**, the undersigned, Assistant Secretary of each of the Companies, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which remains in full force and effect.

Dated this 9th day of December, 2022.

_____
Kevin E. Hughes, Assistant Secretary

To verify the authenticity of this Power of Attorney, please call us at 1-800-421-3880.
Please refer to the above-named Attorney(s)-in-Fact and the details of the bond to which this Power of Attorney is attached.

TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA

HARTFORD, CT 06183

PRINCIPAL'S ACKNOWLEDGMENT

State of Indiana , County of St. Joseph }ss.

On this 18th day of January in the year 20 23, before me, the undersigned, personally appeared Mark Mannisen, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her capacity, and that by his/her signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

Connie Ann Holston
Notary Public

CONNIE ANN HOLSTON
Notary Public, State of Indiana
St. Joseph County
Commission Number NP0631018
My Commission Expires
November 20, 2027

SURETY COMPANY'S ACKNOWLEDGMENT

State of NEW YORK , County of NASSAU }ss.

On this 9th day of December in the year 20 22, before me, the undersigned, personally appeared Camille Maitland, personally known to me, and who, being by me duly sworn, did depose and say: That he/she resides in Nassau County, New York; that he/she is Attorney-in-Fact of **TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA**, the corporation described in and which executed the within instrument; that he/she knows the corporate seal of said Company; that the seal affixed to said instrument is such corporate seal; and that he/she signed said instrument as Attorney-in-Fact by authority of the Board of Directors of said Company; and affiant did further depose and say that the Superintendent of the State of New York Department of Financial Services has, pursuant to Section 1111 of the New York Insurance Law, issued to **TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA** his/her certificate that said Company is qualified to become and be accepted as surety or guarantor on all bonds, undertakings, recognizances, guaranties, and other obligations required or permitted by law; and that such certificate has not been revoked.

Notary Public

NELLY RENCHIWICH M
Notary Public-State of New York
No. 01RE6218158
Qualified in Nassau County
Commission Expires March 1, 2026

TRAVELERS CASUALTY AND SURETY COMPANY OF AMERICA

HARTFORD, CONNECTICUT 06183

FINANCIAL STATEMENT AS OF DECEMBER 31, 2021

AS FILED IN THE STATE OF NEW YORK

CAPITAL STOCK $ 6,480,000

ASSETS		LIABILITIES & SURPLUS	
BONDS	$ 4,427,068,873	LOSSES	$ 1,224,258,147
STOCKS	90,892,083	LOSS ADJUSTMENT EXPENSES	157,266,812
CASH AND INVESTED CASH	3,976,380	COMMISSIONS	49,977,644
OTHER INVESTED ASSETS	4,609,133	OTHER EXPENSES	46,607,590
SECURITIES LENDING REINVESTED COLLATERAL ASSETS	7,433,086	TAXES, LICENSES AND FEES	16,655,025
INVESTMENT INCOME DUE AND ACCRUED	37,877,324	CURRENT FEDERAL AND FOREIGN INCOME TAXES	1,972,277
PREMIUM BALANCES	294,081,729	UNEARNED PREMIUMS	1,212,347,629
REINSURANCE RECOVERABLE	70,677,646	ADVANCE PREMIUM	1,824,313
NET DEFERRED TAX ASSET	60,156,960	POLICYHOLDER DIVIDENDS	14,256,052
OTHER ASSETS	3,286,703	CEDED REINSURANCE NET PREMIUMS PAYABLE	47,473,619
		AMOUNTS WITHHELD / RETAINED BY COMPANY FOR OTHERS	42,097,038
		REMITTANCES AND ITEMS NOT ALLOCATED	10,579,448
		PROVISION FOR REINSURANCE	6,873,132
		PAYABLE TO PARENT, SUBSIDIARIES AND AFFILIATES	40,373,235
		PAYABLE FOR SECURITIES LENDING	7,433,086
		ESCHEAT LIABILITY	537,132
		RETROACTIVE REINSURANCE RESERVE ASSUMED	816,092
		OTHER ACCRUED EXPENSES AND LIABILITIES	250,005
		TOTAL LIABILITIES	$ 2,881,598,277
		CAPITAL STOCK	$ 6,480,000
		PAID IN SURPLUS	433,803,760
		OTHER SURPLUS	1,678,177,878
		TOTAL SURPLUS TO POLICYHOLDERS	$ 2,118,461,638
TOTAL ASSETS	$ 5,000,059,915	TOTAL LIABILITIES & SURPLUS	$ 5,000,059,915

CERTIFICATE

This is to certify that the following is a true and correct copy of resolutions adopted by CSUSA Holdings L.L.C., a Delaware limited liability company which is the general partner of Shambaugh & Son, L.P., a Texas limited partnership:

RESOLVED, that the following named persons be, and they hereby are, appointed to the offices set opposite their respective names below to serve as such officers of Shambaugh & Son, L.P. until their respective successors are duly appointed and shall qualify:

- Paul R. Meyers, Jr. - CEO/President
- William J. Meyer - SVP/Secretary
- R. Kevin Matz - VP
- Charles T. Pavelec - SVP, Purchasing
- Sahsha R. Tigulis - VP, Purchasing
- Cale R. Campbell - SVP, Havel
- Douglas M. Hearld - SVP, Electrical
- Jeffrey L. Johns - SVP
- Thomas L. Scare - SVP, Finance
- Lance S. Dills - Controller
- Erik T. Brandt - Treasurer
- Daniel J. Ritzert - SVP, Mechanical and Process
- Thomas P. Aurich - VP, Refrigeration
- Michael L. Parsey - VP, Engineering & Design
- Gary A. Perkey - VP, Regional Mechanical
- Matthew Gerbers - Assistant Secretary
- Matthew R. Hartenstein - Assistant Secretary
- Mark A. Veerkamp - CFO
- Robert B. Vincent - COO, Fire Protection
- Melissa C. Finnerty - VP, Fire Protection Contracts
- Todd A. Fink - SVP, Fire Protection
- Jon R. Ackley - SVP, Dalmatian Fire
- Dominic A. Bosco - VP, Fire Protection
- Mark T. Adair - VP, Dalmatian Fire
- Todd L. Klopfenstein - VP, Fort Wayne Fire Protection
- Robert K. Reid - VP, Dalmatian Fire Indianapolis
- Sean W. Couch - VP, Dalmatian Fire Cincinnati
- Ronald D. Martin, Jr. - VP, Dalmatian Fire Columbus
- Aaron Michael - VP, Dalmatian Fire Louisville
- Mark R. Gengler - VP, Fire Protection Sales & Estimating
- Bradley S. MacMillan - SVP, Northstar Fire
- Jason W. McKeown - VP, Northstar Fire
- Humberto Valdez - VP, Northstar Fire, Alarm

RESOLVED, further, that any one of the officers of Shambaugh & Son, L.P., as well as any of the following named individuals, be, and each of them hereby is, authorized to execute waivers for payment, bids, bonds and contracts for construction projects by and on behalf of Shambaugh & Son, L.P.:

- **Meredith L.A. Smith**, Havel Indianapolis Director of Controls
- **John L. Reed**, Havel Phoenix Director of Controls and Automation
- **Robert A. Preston**, EMCOR Services Shambaugh Indianapolis Director of Service
- **Matthew F. Selvocki**, Indianapolis Refrigeration Branch Manager
- **Justin S. Hoover**, Refrigeration Division Manager
- **Dan W. Hudson**, Advanced Systems Group, Fort Wayne Branch Manager
- **Mark T. Siemers**, Ed Grace Division Manager
- **Angela R. Perkey**, Collection Manager
- **Mark O. Manninen**, South Bend Fire Protection Branch Manager
- **Larry D. Pever**, Toledo Fire Protection Branch Manager
- **Scott G. Simon**, ASG Division Manager
- **Ronald O. Rabe**, Special Hazards Fire Protection Director
- **Jeffrey A. McNamara**, Detroit Fire Protection Branch Manager
- **Alan L.E. Jacobs**, Chicago Fire Protection Branch Manager
- **Jason D. Cormany**, Chicago Fire Protection Assistant Branch Manager
- **Justin A. Schroeder**, West Coast Fire Protection Assistant Branch Manager
- **Rico O. Olaosebikan**, Southern California Fire Protection Assistant Branch Manager
- **Michael G. Spatafore**, Phoenix Fire Protection Branch Manager
- **William T. Morrison, Jr.**, Memphis Fire Protection Branch Manager
- **Kyle W. Gansel**, Fire Protection Director of Service
- **Christopher Harper**, Northstar Fire Austin Branch Manager
- **Dale A. Payne**, Northstar Fire Dallas Branch Manager
- **Kevin K. Mina**, Northstar Fire Atlanta Branch Manager
- **Joel Hernandez, Jr.**, Northstar Fire Houston Branch Manager
- **Zach C. Fisher**, Northstar Fire San Antonio Branch Manager
- **Jesse J. Galvan**, Northstar Fire, Alarm Manager
- **Carole H. Ritcey**, Harroun Fire Protection Division Manager

I, William J. Meyer, the duly appointed and acting Sr. Vice President and Secretary of Shambaugh & Son, L.P. hereby certify that the above resolutions are a true and correct copy of resolutions adopted by the General Partner of Shambaugh & Son, L.P. as of October 13, 2022.

SHAMBAUGH & SON, L.P.

STATE OF Indiana)
) SS:
COUNTY OF St. Joseph)

William J. Meyer
Senior Vice President/Secretary

Before a Notary Public, in and for said County and State appeared William J. Meyer and acknowledged the execution of the foregoing certificate.

Connie Ann Nolsten Resident of St. Joseph County.

Date Jan. 10, 2023 My Commission Expires: Nov. 20, 2027

FORM OF PROPOSAL
for
BUILDING CONTROLS UPGRADE

Bid of Havel a Division of Shambaugh & Son, LP hereinafter called Bidder, organized and existing under the laws of or a resident of the State of Michigan, doing business as a limited partnership*.

* Insert as applicable: "a corporation", "a partnership" or "an individual"

TO THE CITY OF LIVONIA, MICHIGAN, hereinafter called OWNER:

The undersigned as Bidder hereby declares: that this Bid is made in good faith without fraud or collusion with any person or persons bidding on the same Contract; that the Bidder has read and examined the Notice to Bidders, Instructions to Bidders, Bid, General Conditions, Supplementary Conditions, Agreement, Forms of Proposal, Bond, Specifications and Drawings, as prepared by the ARCHITECT, and understands all of the same; that the Bidder or its representative has made personal investigation at the site and has become fully familiar with regard to the conditions to be met in the execution of this Contract, and the undersigned proposes to furnish all labor, materials, tools, power, transportation, and construction equipment necessary for the construction of the Project and performing related work in full accordance with the aforesaid Contract Documents, including any and all Addenda officially issued, their receipt of which is hereby acknowledged:

Addendum No.	Addendum Date
No. 1	November 22, 2022
No. 2	December 12, 2022
No. 3	December 15, 2022

The Contract will be awarded to the lowest responsive, responsible Bidder based on the lump sum price for all Work specified.

BASE BID PRICE – Civic Center Library: $293,111.00

BASE BID PRICE – Sandburgh Library: $61,946.00

BASE BID PRICE – Police Station: $292,317.00

BASE BID PRICE – Courthouse: $313,617.00

Unit Pricing

Unit Price No. 1: Provide removal of existing ball valve and installation of new ball valve or add new ball valve where currently there is none. Size to be 1/2" isolation ball valve.
Cost Per Unit Installed: $190.00 each

Unit Price No. 2: Provide removal of existing ball valve and installation of new ball valve or add new ball valve where currently there is none. Size to be 3/4" isolation ball valve.
Cost Per Unit Installed: $200.00 each

Unit Price No. 3: Provide removal of existing ball valve and installation of new ball valve or add new ball valve where currently there is none. Size to be 1" isolation ball valve.
Cost Per Unit Installed: $205.00 each

Alternates
Base bid of project will include no work at Civic Center Library, Chilled Water unit. Alternate 1 will include work identified on 1/M-602 for Chilled Water Unit.

Alternate No. 1 $20,671.00

ALLOWANCE FORM ATTACHED X YES

If the foregoing Bid shall be accepted by the OWNER, the undersigned agrees to enter into the attached form of Agreement within ten (10) days after receiving notice of such acceptance, will furnish the OWNER satisfactory bonds and certificates of insurance coverage, and will complete the Project, at the price and within the time stated in this Bid.

The undersigned further agrees that if the foregoing Bid shall be accepted, work will commence immediately after the Contract has been awarded, the Agreement executed, and a Notice to Proceed received. **The undersigned shall complete the Work to Substantial Completion within 240 DAYS of "Notice to Proceed", and to Final Completion within 270 DAYS of "Notice to Proceed"** Substantial completion shall be met when roof is fully installed, and the windows/window wells are installed. Final completion shall be met when all restoration items and punch-list work items have been completed.

The undersigned attaches hereto its Bid security, as required by the Notice to Bidders and Instructions to Bidders. The undersigned agrees that in case it shall fail to fulfill its obligations under the foregoing Bid, and/or shall fail to furnish bonds, as specified, the OWNER may, at its option determine that the undersigned has abandoned its rights and interests in such Contract and that its Bid security accompanying its Bid; has been forfeited to the said OWNER, but otherwise the Bid security shall be returned to the undersigned upon the execution of the Contract and the acceptance of the bonds.

The undersigned also agrees that for each and every calendar day that he may be in default of Substantial Completion of the Work, within the time specified in this Bid, the OWNER will suffer a damage of $750 per day, and said OWNER shall be compensated therefore at the rate as liquidated damages in accordance with the Agreement.

In submitting this Bid, it is understood that the right is reserved by the OWNER to accept any bid, to reject any or all Bids, and to waive irregularities in bidding in the interest of the OWNER.

SUBMITTED on January 10, 2023
Date*

269-207-4288
Telephone Number*

21661 Melrose Avenue
Street*

574-232-3560
Facsimile Number*

Southfield, MI 48075
City, State, ZIP*

*Typed or printed in ink.

BY: Havel, a division of Shambaugh & Son, LP 

Name of Bidder* Signature

Cale Campbell, SVP

Name and Title of Signatory*

DOCUMENT 00 43 21 - ALLOWANCE FORM

1.1 BID INFORMATION

A. Bidder: Havel, a Division of Shambaugh & Son, LP.

B. Project Name: Building Controls Upgrade.

C. Project Location: 12973 Farmington Rd, Livonia, Michigan, 48150.

D. Owner: City of Livonia.

E. Architect: OHM Advisors.

F. Architect Project Number: 0090-21-0060 .

1.2 BID FORM SUPPLEMENT

A. This form is required to be attached to the Bid Form.

B. The undersigned Bidder certifies that Base Bid submission to which this Bid Supplement is attached includes those allowances described in the Contract Documents and scheduled in Section 01 21 00 "Allowances."

1.3 SUBMISSION OF BID SUPPLEMENT

A. Respectfully submitted this 10th day of January, ~~2022~~. 2023

B. Submitted By: Havel, a Division of Shambaugh & Son, LP (Insert name of bidding firm or corporation).

C. Authorized Signature:  (Handwritten signature).

D. Signed By: Cale Campbell (Type or print name).

E. Title: Senior VP (Owner/Partner/President/Vice President).

END OF DOCUMENT 00 43 21

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STATEMENT OF QUALIFICATIONS

Bidder must answer all questions. If more space is needed to complete a question, attach a separate sheet. Bidder may submit any additional information.

Name: Havel, a Division of Shambaugh & Son, LP

Address: 21661 Melrose Avenue
Southfield, MI 48075

Phone: 269-207-4288

Number of years operating under your present name: 11 - in business since 1926

General nature of work performed by your company:
Shambaugh is a full MEP contractor. Havel is the temperature control and building automation division.

Background and experience of the principal members of your organization including officers:
Cale Campbell, PE - Senior VP - 29 years with Havel
Rod DeVries - Senior Account Executive - 41 years with Havel
Thomas Yant - Division Manager - 7 years with Havel, 30 years industry experience

Major equipment available for this contract:
Tridium Niagara N4 Supervisor and Network Controllers
BACnet IP Field Controllers
Schneider Electric and Kele Field Devices

Indicate whether or not your labor force is union or non-union (check one)

_X_ Union

_____ Non-Union

STATEMENT OF QUALIFICATIONS

PROJECT REFERENCES

List similar projects completed within the last (3) years:

Project Title: Campus Wide BAS Upgrade

Client: Hillsdale College

Contact Person: Dave Billington Phone: 517-607-5406

Contract Amount: $829,645.00

Start Date: May, 2022 Completion Date: May, 2023

Project Description:

Upgrade of existing obsolete Honeywell BAS and pneumatic controls

Project Title: Firekeepers Casino and Hotel Addition

Client: John E Gree

Contact Person: Donovan Morehouse Phone: 517-749-2297

Contract Amount: $1,278,960.00

Start Date: August, 2019 Completion Date: January, 2022

Project Description:

Temperature control and BAS for Casino and Hotel addition

STATEMENT OF QUALIFICATIONS

Project Title: City of Sturgis BAS Upgrades

Client: City of Sturgis

Contact Person: Dan Root Phone: 269-503-9537

Contract Amount: $200,000.00

Start Date: October of 2019 Completion Date: Ongoing

Project Description:

BAS upgrades of legacy systems in various city buildings

Project Title:

Client:

Contact Person: Phone:

Contract Amount:

Start Date: Completion Date:

Project Description:

Form Completed by:

Name - Title

Signature

Date

SUBCONTRACTOR LIST

ITEM	NAME, ADDRESS & PHONE # OF CONTRACTOR
_____	_____ _____ _____ Phone: _____
_____	_____ _____ _____ Phone: _____
_____	_____ _____ _____ Phone: _____
_____	_____ _____ _____ Phone: _____
_____	_____ _____ _____ Phone: _____

Date: November 22, 2022

From: Enna A. Bachelor, Purchasing Manager

To: Prospective Bidders

Subject: Addendum No. 1 – BUILDING CONTROLS UPGRADE

Addendum No.1 is being issued to provide clarifications resulting from the mandatory prebid meeting held on November 16, 2022. A copy of the sign-in sheet from the prebid meeting is also attached. Bids will only be considered from firms in attendance at the mandatory prebid meeting.

Any further questions or clarifications desired by vendors shall be submitted in writing to Enna Bachelor, Purchasing Manager via email at ebachelor@livonia.gov. No phone calls will be accepted. All other provisions of the bid remain the same. The due date remains the same. Return the addendum acknowledgement with your bid response.

ADDENDUM NO.1 – BUILDING CONTROLS UPGRADE - ACKNOWLEDGEMENT

Company Name: Havel, a Division of Shambaugh & Son, LP

Signature: 

Title: Senior VP

Print Name: Cale Campbell Date 01/10/2023

Date: December 12, 2022

From: Enna A. Bachelor, Purchasing Manager

To: Prospective Bidders

Subject: Addendum No 2 - Building Controls Upgrade

Addendum No. 2 is being issued to change the due date for receiving proposal responses. **Please be advised that the new due date is 2:00 p.m., January 10, 2023.** Responses to questions received by vendors are forthcoming.

Bid submissions must be submitted via the MITN website (www.mitn.info) as an Adobe PDF File. All other provisions of the solicitation remain the same. Firms should acknowledge receipt of this addendum with their proposal response. Any further questions or clarifications desired by vendors shall be submitted in writing to Enna Bachelor, Purchasing Manager via email at ebachelor@livonia.gov. No phone calls will be accepted.

ADDENDUM NO.1 – BUILDING CONTROLS UPGRADE - ACKNOWLEDGEMENT

Company Name: Havel, a Division of Shambaugh & Son, LP

Signature: 

Title: Senior VP

Print Name: Cale Campbell Date 01/10/2023

Date: December 15, 2022

From: Enna A. Bachelor, Purchasing Manager

To: Prospective Bidders

Subject: Addendum No. 3 – BUILDING CONTROLS UPGRADE

Addendum No. 3 is being issued to respond to questions received from vendors. Responses are attached to the addendum cover page. All other provisions of the RFP remain the same. The due date remains the same.

Return the addendum acknowledgement with your bid response.

ADDENDUM NO. 3 – BUILDING CONTROLS UPGRADE - ACKNOWLEDGEMENT

Company Name: Havel, a Division of Shambaugh & Son, LP

Signature: 

Title: Senior VP

Print Name: Cale Campbell Date 01/10/2023

VENDOR NAME	Havel
CITY/STATE	Southfield, MI
BID DEPOSIT	Bid Bond Submitted
Base Bid Civic Center	$293,111.00
Base Bid Sandburgh	$61,946.00
Base Bid Police	$292,317.00
Base Bid Courthouse	$313,617.00
Alternate 1	$20,871.00
TOTAL BASE BID	$960,991.00
TOTAL BID WITH ALTERNATE 1	$981,662.00

VENDOR NAME	MCMI
CITY/STATE	Sterling Heights, MI
BID DEPOSIT	Bid Bond Submitted
Base Bid Civic Center	$513,600.00
Base Bid Sandburgh	$125,400.00
Base Bid Police	$516,300.00
Base Bid Courthouse	$540,200.00
Alternate 1	$42,950.00
TOTAL BASE BID	$1,695,500.00
TOTAL BID WITH ALTERNATE 1	$1,7381450.00

CITY REPRESENTATIVES:

- Janet Douglas, Office of the City Clerk
- Leslie Rohraff, Office of the City Clerk
- Enna Bachelor, Purchasing Manager
- Jacob Rushlow, DPW