



**REGULAR MEETING
AGENDA
CITY OF CREVE COEUR
FACILITIES TASK FORCE
300 N. NEW BALLAS ROAD
FEBRUARY 4, 2022
11:00 AM**

I. CALL TO ORDER

II. APPROVAL OF MINUTES

Approval of December 8, 2021 Facilities Task Force Regular Meeting Minutes

III. NEW BUSINESS

Ice Arena

I. Ice Arena Refrigerant Change Feasibility Study

1. Ice Arena Refrigerant Change Feasibility Study - Update and Recommendations

Summary: Staff has provided a copy of the Ice Arena Refrigerant Change Feasibility Study report, as well as a summary of the report's recommendations and cost estimates.

II. Ice Arena Alternate Uses Study

1. Request for Qualifications Ice Rink Facility Programming and Planning Analysis

Summary:

Government Center

III. Design Services Recommendation

1. Architectural and Engineering Services RFQ Responses

Summary: Attached are copies of the four responses received and evaluated by the Facilities Task Force Sub-committee.

IV. NEXT MEETING DATE/TIME

V. ADJOURN

Posted: _____ posted 02/2/2022

Kellie Henke
City Clerk



**REGULAR MEETING
MINUTES
CITY OF CREVE COEUR
FACILITIES TASK FORCE
300 N. NEW BALLAS ROAD
DECEMBER 8, 2021
9:00 AM**

CALL TO ORDER

A regular meeting of the Facilities Task Force of the City of Creve Coeur was called to order by Chair, City Council Member Joseph Martinich at the City Council Chamber, 300 North New Ballas Rd, City of Creve Coeur Government Center, Creve Coeur, MO 63141 on Wednesday, December 8, 2021 at 9:00 AM.

Mayor Robert Hoffman
Chair, City Council Member Joseph Martinich
City Council Member Alice Benner
Member Richard Darrow
Member Barry Glantz
Member Richard Kutta
Member Marjorie Richter -- **Absent**

Also present:

City Administrator Mark Perkins
Director of Public Works Jim Heines
Director of Recreation Jason Valvero
Director of Finance Lori Obermoeller
City Engineer/ Assistant Director of Public Works Matt Wohlberg
City Clerk Kellie Henke

II. APPROVAL OF MINUTES

1. Approval of October 8, 2021 Facilities Task Force Regular Meeting Minutes

RESULT:	ACCEPTED [UNANIMOUS]
MOVER:	Robert Hoffman, Mayor
SECONDER:	Barry Glantz, Member
AYES:	Hoffman, Martinich, Benner, Darrow, Glantz, Kutta
ABSENT:	Richter

III. NEW BUSINESS

Ice Arena

i. Refrigerant Switchover Analysis



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Matt Wohlberg provided an overview of the B32 Engineering Group study and stated an ammonia system is highly recommended; estimated cost \$1.5-2 million dollars. Mr. Wohlberg stated a cheaper alternative was not available and the cost provided in the study is for the refrigeration system only; if the Task Force decides to proceed with the replacement of the piping under the floor, an additional \$1-1.5 million dollars would be needed.

Richard Kutta stated the building has lost the ability to remove outside humidity and he is concerned the humidity is going into the roof and will ultimately lead to condensation buildup. Mr. Kutta stated the original system was built in place and would need to be completely removed in order to add a replacement; no cost has been determined.

Chair Joseph Martinich asked if a portable humidification unit can be used, to which Jason Valvero stated yes; GNW Engineering stated a temporary and portable dehumidification system would be approximately \$5,000/mo. with an additional \$5,000 in electrical upgrades to support the system.

Jason Valvero stated a new wheel for the system would cost approximately \$30,000 with labor and would have a lead time of 12-14 weeks. A new wheel would help sustain the life of the system by 8-10 years. GNW Engineering recommended conducting a study that will identify what type of new dehumidification system the building will need; \$10,000 cost. Jason Valvero recommended proceeding with the rental unit until decisions are made for the future use of the building.

Richard Kutta stated regardless of building use, a humidity removal system is needed.

Mark Perkins asked if a different type of dehumidification system will be needed depending on what sport and/or activity the building ends up being used for, to which Jason Valvero stated he would ask GNW Engineering.

Mayor Robert Hoffman recommended replacing the dehumidification system and the aging piping system simultaneously.

Jim Heines stated the piping is approximately 20 years old and its condition is uncertain as removal of existing concrete is the only way to expose the piping.

Mark Perkins stated the overall issue for the Task Force is to decide whether or not to keep the ice arena and proceed with the refrigerant changeover. Recommendations to council should be made no later than April.

Group consensus led to proceeding with the temporary dehumidification system and seeking proposals for a feasibility study of whether or not to proceed with the ice rink.

Jason Valvero stated he will reach out to GNW to see if changing the use of the building will change the scope of work.



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ii. Citizen Survey Results

Mark Perkins went over the 2021 Citizen Survey Results and the questions concerning the ice arena. Mr. Perkins stated 78% of the responses, including members of the household, indicated they have visited the ice area zero times in the last two years, but 69% of responses were supportive or very supportive of keeping the ice arena regardless of the fact that the facility will require substantial improvements.

iii. Future Use

Chair Joseph Martinich stated community input should be sought for determining whether to keep the ice arena or pursue alternative usages.

Jason Valvero stated community input can be included in the RFP; surveys or a public forum.

Mark Perkins stated another option would be to complete the necessary work needed to keep the ice arena functioning for another year; this would eliminate the pressure to make decisions quickly and allocate more time to creating a clear vision for the building.

Mayor Hoffman asked about commercial sponsorship, to which Mark Perkins stated sponsors are usually looking for facilities that bring in larger amounts of people.

Government Center

iv. Architect RFQ

Mark Perkins provided an overview of the RFQ drafted by Navigate Building Solutions to seek out a design team to assist with evaluating the needs of the Government Center and help determine whether renovating or constructing a new building would be the best route. The RFQ will be mainly distributed to companies who have done prior municipal work.

Jim Heines stated the RFQ was very thorough and comprehensive. Mr. Heines recommended limiting the number of pages allowed for submittal and suggested extending the submittal date into early to mid-January.

Richard Kutta stated the RFQ is too long and proposals for renovation or building new should be separate.

Mark Perkins stated keeping both projects on one RFQ would eliminate the need to submit a second RFQ and would provide continuity.

Alice Benner asked if the proposals for renovation and building new could be separate but run concurrently.



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Jim Heines stated if all potential work is not listed on the original RFQ it forces a second RFQ to be issued for either renovation or building new. If all potential work is included in the RFQ, after Phase One is completed, negotiation of design cost for either renovation or constructing a new building in Phase Two can begin. Mr. Heines stated a scope of work for each phase, with designated stopping points, can all be under one RFQ.

Richard Kutta asked if the RFQ needs to be made public, to which Mark Perkins stated no, it is not a requirement for a professional services RFQ.

Chair Martinich asked if any minority or women owned companies are being excluded by not opening up the RFQ to the public. Mr Heines stated that the evaluation criteria will include minority and women business enterprise (MBE/WBE).

Matt Wohlberg recommended the RFQ should state this contract is through Phase One only and additional contract and scope will be negotiated.

Richard Kutta asked if there will be a pre proposal meeting with the companies prior to the bid, to which Jim Heines replied there can be, but the submittal date for the RFQ may need to be further pushed out.

Group consensus led to proceeding with a virtual pre proposal meeting.

Mark Perkins stated after proposals are submitted, three companies will go through an interview and selection process with the Task Force Subcommittee including Alice Benner, Barry Glantz and Richard Kutta.

Richard Kutta suggested more specifics are needed in the RFQ regarding energy efficiency. Instead of LEED, Mr. Kutta recommended the RFQ state the city's intent of an energy conservation goal of 40 percent.

Mark Perkins stated the West Central Dispatch Center and it's plans to move into the Government Center will need to be considered. Initial feedback from Navigate identifies a significant, potentially shared, renovation costs due to 911 call center building requirements.

Barry Glantz asked if a subcommittee should be created that looks into other infrastructures within Creve Coeur that may better suit the Government Center's needs or at least consider it as a third available option.

Alice Benner stated the existing building presents a lot of challenges that renovating may only resolve short term. Constructing a new building or looking for a new building should not be discounted.

Joseph Martinich stated that looking into a third alternative should be put on hold until feedback regarding renovating or building new is received.



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IV. BUSINESS FROM STAFF

Roof Replacement

Jim Heines stated the engineering report should be received within the week and shared with Navigate upon completion; a settlement has been mentioned.

Mark Perkins advised we have a requirement to complete the repairs within two years of the date of loss.

V. NEXT MEETING DATE/TIME

Group discussion led to waiting to schedule the next meeting until the recreation proposals have been received in January.

VI. ADJOURN

Meeting adjourned at 10:43 AM



DEPARTMENT OF PUBLIC WORKS STAFF MEMORANDUM

DATE: February 1, 2022

TO: Facilities Task Force

FROM: Matt Wohlberg, P.E., City Engineer

SUBJECT: Progress Report and Options Summary
Ice Arena Refrigerant Change Feasibility Study

This memo is meant to serve as a brief summary of the Ice Arena Refrigerant Change Feasibility Study that has recently been completed for the Creve Coeur Ice Arena, as well as the preliminary recommendations that stem from this study.

Background

The ice rink floor at the City's Dielmann Recreation Complex is cooled by an aging refrigeration system that uses a refrigerant (R-22) that is no longer produced. Considering the potential costs to operate or upgrade this refrigeration system, the City hired the design team of Chiodini Architects and B32 Engineering Group to evaluate the City's options and associated costs for continuing operations as an ice rink.

Report Schedule and Status

The design team submitted a draft of the Ice Arena Refrigerant Change Feasibility Study in early November 2021. Dick Kutta, Jason Valvero, and Matt Wohlberg reviewed the draft study on behalf of the City and submitted comments back to the design team later that month. The design team provided responses to the City's comments in January 2022, and the final feasibility study report is expected in February 2022.

The draft report, review questions, and design team responses are attached for reference.

Refrigerant System Change Options Summary

The existing refrigeration system cannot be retrofitted to use a different type of refrigerant. Considering this, the design team evaluated four possible options for the refrigeration system at the Creve Coeur Ice Arena:

1. Maintain the current system
2. Install a new system that uses a synthetic refrigerant.
3. Install a new system that uses ammonia as its refrigerant
4. Install a new system that uses carbon dioxide as its refrigerant

The benefits and disadvantages of pursuing each option are detailed in the report. This analysis includes an itemized cost estimate for each of the options for a new refrigeration system. A brief summary of the costs associated with each option is included on the next page. *Note that the costs shown are for the refrigeration system only.*

Option	Estimated Cost	Expected Lifespan
1. Current system	\$ 50,000 *	7 years remaining
2. Synthetic system	\$ 1,350,000	15-20 years
3. Ammonia system	\$ 1,625,000	30 or more years
4. Carbon dioxide system	\$ 1,750,000	25 years

* Existing system cost includes minor maintenance and the purchase of refrigerant to recharge the system. Additional costs would be expected in the near future due to the system's age.

Recommendation and Cost Estimate

The estimated costs and schedule associated with the replacement of the ice arena's refrigeration system are outlined below. In addition to the cost to replace the refrigeration system, there are other issues related to the refrigeration system that need to be considered as part of this review.

Ice Refrigeration System

The ammonia-based refrigeration system appears to provide the most value to the City. The following project schedule and cost estimate are based upon pursuing an ammonia system, with the decision to proceed with the design phase by summer 2022. It is also assumed that the ice arena will remain open as much as possible during the project.

Phase	FY2022	FY2023	FY2024
Maintenance of current system	\$ 50,000	\$ 0	\$ 0
Design/Engineering	\$ 0	\$ 125,000	\$ 125,000
Temporary chilling unit	\$ 0	\$ 0	\$ 100,000
Construction	\$ 0	\$ 0	\$ 1,375,000
Refrigeration system totals	\$ 50,000	\$ 125,000	\$ 1,600,000

Dehumidification Unit

In addition to the ice refrigeration system, the ice arena's dehumidification unit has failed and needs to be replaced. This is a fairly large piece of equipment that is 18 years old and is no longer capable of moderating the humidity in the ice arena. A temporary unit will be necessary in order to keep the ice arena open during winter and summer months until the unit is either fixed or replaced.

The estimate below is for the replacement of the dehumidification unit. Although a repair can be completed for about \$50,000, replacement is recommended as the best long-term solution due to the equipment's age.

Phase	FY2022	FY2023	FY2024
Temporary dehumidification	\$ 30,000	\$ 20,000	\$ 0
Design/Engineering	\$ 10,000	\$ 0	\$ 0
Construction	\$ 0	\$ 200,000	\$ 0
Dehumidification unit totals	\$ 40,000	\$ 220,000	\$ 0

Cost Summary	FY2022	FY2023	FY2024
	\$ 90,000	\$ 345,000	\$ 1,600,000

If the City intends to continue to offer an ice rink at the Dielmann Recreation Complex, the City should plan on expenses of about \$2.1 million to upgrade the facility's refrigeration and dehumidification systems in the immediate future.

Additional costs

There are two additional and pending mechanical improvements that are associated with the ice arena that are not included in the estimates above.

Ice Arena HVAC

The ice arena's air conditioning unit is not functional, and the ice arena currently uses the ice sheet and refrigeration system to cool the air in the building. This arrangement is one of necessity, not efficiency. The various spaces of the ice arena should be evaluated so that an appropriately sized air conditioning system can be designed and installed.

The cost of this work has not been determined.

Ice Sheet Floor

While the primary focus of the current study is the refrigeration equipment for the ice arena, that equipment is one of two primary components of the system that provides the ability to create an ice sheet. The second component is the series of pipes that run through the floor of the ice arena. A coolant is circulated through these pipes to deliver the chilling from the refrigeration units to the floor of the ice arena, thus making the floor cold enough to provide an ice sheet.

A review of the flooring by Murphy Company in 2021 found no reason for an immediate replacement of the floor and its piping. While this is good news, the flooring and its pipes are nearly 20 years old, so the need to replace this portion of the system will become increasingly likely over the next ten years. Such a project would cost at least \$1.5 million.

Attachments: Ice Arena Refrigerant Change Feasibility Study (*Draft; November 4, 2021*)

Questions and answers regarding the study



Ice Arena Refrigerant Change Feasibility Study

The Deilmann Recreation Complex

For:

City of Creve Coeur
300 N New Ballas Road
Creve Coeur, MO 63141

November 4, 2021

Submitted by:

Scott A. Ward, P.E.
B32 Engineering Group, Inc.
2211 O'Neil Road
Hudson, WI 54016
651.256.3090



File No. 900.16.270



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2.0 BACKGROUND AND PURPOSE

The Creve Coeur Ice Arena is located in the Deilmann Recreation Complex at 11400 Olde Cabin Road in Creve Coeur, Missouri. The Creve Coeur Ice Arena has a long tradition of ice hockey, ice skating, and curling. The highest level of play at this facility is high school practices. High School games are not played at this facility due to the limited seating. As part of a continued effort: to improve operation and efficiency at the facility; to plan for future improvements to the ice system; and to continue to provide high quality ice for its user groups; the City of Creve Coeur has commissioned this study to evaluate the options for replacing the R-22 refrigerant in the existing 18-year-old indirect R-22-based ice system, or replacing the entire refrigeration system, along with other improvements. R-22 refrigerant was phased out of importation to and production in the U.S. in 2010 due to its high ozone depleting potential (ODP). In the past 6 months or so the price of R-22 refrigerant has risen substantially and is expected to keep rising as supplies have become very limited and purchases restricted to small quantities.

B32 Engineering Group, Inc. visited the site, with Chiodini Architects, on September 23, 2021. The ice sheet was in place during the site visit. B32 Engineering Group, Inc. has reviewed the Murphy report dated February 15, 2021, agree with its findings and reference it throughout this report.

The facility was built in 2003 and currently operates in the ice mode year-round.

3.0 ICE SYSTEM REVIEW

3.1 Description of Existing Ice System

The existing ice system includes a refrigeration system, a concrete ice rink floor system and a dasher board system. The existing refrigeration system is an indirect R-22-based/glycol refrigeration system and was installed in 2003. Since 2003 the following major improvements to the refrigeration system were completed:

1. 2008 – Compressor 3 remanufactured or rebuilt.
2. 2008 – New evaporative condenser.
3. 2008 - Added heat to the snow melt pit.
4. 2019 - Compressor 1 remanufactured or rebuilt.
5. 2017 – Compressor 2 remanufactured or rebuilt.
6. 2017 – Subfloor or underfloor circulation pump.
7. 2021 – Installed new fins in existing evaporative condenser. The city will finish installing interior fins in 2021.

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The existing refrigeration includes: three Carlyle reciprocating compressors Model 5H120-A219 with capacity of approximately 20 tons each at a 0-degree saturated suction temperature providing a total capacity for the refrigeration system of approximately 120 tons; flooded-type plate and frame chiller system with two plate and frame chillers and one surge drum; rink floor pumps, one evaporative condenser, a control system and a waste heat recovery system. The existing system is considered a “skid package” system where the majority of the components are built and delivered on a single steel frame or “skid”.



Photos 1 & 2 – Existing refrigeration system

There is a waste heat recovery system that serves the subfloor heating system under the rink floor and the snowmelt pit in the resurfacer room. This system essentially provides free heat from the refrigeration system. The subfloor heating system is reportedly in good working order and there are no concerns with frost building up under the ice rink floor. The snowmelt pit heating system is reportedly performing well.



Photo 3 – Existing evaporative condenser

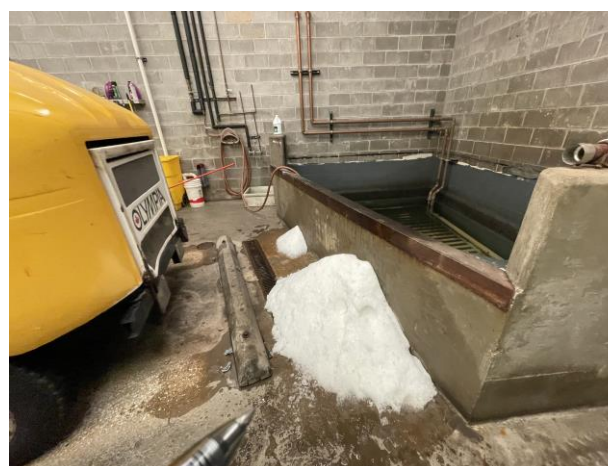


Photo 4 – Existing snow melt pit and coil

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The existing concrete ice rink floor was installed with the original building in 2003 and extended to NHL standard size of 200' x 85' in 2008. The fluid in the subfloor heating system is glycol. The concrete is reported to be uneven which leads to uneven ice thickness and possibly increased energy use and ice quality concerns. In 2003-04 the subfloor header piping system under score keeper's box was replaced. In 2008 the size of the rink floor was extended to the NHL standard size of 200'x85'.



Photo 5 – Overall ice rink floor



Photo 6 – Bleacher seating in ice arena

The existing refrigeration room is approximately 550 square feet which is adequate in size to house a new refrigeration system. See the conceptual ice system layout at the end of the report. There is only one access door out of this room, and it opens directly to the exterior of the building. The existing life safety systems in the refrigeration room include a gas monitoring system and mechanical ventilation and are reportedly in good working order. B32 Engineering Group did not test or witness the operation of any life safety systems.

The existing dasher board system was installed in 2003 (18 years old) and is reaching its typical life expectancy of 20-25 years. Some improvements to the existing system were completed and include the replacement of the white poly facing and the modification of the boxes and doors to meet the requirements of the Americans with Disabilities Act (ADA) in 2008. The manufacturer of the dasher board system is not known. The system appears to be in fair condition and no other concerns have been reported.

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Photo 7 – Existing dasher board system



Photo 8 – Existing dasher board system – Scorer's box

4.0 ICE SYSTEM IMPROVEMENT AND REPLACEMENT OPTIONS

4.1 General

The existing 18-year-old ice system (refrigeration system, ice rink floor and dasher board systems) is nearing its expected useful and safe life of 25 years. Some improvements have been made to the refrigeration system, as outlined above.

The scope of this study did not include evaluating the existing ice rink floor or dasher board system. Murphy performed thermal imaging on the ice rink floor in 2021 and found no large differences in temperature concluding there are likely no leaks in the piping system.

The existing refrigeration room is large enough to accommodate any of the recommended refrigeration system improvement and replacement options outlined in the next section. The conceptual ice system layout, included at the end of this report, shows the layout for Option 3 – stick built ammonia system. This drawing also shows a new access door and vestibule between the refrigeration room and the resurfacer room. The additional access will provide a more convenient access for the facility staff to enter the refrigeration room and provides another layer of protection or isolation between the refrigeration room and the resurfacer room if the ammonia option is selected. The cost estimate includes these improvements and other code required improvements to the refrigeration room each of the recommended options outlined below.

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4.2 Refrigeration System Improvement and Replacement Options

Four main options were identified for improving or replacing the existing refrigeration system at this facility. Additional information such as common terms or definitions, financial programs, cost estimates, etc. can be found at the end of this report. Where applicable, this report references the Murphy report dated February 15, 2021, for additional information and to provide a contractor's perspective to the improvements and cost estimates. The following options will be discussed in this section:

- Option 1: Maintain existing R-22 refrigeration system. Make selected improvements.
- Option 2: New indirect, HFC/HFO synthetic-based refrigeration system.
- Option 3: New indirect, ammonia-based refrigeration system. See conceptual layout in report.
- Option 4: New indirect, CO2-based refrigeration system.

The estimated energy efficiency stated below for each refrigeration system replacement option is given to provide a rough order of magnitude only and may not be specific to this facility. The efficiency of each system can vary greatly depending on the facility type, programming, building construction, operations, weather, length of season, etc.

Cost estimates include construction cost, design, legal, financial and administration costs, and design and construction contingencies for proposed improvements. Cost estimates are based on similar work performed in ice rink facilities from 2018-2021 and recent bid results. Costs will vary depending on the time of year the projects are bid, the economic climate and the size and scope of the project. In general, costs are rising due to the number of ice rink renovation projects, cost of materials, COVID restrictions, etc.

4.2.1 Option 1: Maintain existing R-22 refrigeration system. Make selected improvements

Description: The City may elect to continue to operate the existing indirect R-22-based refrigeration system with selected improvements with the goal of replacing the system in the very near future.

Advantages:

- Lower near-term costs.
- Avoid disruption to user groups, ice schedule and revenue from construction activities.
- Allow a little more time for the new refrigerants and technology to develop. Extending the use of the existing refrigeration systems for a while longer will allow newer ice system technology, such the use of CO2 refrigerant or new synthetic replacement refrigerants, to develop allowing manufacturing costs to decrease, and service companies to gain more experience.

Disadvantages:

- On-going maintenance and equipment costs.
- Risk disruption to schedule and loss of ice as equipment and systems become less dependable.
- Risk of catastrophic leak or failure in system and high cost of repairs and refrigerant replacement.
- Increased environmental concerns with increasing risk of refrigerant release, etc.
- Future availability and higher cost of refrigerant. In the last 6 months or so R-22 refrigerant supplies have decreased substantially increasing the cost to record levels (approximately \$23/pound per Murphy and

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expected to rise significantly higher by the end of the year) and limiting the purchase of R-22 to 30-90 pounds per purchase. The existing system has an estimated charge of over 1,000 pounds of R-22 per Murphy's report.

Recommendation: Unfortunately, at this time there is no "drop-in" or replacement refrigerant for R-22 refrigerant in a flooded type of refrigeration system like the existing system. The traditional pure synthetic refrigerants like R-507 and R-134a will most likely start to be phased out as soon as 2024 based on their high global warming potential (GWP). In addition, these refrigerants substantially decrease the capacity of the refrigeration system by 50% or more as shown in the Murphy report dated February 15, 2021. New blended synthetic refrigerants such as R-513, R-448A, R-449A, etc. would have the same issues and potentially reduce the capacity of the system even further. In addition, these new refrigerants are blends of multiple refrigerants vs pure refrigerants like R-22, R-134a etc. which would likely cause additional operational issues in a flooded-type refrigeration system. Simply replacing the refrigerant in the system is not a recommended option at this time.

Since the trend toward higher cost and lower availability for R-22 refrigerant is not expected to change any time in the foreseeable future, and there are no proven refrigerant replacements for R-22 in a flooded refrigeration system or without substantially reducing capacity, we recommend the City start budgeting and planning for a full replacement of the refrigeration system. If the City elects to continue to operate the existing system, we recommend that only the improvements or repairs that required to maintain the system in a safe working condition and to improve the monitoring of the refrigerant charge and system for leaks, etc. be performed. We recommend the following improvements, etc.

- Budget for 500 pounds of refrigerant replacement and store if possible. If a surplus of R-22 refrigerant is not purchased and stored, one smaller leak in the system could force the facility to shut down until additional R-22 could be purchased. This will likely result in the loss of the ice sheet and cancellation of programming. ***This is the first time in 20 plus years that the ice rink industry has faced this type of limitation and potential for substantial impacts to the operation of the facility.***

Cost Estimate of items above: \$18,000

- Recoat condenser steel support system as recommended in Murphy report.
- Continued monitoring and testing:
 - Monitor the condition of all systems for life and safety concerns.
 - Monitor for refrigerant leaks in the system.
 - Monitor and test all fluids in the system twice a year.
 - Monitor the condition of the ice rink floor and surrounding perimeter concrete and walls. Document all cracking, heaving, movement, etc.
 - Monitor glycol temperatures from the subfloor heating system to assure the system is operating properly.
- Continue to perform the required maintenance on the equipment and systems.

Cost Estimate of items above: Typical maintenance.

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4.2.2 Option 2: New indirect, HFC/HFO-synthetic based system (R-513, etc.)

Description: Replace the existing R-22-based indirect refrigeration system with a new R-513-based refrigeration system, or similar type refrigerant, located inside the existing refrigeration room with a water fluid cooler. The equipment used in this type of system is more commercial grade quality and may include direct expansion chillers (vs flooded), blended HFC or HFO refrigerant, semi-hermetic compressors (vs open drive) and pumps. B32 can provide a conceptual drawing of this system if desired.



Photo 9 - Example of a Carrier or Trane package systems

Advantages:

- Lower capital cost.
- Potentially less space required.
- Lower refrigerant charge.
- Potential to be converted to another synthetic refrigerant type as synthetic refrigerants are phased out in the future. R-513 is a new blended synthetic refrigerant by Opteon that is supported by the National Hockey League as a sustainable, non-ozone depleting, lower global warming potential (GWP) alternative refrigerant. Its GWP is 613 and its ASHRAE Safety Classification is A1 which is lower toxicity and no flame propagation. See the Future of Refrigerants section of this report for additional information.

Disadvantages:

- Lower quality of materials and equipment compared to the existing system. For example, the compressors would likely be replaced when they fail and not re-built, refrigerant piping is copper in place of steel, etc.
- Lower life expectancy (approx. 20 years vs. 30+ years for an ammonia industrial grade system).
- Lower efficiency than industrial grade system. Estimated to be 10-15% less energy efficient than the existing R-22 indirect system.
- Uses synthetic (HFO) refrigerant. Future regulations are uncertain regarding synthetic refrigerants.
- Less waste heat available to recover and use from system.
- Equipment arrangement (e.g., skid package) makes maintenance more difficult.

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Cost Estimate: \$1,262,000

Recommendation: This is a good option if the budget cannot support a natural refrigerant and these systems are currently being used in other ice rink facilities including some NHL facilities.

4.2.3 Option 3: New indirect, ammonia-based system

Description: Replace the existing R-22-based indirect refrigeration system with a new ammonia-based refrigeration system in existing refrigeration room. See figure at the end of this report for conceptual location and equipment layout.



Photo 10 - Example of a stick-built industrial grade, flooded ammonia-based system

Advantages:

- Best available proven technology for this application.
- Proven performance and dependability.
- Maximum operational efficiency. Estimate to be 20% to 25% more efficient than existing R-22 system.
- Sustainability. Ammonia is a naturally occurring refrigerant.
- Longevity of industrial grade equipment and refrigerant (30+ years). Synthetic refrigerants may be faced with future restrictions with high global warming potentials. Ammonia is also a pure refrigerant.
- Lower cost refrigerant (\$2 per pounds vs. \$15 to \$28 per pound for synthetics)
- Availability of equipment and parts.
- Refrigerant charge will be less than the existing R-22 system. Could also explore the option of a low charge ammonia system reducing the charge to under 500 pounds.

Disadvantages:

- Requires more space. Typically, an ammonia system will require more space for the equipment because of the industrial grade equipment that is used in these systems and the systems are typically built on-site and are not a package type system.

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- Recommend installing a vestibule on the inside of the existing refrigeration, as shown on the figure at the end of the report, to house life safety equipment so that it can be monitored prior to entering the ammonia room. All types of refrigeration systems require certain life safety systems like a gas monitoring system and one eyewash-shower station inside the mechanical room and an emergency ventilation switch and refrigeration stop button on the outside of the refrigeration room. For ammonia, a second eyewash-shower system is required outside the refrigeration room. The only way to provide this second system and prevent it from freezing is to construct a vestibule or install in the resurfacer room. The vestibule itself is not required by code. However, it does offer a few additional safety advantages. It provides a safe space for anyone entering the room to stop and monitor any potential hazards (like an ammonia leak) before entering the room through the gas monitoring system or window in the door. It also provides another barrier between the ammonia system and anyone that might be outside the refrigeration room. The risk of an ammonia leak is no greater than any other type of refrigerant and all refrigerants are dangerous. The amount of the ammonia that would be less than the existing R-22 system and the overall charge is much less than the large industrial facilities, so fire and explosion are much less of a concern, if at all. Ammonia refrigerant has been used in ice rink applications since they started building the facilities and is now more common than ever.
- Potentially more training required for operators of the refrigeration system. All refrigerants are dangerous and should be approached with caution and operating staff should be trained. Even though additional training is not required by code to operate an ammonia system, it is recommended that the operating staff take training courses specifically for ammonia refrigeration including both the operation and safety of the system. It has been B32's experience that most ice arena facilities that use ammonia refrigeration use an outside service company that has experience with ammonia for repairs and even some routine maintenance and system checks.
- Potentially greater health/safety hazards in comparison to synthetic refrigerants.
- Reporting requirements. There may be additional annual reports that are required depending on the volume of ammonia that will be in the system. The US EPA has been more aggressive at requiring additional reporting for ice rinks (mainly on the east coast) that operate with more than 500 pounds of ammonia. The proposed system could require as much as 900 pounds. If a low charge ammonia system was used that quantity could be much less, maybe even less than 500 pounds. The reporting for any facility that has less than 10,000 pounds is fairly straightforward. The cost estimates are based on a typical ammonia system.
- Higher capital costs.

Cost Estimate: \$1,504,000

Recommendations: This option should be strongly considered because of its increased efficiency and use of natural refrigerants as well as the ever-changing phase-out of synthetic or artificial refrigerants. However, the City should be mindful of the potentially greater health hazard over synthetic or artificial refrigerants such as R-513, etc. Although all refrigerants are hazardous. It would be prudent to start discussions of the replacement options with the fire marshal, the City's insurance carrier, and other interested parties to educate them on all aspects of ammonia refrigerant.

ICE ARENA REFRIGERANT CHANGE FEASIBILITY STUDY CREVE COEUR, MISSOURI

11.4.21



4.2.4 Options 4: New indirect carbon dioxide (CO2)-based system

Description: Replace the existing R-134a-based refrigeration system with a new CO₂-based indirect refrigeration system located inside the refrigeration room and using an air-cooled gas cooler system. The use of CO₂ refrigerant may likely be the next substantial “innovation” in the ice rink industry. This option is based on a multiple semi-hermetic compressor system of approximately 200-ton, plate and shell chiller, pumps, etc. operating at leaving glycol temperatures of 10°F and entering glycol temperatures of 13°F. It’s likely that this option will fit in the existing refrigeration. B32 can provide a conceptual drawing of this system to confirm. See the Future of Refrigerants section in this report for additional information on CO₂ and the use of CO₂ in ice rink facilities.



Photo 11 - Example of an Indirect CO₂ Chiller Package

Advantages:

- Higher efficiency. CO₂ indirect is estimated to be approximately 5% less efficient than an ammonia system.
- Potentially higher heat recovery temperatures.
- Potentially less space required than an industrial grade system.
- Uses an air-cooled gas cooler system which is shorter in height than the water fluid cooler proposed in Options 2 and 3.

Disadvantages:

- Higher equipment costs due to limited availability.
- Fewer contractors familiar with technology.
- Proprietary control systems used with this technology.
- Efficiency drops off in warmer temperatures.
- Additional safety devices and systems may be required.
- There is a U.S. patent on some or all of this technology as it applies to ice rinks and therefore manufacturers may be limited.

Cost Estimate: \$1,635,900

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Recommendations: It is recommended that a CO2 refrigerant-based indirect refrigeration system be considered. If the City is interested in pursuing the use of CO2 refrigerant, we encourage a site visit to at least one facility that is currently using this type of system, along with in-depth discussion with the facility's management and operation personnel and manufacturer's representatives. B32 Engineering Group has extensive experience with CO2 refrigerant applications in ice rink facilities.

It is also recommended that a more in-depth study of CO2 system options and code requirements be performed during a pre-design or preliminary design phase for this project to determine the feasibility of a CO2 ice system in this facility.

5.0 PROJECT SCHEDULE

The improvements should be planned well in advance of the desired construction time so equipment and materials can be ordered and delivered to the site. Minimizing disruption to the facility's busy schedules and user groups will be a key element to the success of this project.

A very general, typical schedule for similar ice rink type projects is as follows:

Design Phase:	June-September (3-4 months)
Bidding:	October-November (October is the ideal bidding time for this type of work)
Order Materials:	November – March
Construction:	March – October (we estimate construction on this project to take 3-4 months)

If construction is started later and the new refrigeration system is not operational by October, a temporary chiller could be used until the new refrigeration system is complete. The cost of a temporary chiller system is approximately \$23,000 per month plus utilities. These costs are not included in the cost estimate.

B32 Engineering Group, Inc. has extensive experience in working closely with clients to evaluate and identify renovation and improvement solutions for existing ice systems. We understand the City will use the information in this report to determine the scope of the refrigeration system replacement project. Once the project scope and funding sources have been identified, we will work closely with the City to develop a detailed project schedule.

5.0 SUPPLEMENTAL INFORMATION

5.1 General Definitions

Included in this section are definitions for the basic terminology used throughout this report.

Ice System: A term that collectively refers to the refrigeration system, ice rink floor system, waste heat recovery system and dasher board system. This is the type of system that is currently installed in this facility.

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Direct System: A *direct* refrigeration system circulates the primary refrigerant (e.g., R-22) directly through the ice rink floor. There is no secondary solution or refrigerant. These types of systems were very common in the 1970's and early 1980's. Today, indirect refrigeration systems, where glycol solutions are circulated in the rink floor, are more common due to costs and environmental concerns with large quantities of refrigerant required to operate the system.

Indirect-type System (existing system at the Hockey Center): In an *indirect* system the primary refrigerant (e.g., R-22, ammonia, etc.) stays in the refrigeration room. Heat is removed from the ice rink floor through a secondary refrigerant or glycol solution that is circulated in the floor. The heat exchange between the glycol solution and the primary refrigerant takes place in the refrigeration room.

HCFC: Hydrochlorofluorocarbon (e.g., R-22, etc.) – synthetic refrigerant with less ozone depleting than CFCs (e.g., R-12, etc.) but deplete natural resources and contribute to global warming. These are phased out by the Montreal Protocol.

HFC: Hydrofluorocarbon (e.g., R404A, R407C, R-507, etc.) – synthetic refrigerant that deplete natural resources and contribute to global warming. Many have a high global warming potential (GWP) and are now to being phased out of production.

HFO: Hydrofluro-Olefins (e.g., R513A, 1234YF, etc.) – a new class of synthetic refrigerant that have a much lower global warming potential (GWP) than HCFCs or HFCs. These new refrigerants are blends of several refrigerants and are not pure refrigerants as many of the HCFCs and HFCs are.

u-HFC: *Unsaturated Hydrofluorocarbons* - Low GWP HFCs that produce dangerous hydrogen fluoride when they burn and transform to trifluoro-acetic acid in the atmosphere. These are generally patented and much costlier.

Natural Refrigerants: Naturally occurring refrigerants such as ammonia (R-717), carbon dioxide (CO₂) and hydrocarbons.

5.2 The Future of Refrigerants

When discussing ice system options, refrigerants are now the key element to consider when determining what type of refrigeration system is the best fit for your ice rink facility. So, it is necessary to understand how refrigerants impact refrigeration equipment and system options. First, let's start with a little history. R-22 has been the most popular refrigerant used in ice rink applications in recent history. With the signing of the Montreal Protocol in 1987, the United States Environmental Protection Agency (EPA) implemented the final rule of Section 604 of the Clean Air Act in July 1992, limiting the production and consumption of a set of chemicals known to deplete the stratospheric ozone layer as measured by their ozone depleting potential (ODP). R-22, which also has a high global warming potential (GWP), was one of these targeted chemicals and as of 2020, is no longer manufactured or imported in the U.S and can no longer be installed in new refrigeration systems. However, R-22 can be used in existing systems until the supply runs out.

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In 2016 the Kigali Amendment was applied to the Montreal Protocol focusing on the phasedown of production and consumption of HFCs to reduce greenhouse gas emissions driving down the global warming potential (GWP) of refrigerants. More than 90 countries ratified this amendment in 2019 including Canada, but excluding the U.S. as of February 2020. The U.S EPA made certain HFC refrigerants unacceptable for use in the Significant New Alternatives Policy (SNAP) Rules 20 (2016) and 21 (2017). However, the U.S. courts partially vacated these rules, and the industry is awaiting the EPA rewrite expected in 2020. Despite this, states may choose to adopt and set their own timeline for implementation of the SNAP rules. Some of the refrigerants that are currently used in ice skating facilities and are on the phasedown list include: R-134A, R-404A, R-407B, R-407C, and R-507A.

California is one of the states leading the way to lower GWP refrigerants. The California Air Resources Board (CARB) Activity adopted the SNAP Rules 20 and 21 in September 2018 and approved a limit the GWP of refrigerants used in ice rinks to < 750, following the lead of other Countries such as Canada and Europe. This would eliminate R-134a which has a global warming potential of 1410 (meaning the release of one gram of R134a would have the same global warming effect as releasing 1410 grams of carbon dioxide). In late 2020 California passed legislation reducing the GWP even lower to < 150, eliminating most synthetic refrigerants. California is part of a "Climate Alliance" that approximately 14 other states participate in, including New York, which have adopted HFC transition dates.

Currently, the ice rink industry is caught in a transition period for refrigerants as new environmental regulations are implemented. Careful consideration and evaluation of the current refrigerant options should be made. The replacement refrigerants for HCFC refrigerants (e.g., R-22, etc.) and HFC refrigerants (e.g., R-507, R-407C, R-134a, etc.) are fairly new with a limited history and performance data in this application. Some of those new refrigerants are R-448A, R-449A, and R-513A. R-513 is a new blended synthetic refrigerant that is supported by the National Hockey League as a sustainable, non-ozone depleting, lower global warming potential (GWP) alternative refrigerant. Its GWP is 613 and its ASHRAE Safety Classification is A1 which is lower toxicity and no flame propagation.

Large global companies, such as Coca Cola, are leading the charge to ban HFCs and use natural refrigerants such as CO₂, hydrocarbons and ammonia. Since 2004, more than thirty ice skating facilities in Europe have switched over to using CO₂ as the secondary refrigerant with ammonia as the primary. The first CO₂-based ice system in North America, and the first *direct* CO₂-based system in the world, opened in 2011 in Quebec, Canada with a second rink opening in Montreal in 2012. The U.S. now has eight ice rink facilities that use CO₂. B32 Engineering Group, Inc. was the leader in this application designing the first CO₂ based ice rink system in the U.S. in 2016 and has since designed five more.

5.3 Financial Assistance Programs.

There are several financial programs that have traditionally been used on ice rink renovation projects. The local utility companies should be consulted to determine what programs are available and apply to this project(s). They may include:

1. Engineering Assistance Study Program. Some utilities offer this program. The purpose of this program is to provide the City with the necessary business case justification to implement energy-saving opportunities. This evaluation report can be expanded to identify energy conservation opportunities, energy modeling, etc. to meet the programs requirements. Some utilities will reimburse their users up to 75% of the cost of this study. One example where the user would benefit from this additional energy analysis is in selecting a refrigerant

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(ammonia, CO2, etc.) or refrigeration system to replacing the existing synthetic (R-22, etc.) refrigerant or system.

It is typically required that the program be pre-approved by the utility prior to starting any work on the study.

2. Rebate Programs. Rebate programs are often available through utilities for many energy improvement measures that can be performed such as lighting replacement, motor replacement, installation of variable frequency drives, improving insulation systems, etc. Custom rebate programs are also available and may apply to the refrigeration system replacement depending on the type of system selected. The utilities should be contacted to identify possible rebates prior to starting any improvement project relating to energy savings. Some rebates require preapproval prior to purchasing and installation.

END

Opinion of Probable Project Costs - Refrigerant Change Feasibility Study
Deilmann Recreation Complex, Creve Coeur MO
Creve Coeur, MO
 B32 File No. 900.21.437



Date: 11.4.21

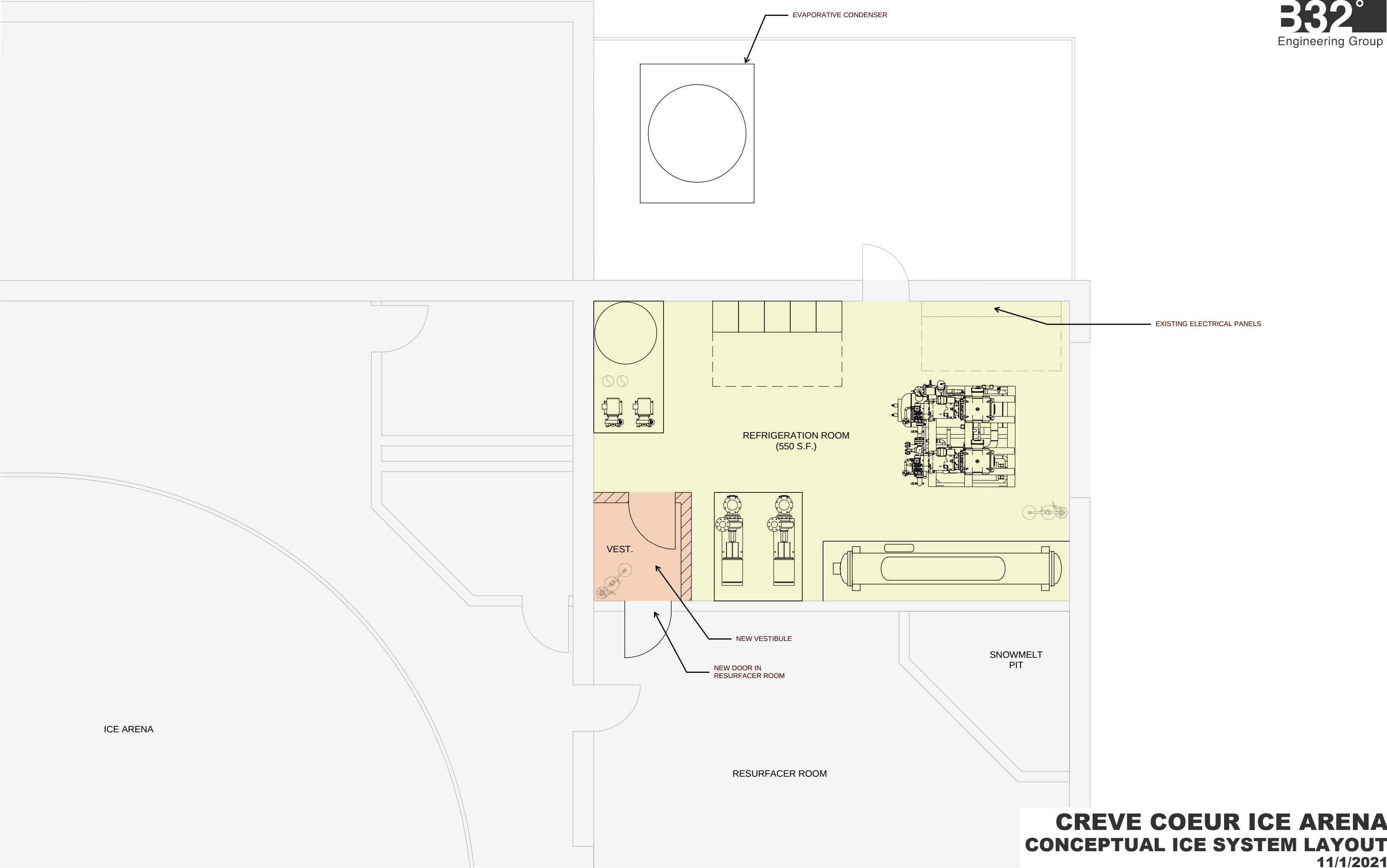
Costs include: escalation, general conditions, ice rink contractors profit, insurance, bonds

Revised:

Item	Cost Estimate ¹		
	Option 2	Option 3	Option 4
Refrigerant type	R-513	Ammonia	CO2
Grade of system	Commercial	Industrial	Mix
Demolition of existing refrigeration system and condenser	\$20,000	\$20,000	\$20,000
Misc. HVAC demolition	\$5,000	\$5,000	\$5,000
Misc. Electrical demolition	\$5,000	\$5,000	\$5,000
Remove and dispose of existing glycol and flush existing rink floor, transmission mains and refrigeration system (option to test and reuse)	\$18,000	\$18,000	\$18,000
New 120 ton refrigeration system (includes new motor control center or panels, condenser, pumps, glycol, refrigerant, etc.)	\$650,000	\$800,000	\$900,000
New glycol solution	\$40,000	\$40,000	\$40,000
Preheat for resurfacer water	Not available	Not included	Not included
Reuse existing snowmelt pit	\$0	\$0	\$0
Concrete equipment pads	\$2,000	\$2,000	\$2,000
Rework existing condenser supports	\$5,000	\$5,000	\$5,000
New electric service if required	\$25,000	\$0	\$25,000
Eyewash and shower stations (1 for synthetic and CO2 and 2 for ammonia)	\$10,000	\$18,000	\$10,000
New ventilation system in refrigeration room	\$35,000	\$45,000	\$35,000
Misc. plumbing in refrigeration room (water lines, move or add drains, etc.)	\$15,000	\$15,000	\$15,000
Misc. electrical in refrigeration room (receptacles, panels, lights, etc.)	\$20,000	\$20,000	\$20,000
Replace existing single exterior door	\$8,000	\$8,000	\$8,000
New vestibule and door into resurfacer room (vestibule for ammonia only)	\$15,000	\$40,000	\$15,000
Misc. sitework improvements around existing refrigeration room	\$0	\$0	\$0
New screen wall (ammonia and R513) or modify existing for CO2 option	\$0	\$0	\$10,000
Paint interior of existing refrigeration room	\$3,000	\$3,000	\$3,000
Subtotal of estimated construction costs	\$876,000	\$1,044,000	\$1,136,000
Estimate, design and constr. Contingency (20%) ¹	\$175,200	\$208,800	\$227,200
Total estimated construction costs	\$1,051,200	\$1,252,800	\$1,363,200
Engineering, legal, financial and administrative (20%) ¹	\$210,240	\$250,560	\$272,640
Total estimated project costs (2022)	\$1,261,440	\$1,503,360	\$1,635,840
Expected useful life - refrigeration system (yrs.)	15-20	30+	25
Adjusted Costs for 2023²	\$1,311,898	\$1,563,494	\$1,701,274
Adjusted Costs for 2024²	\$1,364,374	\$1,626,034	\$1,769,325

Footnotes:

1. See cost estimate narrative in report.
2. Applied escalation costs of 4% per year.





Matt Wohlberg <mwohlberg@crevecoeurmo.gov>

FW: Project: RF21-0621.00 - Creve Coeur Ice Arena DHU System Replace RE: FW: Creve Coeur Refrigeration System Report

Michael Chiodini <mchiodini@chiodini.com>
To: Matt Wohlberg <mwohlberg@crevecoeurmo.gov>
Cc: Michael Chiodini <mchiodini@chiodini.com>

Mon, Jan 10, 2022 at 8:25 AM

Matt:

Please see the responses below.

I think all three firms have had a covid outbreak at one time.

Michael Chiodini

Principal – Project Director

Chiodini Architects

Programming | Planning | Architecture | Interiors | Graphics

1401 South Brentwood Blvd. | Studio 575

St. Louis, Missouri 63144 | 314.725.5588

Direct: 314.561.6525

Cell: 314.494.5566

From: Kevin Griesemer <KGriesemer@gandwengineering.com>
Sent: Sunday, January 9, 2022 1:55 PM
To: Scott Ward <scott.ward@b32eng.com>; Michael Chiodini <mchiodini@chiodini.com>
Subject: Project: RF21-0621.00 - Creve Coeur Ice Arena DHU System Replace RE: FW: Creve Coeur Refrigeration System Report

Michael,

See my response below in green.

Kevin Griesemer, P.E.

President

D: (314) 737-4223

C: (314) 221-1426



Listen • Collaborate • Solve

From: Scott Ward <scott.ward@b32eng.com>
Sent: Friday, January 7, 2022 6:10 PM
To: Michael Chiodini <mchiodini@chiodini.com>
Cc: Kevin Griesemer <KGriesemer@gandwengineering.com>
Subject: RE: FW: Creve Coeur Refrigeration System Report

Michael,

See responses below in red. Sorry we didn't meet the City's timeline for responding to the questions. I will revise the report to incorporate these revisions. Kevin was going to answer questions 3 and 10. For item 10, I didn't realize the refrigeration system is providing AC to the building. Kevin, did you pick up on this? Using the refrigeration system to cool the building is very inefficient. We recommend separating these systems.

Let me know if you have any questions about our responses.

Thanks

Scott

Scott A. Ward, P.E.

President

B32 Engineering Group, Inc.

D. 715.245.8839 O. 651.256.3090 ext. 102 C. 651.492.1376

www.b32eng.com

From: Michael Chiodini <mchiodini@chiodini.com>
Sent: Wednesday, December 8, 2021 5:03 PM
To: Scott Ward <scott.ward@b32eng.com>
Subject: FW: FW: Creve Coeur Refrigeration System Report

Don't forget about these.

Michael **Chiodini**

Principal – Project Director

Chiodini Architects

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From: Matt Wohlberg <mwohlberg@crevecoeurmo.gov>
Sent: Tuesday, November 23, 2021 4:28 PM
To: Michael Chiodini <mchiodini@chiodini.com>
Cc: Jason Valvero <jvalvero@ci.creve-coeur.mo.us>; Dick Kutta <richardkutta@earthlink.net>
Subject: Re: FW: Creve Coeur Refrigeration System Report

Mike,

We have reviewed the report and have several questions and comments:

1. Please move the discussion in section 5.2 about refrigerants to near the beginning of the report. This is good background information that will help readers understand the options better if they have read it first. **B32 Response: Revision will be made.**
2. What is the total refrigeration capacity requirement for the rink? The estimates suggest 120 tons is the answer. If we do not have this, can B32 estimate this for us? **B32 Response: We estimate the new refrigeration system should have a capacity of 100-120 tons without serving the AC system for the building.**
3. What amount of HVAC space conditioning is assumed and how can we provide it so that the refrigeration system is for the ice only? Can this be incorporated into the estimates? **By G&W[KG] – This will require additional investigation on our part. We will need access to existing facility plans so we can assess the current systems capabilities. We also need to know their intent in the operation of the facility so we can take into account the various occupancies/uses possible.**
4. Is the commercial-grade equipment in Option 2 suitable for critical service? Are repairs possible/economical for such a system, or would we need to look at replacement? **B32 Response: Yes, this system is suitable for critical service and will provide a good ice sheet. These systems can be repaired. However, they often they have a higher number of semi hermetic type ("throwaway") compressors, commonly 4-6 compressors vs 2 compressors for an industrial grade system. The compressors are typically just replaced and not rebuild like on an industrial system.**
5. Are low charge ammonia systems commercially available for the required capacity? Are any in service where we could investigate suitability? **B32 Response: We could either design a low charge system from scratch or design around a premanufactured system by a specialized refrigeration system manufacturer. There are a few currently in operation in the U.S. The two that I know of are in South Carolina and Colorado.**
6. The existing electrical service is shown to be replaced for options 2 and 4 but not option 3. Please explain what is intended here. Should this be replaced for all three options? **B32 Response: Option 3 is an ammonia system which is more energy efficient than the existing R-22 system so the electrical system will most likely not need to be upgraded. Its likely that the electrical system will not need to be updated for Option 4 either because it too is more efficient than R-22 but since its newer technology, we wanted to be conservative. The electrical service will most likely need to be updated for Option 2 (R-513) since it is much less efficient than the existing R-22 system.**
7. The electrical controls are obsolete. Is new control equipment included for all three options? **B32 Response: A new computed control system is included in all 3 options.**
8. Option #2 indicates that it would generate less waste heat. If this option is pursued, would we need to find an alternative source for the waste heat that is currently used? If so, is that included in the cost of Option 2? **B32 Response: It is our understand that waste heat is being used to serve the subfloor heating system under the rink floor and the snowmelt pit. All options will provide sufficient waste heat for these options. The next step would be to use waste heat to preheat domestic or resurfacer water. Option 2 would likely not generate sufficient waste heat for this use, but we would review during the design phase. Options 3 and 4 would have waste heat available for preheating. Keep in mind that the waste heat generated by the refrigeration system is not consistent and varies with the loading on the ice sheet. Therefore, all using beyond the basis subfloor and snow melt pit would need to be supplemented by a permanent heat source.**
9. What sort of temporary system will be necessary to keep the ice sheet in place during construction? Will we need temporary electrical service for this? **B32 Response: A temporary chiller system would include a full refrigeration system with pumps and controls mounted on a trailer system (typically a full size 55' trailer). This system would be park in the parking lot outside the refrigeration room. A temporary electrical power source from the building would be required.**
10. Murphy suggested that the evaporative condenser does not have much life left. Have either Chiodini or B32 looked at the condenser? Do they concur with Murphy's opinion? **B32 Response: The existing condenser is 14 years old. The typical life is 18-20 years. B32 typically reviews these units at a high level and rely on contractors that have the equipment to more thoroughly evaluate the systems or the manufacturers representative to review the condition of the condenser. From our observations, we concur with Murphy's observations. We recommend this unit be replaced when the new refrigeration system is installed due to the amount of corrosion on the unit.**
11. Is a new condenser recommended as part of the refrigerant change project? If so, would B32 recommend an evaporative condenser or a fan-cooled condenser? **B32 Response: Due to the condition of the existing condenser, we recommend replacing the unit when the refrigeration system is replaced. We recommend an evaporative type of condenser since it is more energy efficient, more compact footprint, higher capacity, etc. than an air-cooled system and will function much better in the warm summer months. In order for an air-cooled condenser to have the surface area required to cool the refrigerant, with air only in the summery time, the units would need to be very large.**
12. We are going to try to approximate the annual cost to operate the current system. It would be helpful if the report would include the estimated annual cost to operate each option. **B32 response: A very high-level cost of operation can be added to the report for each option.**
13. Please provide an estimated cost for an annual preventive maintenance contract for each option. It would be helpful to know if one system would be significantly more expensive to maintain than the others. **B32 Response: This will be added to the report.**
14. Section 4.2.4 hints that the building code requirements might make the carbon dioxide option infeasible. Has this been a problem in other areas? **B32 Response: The building code should not be an issue for a CO2 indirect system. The building code would not allow a CO2 direct system where CO2 refrigerant is circulated within the rink floor in place of glycol. The report will be revised accordingly.**
15. Are we looking at a skidded system or one that is constructed on site for each option? How does this impact the amount of time it takes to construct each option and how much time we need a temporary system in place? **B32 Response: Options 2 and 4 are typically a skidded system. Option 3 can be either. There may a small-time advantage for a skid package system since they can typically be constructed in the contractor's shop faster than on site.**
16. The section numbers in the report repeat #5. **B32 Response: This will be corrected.**
17. With the recent failure of our dehumidification unit, the replacement of this unit and the rink's HVAC have become a significant portion of this discussion. The ice cooling load on design day (mid-August) is presently high due to the building HVAC inadequacy, both in terms of space conditioning and dehumidification. Presently the refrigeration system is cooling both the ice and the building and there is no operational dehumidification. Moisture removal is a significant load that is best handled by a DOAS (dedicated outdoor air system) that is integrated into the building space conditioning system. You had provided a proposal for G&W to design a replacement system. Would there be a way to have G&W participate in the refrigerant evaluation to give insight into what sort of HVAC scope and cost we are looking at for each of the refrigerant options? Would there be any difference among the options? I imagine that this could be a short supplemental agreement for the additional

design services. B32 Response: By G&W. We recommend separating the building AC from the refrigeration system. [KG] – See response in 3 above.

We have a facilities task force meeting on December 8. Please review these questions and let us know if all or most of these can be answered by the end of next week (December 3).

Thank you,

Matt

CITY OF CREVE COEUR

Matt Wohlberg, PE
City Engineer / Assistant Director of Public Works

Certified Floodplain Manager (CFM)
Envision Sustainability Professional (ENV SP)

300 N. New Ballas Road
Creve Coeur, MO 63141
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On Fri, Nov 5, 2021 at 8:52 AM Michael Chiodini <mchiodini@chiodini.com> wrote:

Michael **Chiodini**

Principal – Project Director

Chiodini Architects

Programming | Planning | Architecture | Interiors | Graphics

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Cell: 314.494.5566

From: Scott Ward <scott.ward@b32eng.com>
Sent: Friday, November 5, 2021 8:46 AM
To: Michael Chiodini <mchiodini@chiodini.com>
Subject: Creve Coeur Refrigeration System Report

Michael,

Please find our report attached. Let me know if you have any questions.

Scott

Scott A. Ward, P.E.

(Licensed: AK, AZ, CO, CT, FL, IA, IL, MA, MD, ME, MI, MN, MO, NC, ND, NE, NH, NJ, NM, NY, OH, PA, SD, TN, TX, VT, WA, WI, WV, WY)

President



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City of Creve Coeur

JANUARY 11, 2022



January 11, 2022

City of Creve Coeur
Attn: Mark Perkins, City Administrator
300 N. New Ballas Road
Creve Coeur, MO 63141



RE: Letter of Interest
RFQ - Professional Design Services - Government Center

Archimages is pleased to submit qualifications to the City of Creve Coeur for Professional Design Services for the Government Center. We have provided professional services to the City for multiple projects and are excited by the possibility of continuing our relationship.

For over 30 years, **Archimages** has specialized in architectural and interior design services of municipal facilities. We provide comprehensive state-of-the-art architectural services based on your specific needs. We are familiar with the City Hall and have provided preliminary existing analysis, programming and "needs" discussions with both city staff and dispatch representatives, field investigation, measurement, and documentation of existing conditions. We have established relationships with City personnel and gained groundwork familiarity of the structure and desired needs.

We offer the City of Creve Coeur:

- Immediate availability.
- Familiarity with the City of Creve Coeur and associated design standards.
- Extensive services including needs assessment, facility studies, planning, design, and construction administration for renovations and new construction of replacement facilities. We are adept in phasing and ensuring municipal functions continue without disruption throughout construction.
- Multi-disciplinary expertise. Our architectural / engineering team has a solid reputation and successful history of municipal building design.
- Proven municipal experience. Our award-winning designs are found throughout the Midwest. We encourage the City to call our references listed within the submittal to hear how Archimages effectively serves our clients.

We truly believe the **Archimages** team offers a unique blend of experience, talent and knowledge that will ensure your project success! We respectfully request an interview with your selection committee to demonstrate our passion for this project and discuss the City of Creve Coeur's next steps.

Most sincere regards,

R. Gregory Garner, RA
ggarner@archimages-stl.com

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Archimages

Section 1 Firm Information

BY THE NUMBERS

34

Years
in Business

23

Staff
Members

12

Years
Average Employee
Tenure

90

Percent
Referral Based
Business

Firm Information

Municipal Experts

Archimages has provided full service architectural and interior design services since 1988. Founding principals Greg Garner and Jim Huber continue to grow the business through responsive client interactions, unique designs, and use of a consistent design team. **We have garnered an exceptional reputation as municipal design experts -providing complete projects that address the needs and, often limited, budgets of municipalities.**

Robust Experience

Archimages has completed 200+ municipal / public sector projects for municipalities, districts, departments, and cities. We provide a full continuum of services from facility assessment, master planning and design through construction closeout. We recognize each project is unique and address specific goals established by each client. Our designers are skilled in phasing, renovation, and new construction and will navigate the City through the complexities and all project phases. Archimages will provide solutions that reflect state-of-the-art design standards and industry protocols.

Subconsultants

Archimages has cultivated exceptional relationships with each of our subconsultants through prior municipal projects including design of Creve Coeur's Police Station and Fire Station. Our team members have developed clear efficiencies in communication and design processes. **With our methods firmly established, we are a powerfully unified team focused on serving the City of Creve Coeur.**

Our team includes:

Horner & Shifrin

M.E.P., FP Engineers, Security, AV, Info/Technology

David Mason & Associates

Structural Engineers (MBE certified)

CEDC

Civil / Surveying Engineers

Landscape Technologies

Landscape Architect

Business Information

Financial Strength and Litigation information found in Section 1, pages 7-8.

Honors & Awards

- 2021 American Public Works Association Award - Kansas City Kansas Fire Dept. Station #12
- 2017 American Public Works Association Award - Olivette Municipal Center
- 2017 Silver, Fire Chief Association
- 2017 Project of the Year Award, Public Works Association
- 2009 Notable Award, Fire Chief Association
- 2004 Bronze Award, Fire Chief Publications
- 2018 Design Documentation Quality Award, BJC Healthcare System*
- 2017 Design Documentation Quality Award, BJC Healthcare System*
- 2015 Excellence in Design Award
- ASHE 2017 VISTA Award - New Construction
- ASHE 2015 VISTA Award - Renovation

QUALITY

Awards for Design
Documentation
Quality*

CONTACT

Greg Garner, RA
Principal
ggarner@archimages-stl.com
(314) 965-7445

Address:
143 W. Clinton Place
St. Louis, MO 63122

TAX ID NO.

Will be provided upon award of project.

BUSINESS REGISTRATION

Registered S-Corp in Missouri since 1988.

SERVICES

Architectural Design
Interior Design / Space Planning
LEED / Sustainable Design
Master Planning
Site Feasibility Studies
Project Management
Budget / Cost Management
Graphic Design
Artwork Specification
Signage Specification

**BJC HealthCare System,
Design Documentation
Quality Awards*

Firm Information - Subconsultants

Horner & Shifrin

MEP, FP Engineering, Security/IT

Horner & Shifrin, Inc. is a professional service organization with offices in St. Louis, Missouri and O'Fallon, Illinois. Horner & Shifrin offers comprehensive M.E.P., FP, Technology, Security, AV engineering and design services in all phases of a project, including planning, development, design, and construction administration.

20+ year relationship with Archimages.

Experience:

- Village of Twin Oaks, New Municipal Center
- Brentwood City Hall Renovation
- City of Rock Hill, New Municipal Center
- Pacific City Hall & Police Station
- City of Olivette, New Municipal Center
- City of Berkeley, New Municipal Building
- Fenton FPD, New Fire Station #2 & HQ
- St. Charles County Ambulance New Headquarters / Operations Center

HORNER  SHIFRIN

David Mason & Associates

Structural Engineering (MBE certified)

DMA is a team of structural professionals with experience ranging for more than 27 years providing full service structural and seismic analysis services. The firm has designed a wide variety of building types to include fire safety, police, municipal, commercial, educational, multi-family, and industrial facilities.

5+ year relationship with Archimages.

Experience:

- Creve Coeur Police Station
- Rock Hill New Municipal Complex
- BJC Health System, Memorial Hospital Medical Office Building, Phase I
- BJC Health System, Memorial Hospital Medical Office Building, Phase II
- BJC Health System, Children's Speciality Care Clinic
- University of Missouri-St. Louis, Nursing Simulation Center



CEDC

Civil Engineering

CEDC is a privately owned Missouri Corporation founded in 2000 by principals Brandon A. Harp, P.E. and Paul K. Boyer, P.E. CEDC has shown an outstanding record in providing top quality Civil / Survey services to clients within the time constraints specified for each project.

15+ year relationship with Archimages.

Experience:

- Village of Twin Oaks New City Hall
- St. Charles County Ambulance New Headquarters / Operations Center
- St. Charles Emergency Operations Center
- Olivette New Municipal Center
- Berkeley New Municipal Complex
- Pacific City Hall & Police Station
- Byrnes Mill City Hall
- Rock Hill New Municipal Center
- Collinsville New Public Works Facility



Landscape Technologies

Landscape Architecture

Founded in 1994, Landscape Technologies aims to provide quality planning and design services to shape the natural and built environment in functional and innovative ways. We take pride in the ability to take a project and design a creative solution for the client while minimizing both project costs and environmental impacts.

12+ year relationship with Archimages.

Experience:

- Creve Coeur Police Station
- City of Creve Coeur Fire Station
- City of Rock Hill Municipal Center
- City of Twin Oaks Municipal Center
- City of Olivette Municipal Center
- Affton F.P.D. New Fire Station
- City of Berkeley Police Station
- Mehlville F.P.D. Multiple Fire Stations
- City of Pacific City Hall and Police Station
- Kirkwood Fire Department Multiple Fire Stations



Firm Information - Team Projects

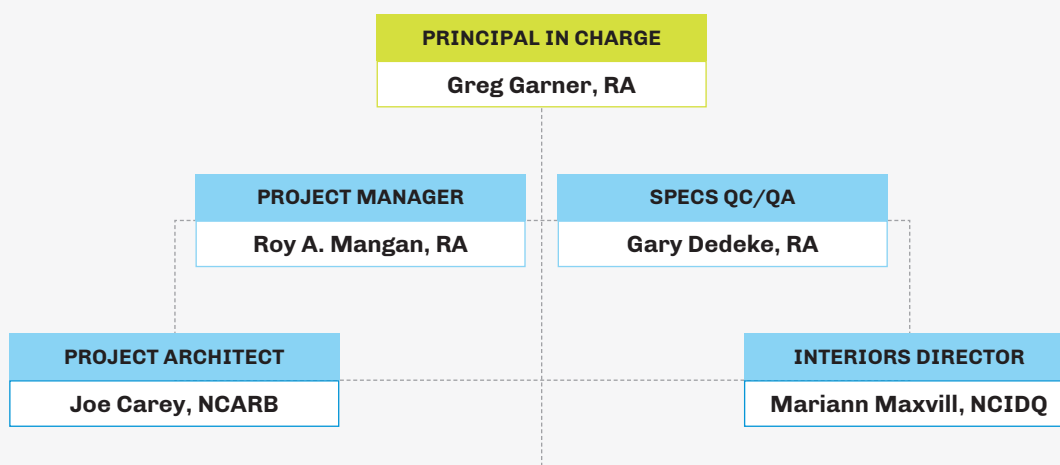
Note: Archimages has partnered with David Mason & Associates on numerous projects in other markets including Education and Healthcare.

	Archimages	Horner & Shiffrin	David Mason & Assoc.	CEDC	Landscape Tech.
Creve Coeur New Police Station	X	X	X	X	X
Creve Coeur New Replacement Fire Station	X	X		X	X
Olivette Municipal Complex	X	X		X	X
Rock Hill Municipal Complex	X	X	X	X	X
Berkeley Municipal Complex	X	X		X	
Twin Oaks Village Municipal Center	X	X		X	X
Berkeley New Police Station	X	X		X	X
St. Charles County Ambulance District - New Administrative HQ & Operations Center	X	X		X	
Afton New Replacement Fire Station	X	X		X	X
Fenton New Replacement Fire Houses #1, #2, #3, & #4	X	X		X	
Mehlville New Replacement Fire Station #2	X	X		X	X
Mehlville New Replacement Fire Station #3	X	X		X	X
Mehlville New Replacement Fire Station #4	X	X		X	X
O'Fallon (IL) New Fire Station	X	X			
University City New Fire Station #1	X	X		X	
Jefferson R-7 Fire Station	X	X			
New Melle Fire District, New Headquarters & Fire Station	X	X		X	

Firm Information - Organizational Chart

Key Team Members

Roy Mangan will be the primary contact for City of Creve Coeur. He will lead the team's design process and coordinate all team members from the study phase through the completion of construction.



SUBCONSULTANTS

Horner & Shifrin
M.E.P., FP Engineers,
Technology, Security, AV

J. Buehler, P.E.
Proj. Mgr / Elect. Engineer

D. Lauver, P.E.
Mechanical Engineer

G. Wanko
Plumbing/Fire Prot. Designer

David Mason & Associates
Structural Engineers

K. Marfell, P.E., S.E.
Structural Engineer

CEDC
Civil / Surveying

B. Harp, P.E.
Civil Engineer

Landscape Technologies
Landscape Architects

R. Mardis, ASLA
Landscape Architect

Firm Information - Financial Stability

Financial Strength

Note: Corporation Financial Documents can be made available upon award of project.

January 15, 2020



Re: Archimages Inc.

To Whom It May Concern:

Archimages has been a customer since April of 2019. They have two depository accounts with the bank and have maintained a combined average balance of a high six figure. These accounts have always been handled in an agreed upon manner. Archimages does not currently or previously have any borrowings with Midwest BankCentre.

Should you have any questions, please feel free to call.

Sincerely,

A handwritten signature in black ink, appearing to read "Timothy Walsh", written over a horizontal line.

Timothy Walsh
President – Jefferson County Commercial Division
Midwest BankCentre
Direct 314-633-6756
Fax 314-544-8675
twalsh@midwestbankcentre.com

Firm Information - Claims / Judgements

History of Disputes

Within the past 10 years, Archimages has neither been terminated by any clients, nor has any client asserted Archimages has defaulted under any contract.

The following are professional liability claims for the past 10 years involving Archimages. ***None of these cases represented direct allegations against our design services.***

Date claim made: December 2018

Claimant: St. Luke's Episcopal - Presbyterian Hospitals

Project: Women's Center, Chesterfield Valley Professional Building

Nature of Claim: This claim was related to a patron falling on a section of walkway outside of the M.O.B. that Archimages had provided services to add an entry vestibule and interior upgrades. The walkway in question was not part of the Archimages design services but because it was part of the overall project modifications, all design and construction participants were cited in the case. A settlement was reached during mediation and no responsibility was related to Archimages, Inc.

Status: Closed

Date claim made: January 17, 2013

Claimant: 8800 Watson, LLC

Project: Medical Office Building - Crestwood, MO

Nature of Claim: Omissions on planning documents related to HVAC system by outside engineer. Settled in a mediation conference. Archimages received a 50% refund check from the insurance company of the deductible paid, a full settlement check was received from the client for all past due accounts receivable, and a full release of claims. No action taken against Archimages.

Status: Closed

Date claim made: August 2015

Claimant: Florissant Surgery Centers, LLC

Project: Eye Surgical Center - Florissant, MO

Nature of Claim: Claim stated that HVAC system was designed incorrectly by sub-consultant under Archimages contract. Mediation failed to find resolution. Arbitration process was held and found Archimages/Engineer to have zero (0) responsibility for any issue. Client currently pursuing manufacturer due to errors/omissions in fabrication and installation of system. No action taken against Archimages.

Status: Closed

Archimages

Section 2 Project Experience

Relevant Experience

City of Creve Coeur New Police Station

CREVE COEUR, MISSOURI

New 26,000 SF modern police station. The clean, contemporary front elevation at the upper grade level creates a strong identifiable public entry. The lower level provides a protected entry for the staff and a desirable degree of concealment for all the fleet parking. Features include private interview rooms, large armory, secure processing lab, and staff fitness center.

Contact: Glenn Eidman, Chief of Police (314) 872-2523

Completion: 2019

Cost: \$8,177,482

Services: Architecture, Interior Design

Team: Garner, Mangan, Maxvill



Olivette Municipal Center

OLIVETTE, MISSOURI

Feasibility analysis, master plan, and design of new 40,000 sf city hall, fire station, police station, and community center. Services also included engaging citizens in community workshops and assisting the City with passing a successful bond issue.

Contact: Barbara Sondag, City Mgr, (314) 993-0444

Completion: 2017

Cost: \$9,179,913

Services: Bond Issue Asst., Feasibility Analysis, Master Plan, Architecture, Interior Design

Team: Garner, Mangan, Carey, Maxvill, Dedeker



City of Ellisville Municipal Complex

ELLISVILLE, MISSOURI

Expansion and renovation of 12,848 SF city hall and municipal courts complex. The new facility will improve public services, maximize staff efficiencies, upgrade security/ accessibility, and promote community pride. Space types include administration, public works, finance, planning, courts, chambers, and support/shared areas.

Contact: Bill Schwer, PE, City Manager (636) 227-9660

Completion: Current

Cost: \$ TBD

Services: Detailed Needs Assessment, Architecture, Interior Design

Team: Garner, Mangan, Maxvill



Relevant Experience

City of Cape Girardeau 911 Dispatch / EOC & Fire Station

CAPE GIRARDEAU, MISSOURI

New 911 Dispatch/Emergency Operations Center (5,355 SF) and new Fire Station (10,230 SF) with separate entries. Space types include offices, functional work areas, large conference room, bunk rooms, multiple apparatus bays.

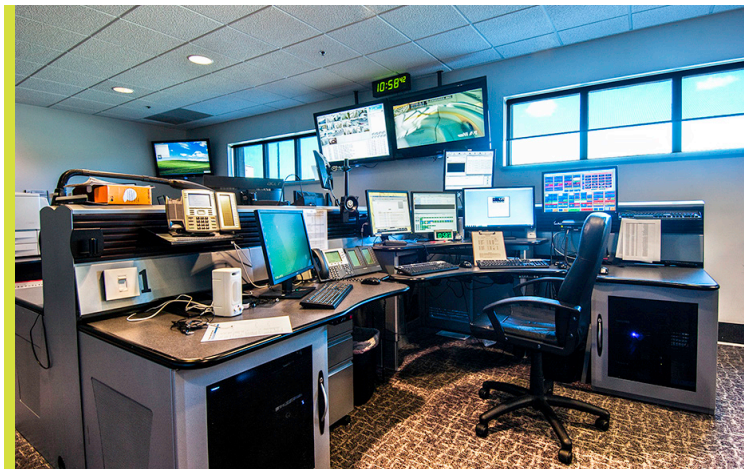
Contact: Reference no longer employed with the City

Completion: 2009

Cost: \$2,232,000

Services: Architecture, Interior Design

Team: Garner, Mangan, Maxvill



Twin Oaks Village Municipal Center

TWIN OAKS, MISSOURI

New 5,000 sf single story municipal center with authentic building materials providing a warmth and richness to achieve a unique and sophisticated character. Space types include City Hall administrative spaces, a formal lobby, Council Chambers and community room and conference spaces.

Contact: Kathy Runge, City Administrator, (636) 225-7873

Completion: 2019

Cost: \$1,708,914

Services: Architecture, Interior Design

Team: Garner, Mangan, Maxvill, Dedeker



Berkeley City Hall and Fire Station

BERKELEY, MISSOURI

Master plan and design services for new municipal complex comprised of new 32,740 SF, two-story city hall and 18,185 SF, two-story fire station. The city hall design focused on streamlined community access and included a large Council Chamber, multi-purpose meeting spaces, and administrative offices.

Contact: Debra Irvin, City Administrator, (314) 524-3313

Completion: 2012

Cost: \$6,800,000

Services: Architecture, Interior Design

Team: Garner, Mangan, Maxvill, Dedeker



Relevant Experience

City of Collinsville City Hall Renovation

COLLINSVILLE, ILLINOIS

Renovations to existing city hall to retrofit/reconfigure space recently vacated by relocated City Departments. Renovations will substantially improve public services, maximize staff efficiencies and upgrade security & accessibility. The new design addresses feature entry points, wayfinding, departmental growth/services consolidation and operational efficiencies.

Contact: Mitch Bair, City Manager (618) 345-0199

Completion: Current

Cost: \$3,000,000 (est)

Services: Facility Assessment, Architecture, Interior Design

Team: Garner, Mangan, Maxvill



Rock Hill Municipal Center

ROCK HILL, MISSOURI

Design of flexible, new municipal complex involving a two-story, 12,200 sf city hall/police station and a two-story, 6,300 sf fire station. The facilities are welcoming, efficient, and provide essential services for a progressive community.

Contact: Jennifer Yackley, City Administrator, (314) 968-1410

Completion: 2019

Cost: \$6,600,000

Services: Architecture, Interior Design

Team: Garner, Mangan, Maxvill, Dedeker



City of Edwardsville Municipal Complex Feasibility Study

EDWARDSVILLE, KANSAS

The City's facilities no longer effectively served their needs and they had begun to consider multiple options including renovations or relocation. Comprehensive facilities studies involving assessments, current space needs, future space needs, and general planning studies with cost estimates for multiple facilities including city hall (12,500 sf), police department (4,212 sf), fire/EMS department (7,159 sf), community center (5,470 sf), public works (2,400 sf), and parks maintenance and storage (1,050 sf).

Contact: Michael Webb, City Administrator (913) 356-6000

Completion: 2018

Cost: N/A

Services: Facilities Studies, Current & Future Needs Assessment, General Planning Studies, Cost Estimates

Team: Garner, Mangan



Archimages

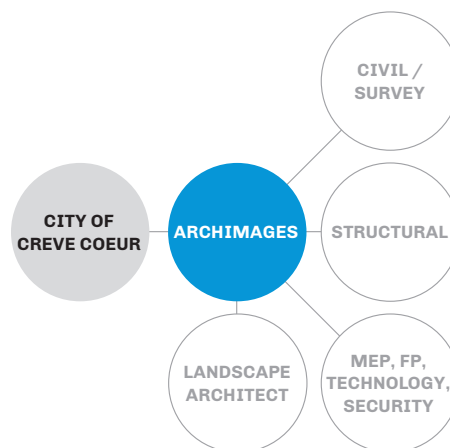
Section 3 Key Personnel

Leadership / Capabilities

A Seamless Process

Because we believe that chemistry is crucial in effective collaborations, we maintain healthy long term relationships with our team members. This familiarity and the trust it fosters guarantees maximized efficiency; established communication protocols; and seamless coordination, design, and documentation.

Archimages functions as the “hub” of our team and assumes all responsibility for coordination within the team as well as with the City of Creve Coeur. This leadership role establishes a single point of contact for the City, providing them the peace of mind and the responsive service you expect.



Capacity and Capability to Perform Work

Archimages' current and projected work load will allow for immediate and consistent support by all selected team members for the duration of your project.

Archimages is staffed with seasoned architects and interior designers who consistently provide comprehensive design and construction services to our clients in numerous markets. We enjoy steady workloads which are managed by the firm's principals and management personnel. Weekly staff utilization levels are reviewed and adjusted to ensure critical path deadlines are met for all projects. We have populated our team with professionals having many years of experience within the municipal / public safety design industry. **This maximizes productivity and ensures full adherence with schedule milestones.**

Contingency Plan

Archimages employs ample staff to cover the unexpected loss of a team member. Our architects and designers are experienced in all market segments we serve and are able to seamlessly step in to project roles should an unforeseen event arise.

LEED Accredited Professional

Our team includes multiple LEED Accredited Professionals including Mariann Maxvill, NCIDQ, LEED AP, Casey Wilson, PE, LEED AP BD+C, Joe Buehler, PE, LEED GA, and Brandon Harp, PE, LEED AP BD+C.



R. Gregory Garner, RA

Principal / Design Coordinator

Greg Garner has over 35 years of architectural design and management experience with an emphasis on planning and design. He directs the Municipal, Planning, and Design divisions of Archimages.

As Principal, Mr. Garner provides expertise in the areas of master planning, operations analysis, and space efficiency studies. He strives to provide innovative solutions that balance the aesthetic, functional, and budgetary needs of clients and users. He will direct the interactions and decisions of the design team while monitoring their overall performance.

Relevant Experience

City of Rock Hill

Rock Hill, Missouri

- New Municipal Center (City Hall / Police / Fire)

City of Olivette

Olivette, Missouri

- New Municipal Center (City Hall / Police / Fire)
- Municipal Facility Evaluation

City of Cape Girardeau

Cape Girardeau, Missouri

- New Fire Station
- New 911 Dispatch Center/EOC

City of Twin Oaks

Twin Oaks, Missouri

- New City Municipal Center

City of Berkeley

Berkeley, Missouri

- Municipal Facility Evaluation
- New Municipal Center (City Hall and Fire)
- New Police Station (including Dispatch Center)

City of Collinsville

Collinsville, Illinois

- Historic City Hall Facility Assessment and Renovation

City of Manchester

Manchester, Missouri

- Courts Building Renovation

City of Creve Coeur

Creve Coeur, Missouri

- New Police Station
- Firehouse #2 Replacement

City of Mehlville

St. Louis, Missouri

- Three (3) new fire stations
- New Training Facility
- 911 Dispatch Center

City of Ellisville

Ellisville, Missouri

- Government Center Facility Evaluation & Master Plan
- Government Center Addition and Renovation

City of Edwardsville

Edwardsville, Kansas

- Municipal Facilities Assessment
- Municipal Master Plan for - Police / Fire / City Hall - Public Works / Parks

City of Pacific

Pacific, Missouri

- City Hall and Police Station Addition

St. Charles County Ambulance District

St. Peters, Missouri

- New Headquarters and Operations Center including Critical Communications Center

Education

Bachelor of Architecture

University of Kansas

Bachelor of Environmental Design

University of Kansas

Registration

Registered Architect:

State of Missouri

Member:

Southern Building Code Org.
Advisory Board - Eagle Bank
Missouri LeadingAge
BOMA International
Municipal League Member

Years Experience

Total

35+

With Archimages

34

Office Location

St. Louis



Roy Mangan, RA

Project Manager

Roy Mangan has over 26 years of architectural experience with an emphasis on project management. Mr. Mangan's expertise lies in the areas of the construction, detailing, and technical aspects of construction, giving him a comprehensive understanding of the built environment.

As Project Manager, Mr. Mangan will be responsible for managing the project from the documentation phase through the completion of construction. He will coordinate the day-to-day architectural activities to ensure thorough and timely communication both internally and with our engineering consultants.

Relevant Experience

City of Rock Hill

Rock Hill, Missouri

- New Municipal Center (City Hall / Police / Fire)

City of Olivette

Olivette, Missouri

- New Municipal Center (City Hall/Police/Fire)
- Municipal Facility Evaluation

City of Cape Girardeau

Cape Girardeau, Missouri

- New Fire Station
- New 911 Dispatch Center/EOC

City of Twin Oaks

Twin Oaks, Missouri

- New City Municipal Center

City of Berkeley

Berkeley, Missouri

- Municipal Facility Evaluation
- New Municipal Center (City Hall and Fire)
- New Police Station (including 911 Dispatch Center)

City of Collinsville

Collinsville, Illinois

- Historic City Hall Facility Assessment and Renovation

City of Manchester

Manchester, Missouri

- Courts Building Renovation

City of Creve Coeur

Creve Coeur, Missouri

- New Police Station
- Firehouse #2 Replacement

City of Mehlville

St. Louis, Missouri

- Three (3) new fire stations
- New Training Facility
- 911 Dispatch Center

City of Ellisville

Ellisville, Missouri

- Government Center Facility Evaluation & Master Plan
- Government Center Addition and Renovation

City of Edwardsville

Edwardsville, Kansas

- Municipal Facilities Assessment
- Municipal Master Plan for - Police / Fire / City Hall / Public Works / Parks

City of Pacific

Pacific, Missouri

- City Hall and Police Station Addition

St. Charles County Ambulance District

St. Peters, Missouri

- New Headquarters and Operations Center including Critical Communications Center

Education

Bachelor of Architecture

University of Kansas

Registration

Registered Architect:

State of Missouri

Years Experience

Total

30

With Archimages

20

Office Location

St. Louis



Joe Carey, NCARB

Project Architect

Joe Carey has over 10 years of management and construction experience on a wide variety of projects. He has assisted with many of the Municipal and Public Sector projects accomplished by Archimages. His specific knowledge and team communication skills will benefit the overall design process.

As Project Architect, Mr. Carey will be responsible for all production and planning aspects of the project. He will assist the Principal in Charge and Project Manager throughout the planning and design process of the project.

Relevant Experience

St. Charles County Ambulance District

St. Peters, Missouri

- New Headquarters and Operations Center including Critical Communications Center

City of Ballwin

Ballwin, Missouri

- Facility Master Plan
- Feasibility Study

City of Creve Coeur

Creve Coeur, Missouri

- New Police Station
- Firehouse #2 Replacement

City of Berkeley

Berkeley, Missouri

- Municipal Facility Evaluation
- New Municipal Center (City Hall, Fire)
- New Police Station

City of Byrnes Mill

Byrnes Mill, Missouri

- New City Hall
- Police Facility

City of Olivette

Olivette, Missouri

- Fire / Police / City Hall Complex

City of Twin Oaks

Twin Oaks, Missouri

- New Municipal Center

Hunter Engineering

Bridgeton, Missouri

- Campus Master Plan
- Training Center Remodel
- Executive Office Expansions
- Conference & Display Suites

City of O'Fallon

O'Fallon, Illinois

- New Fire Station
- New Parks Maintenance Facility
- Site Master Plan

Jefferson R-7 Fire Protection District

Festus, Missouri

- Expansion and Renovation of Fire Station

Consolidated Fire District #2

Prairie Village, Kansas

- New Fire Station / EMS

Education

Masters of Architecture

University of Kansas

Registration

Registration:

State of Missouri

Member:

National Council of Architectural Registration Boards (NCARB)

Years Experience

Total

14

With Archimages

14

Office Location

St. Louis



Mariann Maxvill, NCIDQ

Interior Design Director

Mariann Maxvill has over 17 years of experience as an interior designer and product specifier. She manages the Interiors division of Archimages. She has vast knowledge regarding product specifications and performance criteria for a wide variety of finishes. Her expertise and space planning design ability will generate design themes that are motivational and efficient.

As the Interiors Director, Mrs. Maxvill will provide support space planning, documentation and color and finish selections. Utilizing her hands-on approach, she assesses clients' needs and will meet all budgetary requirements.

Relevant Experience

City of Rock Hill

Rock Hill, Missouri

- New Municipal Center (City Hall / Police / Fire)

City of Olivette

Olivette, Missouri

- New Municipal Center (City Hall/Police/Fire)
- Municipal Facility Evaluation

City of Cape Girardeau

Cape Girardeau, Missouri

- New Fire Station
- New 911 Dispatch Center/EOC

City of Twin Oaks

Twin Oaks, Missouri

- New City Municipal Center

City of Berkeley

Berkeley, Missouri

- Municipal Facility Evaluation
- New Municipal Center (City Hall and Fire)
- New Police Station (including Dispatch Center)

City of Collinsville

Collinsville, Illinois

- Historic City Hall Facility Assessment and Renovation

City of Manchester

Manchester, Missouri

- Courts Building Renovation

City of Creve Coeur

Creve Coeur, Missouri

- New Police Station
- Firehouse #2 Replacement

City of Mehlville

St. Louis, Missouri

- Three (3) new fire stations
- New Training Facility
- 911 Dispatch Center

City of Ellisville

Ellisville, Missouri

- Government Center Facility Evaluation & Master Plan
- Government Center Addition and Renovation

City of Edwardsville

Edwardsville, Kansas

- Municipal Facilities Assessment
- Municipal Master Plan for - Police / Fire / City Hall - Public Works / Parks

City of Pacific

Pacific, Missouri

- City Hall and Police Station Addition

St. Charles County Ambulance District

St. Peters, Missouri

- New Headquarters and Operations Center including Critical Communications Center

Education

Bachelor of Fine Arts - Interior Design

Maryville University

Registration

Registration:

LEED AP

NCIDQ Number 29955

Registered Interior Designer

- State of Missouri

Professional Membership:

IIDA - International Interior Design Association

Years Experience

Total

24

With Archimages

22

Office Location

St. Louis



Gary Dedeke, RA

QA / QC Specialist

Gary Dedeke has over 38 years of architectural experience with an emphasis on document production, construction detailing, and quality control. He has managed multiple project types and has been responsible for all aspects of the design process.

Mr. Dedeke will function as the Quality Assurance and Quality Control Specialist and be responsible for guaranteeing the quality of the construction plans and specifications. Mr. Dedeke will attend selected team meetings, perform required field observations, and review all documents required for the construction phase of the project.

Relevant Experience

St. Charles County Ambulance District

St. Peters, Missouri

- New Headquarters and Operations Center including Critical Communications Center

City of Creve Coeur

Creve Coeur, Missouri

- New Police Station
- Firehouse #2 Replacement

City of Rock Hill

Rock Hill, Missouri

- Police, Fire, City Hall Complex

City of Olivette

Olivette, Missouri

- Existing Facility Plan / Evaluation
- New Fire / Police / City Hall Complex
- Community Center Feasibility Study

City of Berkeley

Berkeley, Missouri

- Municipal Facility Evaluation
- New Municipal Center (City Hall, Fire)
- New Police Station

City of Pacific

Pacific, Missouri

- Municipal Facility Evaluation
- City Hall & Police Station Addition

City of Byrnes Mill

Byrnes Mill, Missouri

- New City Hall / Police Facility

City of Perryville Police Station

Perryville, Missouri

- New Police Station

City of Troy

Troy, Missouri

- City Hall Renovations
- Existing Conditions Study

City of Collinsville

Collinsville, Illinois

- Municipal Center Expansion and Public Works Master Plan

City of O'Fallon

O'Fallon, Illinois

- New Fire Station
- New Parks Maintenance Facility
- Site Master Plan

City of Edwardsville

Edwardsville, Kansas

- Municipal Master Plan
- Public Works / Parks
- Police / Fire / City Hall

Education

Bachelor of Architecture

Washington University

Registration

Registration:

Missouri, Illinois, and 45 other states

Member:

National Council of Architectural Registration Boards (NCARB)
American Institute of Architects (AIA)
Missouri Council of Architects (MCA)
Missouri LeadingAge

Years Experience

Total

40+

With Archimages

15

Office Location

St. Louis



Joe Buehler, PE, LEED Green Assoc.

Project Manager / Electrical Engineer

Joe Buehler has more than 30 years of experience on a wide variety of electrical engineering projects. His design experience includes electrical power and distribution, interior and exterior lighting, emergency power, fire alarm, security, public address, program bell, television systems, UPS systems, labs, computer rooms, power conditioning, and power studies. Joe is located in the St. Louis office.

Joe has provided design for many municipal facilities including: Creve Coeur New Police Facility; Berkeley New Municipal Center; Olivette New Municipal Center; Rock Hill New Municipal Center; Hayti New Municipal Center; Twin Oaks New Municipal Center; Pacific City Hall and Police Department Addition and Renovation.

HORNER  SHIFFRIN

Education

B.S., Electrical Engineering

Missouri University of Science & Technology, Rolla, 1979

Registration

Professional Engineer

Missouri, Illinois, Kentucky



Casey Wilson, PE, LEED AP (BD+C)

Mechanical Engineer

Casey Wilson has 11 years of mechanical engineering experience with project work in science and technology, healthcare, education, recreation, commercial and government facilities. Casey has specialized in HVAC system design, project development, facility assessments construction administration, LEED documentation and client relations. Casey is located in the St. Louis office.

Casey has provided design for numerous municipal facilities including: Creve Coeur New Police Facility; Berkeley New Municipal Center; Olivette New Municipal Center; Rock Hill New Municipal Center; Hayti New Municipal Center; Creve Coeur New Fire Station No. 2; Twin Oaks New Municipal Center; Fenton Fire Protection District Multiple New Fire Stations.

HORNER  SHIFFRIN

Education

B.S., Mechanical Engineering

University of Missouri - Columbia, 2008

Registration

Professional Engineer

Missouri, Illinois, Oklahoma



Greg Wanko

Plumbing/Fire Protection Designer

Greg Wanko has 7 years of plumbing and fire protection design experience with project work in municipal, healthcare, education and recreation. Greg is specialized in plumbing/fire protection design, project development, and construction administration. Greg is located in the St. Louis office.

Greg has provided design for numerous municipal facilities including: Creve Coeur New Police Facility; Berkeley New Police Station; Olivette New Municipal Center; Rock Hill New Municipal Center; Hayti New Municipal Center; Pacific City Hall and Police Department Addition and Renovation; Berkeley New Municipal Center; Creve Coeur New Fire Station No. 2; Brentwood City Hall Renovations, Twin Oaks New Municipal Center.

HORNER  SHIFFRIN

Education

B.A. Architecture

Drury University 2013

Registration

ASPE Certified Plumbing

Design Technician, 2019



Kara Marfell, SE, PE

Structural Engineer

Kara Marfell, with 24 years of experience, is a highly skilled Professional Engineer specializing in structural design and project management for various projects. Scope of work for projects typically includes production of structural drawings, generation of structural specifications, review of shop drawings, and construction administration. Kara is located in the St. Louis office.

Kara has provided design for numerous facilities including: Creve Coeur New Police Station; Rock Hill New Municipal Center; BJC Healthcare-Memorial Hospital Medical Office Building East Phase I, BJC Healthcare-Memorial Hospital Medical Office Building East Phase II, St. Louis County Library-Grand Glaize Branch Expansion and Renovation.



Education

M.S., Civil Engineering

University of Missouri - Columbia

Registration

Professional Engineer

Missouri

Structural Engineer

Illinois



Brandon Harp, PE, LEED AP (BD+C)

Civil Engineer

Brandon Harp has 26 years of experience in civil engineering, site development and land planning design. Brandon will be the principal engineer involved in the design process. He has worked with most municipalities and has established relationships with the personnel within the governing agencies. Brandon provides special attention to detail and utilizes an established quality control program on all projects which provides cost-effective solutions throughout the design process. Brandon is located in the St. Louis office.

Brandon has provided design for numerous municipal facilities including: Creve Coeur New Police Facility; Berkeley New Municipal Center; Olivette New Municipal Center; Rock Hill New Municipal Center; Pacific City Hall and Police Department Addition and Renovation; Twin Oaks New Municipal Center, Byrnes Mill City Hall.



Education

M.B.A.

Webster University

B.S., Civil Engineering

University of Missouri - Columbia

Registration

Professional Engineer

Missouri, Illinois, & 5 others



Randall W. Mardis, ASLA

Landscape Architect

Randy has served the profession through mentoring and taking opportunities to educate the Public. He has been a guest speaker at several garden clubs and college programs in the area. He has served in advisory board capacities at Meramec Community College and Kansas State University. He has spoken at numerous "Career Days" at area high schools and facilitated charettes at elementary schools. Additionally, he has taught adult classes at Missouri Botanical Gardens since 1989. Randy was honored in 2010 when he was presented the Bob Goetz Award for high ethics, mentoring and service to the profession. Randy is located in the St. Charles (MO) office.

Randy has provided design for numerous relevant projects including: Creve Coeur New Police Station, Creve Coeur New Fire Station, Rock Hill New Municipal Center, Twin Oaks New Municipal Center, Olivette New Municipal Center, Pacific City Hall and Police Station addition and Renovation, Affton Fire Protection District New Fire Station, Mehlville Fire Protection District-Multiple Fire Stations.



Education

B.A., Landscape Architecture

Kansas State University

Registration

Registration:

Missouri, Illinois, & 10 others

Archimages

Section 4 Project Understanding / Approach / Schedule

Project Understanding / Approach

With more than 30 years of experience with municipal facilities, the Archimages' Team provides unsurpassed experience and expertise within our industry. We understand City Halls have a responsibility to ensure a sense of safety and community spirit. The facility needs to support and represent the community for decades while having the ability to be flexible to accommodate changing technology and operational trends. Required separation of public and private areas will need to be carefully evaluated to ensure all staff and public are kept safe and functionally efficient.

Project Understanding

The City desires a Needs Assessment and Feasibility Study to determine how to proceed with either a renovation of existing City Hall facility or replacement of the existing facility.

Archimages has provided architectural and interiors services for the City of Creve Coeur for many years. For the City Hall specifically, we have provided preliminary existing analysis, programming and understanding with both city staff and dispatch representatives, field investigation, measurement, and documentation of existing conditions. We have established relationships with City personnel and groundwork familiarity of the structure and desired needs.

Archimages will conduct a thorough Needs Assessment and Feasibility Study and present the pros and cons of renovation vs demolition and new construction.

Approach

Archimages believes the best project experiences are those that provide for every team member to contribute their expertise to the whole. Through an inclusive approach, we will bring the knowledge and perspectives of all involved to the project assessment, planning, design, and construction process. We will work with the City of Creve Coeur to define the frequency and methods of communication that are right for the City.

The following are some tools we typically use:

Interactive Meetings

Interactive meetings with all involved (City Representatives, Staff, Dispatch Representatives, Stakeholders, Core and Support Design Teams) allow the City to make informed decisions. 2D and 3D drawings and BIM models are utilized to greatly increase the City's ability to visualize and make knowledgeable decisions. Critical Path decisions are made after careful evaluation of options so that all involved are educated as to "Why" a direction is selected and "Why" other potentials were not.

Tools of Engagement can be found in the sidebar to the right.

Communication

Meetings are conducted in person, via telephone, or by online portal (e.g. Zoom, Teams, GoToMeeting) as appropriate to the type of meeting, ability to assemble people, and COVID protocols. Each meeting/work session will include pre-approved agendas so all participants can fully prepare. All project decisions, meetings (impromptu and planned meetings), and presentations will be documented with meeting minutes issued to all participants to promote open communication and create an accurate historical database.

Stewardship

The highest and best use of available funding will be a corner stone of our approach. Archimages has a database of market costs for municipal renovation and new construction projects and will actively pursue value based solutions. Functionality, efficiency, and safety concerns are fully addressed during our collaborative design process to ensure full compliance and measurable value is achieved within your budget structure.

Tools of Engagement

- Tours of existing facilities
- Review of comparable plans and specifications
- Programming surveys
- 3D modeling of options
- Budget & schedule database review
- Lessons learned evaluations
- Interactive work sessions
- Forensic Building Review
- Field Measurement Verification

EXPERTISE

**30+ Years and
200+ Municipal
Facilities**

PRIORITY

**Design for
Facility User
Satisfaction**

Project Understanding / Approach

Schedule

Archimages is responsible for developing and managing the project schedule. Critical path elements are identified and prioritized at the outset of the project. The client, design team, and outside authorities are consulted so that proper coordination and timeframes are included in the master schedule. User meetings are established early so consistent participation is achieved. Our project team reviews schedules, next steps, and responsibilities during each meeting so all participants have the current status. Schedule control is a critical aspect of overall project quality.

Archimages will identify long lead items and work to achieve permits from required regulatory agencies within timeframes that allow for the completion of bid documents within the project schedule. **See a Sample Schedule on the next page of our detailed scheduling approach, which we will customize for your project after further assessments and understanding.**

Feasibility Studies and Facilities Assessment

Facility Studies and Assessment is all about determining the ability for a facility to meet an intended purpose or enable an activity. Archimages has performed facility studies and assessments for numerous facility types to assist municipalities in confidently moving forward with repairs and capital planning. Following ASTM-E2018-15 Standards, we are thorough in our systematic inspections, reviews, and reports on the state of a building's structure, systems and infrastructure.

All of our reports are well organized and easy to navigate and include the present condition and estimated life expectancy of building systems and components as well as all physical assets (grounds, facility, infrastructure), presentation of pros and cons for maintaining the existing facility, and recommendations for future decisions.

Phasing and Experience with Demolition of Existing Facilities / Reuse of Existing Sites for New Construction

Archimages has provided architectural design services for numerous municipal projects involving renovation and demolition of existing facilities and reuse of existing sites for new construction. We have developed a thorough understanding and expertise regarding construction phasing that minimizes disruption to ongoing operations.

We have provided service of this type for the City of Fenton (MO) on three replacement fire stations, City of Affton (MO) on one replacement fire station, replacement fire station for the Creve Coeur (MO) Fire Protection District- Station #2 and Metro West (MO) Fire Protection District - two stations.

Construction Administration Approach

Archimages provides Construction Administration on every project we design. Much time is spent helping clients organize their initial ideas to prepare a design and detailed plans documenting exactly how a structure is to be constructed. It is our responsibility, as licensed professionals, to observe construction to ensure that design protocols are being followed during the building process.

Our Construction Administration approach involves carefully observing construction, taking photographs, and identifying inconsistencies with design documents. If contractual specifications are not being followed, we meet with the builders' supervisors to discuss the issues and develop proper solutions that fully address the identified inconsistencies. Archimages also serves as the point of communication between the contractor and City of Creve Coeur representatives in matters regarding the contract including changes, acceptance of the work and payments to the contractor.

Bottom-line: Archimages is working for our clients' complete satisfaction. ***Our role during construction is to protect the City of Creve Coeur and ensure you get the facility that was designed.***

**Design for
Costs and
Energy
Efficiency**

**Designing
to Meet
Budget**

**Design for
Distinctive
Branding**

**Design for
Facility User
Mental &
Physical
Health**

Sample Schedule

City of Creve Coeur Government Center

TASKS	2022												2023																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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Archimages

Section 5 Record of Performance / References / Liability Claims

References, Performance, & Claims

References

Archimages has designed multiple Municipal and Public Safety facility projects. We are proud of our reputation and enjoy long term relationships with our clients. We invite you to contact these resources and gain insight into how we were the **"RIGHT FIT"** for their organizations.

City of Ellisville

(Municipal Complex Renovation and Expansion)
Bill Schwer, PE
City Manager
(636) 227-9660

Creve Coeur Police Department

(New 26,000 sf police station)
Chief Glen Eidman
Chief of Police
(314) 872-2523

City of Olivette

(New 40,000 sf municipal complex including city hall / police / fire)
Barbara Sondag
City Manager
(314) 993-0444 x5200

City of Rock Hill

(New 18,500 sf municipal complex including police / fire / city hall)
Jennifer Yackley
City Administrator
(314) 968-1410

City of Berkeley

(New 12,500 sf police station)
(New 50,925 sf municipal complex including city hall / fire)
Debra Irvin
City Manager
(314) 524-3313

Professional Liability Insurance Claims

In our 30+ year history, Archimages has never been terminated by any client for default nor have we had direct professional liability insurance claims against our design services.

Record of Past Performance/ Design to Budget

Archimages approaches budget control as a pro-active, rather than reactive process. A budget analysis and cost model will be established with the overall project team apportioning the budget to building systems and components. Professional expertise, as well as life-cycle analysis will be continually evaluated to keep projects within budget. Historical cost data bases of completed projects will be used to validate initial project assumptions. Major components of the design are reviewed and priorities are established with the owner and user group on where to emphasize financial resources. The historical models are escalated to current market conditions, reviewed, and used as baselines for future comparisons.

Examples include:

City of Creve Coeur Police Department

(New 26,000 sf police station)
Budget/Estimate: \$8,858,951
Final Cost: \$8,177,482

City of Rock Hill Municipal Complex

(New 18,500 sf municipal complex including city hall/police and fire station)
Budget/Estimate: \$5,470,000
Final Cost: \$5,599,248

City of Olivette Municipal Center

(New 50,925 sf municipal complex including city hall, police, fire)
Budget/Estimate: \$9,856,748
Final Cost: \$9,179,913

“ From a fiscal point of view, we could not be happier that the project completed on time and on budget. Again, so much of this is due to the efforts of Archimages. Understanding that we are allocating tax dollars places a large responsibility on our elected officials to make sure public funds are spent wisely. Our Fire District feels this responsibility was fulfilled with the help of Archimages. ”

Fire Chief Nickolas R. Fahs
Affton Fire Protection District
(314) 631-1803

Archimages

Section 6
Familiarity / MBE
Inclusion / Sustainability

Familiarity with Area / Team Members Locations



Familiarity and Proximity to the City of Creve Coeur

Located in Kirkwood (MO), Archimages has excellent proximity to the City of Creve Coeur and efficient access to your project staff. Our team has years of experience coordinating with the local agencies and utility companies that have jurisdiction over the planning and permit process within the City of Creve Coeur and St. Louis County.

We have provided design services for many clients within Creve Coeur, MO including the **City of Creve Coeur New Police Station and New Fire Station** as well as multiple healthcare clients (Mercy Health System, BJC Health System), commercial clients, and retail clients. We have provided services for hundreds of projects in St. Louis County including numerous municipal facilities such as Clayton City Hall, Rock Hill Municipal Complex, Olivette Municipal Complex, Berkeley Municipal Complex and many others.

Office Locations of Team Members

Archimages

143 W. Clinton Place
St. Louis, MO 63122

Horner & Shifrin

401 S. 18th Street
St. Louis, MO 63103

David Mason & Associates (MBE certified)

800 S. Vandeventer Ave.
St. Louis, MO 63110

Civil Engineering Design Consultants (CEDC)

10820 Sunset Office Dr.
St. Louis, MO 63127

Landscape Technologies

67 Jacobs Creek Drive
Saint Charles, MO 63304

MBE/WBE Inclusion / Sustainability



MBE/WBE Inclusion

Archimages recognizes the importance and long term benefits of utilizing Minority Business Enterprises and Women Business Enterprises (MBE/WBE) in the development of municipalities. We are committed to creating a program that is designed to educate, develop, and economically empower MBEs/WBEs.

We have partnered with David Mason & Associates (DMA), a Minority Business Enterprise (MBE), to provide structural engineering design services. We have successfully partnered with DMA on prior projects including the new Creve Coeur Police Station and the new Rock Hill Municipal Complex (police, fire and city hall), multiple BJC Health System projects, and multiple University of Missouri-St. Louis project.

Sustainable Design

Archimages promotes building designs that make healthy, environmentally responsible spaces for staff and visitors, while being cost effective for the Client. Our energy efficient designs are carefully tuned to the Client's needs. Sustainable project elements include building orientation, building envelope, advanced energy design (i.e. interior and exterior lighting, occupancy sensors, demand response programs, etc.), daylight harvesting, renewable energy production, and advanced thermal design. We have experience with sustainable design programs such as LEED, Green Globes, and Energy Star with several certified projects.

Our team includes several LEED Accredited Professionals in key roles including Mariann Maxvill, NCIDQ, LEED AP (Archimages), Casey Wilson, PE, LEED AP BD+C (Horner & Shifrin), Joe Buehler, PE, LEED GA (Horner & Shifrin), and Brandon Harp, PE, LEED AP BD+C (CEDC).

Team's Representative sustainable design and LEED Certified projects include:

- Veteran's Administration, Physical Medicine and Rehabilitation Center (LEED Silver), Biloxi, MS
- Veteran's Administration, Residential Rehabilitation Center (LEED Silver - pending), Walla Walla, WA
- City of University City, New Fire Station (designed to LEED certified standards), University City, MO
- SLU Jesuit Residence Hall - Pursuing LEED Silver
- City of Creve Coeur, New Police Station, Creve Coeur, MO
- City of Olivette New Municipal Complex, Olivette, MO
- City of Berkeley, New Municipal Complex, Berkeley, MO
- Kansas City Kansas Public Schools, Kansas City, KS
- Kirkwood School District, Various Projects, Kirkwood, MO

CITY OF CREVE COEUR, MISSOURI STATEMENT OF QUALIFICATIONS

January 11, 2022



Professional Design Services Qualifications Government Center



Bond Architects, Inc.
222 S. Central Avenue, Suite 100, St. Louis, MO 63105

Susan Pruchnicki, FAIA, LEED AP ID+C, Principal-in-Charge
spruchnicki@bondarchitectsinc.com | 314.863.4994



January 11, 2022

Mr. Mark Perkins, City Administrator
City of Creve Coeur, Missouri
300 N New Ballas Road
Creve Coeur, MO 63141

RE: Professional Design Services Qualifications – Government Center

Dear Mr. Perkins:

We are pleased to submit our qualifications for Professional Design Services for the City of Creve Coeur Government Center needs analysis. We understand that municipal buildings must appeal to a wide variety of users and meet a myriad of needs, all while balancing a strict budget. Our firm has designed community centers, city hall buildings, fire stations, and more to serve residents across the region. Enhancing staff experience and workflow through efficient design is also a major focus of our municipal work. Our team provided the master plan for the Government Center is very familiar with the City of Creve Coeur.

Our needs assessment process is inclusive and can involve community engagement efforts and be as broad or as targeted as the City desires. Many of our projects have included adaptive reuse, and in some cases have involved historic preservation issues. Our broad range of services has included master planning, design, and cost estimating. Recently, much of our work has been associated with grant funding from various sources from St. Louis County Proposition funding to neighborhood grants.

Our project management efforts are focused on scheduling and cost containment efforts. Clearly defining the scope of the project is critical to the ongoing success of these projects. However, we are nimble enough to dial up projects and begin construction quickly, when they have been stalled in funding decisions, which would otherwise make them untenable on a swift schedule.

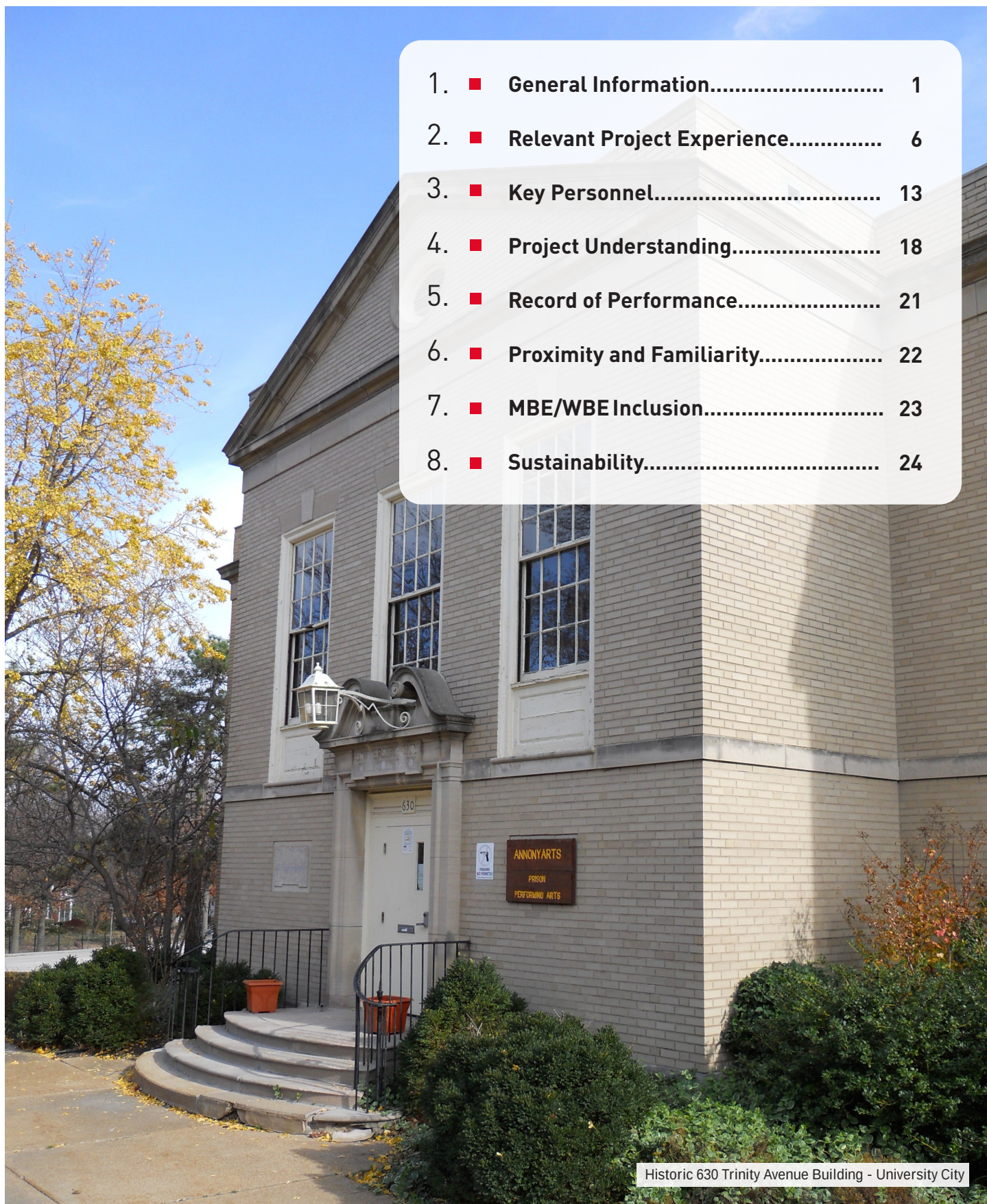
Accessibility is a significant focus in all of our projects. Multi-modal access is critical to many of our park-related projects because they tie into trail and transit systems within the municipality. Safety and security also play an important role in how our projects are developed and as well as the materials and systems that are designed into the project.

When considering our technical experience, focus on cost efficiency, and fully integrated interior design capabilities, the Bond Architects team has the right process and design acumen to appropriately transform your facility. We would be thrilled to perform work for the City of Creve Coeur to design and implement renovations to best use available space within a suitable budget. We look forward to speaking with you further regarding our qualifications. Please do not hesitate to contact us if you have any questions or would like clarifications about our proposal.

Best regards,

Susan Pruchnicki, FAIA, LEED AP ID+C
Principal, Bond Architects, Inc.
spruchnicki@bondarchitectsinc.com

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Historic 630 Trinity Avenue Building - University City

1. GENERAL INFORMATION



1. GENERAL INFORMATION

BOND ARCHITECTS, INC.

Bond Architects, Inc. provides architecture, interior design and planning solutions to a wide range of municipal, educational and commercial clients. Located in St. Louis, our projects, practice and people have been recognized for their commitment to enhancing communities, advancing education and promoting sustainability.

DATE, STATE AND TYPE OF BUSINESS ORGANIZATION

Date:

4/1/1992

State:

Missouri

Firm Structure:

The firm is **incorporated as a C Corporation** in the State of Missouri.

NAMES OF OWNERS, PRINCIPALS AND/OR OFFICERS

The firm is incorporated in Missouri and owned by Susan Pruchnicki and Art Bond, firm partners. Architects are registered in Missouri, Illinois, Kansas, Maine, Michigan and Wisconsin.

Name:

Susan Pruchnicki, FAIA, LEED AP ID+C
Principal

Phone Number:

314.863.4994 (T)

Email:

spruchnicki@bondarchitectsinc.com

Name:

Art Bond, AIA, Principal

Phone Number:

314.863.4994 (T)

Email:

abond@bondarchitectsinc.com

CIVIL OR CRIMINAL CLAIMS, JUDGMENTS OR SUITS WITHIN THE LAST TEN (10) YEARS

Since our inception in 1992, Bond Architects, Inc. has never been involved in litigation or disputes with clients. Our firm has never been terminated by any client or replaced by another firm during the design or construction phase of any related project. We have not had any actions taken by any regulatory agency against or involving the firm, its agents or employees with respect to any work performed. We have never failed to complete any work that the firm has been contracted. If a problem were to arise, our firm will work with the client to resolve the issue in a timely manner. For the schools and institutions we serve, we are not only their architect but also their trusted advisor to help as issues arise.

EVIDENCE OF THE FIRM'S FINANCIAL WHEREWITHAL TO COMPLETE THE PROJECT

As a private company, Bond Architects are not accustomed to sharing the details of our finances with our submittal as it will become public information. In response to this question, we have included a letter addressing this question from our third-party CFO, Dennis Wilhelmi. Dennis has acted as an independent consultant serving as Bond Architects' Chief Financial Officer since 2001. The letter to follow at the conclusion of this section. Also provided are three financial references.

CROSS RHODES

Monetta Lawson

2731 S. Jefferson Avenue
St. Louis, MO 63118
314.421.5141 x205
mlawson@x-rhodes.com

COUNTY BLUE

REPROGRAPHICS, INC.
Ericka Stark

811 Hanley Industrial Ct.
St. Louis, MO 63144
314.961.3800
estark@countyblue.com

PEDRO'S PLANET

Belinda Miller

290 Axminister Drive
Fenton, MO 63026
314.423.3898
accountinghoncho@pedrosplanet.com

FEDERAL AND STATE TAX ID NUMBERS

Federal Tax ID:

43-1608290

MO State Tax ID:

403-35-7676

OFFICER AUTHORIZED TO REPRESENT THE FIRM

Name:

Susan Pruchnicki, FAIA,
LEED AP ID+C
Principal

Address:

222 S. Central Avenue
Suite 501
St. Louis, MO 63105

Email:

spruchnicki@
bondarchitectsinc.com

Phone Number:

314.863.4994 (T)



1. GENERAL INFORMATION

FINANCIAL LETTER

	DENNIS D. WILHELMI, CPA	 P.O. BOX 270412 ST. LOUIS, MO 63127	 TEL: 314.909.0653 CEL: 314.401.6747 FAX: 314.909.0639	 WWW.WILHELMICFO.COM DENNIS@WILHELMICFO.COM
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December 28, 2021

Mark Perkins
City Administrator
City of Creve Coeur, Missouri
300 N New Ballas Road
Creve Coeur, MO 63141

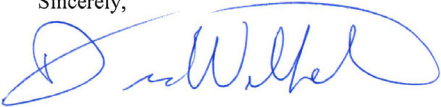
Dear Mark

My name is Dennis Wilhelmi. I am a CPA providing consulting CFO services to growing businesses. I am proud to work with the BA team, I have worked with the firm as an independent consultant/contract CFO since 2002.

BA's profit performance has generally tracked with industry averages. BA has maintained a policy of retaining a portion of each years' profits to grow equity and working capital. This practice has allowed the company to reinvest in technology, reward\retain its key talent, and weather economic downturns. The company has implemented project management systems and financial controls to assure tight management of client project budgets.

Please feel free to call me if you have any questions.

Sincerely,



Dennis D. Wilhelmi, CPA
CFO Consulting Services
314-401-6747



1. GENERAL INFORMATION

**BOND ARCHITECTS, INC.**

WBE Certified Firm St. Louis, MO

222 S. Central Ave., Suite 501, St. Louis, MO 63105

Susan Pruchnicki, FAIA, LEED AP ID+C
Principal-In-Charge

Art Bond, AIA
Principal/Cost Estimating, QA/QC

Rebecca Kleba
Project Manager

Michelle Wells, AIA, LEED Green Associate
Project Architect

Breanna Kolk
Architectural Associate

Andrea Giovando, NCIDQ
Senior Interior Designer

Subconsultants**SSC Engineering, Inc.**

MEP/Structural/FP/Low Voltage/Electrical
Engineer
St. Louis, MO

J. Chris Cornett, P.E., LEED AP, CPMP
Mechanical/Plumbing/FP Engineer

Jeff Huettenmeyer, P.E., LEED AP
Electrical Engineer

Brian Scott, PE, RCDD
Principal/Low Voltage &
Electrical Engineer

**Larson
Engineering**

Larson Engineering Structural Engineer
St. Louis, MO

Michael Goeden, SE, PE
Structural Engineer

**Civil Engineering Design Consultants, Inc.**

Civil Engineer
St. Louis, MO

Brandon Harp, PE, LEED AP BD+C
Principal/Civil Engineer

**HENDERSON
ENGINEERS**

Henderson Engineers Acoustical Designer
Kansas City, MO

Jeff Teel
Acoustical Designer

**Nafe & Associates, LLC** Landscape Architect

WBE Certified Firm St. Louis, MO

Nancy Nafe, PLA, ISA, LEED AP
Landscape Architect



1. GENERAL INFORMATION

PROJECT TEAM MATRIX

PROJECT	BOND ARCHITECTS						SSC ENGINEERING			LARSON ENGINEERING	Henderson Engineers	Civil Engineering Design Consultants, Inc.	Nafe & Associates
	Susan Pruchnicki, FAIA, LEED AP ID+C	Art Bond, AIA	Rebecca Kleba	Michelle Wells, AIA, LEED Green Associate	Breanna Kolk	Andrea Giovando, NCIDQ	J. Chris Cornett, PE, LEED AP, CPM	Brian Scott, PE, RCDD	Jeff Huettenmeyer, PE, LEED AP	Michael Goeden, SE, PE	Jeff Teel	Brandon Harp, PE, LEED AP BD+C	Nancy Nafe, PLA, ISA, LEED AP
City of Brentwood - Fire Department		■						■					
City of Brentwood - Police Department	■	■						■					
City of Brentwood - Library	■	■											
City of Brentwood - City Hall Master Plan	■	■											
City of Brentwood - Community Center Feasibility Study		■											
City of Crestwood - City Hall and Police Station Renovations		■			■					■			
City of O'Fallon - Municipal Centre Renovations		■			■	■	■						
City of Chestfield - Government Center	■	■					■		■				
City of Creve Coeur - Government Center	■	■								■		■	
St. Louis County Library District - 15 locations	■											■	■
Jefferson City, MO - Christopher S. Bond Courthouse											■		
Leawood, KS - Leawood Justice Center											■		
St. Francois County - New Joint Communications Center								■	■				
St. Charles County - Emergency Operations Center Addition & Renovation								■	■				
Franklin County - Government Center Addition & Renovation								■	■				
City of Effingham, IL - New 911 Dispatch & Police Station								■	■				
Village of Glen Carbon - 911/Dispatch Renovation								■	■				
City of Frontenac - Municipal Complex										■			
West County EMS										■			



1. GENERAL INFORMATION

Chesterfield Government Center



St. Louis County Library Grand Glaize Branch



SERVICES

- 3D Renderings and Modeling
- ADA and Code Compliance
- Architectural Design
- Athletic Fields and Complexes
- Bidding and Negotiations
- Bond Issues and Fundraising
- Building Information Modeling (BIM)
- Community Engagement
- Construction Administration
- Construction Documents
- Cost Estimating
- Facility Condition Assessments
- Feasibility Studies
- FEMA & Storm Shelter Design
- Graphics, Branding and Wayfinding
- Interior Design and FF&E
- LEED Design
- Master Planning
- Needs Assessments
- Program Development
- Safety and Security Assessments
- Site Planning
- Space Planning
- Strategic Advocate

POINT OF CONTACT

Susan Pruchnicki, FAIA, LEED AP ID+C
Principal-In-Charge

222 S. Central Ave., Suite 501
St. Louis, MO 63105

314.863.4994

spruchnicki@bondarchitectsinc.com

www.bondarchitectsinc.com

School District of Clayton High School Adzick Field



Bond Architects provides architecture, interior design and planning solutions to a wide range of municipal, educational and commercial clients. Our projects, practice and people have been recognized for their commitment to enhancing communities, advancing education and promoting sustainability.

Located in St. Louis, Missouri, Bond Architects has been designing innovative spaces for 29 years. Experienced designers, technical architects and collaborative managers lead every effort, providing diverse knowledge and exceptional service. Bond Architects' personal delivery method of continuous management and communication ensures we consistently meet budgets and schedules.

Bond Architects is a **certified Women's Business Enterprise (WBE)** through the State of Missouri, the City of St. Louis, St. Louis Lambert International Airport and the State of Illinois.

With this certification, Bond Architects can add team diversity to your project that will inspire inclusion, connection, and collaboration.



Bond Architects' current team features five licensed architects, with two being LEED Accredited, two working towards certification, one Interior Design Professional and three other professional staff. The firm is incorporated in Missouri and owned by Susan Pruchnicki and Art Bond, firm partners. Architects are registered in Missouri, Illinois, Kansas, Maine, Michigan and Wisconsin.

2. RELEVANT PROJECT EXPERIENCE



2. RELEVANT PROJECT EXPERIENCE

CRESTWOOD CITY HALL AND POLICE STATION RENOVATIONS - CRESTWOOD, MO | **Bond Architects, Inc.**



After a flood in the building, Crestwood City Hall and Police Station had extensive damage to its interior finishes. In addition, the main entrance to the building was not wheelchair accessible and the skylights in the lobby were cracked and leaking. Finishes were updated in all the damaged areas and the board room received technology upgrades. A new ADA ramp was constructed to match the look of the main entry stairs. Leaking skylights were replaced and the roof was repaired to stop further leaks.

Bond Architects coordinated with an owners representative during design and construction. The renovations were completed in three phases and municipal services continued as usual during the construction.

SIZE AND COST
28,600 SF | Ph 1 - Ph 3 \$1.2 M

COMPLETION DATE
2021

SERVICES
Architectural Design
Interior Design
Construction Documents
Construction Administration

POINT OF CONTACT
James Gillam, PE
Director of Public Services
City of Crestwood
314.729.4722
jgillam@cityofcrestwood.org



CITY OF O'FALLON MUNICIPAL CENTRE RENOVATIONS - O'FALLON, MO | **Bond Architects, Inc.**



Bond Architects recently completed renovations to the City of O'Fallon's Municipal Centre/City Hall. In 2017, the police department and courts moved to a new Justice Center, vacating a substantial amount of space in City Hall. The renovations will improve adjacencies among departments, improve public and staff access, upgrade interior finishes and will reorient and utilize the vacated former police space.

SIZE AND COST
80,000 SF | \$993 K

COMPLETION DATE
2021

POINT OF CONTACT
Chris Clercx
Project Manager
636.379.5590
cclercx@ofallon.mo.us

SERVICES
Programming
Cost Estimating
Architectural Design
Interior Design
Furniture Procurement
Code Review
Construction Documents
Construction Administration





2. RELEVANT PROJECT EXPERIENCE

BRENTWOOD MUNICIPAL PROJECTS - BRENTWOOD, MO | Bond Architects, Inc.



Bond Architects has a long-standing relationship with the City of Brentwood. An initial City Hall master plan led to the design and development of a new police station, allowing for city hall and library expansions. A new fire station was designed to meet expanding community needs and current codes. Bond Architects was also involved in the Community Center feasibility study. All of the Brentwood projects came in on schedule and at or below budget.

SIZE AND COST

Fire Station: 20,000 SF | \$3.5 M
 Police Station: 8,300 SF | \$2.3 M
 Library: 6,850 SF | \$430,000
 City Hall Master Plan:
 60,000 SF | \$5.4 M
 Community Center Feasibility
 Study: 42,000 SF | \$1.2 M

COMPLETION DATE

Fire Station: 2010
 Police Station: 2005
 Library: 2003
 City Hall Master Plan: 2002
 Community Center Feasibility
 Study: 2000

SERVICES

Feasibility Studies
 Programming
 Site Planning
 Interior Design
 Construction Administration
 Space Planning
 Cost Estimating
 Furniture Procurement
 Move Management

POINT OF CONTACT

Pat Kelly
 Former Mayor/Executive
 Director, Municipal League of
 Metro St. Louis
 314.726.4747
 pkelly@stlmuni.org

CHESTERFIELD GOVERNMENT CENTER - CHESTERFIELD, MO | Bond Architects, Inc.



With a commanding view over Chesterfield, the Government Center was developed as a cultural hub and city center. Consolidating all city offices and personnel, the new facility was programmed to meet anticipated growth in Chesterfield for the next 20 years and designed to host public gatherings indoors and on the piazzas.

The Government Center displays local artwork throughout the building and site. Designed to serve as an example of recently adopted landscape and building ordinances, the site has a parkline setting with low maintenance and native plant life.

SIZE AND COST

62,000 SF | \$15 M

COMPLETION DATE

2001

SERVICES

Feasibility Study
 Site Selection/Evaluation
 Architectural Design
 Interior Design
 Construction Documents
 Construction Administration
 Furniture Selection/Coordination

POINT OF CONTACT

Michael Geisel
 City Administrator
 636.537.4769
 mgeisel@chesterfield.mo.us

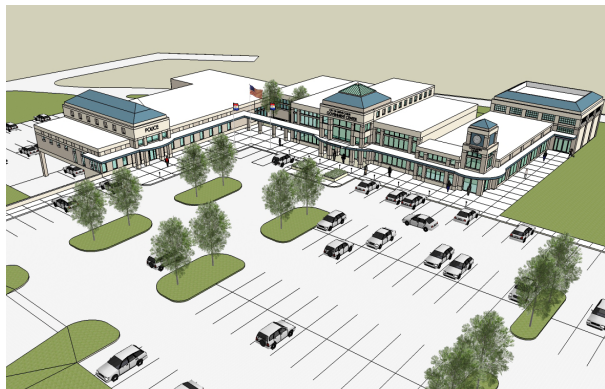
AWARDS

St. Louis Council of Construction
 Consumers: Construction
 Industry Cost Effectiveness
 Award (2003)



2. RELEVANT PROJECT EXPERIENCE

CREVE COEUR GOVERNMENT CENTER - CREVE COEUR, MO | **Bond Architects, Inc.**



Bond Architects worked with the City of Creve Coeur on a feasibility study for their Government Center. A former school, wide and inefficient hallways and limited natural light throughout the space created challenges in converting the existing footprint to an office layout.

Several different concepts were considered, including renovations at the current location to optimize spatial adjacencies, relocating the police station to a new facility on the existing site, and relocating the entire Government Center to a new building on the current site. Cost estimates were developed for all concepts. The study was a collaborative effort between all department directors.



SIZE AND COST

68,000 SF | Est. \$10.5 M Police Station Est. \$5.5 M Gov't Center Renovation

COMPLETION DATE

2015

POINT OF CONTACT

Mark Perkins
City Administrator
314.872.2511
mperkins@crevecoeurmo.gov

SERVICES

Building & Systems Evaluation
Space Programming
Space Planning
Cost Estimating
Conceptual & Site Design
Implementation Phasing

ST. LOUIS COUNTY LIBRARY DISTRICT - 15 LOCATIONS | **Bond Architects, Inc.**



Bond Architects has provided architectural services for numerous renovations, additions, and new construction projects for 15 branches of the St. Louis County Library (SLCL) District. SLCL branches include flexible meeting rooms, smaller study rooms, café areas, outdoor patios and gardens and dynamic Children's Area Discovery Zones. Each branch renovation and addition features distinctive as well as extensive functional and aesthetic upgrades. We worked with SLCL on establishing design templates for service desks, children's area, and work room components, as well as furniture standards for all of their branches.

SIZE AND COST

15,156 SF - 36,927 SF | \$1.6 M - \$9.0 M

COMPLETION DATE

2015 - 2019

POINT OF CONTACT

Kristen Sorth
Director
314.994.3300 x2155
ksorth@slcl.org

SERVICES

Programming
Architectural Design
Interior Design
Graphic Design
Furniture Design & Bid Docs.
Construction Documents
Construction Administration





2. RELEVANT PROJECT EXPERIENCE

CHRISTOPHER S. BOND COURTHOUSE - JEFFERSON CITY, MO | Henderson Engineers



Named for the youngest Missouri governor, the Christopher S Bond Courthouse plays host to the state's federal representation. This project began in response to security and space issues when multiple federal agencies were consolidated under one roof. Henderson Engineers was brought on board as the acoustics engineer.

Courthouses have unique requirements because of the regular activity they house. Special spaces like holding areas, court rooms, judges chambers, and even secure parking garages present unique challenges when it comes to building systems design. Our team implemented acoustic design to do everything from covering the sound of major equipment to ensuring the privacy of a conversation. We also commissioned the acoustics to confirm it met the requirements of client.

SIZE AND COST

117,000 SF | \$48 M

COMPLETION DATE

2013

SERVICES

Acoustics
Audio-Video
Security

POINT OF CONTACT

U.S. General Services
Jean Dodd
Project Manager
816.823.2258
jean.dodd@gsa.gov

LEAWOOD JUSTICE CENTER - LEAWOOD, KS | Henderson Engineers



Henderson Engineers provided mechanical, electrical, plumbing, technology, noise control, and security design services for this three-story, approximately \$20 million, 84,000 SF building housing Police and Courts for the City of Leawood, Kansas.

Key components include 100% emergency back-up power with six automatic transfer switches and three 500 KW indoor paralleling generators. Acoustics scope included noise control of building HVAC consists of geothermal ground source heat pumps and dedicated outdoor air rooftop units. In addition, the project includes a 911 dispatch and server room with dedicated UPS and Computer Room Air Conditioning Unit as well as a 50-car parking garage.

SIZE AND COST

84,000 SF | \$20 M

COMPLETION DATE

2012

SERVICES

Acoustics
Electrical
Fire & Life Safety
Mechanical/Plumbing
Security
Telecom

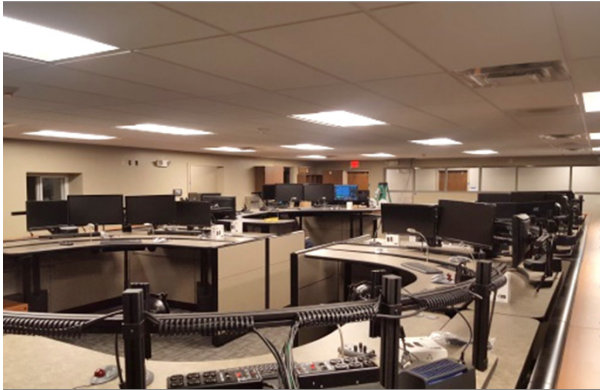
POINT OF CONTACT

City of Leawood
Mike Novak
City Engineer
913.477.7725



2. RELEVANT PROJECT EXPERIENCE

NEW JOINT COMMUNICATIONS CENTER - PARK HILLS, MO | SSC Engineering, Inc.



The St. Francois County Joint Communication Center 911 is a Dispatch Center for all Fire, Police and Emergency Medical Services in St. Francois County and Ste. Genevieve County. The 911 center also serves as the Emergency Operations Center for St. Francois County.

The facility was designed to be constructed in phases to build the new addition, move dispatch and administration operations into the addition and renovate the existing building into an Emergency Operations Center, all while continuing to operate 24/7/365.

Facility was constructed as a hardened building with redundant standby generators and HVAC equipment. The dispatch center makes use of state-of-the-art computer aided dispatch, 911, mapping and weather monitoring systems with new furniture stations.

SIZE AND COST

9,800 SF | \$2.4 M

COMPLETION DATE

2018

SERVICES

Mechanical
Electrical
Structural
Communications

POINT OF CONTACT

Alan Wells, Director
573-431-7842
awells@sfc911.net

EMERGENCY OPERATIONS CENTER ADDITION & RENOVATION - O'FALLON, MO | SSC Engineering, Inc.



Provided engineering design documents for a new 30,000 sf County Emergency Operations Center as part of a Design-Build team. Included a 6,000 sf addition to the existing Police Headquarters for new evidence storage. Facility is designed to meet FEMA 360 Hardened construction criteria for essential facilities as well as 2014 NEC Article 708, "Critical Operations Power Systems (COPS)."

Also included a new, multi-jurisdictional space housing an approximately 275-square foot Media and Training room for use by Emergency Agencies. This room is primarily for use and training to deliver live and recording announcements from emergency agencies to the public regarding warning systems, disaster preparation information, news media and community health. The room contains seating and instrumentation for live feed or recording audio and video or in-person training for visitors or agency personnel.

SIZE AND COST

30,000 SF | \$25 M

COMPLETION DATE

2018

SERVICES

Electrical
Communications
Structural

POINT OF CONTACT

Chris Slagle, Sr. Project Mgr
636-537-1200
cslagle@lcm-inc.com



2. RELEVANT PROJECT EXPERIENCE

GOVERNMENT CENTER ADDITION & RENOVATION - UNION, MO | SSC Engineering, Inc.

Renovation and addition to the Franklin County Government Center. The project consists of design and construction services associated with a EMA/911 hardened structure addition, new two-level jail facility addition, renovation of the existing public safety facility (jail, EMA, evidence storage, narcotics, sheriff administration, detectives, and road patrol) and associated site work. Anticipated features of the new facility include detention cells, medical support, intake, offices, commissary, dishwash, holding, video visitation, program, conference rooms, garage, large training room, lobby, public restrooms, interview, war room, vehicle sally port, EOC, dayrooms, kitchen, crime lab, laundry area, dispatch, server room, restrooms, fitness, break area, open offices, evidence storage and a remote radio communication building.

SIZE AND COST

106,672 SF | \$25M

COMPLETION DATE

2021

SERVICES

Mechanical

Electrical

Communications

POINT OF CONTACT

Alan Wells, Director

573.431.7842

awells@sfc911.net

NEW 911 DISPATCH & POLICE STATION - EFFINGHAM, IL | SSC Engineering, Inc.

New construction of a 3-level police station with processing and detention areas and a six workstation PSAP dispatch center located in the structurally hardened ground level, an IT/Server room with redundant HVAC and electrical systems and raised access flooring, a pre-action suppression system, fiber and copper connections to the county dispatch and a police station complete with processing and detention area. Entire building is backed up with on-site generator power and an additional portable generator connection. The project included development of a seamless plan to temporarily relocate the original 911 dispatch out of the existing building allowing for the demolition and construction of the new building.

SIZE AND COST

17,000 SF | \$4 M

COMPLETION DATE

2017

SERVICES

Mechanical

Electrical/Communications

Structural

Quality Review

POINT OF CONTACT

Matt Wortman

Public Property Division

217.342.4696

mwortman@effinghamil.com

911/DISPATCH WORK STATION RENOVATION - GLEN CARBON, IL | SSC Engineering, Inc.

Design services to add four 911/dispatch workstations and various renovations. Renovation of existing 911/dispatch center to improve security and make room for 2 active workstations, 2 future workstations, a small break area, a records office, an IT/Server room and two interview rooms. The existing space was reworked to create a dispatch area and lobby entry that eliminated the need for dispatchers to leave the secure working area and creating interview rooms off the main lobby to minimize the need to bring individuals into the secured area.

SIZE AND COST

2,000 SF | \$2 M

COMPLETION DATE

2016

SERVICES

Mechanical

Electrical/Communications

Quality Review

POINT OF CONTACT

Jamie Bowden

Village Administrator

618.288.2614



2. RELEVANT PROJECT EXPERIENCE

CITY OF FRONTENAC MUNICIPAL COMPLEX - FRONTENAC, MO | Larson Engineering



This ground-up municipal complex for the City of Frontenac has a steel framed structural system. Lateral loads are resisted by rigid steel moment frames in the one direction, and by steel-braced frames in the other direction. The narrow site required that the fire engine bays be skewed with respect to the building axis, creating the need of a 65 foot long truss to span over the fire engine doors. This truss also supports the exterior brick wall. Construction was completed in 2011.

This project was modeled and documented using Building Information Modeling (BIM). Utilizing BIM, designers from separate disciplines linked their respective 3-D models together enabling comprehensive collision detection and improved coordination. With BIM, the design teams were able to enhance and integrate overall project delivery.

Larson Engineering Inc. provided structural engineering services for this ground-up development.

SIZE AND COST

32,200 SF | \$7 M

SERVICES

Structural

COMPLETION DATE

2011

POINT OF CONTACT

Arcturis

WEST COUNTY EMS - BALLWIN, MO | Larson Engineering



Larson Engineering, Inc. provided the structural design for the addition of an engine bay, training center, outdoor pavilion and educational facility for children for this existing EMS facility.

The Kids Safety Center and Advanced Center of Excellence are separate one-story structures connected by a structurally independent breezeway. Both buildings are constructed with light gage metal studs with light gage metal roof trusses. The Apparatus Bay is a one-story, 2,100 square foot addition to the existing building used for emergency vehicle maintenance. The design consisted of metal stud bearing walls that tie into the existing building. The roof was designed with light gage metal trusses framing perpendicular to the trusses on the existing building. Construction was completed in 2012.

SIZE AND COST

10,000 SF | \$1.3 M

COMPLETION DATE

2012

SERVICES

Structural

POINT OF CONTACT

Christner Architects

3. KEY PERSONNEL



3. KEY PERSONNEL



EDUCATION

Harvard University

Graduate School of Design
Planning & Design of
Public Libraries

Washington University

Master of Architecture

Bachelor of Arts in
Architecture

EXPERIENCE

32

SUSAN PRUCHNICKI, FAIA, LEED AP ID+C
Principal-in-Charge | Bond Architects, Inc.
spruchnicki@bondarchitectsinc.com

Susan's specialty is creating internal environments that contribute dramatically to a facility's functionality, working atmosphere and historical accuracy. She offers a track record of consistently on-time and on-budget projects. **Registrations:** MO, IL and MI

City of Ladue (Ladue, MO)

- Feasibility Study for City Hall Renovations

City of Creve Coeur (Creve Coeur, MO)

- Feasibility Study for existing Government Center, including Police, City Hall, Public Works and Parks and Recreation Departments

City of Brentwood (Brentwood, MO)

- New fire station and police station
- City hall and library renovations

City of Chesterfield (Chesterfield, MO)

- New Government Center with City Hall, Police, Council Chambers, Staff Lounge, Community Event Space
- Incorporated extensive Sustainable Design Practices

St. Louis County Library District (Various Locations, St. Louis County, MO)

- Extensive Renovations, Additions and New Construction



EDUCATION

Harvard University

Graduate School of Design
Post-Graduate Studies in
Architecture

Washington University

Master of Architecture

Kenyon College

Bachelor of Arts in
Architecture

EXPERIENCE

34

ART BOND, AIA

Principal, Cost Estimating & Project Scheduling | Bond Architects, Inc.
abond@bondarchitectsinc.com

Art has built his career on translating client goals into facilities of prominence and pride. His unyielding determination to assess clients' true desires, actively engaging in problem solving and prioritizing, builds strong working relationships based in openness and trust. **Registrations:** MO, IL, KS and ME

City of Chesterfield (Chesterfield, MO)

- New Government Center with City Hall, Police, Council Chambers, Staff Lounge, Community Event Space

City of Brentwood (Brentwood, MO)

- New police station and fire station
- Parks master plan and on-call IDIQ contract

City of Crestwood (Crestwood, MO)

- Reno. of 28,600 SF City Hall/Police Station
- Renovation of Rayburn Park and Master Plan/Upgrades at Whitecliff Park

City of O'Fallon Justice Center (O'Fallon, MO)

- New 88,000 SF O'Fallon Justice Center

City of Ladue (Ladue, MO)

- Feasibility Study for City Hall Renovations

City of Creve Coeur (Creve Coeur, MO)

- Feasibility Study for existing Government Center, including Police, City Hall, Public Works and Parks and Recreation Departments



EDUCATION

Washington University

Master of Architecture

Bachelor of Arts in
Architecture

EXPERIENCE

21

MICHELLE WELLS, AIA

Project Manager | Bond Architects, Inc. | mwells@bondarchitectsinc.com

With over 20 years of experience, Michelle has worked in many market sectors, including education, government, non-profit, religious and hospitality. Communication, problem solving and collaboration encompass her strengths that ultimately contribute to her goal of developing a design that reflects the community and the client's range of unique needs. **Registrations:** MO

St. Charles County (St. Charles, MO)*

- St. Charles County Government Center As-Builts

City of Ladue (Ladue, MO)*

- New Ladue Fire Station #1

Forest Park Forever (St. Louis, MO)*

- Steinberg Pavilion Feasibility Study

Federal Reserve Bank (St. Louis, MO)*

- Fitness Center Renovation Project
- Incinerator Room Project
- 2nd Floor Renovation Project
- Main Door Project Front Entry Conceptual Design Project
- Building Finishes
- Assessment Project
- 4th and 9th Floor Renovation

* Work with another firm



3. KEY PERSONNEL



EDUCATION

Ranken Technical College
Associate of Applied
Science and Technology in
Architecture and Design

EXPERIENCE

25

* Work with another firm

REBECCA KLEBA

Project Manager | Bond Architects, Inc.

Rebecca has over 25 years of experience in project types, such as education, government, religious, hospitality and financial. She is also certified through National Council of Architectural Registration Boards (NCARB).

Ballwin City Hall (Ballwin, MO)*

- New Construction

City of Ladue (Ladue, MO)*

- New Ladue Fire Station #1 and #2

The St. Louis Municipal Opera Theatre (St. Louis, MO)*

- The West Rehearsal Pavilion Renovation
- Café One Renovation

Federal Reserve Bank (St. Louis, MO)*

- Main Facility
 - Lower Level - Renovation Project
 - 4th Floor Renovation Project
 - 9th Floor Renovation Project
 - Security Entrances
- 500 North Broadway Suite Security
 - 19th Floor Renovation Project
 - 20th Floor Renovation Project
 - 21st Floor Renovation Project
 - Security Entrances



EDUCATION

University of Kansas
Master of Architecture

Bachelor of Arts
Architectural Studies

EXPERIENCE

2

* Work with another firm

BREANNA KOLK

Architectural Associate | Bond Architects, Inc. | bkolk@bondarchitectsinc.com

Breanna is an Architectural Associate who is passionate about sustainable and wellness design. She is skilled in combining aesthetically pleasing designs with functionality in creative ways. Breanna has a broad range of knowledge in architectural programs and conceptual design. Breanna will work closely with Sue and Michelle as the design is being developed from conceptual design through construction documents.

Crestwood City Hall And Police Station (Crestwood, MO)

- Renovation and new ADA Ramp

City of Ladue, City Hall (Ladue, MO)

- Feasibility Study and Facility Conditions Assessment for City Hall renovations

City of O'Fallon Municipal Centre (O'Fallon, MO)

- Renovation of existing building, including new safety and security upgrades

Whitecliff Park Quarry Lake Master Plan (Crestwood, MO)

- New boardwalk and ADA parking lot

Caulks Creek Pump Station (Chesterfield, MO)

- Renovation of water pump station

University City Public Library (University City, MO)

- Extensive Renovations



EDUCATION

Maryville University
Bachelor of Fine Arts in
Interior Design

**Santa Reparata
International School of Art**
Study Abroad Program

EXPERIENCE

15

* Work with another firm

ANDREA GIOVANDO, NCIDQ

Interior Designer | Bond Architects, Inc. | agiovando@bondarchitectsinc.com

Andrea began her career over 15 years ago. A strong connection to interior design, paired with a passion for creating solutions is her foundation for design. Listening to her clients, understanding and developing their spatial needs and following through is the core to her design process. Her experience includes many market sectors. Among those markets are municipal, education, commercial/tenant improvement, religious and hospitality.

City of Ballwin (Ballwin, MO)*

- New Build – City Hall

City of Wentzville (Wentzville, MO)*

- New Build – City Hall

City of Cape Girardeau (Cape Girardeau, MO)*

- New Build – Police Station

City of Brentwood (Brentwood, MO)*

- Recreation Complex Renovation

City of Ladue (Ladue, MO)*

- New Build – Firehouse #1

University City Public Library (University City, MO)

- Interior Renovations

Maryville Community Library (Maryville, IL)

- Interior Renovations



3. KEY PERSONNEL

**EDUCATION**

Kansas State University
Bachelor of Science
Mechanical Engineering

EXPERIENCE

28

J. CHRIS CORNETT, PE, LEED AP

Mechanical Engineer | SSC Engineering, Inc. | ccornett@sscengineering.com

Chris is one of the original founders of SSC. He has over 25 years of experience as a Project Engineer and Manager. Chris' experience in HVAC system design has covered an extensive array of facilities such as higher education, government, commercial, retail, healthcare, multi-use and institutional buildings.

Registrations: AL, AR, AZ, CA, CO, CT, DC, DE, GA, HI, ID, IL, KS, LA, MA, ME, MI, MO, MS, MT, NC, NE, NH, NJ, NM, NV, OH, RI, SC, TX, VA, WA and WI

City of Chesterfield (Chesterfield, MO)

- Design and construction drawings for mechanical improvements for the existing City Hall complex.

City of O'Fallon (O'Fallon, MO)

- MEP/FP/Structural renovations of 16,000 SF Municipal Centre

City of Ballwin (Ballwin, MO)

- Project Manager for the renovation of Ballwin City Hall

St. Charles County Emergency Operations Center and Police Department Expansion (O'Fallon, MO)

- Mechanical/FP/Plumbing design development documents for a new 30,000 SF facility

**EDUCATION**

Missouri University of Science and Technology
Bachelor of Science
Electrical Engineering

EXPERIENCE

27

JEFF HUETTENMEYER, PE, LEED AP

Electrical Engineer | SSC Engineering, Inc. | jhuettenmeyer@sscengineering.com

More than 20 years' experience as Project Manager and Professional Electrical Engineer licensed in Missouri. Specialty areas include lighting, short circuit, arc flash and load calculations, electrical systems design of lighting, communication, power, security, access control and fire alarm systems.

Registrations: AZ, CA, CO, FL, HI, IL, KY, MD, MI, MN, MO, NE, NV, OR, TN and WV

City of O'Fallon (O'Fallon, MO)

- Electrical renovations of 16,000 SF Municipal Centre

St. Charles County Emergency Operations Center and Police Department Expansion (O'Fallon, MO)

- Electrical design for a new 30,000 SF facility

Franklin County Government Center (Union, MO)

- Electrical services for the renovation of and addition to the county government center

Cottleville City Hall and Police Facility (Cottleville, MO)

- City Hall and Police Facility was a new construction project designed with LEED Gold certification. The design also included power, lighting, data, voice, public address, CATV, fire alarm, CCTV and detention door controls.

St. Louis County Courts (Clayton, MO)

- Project Engineer for Phased Renovation and Addition to consolidate services for county seat.

**EDUCATION**

Purdue University
Bachelor of Science
Electrical Engineering

EXPERIENCE

16

BRIAN SCOTT, P.E., RCDD

Electrical/Low-Voltage Engineer | SSC Engineering, Inc. | bscott@sscengineering.com

Brian has over 15 years of experience with Electrical and Power Engineering for critical systems including utility level transmission and distribution, emergency generators, life safety systems, UPS systems, etc. Brian is heavily involved in other critical systems and buildings including data centers, healthcare emergency systems, automated panic/security systems, and other critical IT infrastructure.

Registrations: MO, IL, AR, IN, MI, NY, WI

St. Charles County Emergency Operations Center and Police Department Expansion (O'Fallon, MO)

- Electrical design for a new 30,000 SF facility

St. Louis County Police Department (St. Louis, MO)

- Design/construction services of the replacement of two existing Precincts

Franklin County Government Center (Union, MO)

- Renovation and addition to the Franklin County Government Center

St. Francois/Ste. Genevieve County 911 Center (Park Hills, MO)

- Electrical design of joint communications center



3. KEY PERSONNEL



EDUCATION

Webster University

Master of Arts

Planning & Design of
Public Libraries

University of Missouri - Columbia

Bachelor of Science
Civil Engineering

EXPERIENCE

30

BRANDON HARP, PE, LEED AP BD+C

Civil Engineer | CEDC | bharp@cedc.net

Brandon has 30 years-experience in civil engineering, land planning and site development, 20 years as co-owner of CEDC. Brandon will be the principal engineer involved in the design process. He has established relationships with the personnel within all governing agencies. Brandon provides special attention to detail and utilizes an established quality control program on all projects which provides cost-effective solutions throughout the design process. **Registrations:** MO, IL, LA, MS, NC, TN

St. Charles County Health Department

(St. Charles, MO)

- Building a parking lot expansion

DePaul Hospital Medical Office Building

(Bridgeton, MO)

- New 2-story 27,000 SF medical office building with 104 parking spaces

Mercy Clinic (Sullivan, MO)

- New 20,500 SF medical office building with 100 parking spaces

St. Charles Emergency Operations Center

(O'Fallon, MO)

- New 30,000 SF communications facility, 9,000 SF addition to existing police station, parking lots and site improvements



EDUCATION

Washington University - St. Louis

Master of Science

Structural Engineering

Bachelor of Science
Civil Engineering

Buena Vista University

Bachelor of Arts
Math/Physics

EXPERIENCE

18

MICHAEL GOEDEN, SE, PE

Structural Engineer | Larson Engineering | mgoeden@larsonengr.com

Mike has nearly 20 years of extensive structural design experience in the areas of architectural and industrial design. He has worked with architects, contractors and owners in the design of commercial, religious, educational, municipal, and residential buildings. Mike is knowledgeable of code requirements and his design experience has led to expertise in designing with wood, light gauge steel, structural steel, concrete and masonry. **Registrations:** MO, IL and PR

West County EMS (Ballwin, MO)

- Structural design for the addition of an engine bay, training center, outdoor pavilion and educational facility

Florissant Fire Station #1 (Florissant, MO)

- 18,000-sf fire station constructed with reinforced masonry, steel framing, pre-cast concrete hollow core planks, and pre-engineered metal trusses

City of Frontenac Municipal Complex (Frontenac, MO)

- Ground-up municipal complex with a steel framed structural system

Ladue Early Childhood Center (Ladue, MO)

- 55,000 SF, Energy Star Certified, two-story multipurpose building



EDUCATION

University of Kansas

Master of Science

Engineering Management

Kansas State University

Bachelor of Science

Architectural Engineering

EXPERIENCE

22

JEFF TEEL

Acoustical Designer | Henderson Engineers | jeff.teel@hei-eng.com

Standing as director of Henderson Engineers' acoustics team, Jeff consults clients in architectural acoustics, building systems noise and vibration control for projects across the nation. Along with his extensive field testing experience, Jeff provides feasibility testing, community noise studies and expert witness services.

Christopher S. Bond Courthouse (Jefferson City, MO)

- Acoustic design of a 117,000 SF courthouse

Leawood Justice Center (Leawood, KS)

- Acoustic design of a 84,000 SF building housing Police and Courts for the City of Leawood

Blue Springs Public Safety Expansion & Remodel (Blue Springs, MO)

- Acoustic design of a 72,000 SF facility

St. Charles Fleet Maintenance Campus (St. Charles, MO)



3. KEY PERSONNEL



EDUCATION

Rensselaer Polytechnic Institute

Certificate of Completion
Outdoor Lighting Seminar

Louisiana State University

Bachelor of Landscape
Architecture
Landscape Architecture

EXPERIENCE

35

NANCY NAFE, RLA, ISA, LEED AP

Landscape Architect | Nafe & Associates, LLC | nancy@nafelandscapearchitects.com

Nancy Nafe, a board member of the St. Louis Chapter of the American Society of Landscape Architects, has over 35 years of experience in the field of landscape architecture. Nancy, a Certified Arborist and a LEED AP, has served as a guest lecturer for Washington University's Graduate School of Urban Design. Nancy owns Nafe & Associates, a landscape architecture firm operating in the St. Louis Metropolitan Region. **Registrations:** MO, LA

St. Louis County Library District

(Various Locations, St. Louis County, MO)

- Working closely with the building architects, plans were prepared for 15 branch renovations/additions including redesign of parking lots, design of new entrance plazas, design of children's reading garden and planting design

University City School District (University City, MO)

- Tree Evaluation, Tree Replacement Plan, Rain Garden, Landscape Plan for LEED Certified Barbara C. Jordan Elementary, LEED Certified Pershing Elementary and Brittany Woods Middle School

Clayton School District (Clayton, MO)

- Tree Evaluation, Tree Replacement Plan, Rain Garden, Landscape Plan for LEED Silver Certified Addition and Renovation

St. Louis County Special School District (St. Louis, MO)

- Northview High School Campuswide Landscape Architecture including design of the school courtyard, outdoor classroom, kitchen garden and entrance plaza



Clayton High School

4. PROJECT UNDERSTANDING



4. PROJECT UNDERSTANDING/APPROACH/SCHEDULE



Creve Coeur Government Center entrance



Enhance experience in public lobby



Increase safety, security, technology and aesthetics of council chambers



Increase efficiency of north/south corridor

APPROACH TO SPACE NEEDS FEASIBILITY STUDY

Addressing space needs and facility improvements for the Creve Coeur Government Center offers important opportunities to rectify specific shortcomings, increase operational efficiencies, enhance security and technology and establish a unified community identity. Bond Architects will work closely with the Project Manager, City staff and administration, and community stakeholders to bring your vision for Creve Coeur to fruition through a cost-conscious phased approach. We balance our extensive expertise in municipal design and current trends with your specific needs, culture and budget. Finally, we keep an eye to the future, providing for expansion and new technologies and services.

We have developed a planning process to ensure that the concerns and goals of the Creve Coeur community are considered throughout the facility evaluation, planning and design process. Following is Bond Architects approach to the Creve Coeur Government Center space needs feasibility study project, along with a schedule illustrating each phase of work:

KICK-OFF MEETING/PRELIMINARY PROGRAMMING

Our first goal is to establish a high level of communication and to clearly identify expectations for the project. The foundation for a successful project is developed through an initial meeting with the Project Manager and appropriate city staff members. This meeting is an opportunity for the following:

- Identify and meet with stakeholders
- Clarify appropriate lines of communication
- Define initial programmatic concerns and priorities
- Establish schedule expectations
- Identify preliminary budget expectations
- Tour the facilities

PROGRAMMING

During the programming process, we organize and communicate the information gathered through the facilities review. We will identify issues, opportunities and priorities through further communication as follows:

- Submit a draft program for the Project Manager, city staff and stakeholder review
- Refine the draft program and submit updated draft program and initial cost estimate to the Project Manager
- Identify priorities and establish probable project phases with the Project Manager
- Present program, cost estimate, possible phasing and recommended priorities to the Project Manager and appropriate city staff

CONCEPT DESIGN

Based on the priorities established during the programming process, we will identify those components of the project to develop through concept design. Development of the concept designs will be used to further examine programmatic opportunities, refine cost estimates and communicate the proposed direction of the project to community stakeholders. The concept design process will include the following:

- Development of site plans, plan diagrams, elevations and/or details
- Presentation of concept designs to the Project Manager for review and comment



4. PROJECT UNDERSTANDING/APPROACH/SCHEDULE



Enhance signage and wayfinding at Multi-Purpose entrance



Improve interior signage and wayfinding



Explore additional opportunities for public art



Enhance usefulness of outdoor spaces

GOVERNMENT CENTER FACILITIES REVIEW

Bond Architects will conduct our facilities review through extensive and detailed tours and conversations with the Project Manager, staff and stakeholders. We will assess the following general conditions of each department throughout the building:

- Safety and security
- Technology and technology infrastructure
- MEP systems (in conjunction with the existing energy audit)
- Lighting design
- ADA accessibility
- Restroom facilities designs (for accessibility, finishes and fixtures)
- Interior finishes and design

Administrative Facilities

The administrative offices must provide a user-friendly environment that promotes interaction between city government and community stakeholders. At the same time, safety and security measures are increasingly required at city halls. Bond Architects will work with Creve Coeur to balance a welcoming environment with the appropriate security for staff and elected officials. We will review and assess the existing facilities and examine opportunities related to the following spaces:

- Administrative Offices
 - Mayor
 - City Clerk
 - City Administrator
- Finance Department Offices
- Community Development Offices
 - Building Division
 - Planning Division
- Public Works Offices
- Municipal Court
 - Offices
 - Court night requirements
- Conference Rooms
 - Technology and opportunities to add natural lighting
- Council Chambers
 - Accessibility, aesthetics, technology and security enhancements

Community Center

The Community Center is widely used and presents opportunities for improvement and enhanced experience for the community. Bond Architects will assess the following:

- Gymnasium finishes, lighting and acoustics
- Multipurpose room finishes and technology
- Kitchen finishes and equipment upgrades
- Possible opportunities for additional services and functions

Site And Building Exterior

The initial experience of the Government Center starts with the site and exterior building appearance. Bond Architects will assess the following:

- "Curb appeal" of the building and landscaping
- Parking and vehicular circulation
- Site signage and wayfinding at all entrances
- Pedestrian circulation and ADA accessibility
- Courtyard improvements and opportunities for programmed spaces
- Additional opportunities for public art installations
- Site lighting and security



4. PROJECT UNDERSTANDING/APPROACH/SCHEDULE

CITY OF CREVE COEUR GOVERNMENT CENTER - PROPOSED SCHEDULE

1/11/2022

		2022												2023								
Phase I		Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug		
Council Approval of Contract		Approval																				
Preliminary Design	Conduct Interviews		Needs Assessment																			
	Prioritize Needs																					
	Test Space Program																					
	Test Adjacencies		Feasibility Study																			
	Develop Concepts			Cost Estimate																		
City's Decision on Design Direction						Design Direction																
Phase II																						
Schematic Design	Start Selected version of Concepts into BIM						Start BIM Model															
	Develop Fenestration and Coordinate with plan concepts. Code Review.							Develop Plans and Elevations														
Design Development	Model is refined to better integrate all plans, elevations and details								Detail to BIM Model													
	Interior finishes are further detailed and rendered in Model					Update all code implications			Sort out Phased Implementation		Detail of Primary Spaces											
	Alternates will be developed, so that they can be bid out seperately and evaluated for inclusion								Coordinate Disciplines		Determine Bidding Alternates											
Construction Documents	Develop model details and other details											Construction Documents										
	Coordinate systems in all areas.												Add significant detail to Model									
	Select all finishes/Colors and specify typesof installation.											Specify and coordinate all alternates		Specifications and Schedules								
													Coordinate all Documents		Issue Documents							
Bidding & Negotiation	Coordinate Owner's Advertisement for bids and coordinate drawings for issue															Bidding						
	Respond to bidders questions and clarify details.															Respond To Bidders						
	Receive and review bids and make recommendation to BOE															Receive and Evaluate Bids						
Construction Administration	Review and coordinate shop drawings																Construction Commences					
	Site visits throughout the construction process.																					
	Provide additional direction and details when contacted by the site.																					
	Attand all AOC Site meetings																					
	Review & Approve Payment Applications																					
	Develop punch lists and coordinate with final payment.																					

5. RECORD OF PERFORMANCE



5. PAST RECORD OF PERFORMANCE

Bond Architects is proud to partner with many of our clients for more than a decade. Long-standing relationships built on trust and integrity are at the core of our business. Our proven ability to meet schedules, design within the budget, estimate project costs and execute innovative design can be echoed by our long-term clients. We have included several examples of past projects that showcase our ability to adhere to project schedule and budget.

St. Ann Community Center (St. Ann, MO)

Anticipated construction schedule: 18 months
Actual: 15 months
Estimated construction cost: \$4.1 M
Actual: \$4.0 M

Center of Clayton Renovation and Addition (Clayton, MO)

Anticipated construction schedule: 24 months
Actual: 24 months
Estimated construction cost: \$8.7 M
Actual: \$8.6 M

Crestwood City Hall Renovation (Crestwood, MO)

Anticipated construction schedule: 18 months
Actual: 15 months
Estimated construction cost: \$1.1 M
Actual: \$ 870,900

Ladue Secure Vestibule Additions for Old Bonhomme Elementary School and Reed Elementary School (St. Louis, MO)

Anticipated construction schedule: 3 months
Actual: 3 months
Estimated construction cost: \$154,000
Actual: \$152,000

Parkway South Middle School Renovations (St. Louis, MO)

Anticipated construction schedule: 3 months
Actual: 3 months
Estimated construction cost: \$1.94 M
Actual: \$1.57 M

Franklin Elementary School (Cape Girardeau, MO)

Anticipated construction schedule: 14 months
Actual: 14 months
Estimated construction cost: \$7.4 M
Actual: \$7.2 M

Ladue Horton Watkins High School Addition and Renovation (Ladue, MO)

Anticipated construction schedule: 27 months
Actual: 27 months
Estimated construction cost: \$85 M
Actual: \$79.2 M

Parkway Central Middle School Renovations (St. Louis, MO)

Anticipated construction schedule: 3 months
Actual: 3 months
Estimated construction cost: \$1.37 M
Actual: \$1.03 M

LEED Certified Barbara C. Jordan Elementary (University City, MO)

Anticipated construction schedule: 18 months
Actual: 16 months
Estimated construction cost: \$14 M
Actual: \$13.2 M

Riverview Gardens Senior High School Library (Bellefontaine Neighbors, MO)

Anticipated construction schedule: 120 days
Actual: 110 days
Estimated construction cost: \$2 M
Actual: \$1.5 M

University City High School Library Addition (University City, MO)

Anticipated construction schedule: 23 months
Actual: 21 months
Estimated construction cost: \$7.9 M
Actual: \$7.0 M

Maplewood Richmond Heights ECC Renovation and Addition (Maplewood, MO)

Anticipated construction schedule: 18 months
Actual: 15 months
Estimated construction cost: \$7.3 M
Actual: \$7.0 M

Cape Girardeau Franklin Elementary School

6. PROXIMITY AND FAMILIARITY



6. PROXIMITY AND FAMILIARITY

Bond Architects has worked on several of projects within this time frame and geographic location, many of which have been new construction, addition and renovation projects for libraries, K-12 educational facilities and commercial buildings. In 2015, Bond Architects also completed a feasibility study for the City of Creve Coeur's Government Center.

The majority of our work is performed within 50 miles of the City of Creve Coeur, and we are extremely familiar with the surrounding communities. Our related experience can be found in **Tab 2: Relevant Project Experience**.

Our firm would be thrilled to partner with the City of Creve Coeur to provide professional design services required to plan, design and construct new or renovate the existing City Hall facility.



Chesterfield Government Center

7. MBE/WBE INCLUSION



7. MBE/WBE INCLUSION

We partner with a wide range of diverse consultants on all of our projects, whether or not it is a client-driven directive. We regularly partner and have long-standing relationships with many DBE/MBE/WBE professional services firms. **In the past six years, 44% of our total consultant billings included DBE/MBE/WBE firms.**

Diversity is also a part of Bond Architects directly. As a registered Small Business firm of 11, we employ 9 women, including Susan Pruchnicki, co-owner with Art Bond. At Bond Architects, we are committed to diversity and providing equal opportunity for employment. **Our firm is over 80% female in a predominantly male industry.**

We hire solely on the qualifications of each individual candidate. We do not tolerate or condone discrimination due to age, race, color, religion, sex, sexual orientation, national origin or disability nor do those factors influence our decisions regarding the hiring or termination of employees or consultants. We believe the best team to put forward is one that showcases the incredibly diverse talent available in our region to bring your projects to life.



University City Barbara Jordan Elementary



Cape Girardeau High School Performing Arts Theater



St. Louis County Library Bridgeton Trails Branch



Ladue School District Early Childhood Center



MET Center

8. SUSTAINABILITY

DEDICATION TO ENERGY SAVINGS DESIGN & PRACTICES

Bond Architects understands that our responsibility to clients goes beyond creating handsome and functional spaces. We work with our clients to maximize energy efficiency through advanced building control systems, climatically responsive layouts, waste reduction and natural daylighting practices.

In addition to our LEED Certified projects, our team has completed **Ameren Energy Star Certifications** for both the new Ladue Early Childhood Center (2013) and Ladue Horton Watkins High School renovation and addition (2018).

The Bond team typically evaluates the appropriate use of energy efficient building systems, from building envelope systems to energy efficient lighting and HVAC systems. As we determine the appropriate solution of the building envelope, we review the impact on the mechanical system and any downsizing that can be achieved as a result of the improved thermal capability of the building shell.

We work to achieve right-sizing of the systems based on use of the building or portion of the building as weighed against the initial cost, **life cycle cost analysis**, operational efficiency and reduced maintenance costs. The return on investment is considered by these factors when determining the most appropriate components to design or specify. Even down to the finishes of the final design, these issues are balanced against each other, to determine the best solution to **meet your sustainable design goals**.

Energy conservation is always our goal when designing new buildings and renovating existing buildings. The advanced **Energy Design Guide for K-12 School Buildings – Achieving 50% energy savings** toward a net zero energy building provides a simplified guide for strategies to reduce overall energy use. Some of the suggestions have now become common design practices, such as reducing the lighting power consumption which is usually easily accomplished by use of LED lighting.

Other suggestions require a discussion and agreement between the design team and owners/users. Certain items require additional commitment beyond the design and construction period, such as policies related to equipment purchases, measurement and verification.

We have found one of the best ways to increase and maintain the energy savings is through the use of a **third-party commissioning agent**. The commissioning agent should take a holistic approach to the project and review not only the HVAC controls, but verify during construction that submittals meet the project's requirements and the building envelope is properly sealed. Follow-up commissioning to verify the system is still operating as designed is also recommended.



Chesterfield Government Center - Exterior landscape features utilize onsite stormwater retention basins and bedrock from excavation.



St. Louis County Library District - Samuel C. Sachs Branch use of daylighting in the reading room.



School District of University City - Barbara Jordan Elementary - First LEED Certified public elementary school in St. Louis that encompasses two rain gardens.



City of Creve Coeur

Professional Design Services Qualifications
Government Center
January 11, 2022



Submitted By
Chiodini Architects
1401 South Brentwood Blvd.
St. Louis, Missouri 63144
314.725.5588
email: Ichiodini@chiodini.com



CITY OF CREVE COEUR, MO
• 1949 •

CITY OF COLUMBIA

701

LETTER OF INTEREST



January 11, 2022

Re: Request for Qualifications I Design Services – Government Center

Dear Mr. Perkins,

Chiodini Architects and our consulting Engineers are pleased to build a successful partnership with the City of Creve Coeur, Missouri on the Government Center Project through innovative, efficient, and cost effective architectural and engineering services. Our proposed Team consists of Chiodini, our engineering consultants and Navigate Building Solutions – all who have a very long history of working together on successful Municipal projects.

We believe that we will be a genuine partner with Creve Coeur as we focus on listening, investigating, and understanding your needs and developing creative and practical alternatives to the City's Government Center project. We have reviewed and understand the Scope of the Project starting with a Needs Assessment/Feasibility Review of renovation or new alternatives and Final Design of the approved method to proceed.

Exceptional Results Through Collaboration

Our collaborative client-centered approach leverages the unique perspectives of City stakeholders, including staff and elected officials, and our designers to co-create supportive solutions to the City's needs. Our goal is to design environments meeting your specific needs, reflecting the character and values of the Creve Coeur community. This goal will be paramount in either a renovated or new Government Center.

Chiodini TEAM

Our Chiodini Team will consist of our most experienced Municipal staff led by myself as Principal in Charge, Sue King - Project Manager, Greg Uphoff - Design Director, and Christine Capps - Interiors Director. In fact, Sue King, Greg Uphoff, and I have been instrumental on every municipal project completed by our Firm. Our consultants include Custom Engineering (MBE) for MEP, Oates Engineering for Civil and Structural, DG2Design (WBE) for Landscape Design. These are all firms with which we have a very strong relationship.

CMR Experience

We have considerable experience with CMR led projects, particularly working with Navigate, and believe that the CMR/Architect combination, working as a close collaborative Team is the best way to assure the City a solution to meeting their project needs in a timely and economically responsive manner. Most important is budget control from start to finish which a CMR/Architect Team can provide, avoiding after the fact "Value Engineering," which is not proper Budget Control, in our opinion.

Our Philosophy

Chiodini Architects was founded on the philosophy that the design of environments must enhance the daily lives of the users with an economically responsible, sustainable, and quality design.

We look forward to your consideration of our credentials and interest for providing design services to the City of Creve Coeur; we truly believe that the combination of the level of personal attention and professional service that Chiodini Architects provides distinguishes us in our industry. Our Team is prepared to begin working with you on this exciting project immediately.

Respectfully submitted,,

Louis G. Chiodini, AIA, NCARB, LEED AP BD+C

CONTENT



Letter of Interest

- | | | |
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| 2. | Team's Previous History Working Together | Sec. 2 Pages 5 |
| 3. | Relevant Experience – Firm | Sec. 3 Pages 6-14 |
| 4. | Relevant Experience – Key Staff | Sec. 4 Pages 15-17 |
| 5. | Project Understanding/Approach/Schedule | Sec. 5 Pages 18-19 |
| 6. | Record of Performance / References | Sec. 6 Pages 20-21 |
| 7. | Proximity and Familiarity | Sec. 7 Pages 22 |
| 8. | Sustainable Design Experience | Sec. 8 Pages 23 |
| 9. | MBE/WBE Participation | Sec. 9 Pages 24 |



1 General Information & Team Structure





Chiodini Architects has provided a design that is both functional and aesthetically pleasing. The project has been moving according to the original timeline and our latest estimates indicate that the building will meet all of our needs and stay within established budget parameters. It took a great deal of work and attention to detail to reach that point. Chiodini expended a lot of effort and energy to make it happen.

David Gipson, Acting City Administrator/City Hall Project Manager
City of Clayton

I whole-heartedly recommend Chiodini Architects and Lou for any significant project that demands professional leadership, state of the art design and cost/schedule compliance.

Nancy Spewak, Mayor
City of Ladue, Missouri

Since joining the University the project which continues to be the one I am most proud of is the fitness center and gymnasium Chiodini designed for us. Very creative.

Pat Litty
Project Manager, Design, Construction & Space Management
Missouri S&T

It has been an exciting and enjoyable experience for us thanks to the competence and creativity of you and your staff. You submitted a great plan, encouraged and accepted our input, kept us informed throughout the process, and delivered a quality facility that will meet our needs for many years to come. The professionalism of your organization and your working knowledge enabled the design to be completed on schedule with bids coming in under the city's budget.

This was not surprising since we received the same outstanding service from you when you designed the City's new Public Works Facility

Mike Moeller Mayor
Maryland Heights, Missouri

"We sure picked the right team! Chiodini was there with us every step of the way. Not only did they assure we stayed on budget and on schedule, but they were essential in helping us bring The Center Recreational Center to fruition."

Kevin Head City Administrator
City of Edwardsville, IL

EXECUTIVE SUMMARY



ABOUT CHIODINI

Chiodini Architects is an award-winning architecture and interior design firm committed to excellence in design while enhancing the lives of the users with economically and environmentally responsible solutions. In 1974, Lou Chiodini founded Chiodini Architects and has passed down to his son and co-President, Michael, the importance of producing work of enduring value: buildings that are expressly right for their time and place and that culturally and physically age gracefully. Our projects are diverse in type, size, and location. The firm has earned a reputation for both designing exceptional new facilities and spaces and, through preservation, adaptive reuse, and renovation, discovering innovative ways to reuse buildings.

We use a truly integrated process to reduce energy consumption, maintenance and operation costs, and the environmental impact of our designs. The benefits of Green Building Design (LEED) are very wide ranging. They begin with efficiencies and environmental qualities that can be realized directly by the user or owner and extend to global concerns of pollution, renewable resources, and recycling.

Architecture is a collaborative art. We actively engage our clients and consultants to understand the needs of the users, the opportunities of the site and facility, and the budget, in consideration of the social, cultural, and environmental constraints and goals of each project. Our architects and interior designers thrive on the healthy dynamic and meaningful dialogue surrounding projects.

Fostering both Principal involvement and personal attention, Chiodini has purposefully maintained a collaborative team studio environment; a team with a median tenure of 18 years. This continuity exemplifies our philosophy of commitment and dedication to continuously advance better practices when working together as a team, both internally and with clients.

We strive to be the most creative designers and problem solvers out there – we have a passion for what we do and bring that enthusiasm to you!

FINANCIAL

Principal/Owners:

Louis G. Chiodini, President | Managing Partner

lchiodini@chiodini.com
314.808.5588 cell

Michael A. Chiodini, President

mchiodini@chiodini.com
314.494.5566 cell

Date Established: 1974

Organization: Missouri S-Corp

Federal Tax ID: 43-1020010

Missouri ID: A-135-D

In-house Registered Architects: 6

In-house Interior Designers: 2

Design Staff: 10

Admin Staff: 2

Financial Health:

Chiodini Architects has no debt and has been profitable for over 40 years.

UMB Banking Reference:

Gregory Aman
7700 Forsyth Blvd., Ste 120
St. Louis, MO 63105
(314) 719.4362
Gregory.Aman@umb.com

Claims:

Neither Louis G. Chiodini, Inc. (dba Chiodini Architects) nor any of its officers has had any professional liability, civil or criminal claims, judgements, or suits.

TEAM STRUCTURE



Joe Davis
CEO



Thomas Cissell
Senior Project Manager



Larry Richie
Director of Design
Audio | Visual Solutions
IIDA | NCIDQ



Kristy DeGuire
President
Landscape Architect
PLA | CPSI

WHAT SETS US APART

- We Understand contemporary Municipal Facility Design & Operations
- We understand people-centric environments
- Lou & Michael Chiodini are personally involved in each project
- We clearly understand that our projects are actually our **CLIENTS** project and meeting or exceeding their needs, goals & objective with quality cost effective solutions, is our job.
- We believe that an Inclusive **EXTENDED TEAM** working as one is the very best way to solve a design project - **Client –Users –CMR – Chiodini -Consultants – Community – General Contractor & Subs.** Together the job is to provide the Client with the best job with the least number of issues.
- We Build Consensus through respectful open accurate, review & discussion
- We Maximize Design Quality with efficient, economical, and environmentally responsible solutions meeting and exceeding the Clients expectations and needs.
- We Balance Cost/Needs/Design to produce quality design solutions.
- **WE LOVE WHAT WE DO**



DISPUTE RESOLUTION

Chiodini believes that open and spirited discussion among the Extended Team members is essential to achieve the best project resolution for our clients.

Disagreements will inevitably occur through the normal complicated design process and the desire for consensus. When conflicts arise, it is important for all Team members to remember that our charge is to provide the Client with the BEST solution, preferably with the least issues, through the entire process. Therefore, resolving disputes should be done through clear objective and respectful discussion, review of the facts and alternatives. It is important that the entire Team strive for consensus and not personal agendas.



Ballwin CITY OF
Est. 1837

COURT

ADMINISTRATION

2 History of Team's Working Together

WORKING RELATIONSHIP

We have a long, successful and collaborative relationship with both your CMR Manager and each of the consultants on our Team. These long established and continuing professional relationships are invaluable to the success of a project, bringing a significant level of familiarity and trust that yields process and project efficiencies and economics and project budget and schedule maintenance assurances. Listed below are representative projects we've recently completed with our Team members:

Chiodini Architects | Navigate Building Solutions

- Ballwin City Hall
- Wentzville City Hall/Government Center
- Ladue Fire Station



Chiodini Architects | Custom Engineering

- Alpha Phi Sorority House – Columbia, MO
- St. Louis Zoo WildCare Park
- St. Louis Zoo Stingray Facility
- St. Louis County Hoteling
- Enterprise Rental Car – Multiple locations



Chiodini Architects | Oates Associates

- RP Lumber Center – Recreation and Ice Rink Facility – Edwardsville, IL
- O'Fallon First United Methodist Church



Chiodini Architects | DG2 Design

- Ballwin City Hall
- St. Louis County – Greensfelder Ice Rink Renovation
- Parkway School District Additions/Renovations
- RP Lumber Center – Recreation and Ice Rink Facility – Edwardsville, IL
- Enterprise Rental Car – Multiple locations



Chiodini Architects | CI Select

- Maryland Heights Government Center
- Ballwin City Hall
- Parkway School District
- Maryland Ice Rink
- Brentwood Ice Rink



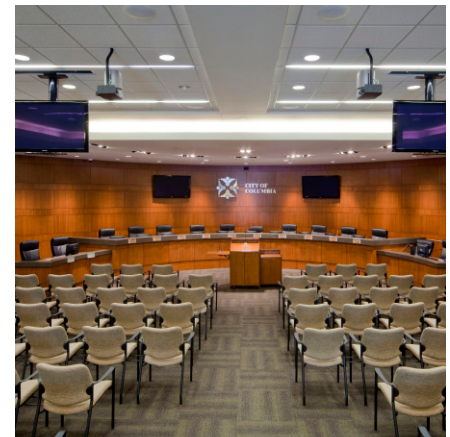
3 Relevant Project Experience



RELEVANT PROJECT EXPERIENCE

MUNICIPAL CLIENTS

City of Brentwood - Community Center Renovation
 City of Columbia, Missouri - Government Center, City Hall & Municipal Court
 City of Columbia, Missouri
 Historic Award Winning Howard & Gentry Buildings Renovations
 City of Cape Girardeau - New Police Headquarter and Municipal Court
 City of Wentzville - New City Hall and Municipal Court
 City of Clayton - Council Chamber Renovation
 St. Louis County - District 5 Department of Highways Roof Replacement
 St. Louis County - Departmental Office Relocations/Renovations
 St. Louis County - New Wash Bay at Transportation Maintenance
 City of Maryland Heights - Government Center and Police Headquarters
 City of Maryland Heights - Maintenance Facility
 City of Bridgeton - Government Center and Police Headquarters
 City of Bridgeton - Maintenance Facility
 City of Woodson Terrace - City Hall and Police Renovation
 City of University City - Police Department & Municipal Court Feasibility Study
 City of Ladue - Municipal Fire Facility Master Plan/Feasibility Study
 St. Charles County - Adult Detention Facility
 City of Ladue - Fire Stations #1 and #2
 City of Sedalia - Council Chamber/Municipal Court Renovation
 City of Edmundson - City Hall/Municipal Court Study
 City of Woodson Terrace - Community Center
 City of Des Peres - Maintenance Facility
 City of Hazelwood - City Hall and Police Feasibility Study
 City of Hazelwood - City Hall Façade Renovation and Window Replacement
 State of Missouri - Potosi Correctional Center Roof Replacement
 State of Missouri - Missouri Eastern Correctional Center Phase I & II



HISTORIC | RENOVATION | ADAPTIVE REUSE

City of O'Fallon, Missouri - Municipal Center Space Needs | Reuse
 City of Clayton - 10 S. Brentwood City Hall Relocation
 City of Columbia, Missouri - Government Center, City Hall and Municipal Court
 City of Columbia, Missouri - Historic Award Winning Howard & Gentry Buildings Renovations
 City of Clayton - Council Chamber Renovation
 St. Louis County - District 5 Department of Highways Roof Replacement
 St. Louis County - Departmental Office Relocations/Renovations and Roof
 St. Charles County - Adult Detention Facility - Renovation/Adaptive Reuse
 Federal Reserve Bank of St. Louis - Multiple Floor Renovations
 Parkway School District - Parkway North High School Campus Wide Facility & Site
 - Phase 1: Addition & Renovation-Music | Fine Art | Food Service & Commons | Roof
 Ranken Technical College Campus Wide Master Plan - St. Louis, Missouri
 - MaryAnn Lee Technology Center Renovation
 - RW Staley Auditorium Renovation
 - Rodenheiser Annex Addition | Renovation
 Washington University - Danforth Campus
 - Department of Physics - Crow Hall Auditoria Renovation
 St. Mary's Catholic Church - Brussels, Illinois Historic Reconstruction
 Bonne Terre Memorial Library - Bonne Terre, Missouri Historic n & Addition
 St. Mary's Catholic Church - Cape Girardeau, Missouri Sanctuary Renovation & Grade School Historic Addition

City of Ballwin - Government Center

New Facility + Space Planning
Ballwin, Missouri



City of Ballwin - Government Center

New Facility + Space Planning
Ballwin, Missouri



Project Size: 9,911,GSF

Budget: \$3,109,481

Bid: \$2,619,670

Completion: March 2019

Key Personnel : Lou Chiodini

Greg Uphoff | Sue King

Sited in Vlasik Park, the City of Ballwin's signature park, the new City Hall building and landscaping are designed to be the catalyst for a new Park Master Plan. The City Hall will mark the main entry to the park and is designed to integrate as a central core for park activities. Just as the architectural design spoke to the context of the location in the park, so too, was the interior design focused on park views, daylighting, and open collaborative space planning. Planning and programming efficiencies realized in the administrative functions of the facility allowed for the addition of the Aldermanic Chambers to the City Hall program; while maintaining flexibility for departmental growth within administrative areas. Original estimated program was 10,000 sf (without the Aldermanic Chambers), final program square footage, even with the Aldermanic Chambers, is only 9,911 sf.

City of Bridgeton

Government Center - Police Department Facility
Bridgeton , Missouri

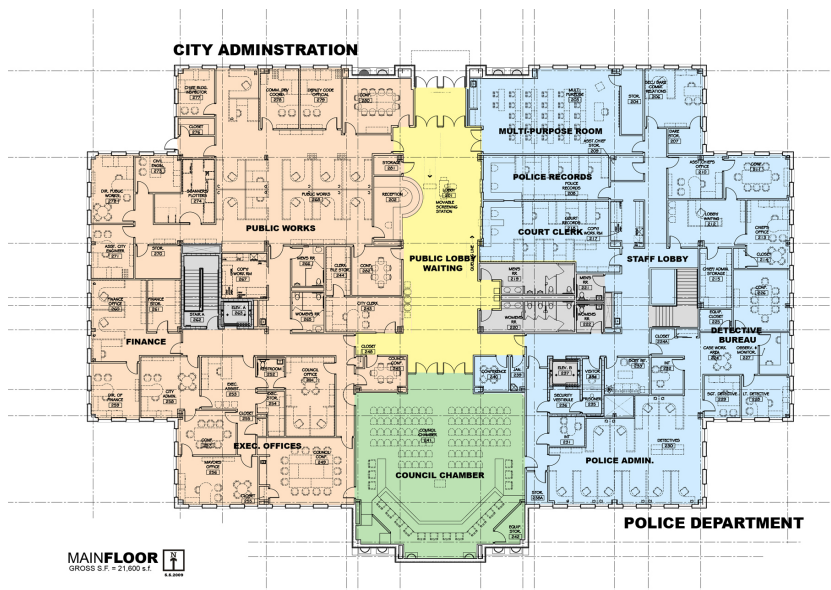
Size: 42,000 GSF

Budget: \$10,000,000

Cost: \$8,314,754

Completion Date: May 2012

Key Personnel: Lou Chiodini | Greg Uphoff



The architectural character of the new municipal facility was meant to evoke an up to date, efficient, modern style with traditional elements of building materials (brick and stone) symbolizing the long history of the Bridgeton Community. The main functions of the Government Center - City Hall & Police Headquarters were separated by an entry atrium with the Council Chamber/Municipal Courts located between the two functions. Operational efficiency, long term maintenance, and environmentally sensitive design (LEED) were key Principles throughout the design process. Most importantly, the Bridgeton Government Center project was completed On Budget and On Schedule.



City of Maryland Heights

Government Center - Police Department Facility
Maryland Heights, Missouri

Size: 67,000 GSF
Budget: \$15,575,831
Cost: \$14,538,722
Completion Date: Sept. 2009
Key Personnel Lou Chiodini
Greg Uphoff | Sue King



The Maryland Heights Government Center, Police Headquarters and Municipal Courts were initially developed by other Programming and Design Firms; but due to extensive estimated cost overruns prior to the start of construction, those firms were dismissed and Chiodini was hired to replace them and complete the project. Chiodini reevaluated the Space & Operational Program and was able to reduce the space needs by 20% and design a Public Building which met the practical needs and aesthetic "identity" needs of the Maryland Heights Community. Approach included close collaboration with the Mayor, Council, City Administration, Police and facility users throughout the design process.



City of Wentzville

Government Center - Police Department Facility
Wentzville, Missouri

Size: 44,474GSF

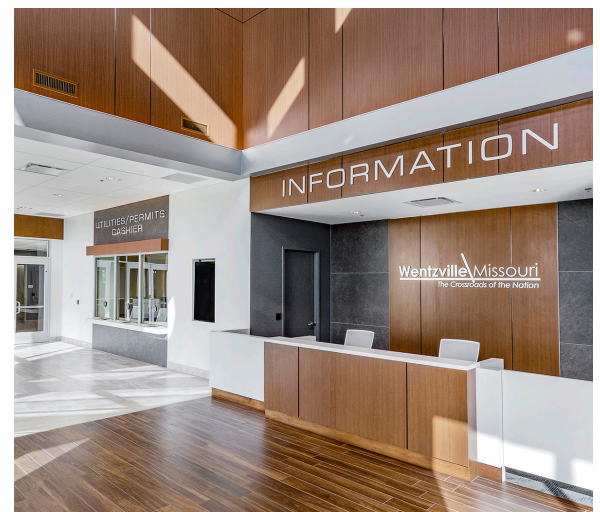
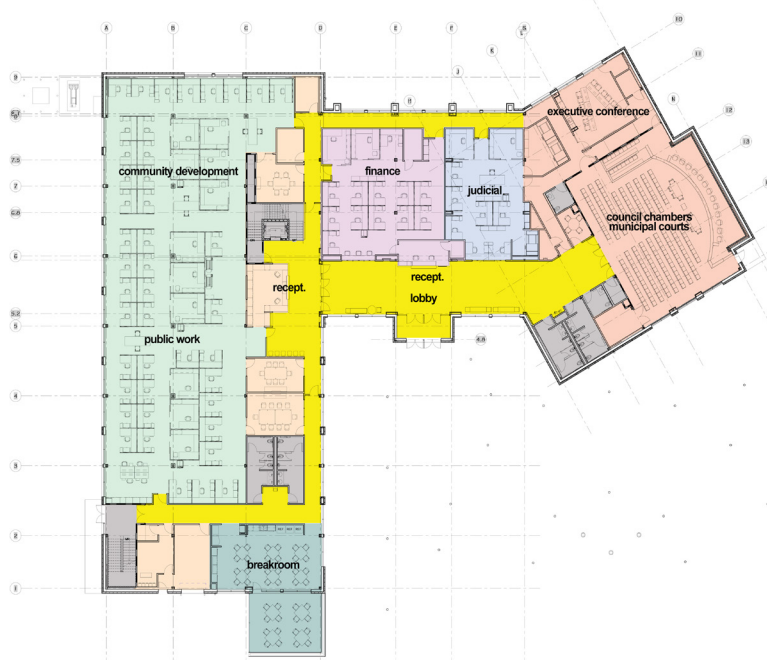
Budget: \$10,881,000

Cost: \$9,145,000

Completion Date: October 2017

Key Personnel: Micheal Chiodini

Greg Uphoff | Sue King



Chiodini Architects worked with the City of Wentzville on the Programming, Planning and Design of the New Wentzville City Hall at the southwest corner of Wentzville Parkway and Schroeder Creek Boulevard. This new facility consolidated multiple municipal departments previously located in 5 separate existing facilities throughout the City:

City Administration, Human Resources, Procurement, Finance, Information Technology, Community Development, Economic Development, Public Works, Judicial, Parks & Recreation, and Council Chamber/Municipal Court. This consolidation increased staff operational efficiencies and citizen convenience.

City of Columbia

Government Center
Columbia, Missouri

Size: 60,000 GSF

Budget: \$ 21,891,373

Completion Date: October 2011

Key Personal: Lou Chiodini | Greg Uphoff



The first phase of the New City Hall project involved the renovation/adaptive reuse of the first floor of the historic Boone Hotel, existing City Hall, to accommodate Treasury Management and Utility Customer Service. Following this work, the new 5-story, 60,000 sf City Hall tower was constructed; upon completion, the City Administration was relocated to the new tower from the existing City Hall (Boone Hotel) and renovation of the historic Boone Hotel was under taken. This renovation of the existing 5-story, 55,000 sf historic City Hall facility was also a recipient of the State of Missouri Historic Preservation Award.

The new Government Center design is sensitive to the existing design of the 90 year old Boone Hotel, incorporating similar materials, detailing, and overall composition; complementing the original City Hall and Enhancing the overall historic Downtown area..



Cape Girardeau Missouri Assessment | Space Needs

City Hall
Cape Girardeau, Missouri

Size: 60,000 GSF
Budget: \$ 21,891,373
Completion Date: October 2011
Key Personal: Lou Chiodini | Greg Uphoff



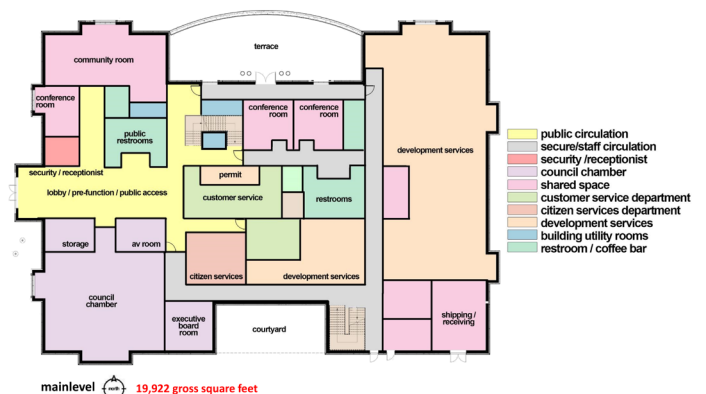
Conduct a Space Needs Assessment to develop a Space Program to be used in the evaluation of the future of City Renovation/additions to the existing City Hall Relocation of some City Hall functions to the historic Common Pleas Courthouse and Annex (Carnegie Library)

Relocation of some or all City Hall functions to a new City hall facility – including the identification of suitable sites.

Prepare Conceptual Designs for each of the alternatives for the future City Hall:

Develop conceptual renderings, site plans, floor plans and elevations for each conceptual alternative.

Prepare detailed Total Program Budgets for each conceptual alternative.



City of Clayton Needs Assessment I Feasibility Study

City Hall I Park Department I Public Works
Clayton, Missouri

Size: 22,7100 GSF

Budget: \$ 5,358,397

Completion Date: September 2018

Key Personnel: Lou Chiodini I Christine Capps

Part One:

Space Needs Analysis, Programming, Existing Facility Analysis, Schematic Design, Detailed Schematic Design Cost Estimate, and Return on Investment Analysis After council review and approval of detailed cost estimate and return on investment analysis, the determination could then be made whether or not to proceed with the project.

Part Two:

Design Development, Construction Documents, Bidding and Construction Administration

Although the Planning & Design was well received by City Staff and the Council; it also reflected that the project City Hall cost was in fact too expensive to support a reasonable return on investment for the proposed relocation. This process highlights the importance of the development of an accurate project scope and detailed budget during the feasibility study phase of the project, especially on an Adaptive Reuse/Renovation Project, and why Chiodini Architects incorporates a construction cost estimator on the Design Team during this initial phase, instead of relying solely on a square foot estimate.

Specific factors that influenced this analysis:

- Initial return on investment was based only on Construction Cost and not on Total Program Budget.
- Complexities of raising the 4th floor roof to accommodate the vaulted Council Chamber ceiling (requested match the existing council chamber which Chiodini Architects had recently renovated) were not adequately accommodated by the allocated cost per square foot.
- Urban site condition; very restricted site access and no freight elevator in the existing building to reach the upper floors.
- Adequate contingency development for renovating an existing building and working with existing systems.
- Existing building configuration is very inefficient; multiple fire stairs in a very small floor plate, inaccessible mansard roof floor space, and large central core of stairs, elevators, and restrooms – especially on the upper floors; resulted insignificant square footage of corridors and lobbies that needed to be included in the renovation cost.



4 Key Staff Experience





Louis G. Chiodini, AIA | NCARB | LEED AP BD+C
Managing Principal in Charge



Sue King, AIA | NCARB
Senior Project Architect | Manager



Qualifications

Bachelor of Architecture
Washington University
Steedman Fellowship

Experience: 59 Years

Project Role: Lou is managing principal and owner. In 1971, Lou was awarded the Steedman Fellowship from Washington University, which allowed him to travel and study Architecture, Urban Planning and Interior Design throughout Europe. In 1974, Lou established Chiodini Architects, a St. Louis based architecture and design firm to provide clientele with high quality, creative, professional design services.

Selected Project Experience

City of Ballwin - City Hall
City of Wentzville - New City Hall/Government Center
City of University City - Police Dept & Municipal Courts
City of Edmundson, Missouri - City Hall
City of Sedalia - Council Chamber Renovation, MO
City of Maryland Heights - New Government Center
City of Maryland Heights - New Maintenance Facility
City of Bridgeton - New Government Center
City of Bridgeton - Maintenance Facility
City of Columbia - New Government Center Complex:
 Howard & Gentry Buildings Award winning Historic
 Renovations as part of 8yr Phased Project
 Boone Hotel as part of 8yr Phased Project
City of Ladue - Fire Facilities Master Plan / New Fire Stations
City of Hazelwood - City Hall & Police Facility Feasibility
City of Woodson Terrace - City Hall and Police Facility
City of Clayton - Council Chambers Renovation
City of Brentwood - Community Recreational Renovation

Qualifications

Bachelor of Architecture
University of Kansas

Experience: 30 Years

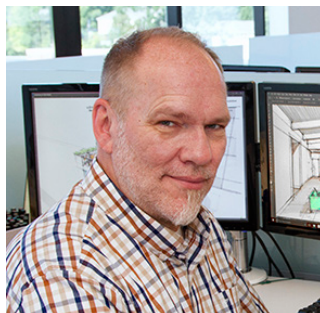
As a registered architect, Sue has over 20 years of varied professional design and management experience. While at Chiodini Associates. Her presence on the job site, combined with considerable construction administration knowledge, helps to strengthen the relationship between the owner, contractor and architect. She will remain involved from the very first sketch to the final punch list, ensuring a project to be proud of and to admire for many years to come.

Selected Project Experience

City of Ballwin - New City Hall
City of O'Fallon - Municipal Center Space Needs
City of Columbia - New Government Center Complex:
 Howard & Gentry Buildings Award winning Historic
 Renovations as part of 8yr Phased Project
 Boone Hotel as part of 8yr Phased Project
City of Bridgeton - New Government Center
City of Maryland Heights - New Government Center
City of Ladue
 Municipal Fire Facilities Master Plan Study
City of Wentzville - New City Hall/Government Center
City of Ladue - Fire House #1 and Ambulance
City of Ladue - Fire House #2
Saint Louis County
 Department of Information Technology (I.T.),
 St. Louis County - District 5 Department of Highways
 Roof Replacement
 St. Louis County - Departmental Office
 Roof Replacement

CHIODINI WORKLOAD + STAFFING

Chiodini Architects has a staff of 20 professionals. We have reviewed our workload and find that the personnel we've committed to your project will be available on the start date you've indicated and for the duration of the project as needed. If additional personnel are needed, we have that resource also. In fact, all our team members have reviewed their workloads and can assure our complete and total dedication to achieving the schedule set by Creve Coeur.



Gregory A. Uphoff
Director of Design

Qualifications

Bachelor of Architecture
University of Cincinnati

Interior Design
Washington University

Experience: 31 Years

Project Role: Greg will serve as the team's Project Designer. He will assist the Team in developing and planning design concepts and requirements. Several different building types make up his design background including Municipal, Collegiate, Recreational, Academic, Healthcare, Retail, Financial, Corporate, Hospitality and Religious facilities. Greg has a quick sketch technique allowing for the development and analysis of alternatives quickly.

Selected Project Experience

City of Ballwin - City Hall
City of Wentzville - New City Hall/Government Center
City of University City - Police Dept & Municipal Courts
City of Edmundson, Missouri - City Hall
City of Sedalia - Council Chamber Renovation, MO
City of Maryland Heights - New Government Center
City of Maryland Heights - New Maintenance Facility
City of Bridgeton - New Government Center
City of Bridgeton - Maintenance Facility
City of Columbia - New Government Center Complex:
Howard & Gentry Buildings Award winning Historic
Renovations as part of 8yr Phased Project
Boone Hotel as part of 8yr Phased Project
City of Ladue - Fire Facilities Master Plan / New Fire Stations
City of Hazelwood - City Hall & Police Facility Feasibility
City of Woodson Terrace - City Hall and Police Facility
City of Clayton - Council Chambers Renovation
City of Brentwood - Community Recreational Renovation



Christine Capps, NCIDQ | IIDA | LEED Accredited
Director of Interior Design

Qualifications

Bachelor of Interior Design
Maryville University

Experience: 27 Years

With more than 25 years of diverse facility design, Christine develops comprehensive interior design strategies for her clients. She works with clients to establish an interior design palette that reflects their institutional mission and selects furniture and fixtures that meet their expectations for budget, aesthetics, and collaboration. She focuses on selecting materials that are easily maintained and will stand up to the rigors of everyday use.

Selected Project Experience

Edwardsville RP Lumber- Ice Rick
City of Columbia - New Government Center Complex:
Howard & Gentry Buildings Award winning Historic
Renovations as part of 8yr Phased Project
Boone Hotel as part of 8yr Phased Project
City of Bridgeton - New Government Center
City of Woodson Terrace - City Hall and Police Facility
Richmond Heights - Community Center*
City of Des Peres - Lodge
Lindenwood University | St Charles, MO *
Eight Residence Halls
Spellmann Campus Center
Scheidegger Center for the Arts
Evans Commons & Arena Expansion
John Brown University | Siloam Springs, AR *
Health Education Building
Southeast Missouri State | Cape Girardeau, MO*
Aquatic Center
Longwood University | Farmville, VA* - Recreation
Truman State University - Kirksville, MO*
Health + Science Building

* Work Completed at Prior Firm



Joseph T. Davis, PE I LEED AP

CEO I Principal in Charge

26 Years of Experience



Background

University of Oklahoma

BS Electrical Engineering, 1985

University of Phoenix

Masters in Business Administration, 1992

As CEO of Custom Engineering, Mr. Davis has managed the firm's human resources and support services to successfully complete each project on time and within budget. He is responsible for fee negotiations, quality of product delivery and overall client satisfaction. Since assuming leadership of Custom Engineering, the company has earned recognition as one of the industry's top small businesses and the Herman A. Johnson Mentorship Award.

Selected Project Experience

City of Kansas City Parks and Recreation, KCMO School District, Public Works, Aviation Department and KCMO Water Services. His experience encompasses Federal contracts with the Veterans Administration, US Fish and Wildlife, US Corps of Engineers, US Department of Defense and the State of Missouri Design and Construction.



Thomas Cissell PE I PTOE I LEED AP BC+C

Senior Project Manager

24 Years of Experience

Background

Master of Science, Civil Engineering | 2004

Bachelor of Science, Civil Engineering | 1997

Southern Illinois University Edwardsville

As the manager of Oates Associates' Facilities Group, Mr. Cissell oversees the pursuit and completion of building related projects and the associated site work. His expansive engineering background, extensive history in providing building related services, and strategic vision gives him the insight needed in directing market pursuits.

On a technical level, Mr. Cissell focuses on site design and stormwater management and is an expert in transportation and traffic engineering. Over his twenty years as an engineer he has developed an enthusiasm for improving recreational life. He is an advocate for natural opportunities to encourage sustainable solutions and to connect people to their environment.



Kristy DeGuire PLA I CPSI

President

26 Years of Experience



Background

Kansas State University

Bachelor of Arts degree in Landscape Architecture

Kristy worked for almost a decade with a multidisciplinary design firm where she led the planning and landscape architecture team. While there, Kristy received multiple awards and honorable mentions for her work.

Her educational background, professional experience, and history of creating award-winning outdoor spaces are the tip of the iceberg that comprises Kristy DeGuire's qualifications as a planning and landscape architect. Kristy's view of any outdoor space is through the lens of her personal experience.

Selected Project Experience

Ballwin City Master Plan

St. Charles Activity Park

Gravois Greenway

5 Understanding I Approach I Schedule



UNDERSTANDING APPROACH

Along with the City Administrator and Navigate, the Chiodini Design Team proposes the following approach to the Needs Assessment/Feasibility Study and Implementation Phases of the Creve Coeur Government Center project.

Phase 1 - Needs Assessment and Feasibility Study, including the following tasks:

- Kick off meeting to gain more thorough understanding of Creve Coeur's goals, needs and expectations
- Analysis of existing City Hall/Government Center
- Programming of Space Needs
 - Programming Questionnaires and Interviews
 - Program Development and Review
 - Prepare final Program and Space Needs report
- Develop alternative Building and Site Design Concepts in coordination with Space Needs Program, Operational Expectations and Budget Objectives
- Review with City and Navigate for refinement
- Costing of both Renovation and New Facility Concepts
- Recommendation of Team on path forward – City, Navigate, Chiodini

Phase 2 - Implementation I Construction Documents

- Implementation based on direction to proceed on approved Renovation or New Facility Concept
- Refine approved Concept Design into scaled Schematic Design drawings
- Verify conformance of Schematic Design with operational objects, budget and schedule with Team City, Navigate, Consultants

Budget (Navigate)

- Based on Schematic – develop Design Development documents for all Disciplines
- Prepare all Architectural and Engineering Construction Documents and Specifications
 - MEP/FP, Structural, Civil Team, Landscape and A/V coordination
 - City and Navigate reviews throughout to assure compliance with Budget & Schedule
 - Quality Control reviews throughout
- Assist in submittal for Permitting with authorities having jurisdiction

Budget (Navigate)

- Bidding and Award
- **Construction Administration**
 - Weekly site visits
 - RFI Responses
 - Pay request approvals
- Project Closeout

UNDERSTANDING YOUR PROJECT

Based on our review of the RFQ the project Overview , Scope and AIA Agreement , we clearly understand the requirements Creve Coeur Government Center Needs Assessment/ Feasibility Study and the Implementation project.

We also understand that the project will be accomplished in two (2) Phases

PHASE 1

Needs Assessment/Feasibility Study
 Space Needs Programming
 Existing Facility Analysis
 Renovation & New Facility Concept Alternatives
 Initial Cost of Alternatives - Navigate
 Comparison of Alternatives
 Feasibility Study Report

PHASE 2

Implementation
 Council Direction to Proceed
 Implementation Construction Documents
 Bidding & Construction
 Occupation of Renovated or New Facility

PROJECT SCHEDULE

**Collaborative Team
Start to Finish**



DESIGN APPROACH

Inspiration: Our clients' needs + expectations are the foundation – we build on that foundation, listen carefully and guide our clients to a creative, economical, and efficient solution.

Collaboration: We set the stage for the Team's collaboration. Everyone's input is valued – we work together with client, stakeholders, CM, GC, and consultants to maintain open and clear communication throughout.

Document Production: We utilize BIM/Revit to allow for effective communication of design ideas. Using a 3D digital representation of the final building, we can better identify and resolve potential conflicts - avoiding costly change orders and time delays.

Quality Control: Employing a dedicated third-party review at each phase assures the accuracy of our documents. Chiodini is often told our professional documents are among the best in the biz.

LEED/Sustainability: We have maintained leadership in environmental sensitivity and responsible design. LEED design has become an integral part of our practice and decision making on projects, from adaptive reuse through new facility design.

Budget Maintenance: Our internal reviews at each phase of a project, along with reviews by Navigate, leads to our outstanding reputation of meeting both budgets and schedules.

Diversity Commitment: Over 55% of our staff are minorities or women and over 50 % of our Consultants are MBE/WBE Certified - Our inclusive culture empowers all of us to connect, belong, and grow!





6 Performance & References

RECORD OF PAST PERFORMANCE

The success of our established planning and design process is evidenced in all of our recently bid work:

Chiodini Architects has a long established reputation of meeting both budgets and schedules and has a specific understanding of budget implications on projects.

	Budget	Final Cost
City of Ballwin	\$3,109,481	\$ 2,619,670
City of Ladue - Fire House #2	\$2,400,000	\$ 2,215,850
City of Ladue - Fire/Ambulance House #1	\$3,200,000	\$ 3,189,842
City of Woodson Terrace - City Hall and Police Renovation	\$1,000,000	\$ 1,015,167
Howard & Gentry Historic Building	\$2,820,000	\$ 2,736,990
City of Maryland Heights, Missouri - New Maintenance Facility	\$1,200,000	\$ 1,135,024
City of Bridgeton, Missouri – New Public Works Maintenance Facility	\$1,200,000	\$ 1,135,024
City of Cape Girardeau, MO Police Headquarters	\$11,000,000	\$10,500,000
City of Wentzville, MO New City Hall	\$10,881,000	\$ 9,145,000
City of Brentwood Recreation Complex	\$6,850,000	\$ 6,700,000
City of Bridgeton, MO New Gvt Ctr. & Police Headquarters	\$10,284,162	\$10,229,087
City of Maryland Heights, MO New Gvt. Ctr. & Police Headquarters	\$15,575,831	\$14,538,722
City of Columbia, MO New Govt. Ctr. New City Hall Tower & Boone	\$22,000,000	\$21,891,373

COST | BUDGET COMPETENCE

Controlling Costs Without Cutting Corners

There is no other option than to design within the appropriately established project budget. We will prepare and develop strategies that create the greatest value within budget parameters.

We will start macro budgeting from the awarded project kickoff meeting. The intent of early budgeting activity is to arrive at a comprehensive understanding of the big picture and a ranking of priorities. At this early stage, it may be too early to accept or forego certain options, which could be as major as a whole program component or as specific as an architectural finish.

We will work closely with the City, Navigate and the consultants to prioritize program elements and design options. We'll share our experience with benchmark costs for like projects and can address costs per square foot for varying types of spaces. We can also tour you through projects executed at varying budget levels to clearly demonstrate what those costs represent. Through ongoing conversations with contractors, subcontractors, and suppliers, we gain first-hand knowledge of the current and projected construction and furniture costs.

Project Controls

Chiodini project control procedures rely on our ability to control quality, cost, decisions, and schedules. We believe there are two essential reasons we have earned a reputation for success in this area. One is the quality of our people. The team we are proposing for your project is highly qualified.

We have also developed tools and techniques to insulate our projects from pitfalls. The combination of daily communications, weekly and monthly status reports, along with the close working relationship we establish, makes for a smooth transition from planning and pre-design services to design and construction, to move-in and ongoing follow-through:

Quality Control

Chiodini believes that quality begins with a clear and precise project definition. Quality is assured when the design conforms to the requirements set forth in the project definition and construction then conforms to the design. Chiodini will implement quality assurance standards, peer reviews, and provide project updates to the City during all design phases.

Decision Control

While the construction process is labor intensive, the design process is decision intensive. Chiodini system for decision control is based on identifying key decisions well in advance. We seek out the decision makers, develop a decision matrix, and ensure that the necessary information is available to them well in advance of the time by which they need to make the required decision.

REFERENCES

City of Edwardsville, IL

Hal Patton - Mayor (Former) mayor@cityofedwardsville.com

Kevin Head - City Administrator khead@cityofedwardsville.com

Eric Williams - Director of Publicworks

ewilliams@cityofedwardsville.com

Ryan Zwijack - City Engineer kzwijack@cityofedwardsville.com

Nate Tingley - Director of Parks & Recreation

ntingley@cityofedwardsville.com

Bola Akande

City Administrator, City of Brentwood

City of Brentwood, Missouri

akande@brentwoodmo.org 314.963.8605

Douglas Lee

City of Wentzville - City Administrator

douglas.lee@wentzvillemo.org 636-639-2052

Re: Wentzville Government Center

David Gipson

City of Clayton - City Manager

dgipson@claytonmo.gov 314.290.8400

Re: Wentzville Government Center

Michelle Harris

Mayor

City of Clayton, Missouri

mharris@claytonmo.gov 314-290.8470

Re: Clayton City Hall

Patricia Litty, Project Manager, Missouri University of S & T

littyp@mst.edu 573.341.4865

Re: Gale Bullman Recreation Complex Addition & Renovation

Ray Crader

Division of Design & Construction

St. Louis County

RCrader@stlouisco.com 314.615.2567

Re: St. Louis County Projects

Eric Hanson

Former City of Ballwin Administrator

Assistant City Manager at Town of Normal, IL

ehanson@normal.org 309-454-9777

Re: City of Ballwin, Missouri

John Glascock

City Manager

City of Columbia, Missouri

cmo@CoMo.gov 573.874.2489

Re: Government Center Complex



7 Proximity & Familiarity



PROXIMITY

Chiodini Architects is located at Brentwood Blvd. and Highway 40, a mere 15 minutes from the Creve Coeur Government Center. Additionally, Michael and Lou Chiodini are available 24/7 should you have questions or need guidance concerning your project.

Chiodini Architects
1401 S. Brentwood Blvd
St. Louis, Missouri 63144

Custom Engineering
1552 S 7th St
Ste 201B
St. Louis, MO 63104

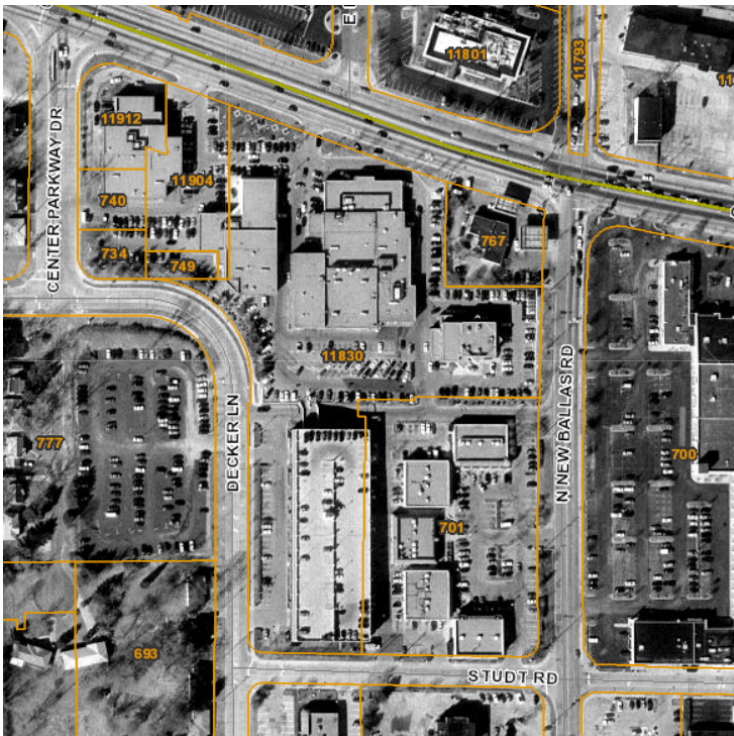
Oates Associates
720 Olive, Suite 700
St. Louis, MO, 63101

DG2 Landscape Architects
4835 MO-109 #102
Eureka, MO 63025



FAMILIARITY

Chiodini is very familiar with Creve Coeur due to many projects we have done within the City including the DeSmet Performing Arts Building, several Plaza Motors projects, Dierbergs Supermarket and a variety of commercial and retail buildings. In fact, we are currently working with the City of Creve Coeur on the Ice Arena Feasibility Study. In addition, we have successfully completed dozens of projects with St. Louis County, including most recently, a new office hoteling space on the Concourse level of the Administration Building and a renovation to the Greensfelder Recreation Complex.



8 Sustainable Design Experience



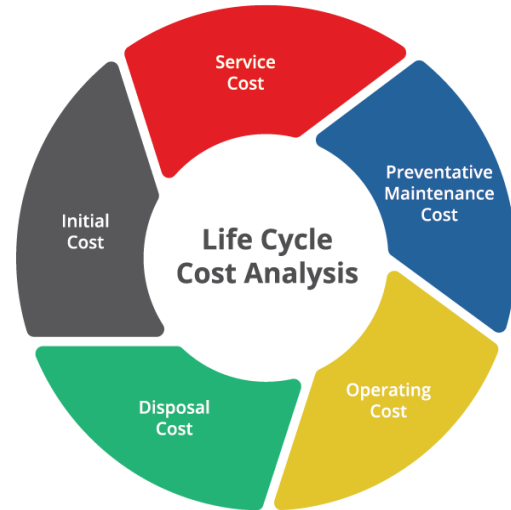
SUSTAINABLE DESIGN

VALUE ANALYSIS & LIFE CYCLE COST

Our team believes that we have an obligation to control project costs and maintain our clients approved budget.

Accurate cost estimating, cost control and Value Engineering is a continual process that involves users working in concert with the design team and is a pro-active process that must be implemented at initial conceptual/schematic design stages; where cost control is most effective and insight into the specific drivers of project cost can be identified. For the most effective cost control, elements of value analysis and life-cycle analysis must be incorporated with continuous validation to keep the project on budget. Our culture of cost-consciousness means that every time we present a decision, we also present the cost implications. We make sure the budget meets the Clients budget before it goes out for bid.

We utilize value analysis during schematic and design development phases; focusing on identifying the true value of an item to the owner. It is a balance of scope, budget, and quality. Our approach to value analysis emphasizes the value received as opposed to concentrating solely on initial cost. We see maintainability, function, and energy consumption as key factors important in the evaluation of alternative technologies and designs.



Over the years, Chiodini Architects has maintained leadership in environmental sensitivity and responsible design and has expanded that effort since becoming LEED certified.

Chiodini Architects is genuinely committed to the best interests of clients and community. In as much, we are dedicated to responsible stewardship of our environmental resources in all our decisions and actions. We aspire to instill sustainable practices in ways that are measurable and transparent. Through demonstrated leadership we aim to actively engage our clients in support of sustainability.

LEED design has become an integral part of our practice and decision making on projects, from adaptive reuse through new facility design.

UMB Bank
Olathe, KS - LEED Silver

UMB Bank - Collinsville, IL
LEED Silver

University of Missouri System LEED Sustainable Guidelines

City of Cape Girardeau Police
Headquarters/Municipal Court
Incorporation of Sustainable Design Principles - LEED Certified Level

City of Columbia Government
Center -LEED GOLD
(Publicly Funded Project)

UMSL @ Grand Center/St. Louis Public Radio - LEED Silver
(Publicly Funded Project)

FDA St. Louis Laboratories - LEED Silver (Publicly Funded Project)

City of Brentwood Recreation Ctr
Renovation - Incorporation of
Sustainable Design Principles - LEED Certified Level

City of Wentzville City Hall
Incorporation of Sustainable
Design Principles - LEED Certified Level

City of Maryland Heights Govt Ctr - Incorporation of Sustainable
Design Principles - LEED Certified Level

City of Bridgeton Govt Ctr
Incorporation of Sustainable Design
Principles -LEED Certified Level

City of Woodson Terrace City Hall
Incorporation of Sustainable Design Principles - LEED Certified Level

9 MBE | WBE Participation



TEAM DIVERSITY

TEAM Diversity Certification Status / Achieving Diversity Goals

We have a long history of Teaming with quality MBE and WBE Consultant firms, including the firms we have included for the Creve Coeur Government Center Project, Custom Engineering (MBE) – MEP/FP Engineer and DG2 (WBE) – Landscape Design. Additionally, I am proud to state that over 50% of our staff are highly qualified minority and women professionals. Over 50% of our consultants are DBE / WBE on all projects.

Chiodini Architects - Veteran Owned.

Chiodini Diversity Break Down

Total Staff 20

Licensed Architects 6 (4 in process) 50%

Women Employees 7 35%

Minority Employees 4 20%

Total Women | Minority 11 55%



We continually team with W/MBE consultants regardless of project requirements.

Chiodini Architects - Veteran Owned

Custom Engineering- Minority-Owned Business Enterprise MBE
Small Disadvantaged Business SDB

DG2 Landscape Architects
Women-Owned Business Enterprise WBE
Minority-Owned Business Enterprise MBE



As our Consultant Relationship information indicates, Chiodini Architects regularly teams with this consultant group on a diverse range of projects.

"Our Success
is Due to the
Quality of
Our Professional
+ Diverse Staff"



STATEMENT OF QUALIFICATIONS



PROFESSIONAL DESIGN
SERVICES

**CREVE COEUR
GOVERNMENT CENTER**

PREPARED FOR

Mark Perkins, City Administrator
CITY OF CREVE COEUR, MISSOURI

300 N New Ballas Road
Creve Coeur, MO 63141

ISSUED
01/11/2022

JEMA

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01

GENERAL INFORMATION / TEAM STRUCTURE

Cover Letter

History & Firm Overview

Our Subconsultants

History of Working Together

Project Management & Organization

Evidence of Financial Wherewithal

MESSAGE FROM
JOHN MUELLER
MANAGING PARTNER



January 11, 2022
City Administrator's Office
City of Creve Coeur
Attn: Mark Perkins, City Administrator
City of Creve Coeur, MO
300 N New Ballas Road
Creve Coeur, MO 63141

Executive Summary - Proposal for Professional Needs Assessment & Feasibility Study and Design Services

Greetings,

We are pleased to submit our qualifications to the City of Creve Coeur for Phase One and Phase Two Services as outlined by the Creve Coeur Government Center RFQ. We are a firm that specializes in municipal and mission critical design. We offer a "listen first" approach and believe in the power of collaboration and partnership with our clients. We've worked extensively with both existing buildings and ground-up construction, both of which require in-depth analysis of the building structure, utility infrastructure, aesthetics, and functional layout in order to assess current utilization and plan for the future. Along with the team of other experts we've assembled, we believe we'll be able to offer you a thorough evaluation of your current facility, an accurate program of space needs, and a sound recommendation on either renovation or new build as the correct path forward. Once a path is determined, the JEMA team will bring 150 years of collective experience to the table to develop a facility that we can all be proud of.

In addition to our extensive knowledge of municipal and mission critical design, we're also rooted in the region. Our partnering consultants, David Mason & Associates, IMEG, and DG2 will provide their civil engineering, structural, MEP/FP, and Landscape Architecture expertise, respectively. DMA is a firm with a reputation for meeting the constraints of budgets and deadlines while utilizing the latest technology to take major projects and programs from conception to completion. IMEG is a leading municipal government engineering design firm that delivers a rare combination — the broad expertise of a national leader with the personal relationship of a local firm. DG2 is a Landscape Architecture Studio that has designed and implemented many successful projects where sensitivity to the environment and personal understanding of the client's cultural values and beliefs were instrumental to the overall project concept.

Our team believes in the uniqueness of each municipality and we are confident that we will deliver an assessment and building design that is reflective of the specific needs and goals of the City of Creve Coeur. Please don't hesitate to contact me with any questions or concerns.

Sincerely,



John Mueller, AIA, LEED AP
Managing Partner
JEMA

**FIRM OVERVIEW**

Established in 2010

JEMA Staff Breakdown:

24 Total Staff Members
10 Registered Architects
2 Interior Designers
10 Architectural Designers
2 Administrative / Accounting

Federal Tax ID
 No. 80-0671214
 State Tax
 ID No. 21765022

SERVICES

Architecture
 Interior Design
 Master Planning
 Urban Planning
 Sustainable Design
 Building Information Modeling

Ownership & Principals

John Mueller (Managing Partner)
 Jonathan Emert (Partner)
 Chip Houser (Principal)
 Steve Hoover (Principal)
 Jonathan McKee (Principal)

Main Point of Contact:

John Mueller
 Managing Partner
 jmueller@jemastl.com
 P: 314-531-7400 ext. 10

2823 Olive St.
 St. Louis, MO 63103

www.jemastl.com

JEMA has **no record** of civil or
 criminal claims, judgments or
 suits within the last ten (10) years.

AREAS OF EXPERTISE

JEMA specializes in planning, architecture, and interior design. The partners, John Mueller and Jonathan Emert, share a passion for client service, sustainable design and community building. Our partnership brings over three decades of experience with a wide array of architectural projects. Over the last 10 years, we have successfully designed and constructed over 400,000 square feet of municipal projects including city halls, courts, police stations, and fire stations.

CULTURE

JEMA sees planning and architecture as engines for building new community, enhancing our clients' lives and challenging the expected. We cherish nature and work to restore the environment through sustainable design. Understanding that all things are interwoven drives our philosophy of design. Our culture recognizes that the best ideas and innovations can come from anyone. We foster a culture of transparency, collaboration and non-judgment.

APPROACH

Our approach is characterized by listening, understanding, collaborating and leading. We understand that new facilities are more than "bricks and mortar". Any new project has the potential of becoming critical building blocks for the life of a community. Functionality and security need to be balanced with civic identity and character. We believe that a great project is created through collaboration amongst all the stakeholders. The client, design and construction team, site, budget, communication, technology, innovation and delivery are all important ingredients of a project. Understanding the elasticity and balance between each of these ingredients forms the underpinnings of our practice.





**STRUCTURAL & CIVIL
ENGINEERING**

DAVID MASON + ASSOCIATES (DMA) is a professional engineering company, incorporated in March of 1989, headquartered in St. Louis with offices in Chicago, Illinois and Philadelphia. Over the years, we have established a reputation for meeting the constraints of budgets and deadlines while utilizing the latest technology to take major projects and programs from conception to completion.

Creative problem solving is a hallmark of our work. Our 160 employees have an average of 15 years of job experience and our professionals are equipped with equal measures of skill and pride in the work we do every day. Our project managers are adept at communicating to keep projects on track—working to identify potential problems and/or changes early in the process.

DMA is a Minority-Owned Business Enterprise (MBE) providing a full range of planning, design, management, and inspection services.



800 S. Vandeventer Ave.
St. Louis, MO 63110

P: 314-534-1030
www.davidmason.com



**MECHANICAL, ELECTRICAL,
& PLUMBING ENGINEERING**

IMEG is a leading municipal government engineering design firm that delivers a rare combination — the broad expertise of a national leader with the personal relationships and deep collaboration of a local firm. But what really sets IMEG apart?

Our market-sector team structure allows our engineers to specialize and become healthcare experts—providing data driven solutions and innovation. We value a culture of learning and development—sharing our knowledge to help impact industry trends and solve complex design problems. Through organic and strategic acquired growth we have an extensive breadth of expertise and deep bench of client knowledge—helping transform environments and communities. We have been driving design innovation for decades delivering many “firsts” in sustainable design —helping clients become energy stewards and reduce impact. We bring extensive national, regional, and local knowledge to every client relationship—with a commitment to deliver high quality, cost-effective outcomes through a collaborative and flexible project approach.



15 Sunnen Drive, Suite 104
St. Louis, MO 63143

P: 314-951-2538
www.imegcorp.com



**LANDSCAPE
ARCHITECTURE**

DG2 Design was established in March of 2011. The designers at DG2 Design have successfully integrated over 20 years of design experience into a landscape architecture firm that has sensitivity for the environment and the client's values and needs. In addition to our design education, Jeremiah DeGuire, a disabled veteran and partner in DG2 Design brings first-hand knowledge to the challenges one in a wheelchair faces and overcomes daily. This helps us create environments that ensure the safety and accessibility of others.

We are landscape architects. It is our passion. It is what we live and breathe, and it is an exciting time to be doing what we do. New technologies and philosophies are merging to form wonderful outcomes. Unlike many landscape architecture firms, we embrace a diverse range of project types. We sincerely desire to hone and develop what we do and this is done through considering a far greater range of possibilities than what is usually found on a single-tier solution practice.

We invite you to connect with us. We welcome the opportunity to share ideas and collaborate with you.

DG2 Design is a certified WBE / DBE.



4835 MO-109,
Suite 102 Eureka, MO 63025

P: 636-549-9007
www.dg2design.com

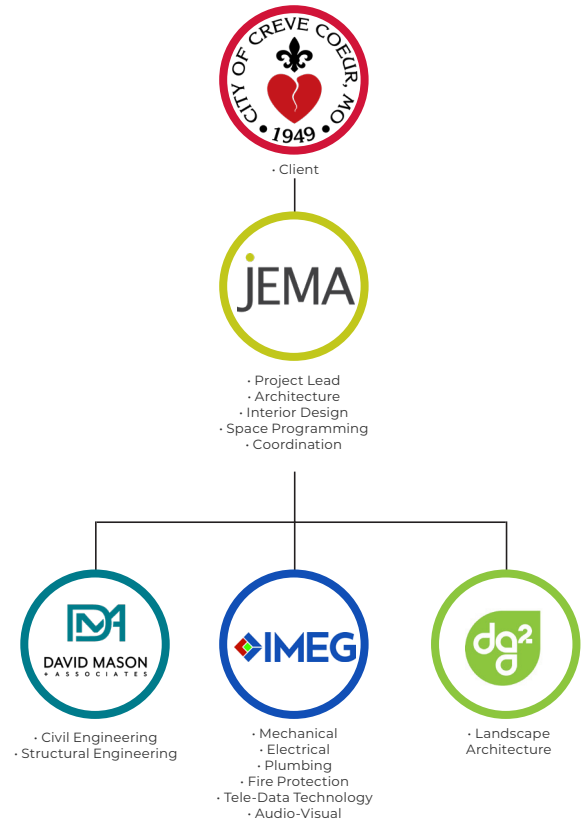
PROJECT PARTNERSHIPS

PROJECT NAME	JEMA	DAVID MASON + ASSOCIATES	IMEG	dg ²
St. Charles Community College	○		○	
Cardinal Ritter Highschool Weight Room	○		○	
Westwind Hills Wedding and Event Venue	○		○	
Ranken Tech. Manufacturing Incubator	○	○		○
Cliff Cave Park	○			○
Clayton Family Center	○			○
Ballwin Police Station	○			○
Ballwin City Hall	○			○
Kinetic Park	○		○	○
Frontenac Municipal Complex	○			○

COORDINATION OF
DESIGN DISCIPLINES

As the design lead and architect of record, JEMA will be the main point of contact with Creve Coeur and the Owner's rep and will collaborate the structural, civil, and MEP timelines and deliverables with David Mason + Associates, IMEG, and DG2. JEMA has worked with David Mason + Associates, IMEG, and DG2 on a number successful projects. Our ability to work together as a cohesive team benefits you through timeline management and cost savings.

TEAM STRUCTURE



EVIDENCE OF FINANCIAL WHEREWITHAL



To Whom It May Concern:

Jema, LLC has been a client of First Bank since 2015. They have been a client of mine since 2008, spanning multiple financial institutions and have maintained an impeccable record during that time. Most recent fiscal year-end sales (2020) were just north of \$3MM. As it stands today, 01/10/2022, JEMA has substantial working capital and maintains strong borrowing capacity.

Sincerely,

Joel M. Jeffe
Vice President | Business Banking Officer
First Bank | 1190 Meramec Station Rd | Ballwin, MO 63021
o: (636) 225-9990 | c: (314) 809-7500 | f: (636) 225-6516
joel.jeffe@fbol.com | firstbanks.com

02

RELEVANT PROJECT EXPERIENCE



JEMA Project Matrix

JEMA Relevant
Project Experience

Subconsultant Relevant
Project Experience

100%
SUCCESS RATE
on bond initiatives with clients.



RELEVANT PROJECT MATRIX

Project Name



City of Ballwin Police Station	○	○	○	⌚	⌚	○				○
City of Ballwin Council Chambers	○		○	○				○	○	
City of Glendale Fire Station	○		○		○	○			○	
City of Glendale City Hall & Police Station	○	○	○		○		○	○	○	
Northeast Ambulance & Fire Protection	○	○	○	○		○			○	
Frontenac Municipal/ Fire/ Police Complex	○	○	○	○		○			○	
Maplewood Fire & EMS HQ	○		○	○		○			○	
Ferguson Fire Department	○		○		○	○			○	
Ferguson Police & Municipal Court	○	○	○	○			○	○	○	
Valley Park Fire Station 1	○		○	○				○	○	
Valley Park Fire Station 2	○		○		○	○				○
Lake St. Louis Fire Station	○		○	○		○			○	
City of St. Charles Fire Station 1	○		○	⌚	⌚			○		○
City of St. Charles Fire Station 2	○		○	⌚	⌚	○				○
City of St. Charles Fire Station 3	○		○	⌚	⌚	○				○
City of St. Charles Fire Station 5	○		○	⌚	⌚			○		○
City of St. Charles Police Department	○	○	○	⌚	⌚			○		○
Beaufort Leslie Fire Protection District	○		○	○			○	○	○	
Webster Groves Fire Station 2	○		○		○	○				○
Crestwood Government Center	○		○	○			○	○	○	
Cape Girardeau Fire Station	○		○	○				○	○	
Afton Fire Station	○		○	○				○	○	
Eureka Municipal Center	○	○	○							
O'Fallon Public Safety Facility*	○	○	○	○		○			○	
Carbondale Public Safety Facility*	○	○	○	○		○			○	

LEGEND

Needs Assessment / Evaluation Conducted

Dispatch Component

Sustainable Practices Employed

Project Within Budget

Project Below Budget

Completed On-Time

In-Progress

New Construction

Addition

Renovation

Our goal is to set you up for SUCCESS.

Let us collaborate to evaluate your needs, develop a solution, and share your vision with the community.

25+

SUCCESSFUL
MUNICIPAL
PROJECTS
IDENTICAL TO
YOURS
ACROSS THE
BI-STATE REGION
WHERE WE
CONDUCTED:

PHASE ONE

- SPACE PLANNING
- FEASIBILITY STUDY
- CONCEPTUAL DESIGN
- COST ESTIMATING

PHASE TWO

- DESIGN OF NEW BUILDING OR RENOVATION

**CITY OF BALLWIN POLICE STATION
NEEDS ASSESSMENT & NEW POLICE FACILITY**
BALLWIN, MO



Completion Date: In-progress
Size: 25,000
Reference: Bob Kuntz
Former City Administrator
Contact: 636-227-9000

Key Personnel

John Mueller, Jon Emert, Adolfo Maalindog, Lara Thiel, Chip Houser

Ballwin Police Department is in the process of building a new facility. JEMA conducted building evaluation & analysis of the existing station along with a programming and needs assessment. This was followed by conceptual design studies on multiple sites. JEMA is currently working with the city of Ballwin on the design development and construction of the new facility.



**CITY OF GLENDALE
NEEDS ASSESSMENT & NEW FIRE STATION**
GLENDALE, MO



Completion Date: 2018
Cost: \$ 6.75M
Size: 22,400 Square Feet
Reference: Curtis VanGaasbeek
Fire Chief
Contact: 314-965-7097



Award: 2019 AIA
Honor Award

Key Personnel

John Mueller, Jon Emert, Chip Houser

JEMA provided building evaluation and needs assessment for the Glendale Fire Department. A new Fire Station was determined necessary due to seismic upgrades needed. Glendale's new station improved response time, provides on-site training, creates a new "home" for the fire fighters, employs sustainable practices, and anchors the downtown area.



**CITY OF GLENDALE
NEEDS ASSESSMENT & IMPROVEMENTS
CITY HALL & POLICE STATION**
GLENDALE, MO



Completion Date: December 2018
Reference: Chief Frank Arnoldy, Chief of Police - Retired
Contact: 314-729-4800

Key Personnel

John Mueller, Jon Emert, Adolfo Maalindog, Chip Houser

The City of Glendale's previous municipal facility was over 100 years old and contained the city's administration, police and fire functions. JEMA provided site evaluation, needs assessment, planning, architectural, and interior design services to renovate the existing municipal and police facility. Extensive improvements were required but did not trigger and seismic or structural upgrades making the renovation option better than building a new facility. This facility was completed on time and under the original budget.



**FIRE STATION & EMS NO. 1
NEEDS ASSESSMENT & NEW CONSTRUCTION**
FERGUSON, MO



Completion Date: 2012
Size: 25,000 Square Feet
Construction Cost: \$5.68 M
Reference: John Hampton, Fire Chief
Contact: 314-522-1122

Key Personnel
John Mueller, Jon Emert, Steve Hoover

JEMA's needs assessment determined that there was not enough space in Ferguson's existing fire station. JEMA collaborated with the City of Ferguson to complete the design for their new state-of-the-art Fire House No. 1. Key features include a 3 bay drive-thru apparatus area, training/multi-purpose room, fitness center, training tower and private sleeping suites. This facility was completed on time and under the original budget.



**FERGUSON POLICE STATION & MUNICIPAL COURT
NEEDS ASSESSMENT & ADDITION / REMODEL**
FERGUSON, MO



Completion Date: December 2014
Size: 24,000 Square Feet
Approx. Cost: \$3.5 Million
Reference: Matt Unrein,
Former Assistant City Manager
Contact: 636-937-6646

Key Personnel
John Mueller, Jon Emert, Steve Hoover

Ferguson's Police Headquarters was built in 1979 and was in severe need of upgrades and improvements. JEMA assessed the existing conditions of the facility and needs of the department, developing a design to renovate the entire facility and bring it up to 21st century standards. We also created new additions to the building that included a new Sally Port, Dispatch Center, Evidence Room, Entry Lobby, Courtroom, Training/EOC Room and Staff Break Room. The project employs Sustainable Design practices.



**VALLEY PARK FIRE STATION 2
NEEDS ASSESSMENT & NEW FIRE STATION**
VALLEY PARK, MO



Completion Date: in-progress
Size: 14,680 Square Feet
Approx. Cost: \$6.1 Million
Reference: Jim Polk,
Valley Park Fire Chief
Contact: jpolk@vpfire.org

Key Personnel
John Mueller, Jon Emert, Steve Hoover, Adolfo Maalindog,
Lara Thiel

New ground up construction of a fire house with four apparatus bays and living quarters on an upper level with administration offices, training and boardroom located on a lower level as well as an entry lobby and restroom facilities. The new building was determined to be a must after JEMA's evaluation uncovered structural and seismic deficiencies in the old facility.



**NORTHEAST AMBULANCE & FIRE PROTECTION DISTRICT HEADQUARTERS
NEEDS ASSESSMENT & NEW FIRE STATION**
ST. LOUIS, MO



Completion Date: 2017
Size: 31,000 Square Feet
Construction Cost: \$6.7M
Reference: Quinten Randolph, Fire Chief
Contact: 314-382-1501

Key Personnel

John Mueller, Jon Emert, Steve Hoover, Chip Houser

NEAFPD's former station was in dire need of structural upgrades. JEMA worked with Chief Quinten Randolph and his crew to develop the pioneering design, which features five drive-through apparatus bays, a community and training center, individual sleeping suites, and a storm shelter. To maximize response time, two fire poles along with a communicating stair provide exceptionally quick access from the upper floor to the apparatus bay. Enhancing response time even further is the use of four-fold door technology.



**FRONTENAC POLICE/FIRE/MUNICIPAL COMPLEX
NEEDS ASSESSMENT & NEW CONSTRUCTION**
FRONTENAC, MO



Completion Date: 2010
Reference: Mark Richert,
Planning and Zoning
Contact: 314-432-3000

Key Personnel

John Mueller, Jon Emert, Chip Houser

In 2006, the City of Frontenac was seeking to build a new city hall, fire station and police station. They did not own enough land to build all 3 separate facilities, so the decision was made to design and construct a "3 in 1" municipal facility. The project phasing plan was key to the project's success. The new building was constructed between the existing Police Station and Fire Station.



**FIRE & EMS HEADQUARTERS / TRAINING TOWER
NEEDS ASSESSMENT & NEW CONSTRUCTION**
MAPLEWOOD, MO



Completion Date: 2017
Cost: \$ 6 M
Size: 21,000 Square Feet
Reference: Terry Merrell, Fire Chief
Contact: 314-646-3613

Key Personnel

John Mueller, Jon Emert, Steve Hoover



Maplewood's decades old station was antiquated and did not meet the needs of a modern fire-fighting force. The new 20,500 sq. ft. facility is located on a prominent corner site at the intersection of Manchester Road and Bredell Avenue. Integrating the building into the steep grade while providing a drive-through apparatus bay presented a significant design challenge. The building's public entry, administration and community/training room is located on the lower level. The facility's living quarters and support spaces are on the upper level directly adjacent to the apparatus bay which improves overall response time significantly.



In keeping with the City's "green" initiatives, the building will achieve LEED Silver certification.

**FIRE STATION HQ & TRAINING TOWER
NEEDS ASSESSMENT & IMPROVEMENTS**
LAKE ST. LOUIS, MO



Completion Date: 2018
Size: 12,928 Square Feet
Construction Cost: \$3.5 M
Reference: Clinton Gussner, Fire Chief
Contact: 636-561-9200

Key Personnel
John Mueller, Jon Emert, Adolfo Maalindog

Evaluation determined the need to replace the old fire station due to structural and seismic upgrades needed. The 12,928 sq. ft. facility includes administration areas, an EOC/training room, kitchen/dining area with access to an outdoor gathering space, staff quarters, day room, and a 3-bay drive-through apparatus bay with dedicated support spaces and a training/fitness mezzanine.



**ST. CHARLES FIRE AND POLICE FACILITIES
NEEDS ASSESSMENT & RENOVATION/ NEW
CONSTRUCTION OF MULTIPLE FACILITIES**
ST. CHARLES, MO



Completion Date: in-progress
Size: multiple facilities
Reference: George Sheets, Fire Chief
Contact: 636-949-3250

Key Personnel
John Mueller, Jon Emert, Lara Thiel, Chip Houser

JEMA is conducted multiple building evaluations and needs assessments for St. Charles' Fire and Police Stations. The result is a combination of renovation and new construction projects currently in progress for Fire Stations 1, 2, 3, and 4 and the Police Station.



**BEAUFORT LESLIE FIRE PROTECTION DISTRICT
SITE EVALUATION & RENOVATION & ADDITION**
BEAUFORT, MO



Completion Date: 2021
Cost: \$1.1 M
Size: 10,270 Square Feet
Reference: Terry Feth, Fire Chief
Contact: 314-971-3443

Key Personnel
John Mueller, Jon Emert, Steve Hoover, Adolfo Maalindog, Chip Houser

JEMA partnered with Beaufort-Leslie Fire Protection District to renovate their existing fire station and add administrative facilities to accommodate the needs of the growing district. The existing 5 bay fire station was transformed into a new administration building consisting of training room, conference/EOC room, offices, kitchen and dining area, restrooms, and support/storage areas. The new building addition was designed to provide 5 deep apparatus bays, storm shelter, workroom, decontamination area, SCBA compressor room, gear turnout lockers, and mezzanine storage area over support spaces.



The new facility allows enhanced response time and the ability to facilitate onsite training for the entire volunteer department.

**WEBSTER GROVES FIREHOUSE 2
NEEDS ASSESSMENT & NEW CONSTRUCTION**
WEBSTER GROVES, MO



Completion Date: In-progress
Size: 11,500 Square Feet
Construction Cost: \$4.2 M
Reference: Tom Yohe, Fire Chief
Contact: 314-963-5345

Key Personnel

John Mueller, Jon Emert, Adolfo Maalindog, Lara Thiel

JEMA worked with the Webster Groves Fire Department and the City of Webster Groves to do site analysis, needs assessment, and preliminary design services for a new fire station. The new station would allow for improved functionality and increased size to meet current and future needs. It would create a more healthy environment for firefighters by separating living quarters from material and equipment space, comply with building codes and create an improved response time. An additional benefit would be adequate parking for staff and visitors.



**CRESTWOOD GOVERNMENT CENTER
POLICE SALLY PORT ENCLOSURE
NEEDS ASSESSMENT & IMPROVEMENTS**
CRESTWOOD, MO

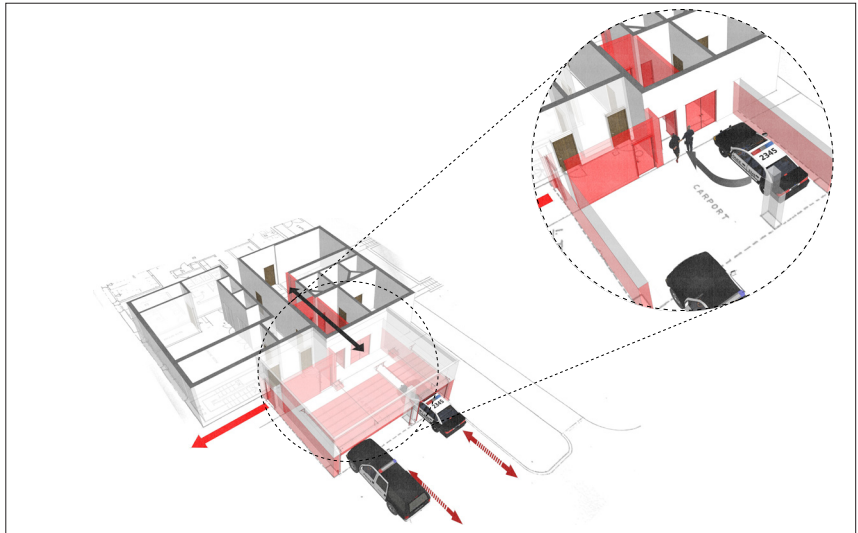


Completion Date: December 2018
Reference: Chief Frank Arnoldy, Chief of Police - Retired
Contact: 314-729-4800

Key Personnel

John Mueller, Jon Emert, Adolfo Maalindog, Steve Hoover

JEMA worked with the City of Crestwood to provide evaluations of the existing Government Center and to provide architectural services, as needed, for a number of the facility spaces. One of the improvements currently is the design and construction of an enclosure for the Police Sallyport. The new enclosure addresses a number of programmatic needs including better circulation and adjacencies, secured access, and the addition of more functional space.



**DISPATCH TECHNOLOGY
EXPERTISE & EXPERIENCE**

City of Ballwin Police Station

City of Glendale Police Station

Northeast Ambulance & Fire Protection District

Frontenac Police Station

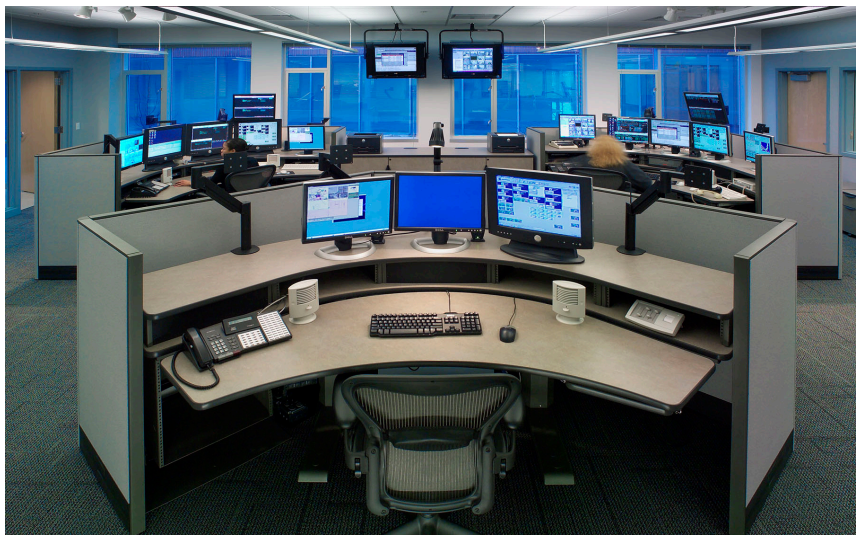
Ferguson Police Station

St. Charles Police Station

Eureka Municipal Center

City of O'Fallon, IL Public Safety Facility - New ground up public safety building with full dispatch center *

City of Carbondale, IL Public Safety Facility - New ground up facility including full dispatch center*



*Work conducted by Jon Emert (while at another firm)



St. Louis County Parks, Creve Coeur, MO, 500-sf Creve Coeur Park New Restroom Building
City of University City, University City, MO, 48,000-sf Annex, Connector, and Trinity Buildings Renovation
City of Richmond Heights, Richmond Heights, MO, 1,200-sf A.B. Green Park Pavilion Renovation
Gates Foundation, St. Louis, MO, Gates Office Tenant Improvement
GSA Public Buildings Service, St. Louis, MO, 10,000-sf Thomas Eagleton Federal
Courthouse Elevators (15) Renovation/Modernization - Design/Build
Millstadt Library Board of Trustees, Millstadt, IL, 9,800-sf New Library
Missouri Botanical Garden, St. Louis, MO, 91,700-sf New Visitor Center, Pursuing LEED Gold
National Park Service, St. Louis, MO, 87,000-sf Old Courthouse Phase 2 Renovation
St. Louis County Library District, St. Louis, MO, 80,000-sf New Library Headquarters and Genealogy Center
U.S. General Services Administration - St. Louis, MO, 800-sf Thomas Eagleton
Federal Courthouse Interview Rooms Renovation
U.S. General Services Administration - Kansas City, St. Louis, MO, 800-sf
Thomas Eagleton Courthouse Secure Processing Room and Vestibule Renovation
City of Collinsville, Collinsville, IL, 7,800-sf Collinsville Gateway Center Conference Rooms Renovations



DAVID MASON
+ ASSOCIATES

Chouteau Greenway Master Plan- St. Louis, MO
Jefferson Barracks Joint Armed Forces Reserve Center- St. Louis, MO
City Arch River Central- St. Louis, MO
Forest Park Master Plan Implementation- St. Louis, MO
Branson's Nantucket New Clubhouse- St. Louis, MO
Grant's View Branch Library- St. Louis, MO
Busch Stadium- St. Louis, MO



City of University City Annex & Trinity Bldg (police headquarters and municipal courts functions)
Ballwin City Hall- Ballwin, MO
St. Louis County Courts Building- St. Louis, MO
Ballwin Police Station- Ballwin, MO
Marion County Community Justice Center*- Marion County, MO
Kirkwood City Hall*- Kirkwood, MO
Hammond Federal Courthouse*- Hammond, IN
Michigan City Fire Stations (5)*- MI
Carmel Public Library*- Carmel, IN
Michigan City, City Hall*- Michigan City, MI
Porter County Government Complex*- Porter County, IN
(*Completed while at another firm)



03

KEY PERSONNEL QUALIFICATIONS



JEMA Staff Qualifications

Subconsultant Key Team Members

Workload & Availability

Staff Contingency Plan

LEED Accredited Professionals



John Mueller, Partner
AIA, NCARB, SAVE, LEED AP

Role: Partner In Charge
Location: St. Louis Office

27 MUNICIPAL
PROJECTS

33 years of Experience
12 years with JEMA

EDUCATION

Bachelor of Architecture
University of Kansas

School of Architecture
University of Copenhagen

CERTIFICATION

LEED Accredited Professional

REGISTRATIONS

State of AZ, AR, GA, CO, IL, IN, MS, MI, MN, MO, NY, PA, VR, WY, TX,
KA, NJ, NY, CA, NC, MD, NM, TN, District of Columbia

AFFILIATIONS

American Institute of
Architects (AIA)

Grace Hill Settlement
House, Past Board Member

John Mueller is JEMA's managing partner. He has practiced architecture in Missouri and New York since 1989 and has managed and delivered many complex projects. John works to uphold the firm's vision of serving our clients through innovative design, professional collaboration and a commitment to sustainability. He is a catalyst for the firm's dedication to design excellence and the delivery of integrated, innovative and intelligent design solutions. He believes in the direct connection between architecture and quality of life. Mr. Mueller also has extensive experience with municipal and mission critical projects throughout the United States. He works closely with clients and consultants to create functional, well designed buildings that are timeless in nature. John will be the partner-in-charge and lead designer.

RELEVANT EXPERIENCE

- City of Ballwin Police Station- Ballwin, MO
- City of Ballwin Council Chambers- Ballwin, MO
- City of Glendale Fire Station- Glendale, MO
- City of Glendale City Hall & Police Station- Glendale, MO
- Northeast Ambulance & Fire Protection District
- Frontenac Municipal Complex- Frontenac, MO
- Maplewood Fire & EMS HQ- Maplewood, MO
- Ferguson Fire Department- Ferguson, MO
- Ferguson Police & Municipal Court- Ferguson, MO
- Valley Park Fire Stations 1, 2- Valley Park, MO

- Lake St. Louis Fire Station- Lake St. Louis, MO
- City of St. Charles Fire Stations 1, 2, 3, 5- St. Charles, MO
- City of St. Charles Police Station- St. Charles, MO
- Beaufort Leslie Fire Protection District- Beaufort, MO
- Webster Groves Fire Station 2, Webster Groves, MO
- Crestwood Government Center- Crestwood, MO
- Cape Girardeau Fire Station- Cape Girardeau, MO
- Affton Fire Station Evaluation- Affton, MO



Jon Emert, Partner
LEED AP

Role: Project Manager
Location: St. Louis Office

28 MUNICIPAL
PROJECTS

20 years of Experience
12 years with JEMA

EDUCATION

Bachelor of Architecture
University of Kansas

School of Architecture
University of Copenhagen

CERTIFICATION

LEED Green Accredited
Professional

SAVE Certified-Structural
Assessment and Visual
Evaluation for SEMA

AFFILIATIONS

US Green Building Council-St. Louis Regional Chapter

With two decades of experience, Jon has led the technical delivery of some of the largest and most complex projects in the St. Louis region. He is adept at the detailing and delivery of projects ranging from a few thousand to over 300,000 square feet. He has worked extensively with many Fortune 500 companies and city governments in delivering successful projects throughout the region. He is a self-confessed perfectionist and is committed to technical excellence. Every project at JEMA sees direct involvement from Jon, from the earliest design concepts to hands-on resolution of construction details. He is passionate about the firm's commitment to sustainable design practices and delivering projects that enhance the human experience through the built environment. Jon also oversees the implementation of technology solutions at JEMA. Jon assures project schedules are met, budgets are maintained and all work is performed to the highest level of quality.

RELEVANT EXPERIENCE

- City of Ballwin Police Station- Ballwin, MO
- City of Ballwin Council Chambers- Ballwin, MO
- City of Glendale Fire Station- Glendale, MO
- City of Glendale City Hall & Police Station- Glendale, MO
- Northeast Ambulance & Fire Protection District
- Frontenac Municipal Complex- Frontenac, MO
- Maplewood Fire & EMS HQ- Maplewood, MO
- Ferguson Fire Department- Ferguson, MO
- Ferguson Police & Municipal Court- Ferguson, MO
- Valley Park Fire Stations 1, 2- Valley Park, MO
- Lake St. Louis Fire Station- Lake St. Louis, MO

- City of St. Charles Fire Stations 1, 2, 3, 5- St. Charles, MO
- City of St. Charles Police Station- St. Charles, MO
- Beaufort Leslie Fire Protection District- Beaufort, MO
- Webster Groves Fire Station 2, Webster Groves, MO
- Crestwood Government Center- Crestwood, MO
- Cape Girardeau Fire Station- Cape Girardeau, MO
- Affton Fire Station Evaluation- Affton, MO
- O'Fallon Public Safety Facility- O'Fallon, IL*
- Carbondale Public Safety Facility- Carbondale, IL*

**projects completed while at another firm*



Steve Hoover, Principal
AIA, LEED AP

Role: Project Architect
Location: St. Louis Office

17 MUNICIPAL
PROJECTS

23 years of Experience
8 years with JEMA

EDUCATION

Bachelor of Architecture: Washington University in St. Louis

CERTIFICATION

LEED Accredited Professional

REGISTRATIONS

MO

AFFILIATIONS

American Institute of Architects (AIA)

With over 20 years of experience as project architect and manager, Steve is responsible for ensuring that the design direction and client goals are being met through all phases of each project. His management ensures that projects are completed on schedule and at the estimated cost. He collaborates with the design team to make certain that all projects meet the highest standards of quality in regard to design, detailing, and construction documentation. His attention to detail and technical expertise bring a high standard of quality control to all projects he is involved in.

Steve is a LEED accredited professional with the United States Green Building Council and a registered architect in Missouri.

RELEVANT EXPERIENCE

- Northeast Ambulance & Fire Protection District
- Maplewood Fire & EMS HQ- Maplewood, MO
- Ferguson Fire Department- Ferguson, MO
- Ferguson Police & Municipal Court- Ferguson, MO
- Valley Park Fire Stations 1, 2- Valley Park, MO

- Beaufort Leslie Fire Protection District- Beaufort, MO
- Crestwood Government Center- Crestwood, MO
- Cape Girardeau Fire Station- Cape Girardeau, MO
- Affton Fire Station Evaluation- Affton, MO

**Lara Thiel**
NCIDQ, LEED APRole: Interior Designer
Location: St. Louis Office9 MUNICIPAL
PROJECTS32 years of Experience
1 year with JEMA**EDUCATION**

Associate of Applied Science / Interior Design, St. Louis Community College

CERTIFICATION

LEED Accredited Professional

With more than 25 years of experience, Lara is an exceptionally experienced and talented interior designer and project manager. She is passionate about helping others visualize their ideal live and work environments. She skillfully creates a design and implementation plan to bring that vision to life. Lara has broad experience with many project types - workplace, education, municipal, residential and hospitality. Her innate ability to see the big picture while having a keen sense of the details needed help to ensure a successful project.

RELEVANT EXPERIENCE

- Valley Park Fire Stations 2- Valley Park, MO
- City of St. Charles Fire Stations 1, 2, 3, 5- St. Charles, MO
- City of St. Charles Police Station- St. Charles, MO
- Webster Groves Fire Station 2, Webster Groves, MO
- Brentwood Fire- Brentwood, MO *
- Ladue City Hall- Ladue, MO *
- Kirkwood Public Library- Kirkwood, MO *
- Kinetic Park- St. Charles, MO
- Ballwin Police- Ballwin, MO

projects completed while at another firm*Chip Houser, Principal**
AIARole: Quality Control
Location: St. Louis Office16 MUNICIPAL
PROJECTS30 years of Experience
8 years with JEMA**EDUCATION**Bachelor of Architecture
University of KansasMaster of Fine Arts - Creative Writing
University of Missouri - St. Louis**REGISTRATIONS**

MO, TX

AFFILIATIONS

American Institute of Architects (AIA)

Chip studied architecture at the University of Kansas and acted as a teaching assistant while in the architectural studies program in Spannocchia, Italy. He has more than two decades of experience with various firms throughout the country, as well as internationally with the firm Stankovic + Bonnen Architekten in Berlin, Germany. Chip has a wide range of experience in both architecture and interior design. Throughout his career he has worked in the planning, design, and construction of commercial, residential, and mixed-use projects in the United States and Europe. At JEMA, Chip is both a project manager and a project architect.

RELEVANT EXPERIENCE

- City of Ballwin Police Station- Ballwin, MO
- City of Ballwin Council Chambers- Ballwin, MO
- City of Glendale Fire Station- Glendale, MO
- City of Glendale City Hall & Police Station- Glendale, MO
- Northeast Ambulance & Fire Protection District
- Frontenac Municipal Complex- Frontenac, MO
- City of St. Charles Fire Stations 1, 2, 3, 5- St. Charles, MO
- City of St. Charles Police Station- St. Charles, MO
- Beaufort Leslie Fire Protection District- Beaufort, MO

**Adolfo Maalindog**
NCARBRole: Project Designer
Location: St. Louis Office22 MUNICIPAL
PROJECTS7 years of Experience
7 years with JEMA**EDUCATION**Bachelor of Design in Architecture
University of FloridaMaster of Architecture
Washington University in St. Louis**AFFILIATIONS**

National Council of Architectural Registration Boards (NCARB)

Adolfo initially received architecture training at the University of the Philippines. He then traveled the world proudly serving in the United States Navy. Upon completing two tours in the military he continued his educational pursuits, earning his Bachelor's Degree from the University of Florida and his Master's Degree from Washington University in St. Louis. Adolfo is involved early on in many of JEMA's projects and has made many contributions to the ideation of some of the studio's most recognizable creations. His expertise lies at the intersection of Architecture, Art, and Technology. His recent explorations include employing digital sketching, virtual and augmented reality, and drone photography. Adolfo's keen design sense paired with a mastery of 3D modeling and architectural visualization have been pivotal in communicating JEMA's innovative design concepts

RELEVANT EXPERIENCE

- City of Ballwin Police Station- Ballwin, MO
- City of Glendale City Hall & Police Station- Glendale, MO
- Valley Park Fire Stations 1, 2- Valley Park, MO
- Lake St. Louis Fire Station- Lake St. Louis, MO
- Beaufort Leslie Fire Protection District- Beaufort, MO
- Webster Groves Fire Station 2, Webster Groves, MO
- Crestwood Government Center- Crestwood, MO
- Affton Fire Station Evaluation- Affton, MO

DAVID MASON + ASSOCIATES STRUCTURAL & CIVIL
ENGINEERING

Location: St. Louis Office



David Johnson, P.E., Civil Design Principal

Role: Civil Engineer

EDUCATION

Bachelor of Science-Civil Engineering,
University of Missouri Rolla

REGISTRATIONS

Professional Engineer: MO, IL, AZ, OK, IN

AFFILIATIONS

American Society for Civil Engineering (ASCE)
Environmental & Water Resources Institute (EWRI)



Kara Marfell, P.E., Senior Project Engineer

Role: Structural Engineer

EDUCATION

Bachelor of Science-Civil Engineering,
University of Missouri Rolla
Master of Science-Civil Engineering,
University of Missouri

REGISTRATIONS

Professional Engineer: MO, IL

DMA RELEVANT EXPERIENCE

- Chouteau Greenway Master Plan- St. Louis, MO
- Jefferson Barracks Joint Armed Forces Reserve Center- St. Louis, MO
- City Arch River Central- St. Louis, MO
- Forest Park Master Plan Implementation- St. Louis, MO
- Branson's Nantucket New Clubhouse- St. Louis, MO
- Grant's View Branch Library- St. Louis, MO
- Busch Stadium- St. Louis, MO

IMEG MECHANICAL, ELECTRICAL,
& PLUMBING ENGINEERING

Location: St. Louis Office



Zach Carter, P.E., LEED AP BD+C

Role: Electrical Engineer

11 years of Experience

6 years with IMEG

LEED Accredited Professional BD+C

EDUCATION

Bachelor of Science-Architectural Engineering,
Missouri University of Science & Technology

REGISTRATIONS

Professional Engineer: MO, IL

AFFILIATIONS

United States Green Building Council (USGBC)
Gateway Chapter



Matt Kahn, P.E., LEED AP BD+C

Role: Mechanical Engineer

18 years of Experience

9 years with IMEG

LEED Accredited Professional BD+C

EDUCATION

Bachelor of Science-Mechanical Engineering
University of Missouri

REGISTRATIONS

Professional Engineer: MO, IL

AFFILIATIONS

ASHRAE

AWARDS

Building St. Louis Award 2020-St. Louis County Meramec Valley Library
ASHRAE St. Louis Chapter Technology Award 2020 & ACEC Missouri Excellence in
Engineering Grand Award 2021-Washington University January Hall Renovation

IMEG RELEVANT EXPERIENCE

- St. Louis County Parks, Creve Coeur, MO, 500-sf Creve Coeur Park New Restroom Building
- City of University City, University City, MO, 48,000-sf Annex, Connector, and Trinity Buildings Renovation
- City of Richmond Heights, Richmond Heights, MO, 1,200-sf A.B. Green Park Pavilion Renovation
- Gates Foundation, St. Louis, MO, Gates Office Tenant Improvement
- CSA Public Buildings Service, St. Louis, MO, 10,000-sf Thomas Eagleton Federal
- Courthouse Elevators (15) Renovation/Modernization - Design/Build
- Millstadt Library Board of Trustees, Millstadt, IL, 9,800-sf New Library
- Missouri Botanical Garden, St. Louis, MO, 91,700-sf New Visitor Center, Pursuing LEED Gold
- National Park Service, St. Louis, MO, 87,000-sf Old Courthouse Phase 2 Renovation
- St. Louis County Library District, St. Louis, MO, 80,000-sf New Library Headquarters and Genealogy Center
- U.S. General Services Administration - St. Louis, MO, 800-sf Thomas Eagleton
- Federal Courthouse Interview Rooms Renovation
- U.S. General Services Administration - Kansas City, St. Louis, MO, 800-sf
- Thomas Eagleton Courthouse Secure Processing Room and Vestibule Renovation
- City of Collinsville, Collinsville, IL, 7,800-sf Collinsville Gateway Center Conference Rooms Renovations



**LANDSCAPE
ARCHITECTURE**

Location: Eureka Office



Kristy DeGuire, PLA, President

Role: Landscape Project Designer
18 Years of Experience
10 Years with DG2

EDUCATION

Kansas State University: Bachelor of Arts Degree
in Landscape Architecture

REGISTRATIONS

Professional Landscape Architect (PLA)- MO

AFFILIATIONS

American Society of Landscape Architecture (ASLA)



Derek Don

Role: Landscape Project Manager
15 Years of Experience
1 Year with DG2

EDUCATION

Bachelor of Science- Landscape Architecture,
Purdue University

AFFILIATIONS

American Society of Landscape Architecture (ASLA)

DG2 RELEVANT EXPERIENCE

- *Fogerty Park Master Plan/Phase 1; University City, MO*
- *Watershed Nature Center Master Plan, Phase 1; Edwardsville, IL*
- *Frontenac Municipal Complex; Frontenac, MO**
- *Ballwin City Hall; Ballwin, MO*
- *University City Police Headquarters; University City, MO*
- *Kirkwood City Hall; Kirkwood, MO**
- *Marion County Community Justice Campus; Indianapolis, IN**
- *St. Louis County Courts Building- St. Louis, MO*
- *Ballwin Police Station- Ballwin, MO*
- *Marion County Community Justice Center*- Marion County, MO*
- *Kirkwood City Hall*- Kirkwood, MO*
- *Hammond Federal Courthouse*- Hammond, IN*
- *Michigan City Fire Stations (5)*- MI*
- *Carmel Public Library*- Carmel, IN*
- *Michigan City, City Hall*- Michigan City, MI*
- *Porter County Government Complex*- Porter County, IN*

(*Completed while at another firm)

WORKLOAD & CONTINGENCY PLAN

ABILITY TO STAFF & PERFORM

JEMA guarantees that the personnel dedicated to the Creve Coeur Government Center project have the time, focus, and commitment to complete the project competently and expeditiously. If a JEMA team member becomes unexpectedly unavailable, JEMA will provide a similarly competent and experienced person for replacement. David Mason + Associates, IMEG, and DG2 also confirm that their proposed team members have the talent and capacity to successfully execute this project.

CONTINGENCY PLAN

If a JEMA team member becomes unexpectedly unavailable, JEMA will provide a similarly competent and experienced person for replacement with approval from the client.

LEED ACCREDITED PROFESSIONALS



The JEMA team assigned to this project consists of LEED Accredited Professionals- John Mueller, Jon Emert, Steve Hoover, and Lara Thiel. Zach Carter and Matt Kahn with IMEG's team are also LEED Accredited Professionals.



04

PROJECT UNDERSTANDING & APPROACH



Project Understanding

Project Approach

Project Schedule

Regulatory Submissions

PROJECT UNDERSTANDING

JEMA has worked extensively with both existing building renovations and ground-up new construction. The decision of whether to renovate or build new requires in-depth analysis of the site, building structure, utility infrastructure, aesthetics, functionality, and operational continuity. We are confident our team of experts will lead you and provide you the best 50 year solution for the City of Creve Coeur.

PROJECT APPROACH



THOROUGH DATA COLLECTION & DOCUMENTATION

JEMA will conduct a full field verification of all existing site conditions.

JEMA will conduct interviews with the key stakeholders of the Creve Coeur Government Center Project in order to confirm the project scope and ensure desired functional needs are met.

JEMA will investigate all current codes & regulations to ensure project is fully code compliant and meets the standards of all authorities having jurisdiction.

WE ARE COLLABORATORS. WE BELIEVE IN THE POWER OF LISTENING

Our way is to work **TOGETHER** with our clients to best analyze their various space needs. JEMA and our consultant team have experience and expertise in the design and construction of both renovations and ground-up municipal facilities. Being experts, however, is only part of executing a successful project for you. Our collaborative process of dreaming and working together is the other key to success.

Today's facilities must work hard for the institution - fulfilling many different roles and functions. Your Government Center should embrace best practices and emerging trends as well as employ the latest technology while still being flexible, open and inviting to the community.

MANAGEMENT PROCESS THROUGHOUT THE PHASES OF DESIGN

Our approach to engaging you begins with our Programming Process. This is the phase where we **ASK, LISTEN, and UNDERSTAND**. We begin with questionnaires specifically tailored to your project. We also personally interview each of the key stakeholders who have a role in the project. Then we bring everyone together for a workshop. Our workshops are extremely successful because we bring everyone together (in person or virtually) where team chemistry is created, ideas are generated, and issues are flushed out and worked through. In this workshop, we present our programming information, ideas, sketches, and floor plans and engage with you. We will then create a number of preliminary options to present back to you. At that point, we will develop a **Conceptual Design** package that includes floor plans, 3D renderings of the space, and a cost estimate.

After the conceptual design is complete, we will begin **Design Development and Construction Documents** to complete the design phase. During the design phase, we will continue to meet with you to review our progress and make sure we are on the right track in terms of design, budget and schedule. We then move to the **Construction phase**.

Once the bidding process is complete, we begin the **Construction Administration** phase. During this phase, for the entire duration of the construction period, we will visit the site and attend construction meetings to ensure the project is being built according to the design documents. We will be with you and the project the entire way until the final punch-list and close-out.

DEPLOYMENT OF UNIQUE CAPABILITIES & INNOVATIVE APPROACHES

JEMA utilizes state-of-the-art 3D database modeling software called Building Information Modeling (BIM). By using this software, we literally build the entire project digitally before it is physically built. We build all the components of the building, including the Mechanical, Electrical, Plumbing and Fire Protection systems along with the structure, walls, ceilings lights, doors, windows and all the site elements. We take the time and effort to digitally build your whole building and site for several reasons.

- We want to show you the design as realistically as possible in the early stages of the process. We want to make sure we render the building exactly as it will appear in reality for your review. There will be no “surprises” as the new building or addition goes up.
- We use this digital database to allow for greater collaboration with the owner’s representative on constructability and cost estimation. We are able to calculate the precise square footage of nearly all building materials, thereby making the cost estimate more exact. “Tricky” construction issues will be fully explored digitally before construction begins.
- We are able to discover conflicts and coordination problems before they become a problem in the field. The Architecture, Structure, Mechanical, Electrical and Fire Protection systems are all modeled and the software indicates to us where the conflicts are.
- Lastly, we use the digital modeling during construction to resolve any issues or questions that the General Contractor or their sub-contractors may have by providing a three-dimensional drawing.

PROJECT SCHEDULE

The project schedule of 10 months from Evaluation to completion of Bid Documents is acceptable and JEMA commits our team, our staff, and our partners to achieving this schedule goal.

Council Approval of Firm's Contract	FEB. 2022
Needs Assessment/ Feasibility Study	• Needs Assessment • Confirm Current Program • Finalize Program • Deliver Programming Document for Review • Deliver Feasibility Study and Determination of Renovation vs. New Build MARCH - APRIL 2022
Cost Estimate	APRIL - MAY 2022
City's Decision on Design Direction	JUNE 2022
Design Phase	<u>Schematic Design</u> • Review SD Concept with Creve Coeur • City Council Approval • Planning and Zoning Approvals Process • Finalize Schematic Design Concept • Final Schematic Design Package to Creve Coeur <u>Design Development</u> • Planning and Zoning Approvals Process Completion • Design Development Documents • Final Design Development Package to Creve Coeur <u>Construction Documents</u> • Contract Documentation • Review Revised Interior Finishes, Power/Data Requirements, HVAC Strategy, Plumbing (MEP Engineers, JEMA, Creve Coeur) • 75% Coordination Set to Consultants • 75% Review with Creve Coeur • Receive Final Documents from Consultants (Internal QC Review) • Issue Documents for Bid/Permit JULY 2022 - MARCH 2023
Bid & Permit	MARCH - APRIL 2023
Construction Phase	MAY 2023 - JULY 2024

05

RECORD OF PERFORMANCE/ REFERENCES



Record of Past Performance

References

Professional Liability Insurance Claims

RECORD OF PERFORMANCE

JEMA works closely with the client from the earliest stages of the project to **develop a clearly defined budget**. This budget serves to provide direction as the team goes through the process of design.

Throughout different milestones, the entire team takes pause points to review the budget and see how we can further refine it, pinpointing specific areas where steps can be taken to "sharpen the pencil" and **maintain alignment in budget and schedule**.

ON TASK ON TIME

We are confident that our expertise in municipal design will allow us to deliver an assessment that meets your programmatic goals, on budget and schedule.

• Valley Park Fire Station 2 - Valley Park, MO:

PROJECT BUDGET: \$4.5M

ACTUAL PROJECT COST: \$4.2M

\$300,000 under budget

• Webster Groves Fire Station 2 - Webster Groves, MO:

PROJECT BUDGET: \$6.3M

ACTUAL PROJECT COST: \$6.1M

\$200,000 under budget

• Ranken Technical College - St. Louis, MO:

PROJECT BUDGET: \$5.4M

ACTUAL PROJECT COST: \$5.4M

on budget

• Glendale Fire Station - Glendale, MO:

PROJECT BUDGET: \$8.68M

ACTUAL PROJECT COST: \$8.67M

\$10,000 under budget

• Ranken Technical College - Wentzville, MO:

PROJECT BUDGET: \$5.3 M

ACTUAL PROJECT COST: \$5.1M

\$200,000 under budget

• Ferguson Fire Station - Ferguson, MO:

PROJECT BUDGET: \$5.8M

ACTUAL PROJECT COST: \$5.4M

\$400,000 under budget



LAST FIVE CLIENT REFERENCES

St. Charles City
Larry Dobrosky
Director of Administration
636-949-3262

Valley Park Fire Station
Chief Jim Polk
jpolk@vpfire.org

Webster Groves Fire Station
Chief Tom Yohe
314-963-5345

Beaufort-Leslie Fire Protection
District
Chief Terry Feth
314-971-3443

City of Glendale City
Jaysen Christensen
Current Frontenac City
Administrator
314-373-6503

PROFESSIONAL LIABILITY INSURANCE CLAIMS

JEMA has had no professional liability insurance claims nor has it had any civil or criminal claims, judgment or suits against the firm within the past 10 years.

06

PROXIMITY AND FAMILIARITY

Proximity and Familiarity

Missouri Firms: A Homestate Team

PROXIMITY AND FAMILIARITY

We are **rooted in the region**. Our team has worked with municipalities across the region to assess their needs and plan for the future. This includes evaluation of sites, facilities, systems, design, and functionality. Our due diligence has produced successful outcomes ranging from strategic master plans to ground-up construction.



MISSOURI FIRMS: YOUR HOMESTATE TEAM

The JEMA - DAVID MASON + ASSOCIATES - IMEG - DG2 team is comprised of **Missouri firms** with each of the individual team members located in local offices.



07

MBE / WBE
INCLUSION



Commitment to Diversity

OUR COMMITMENT TO DIVERSITY

JEMA's design goal is to create places that promote and enhance our social, economic, and environmental wellbeing. We work with the knowledge that we are all fundamentally connected, and that what we do affects everyone and everything else on a regional and global scale.

We're passionate about creating places that promote our values of equity, diversity, and inclusivity. Diverse ideas, perspectives, and backgrounds contribute to a stronger, more creative team that solves problems faster and delivers better results. Diversity, equity, and inclusion are paramount to our work as we seek to bring JOY to our clients and our community. JEMA is **comprised of team members with diverse backgrounds who have studied and worked across the U.S.A. and around the world.**



We have partnered with **DAVID MASON + ASSOCIATES, a certified Missouri MBE firm** and **DG2, a certified WBE/ DBE firm.** Additionally, **IMEG has a long history of teaming with minority and disadvantaged businesses to deliver successful services** for a wide variety of owners and project types including both public contracts and private companies.

08

SUSTAINABILITY



LEED Accredited Personnel

LEED Project Experience

LEED ACCREDITED PROFESSIONALS



John Mueller



Jonathan Emert



Steve Hoover



Lara Thiel



Zach Carter



Matt Kahn



JEMA is a strong advocate of sustainable practices in design and construction. We believe that sustainability begins within our own office. In response, JEMA has created a dedicated “Green Team” that implements environmentally-friendly initiatives for our studio and projects. We make sure that we are conscientious about the decisions we make for ALL of our design endeavors.

We are proud to have worked on a number of LEED Certified Projects and to partner with firms that value sustainability as much as we do. The Maplewood Fire Station is **the first and only LEED Silver Certified fire station** in the area. Wydown Middle School is LEED Gold Certified and HD Supply is LEED Certified.

LEED PROJECTS

JEMA



Maplewood Fire Station - LEED Silver Certified (JEMA)



Wydown Middle School - LEED Gold Certified (JEMA)



HD Supply - LEED Certified (JEMA)

IMEG

- New Intermodal Facility- City of Ames, IA LEED Certified
- CA Highway Patrol (CHP), San Diego, CA New Border Division Replacement Facility, LEED Gold
- City of Des Moines, IA - 215,000-sf Municipal Service Center Including Fleet Maintenance, Pursuing LEED Certification
- City of Des Moines, IA - 50,000-sf New Fire Station, LEED Silver
- City of Clayton, MO - 78,000-sf Conversion to Police Headquarters, LEED Platinum
- City of El Segundo, CA - 13,957-sf Fire Station No. 2, LEED Gold
- City of Evanston, IL - New 14,000-sf Fire Station #5, LEED Gold
- City of Houston, TX - Permitting Center, Refurbish Existing 4-story, 187,000-sf Warehouse, LEED Gold
- City of Houston, TX - Julia Ideson Library Additions and Renovations, LEED Gold
- City of Los Angeles, CA - Metropolitan Jail, LEED Silver
- City of Los Angeles, CA -Fire Station #4, LEED Certified
- City of Los Angeles, CA -Pico/Union Fire Station #13, LEED Gold
- City of Los Angeles, CA -Police Headquarters Building, LEED Gold
- City of Los Angeles, CA -Pico/Union Fire Station #21, LEED Certified

09

CONCLUSION





JEMA

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St. Louis, MO

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www.jemastl.com



DAVID MASON
+ ASSOCIATES

800 S. Vandeventer Ave.
St. Louis, MO 63110

P: 314-534-1030
www.davidmason.com



IMEG

15 Sunnen Drive, Suite 104
St. Louis, MO 63143

P: 314-951-2538
www.imegcorp.com

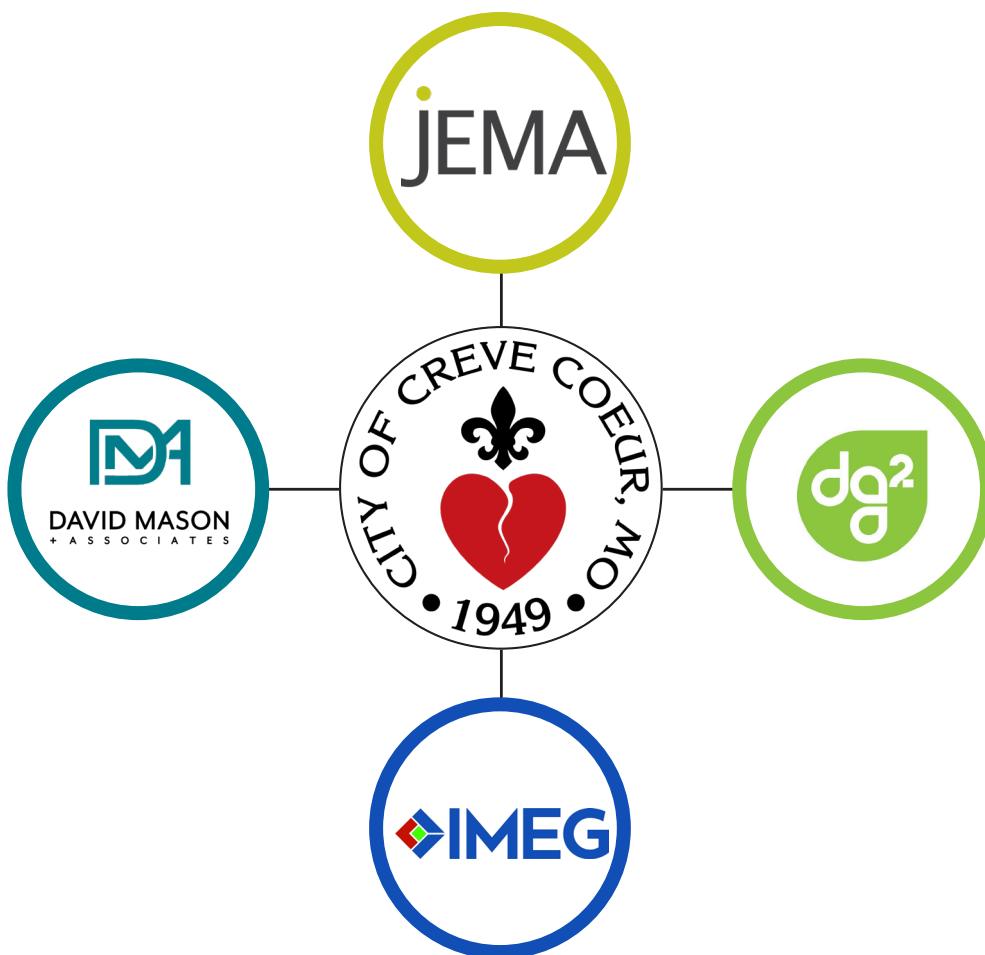


dg² DG2 Design
Landscape Architecture

4835 MO-109,
Suite 102 Eureka, MO 63025

P: 636-549-9007
www.dg2design.com

WE HAVE ASSEMBLED A TEAM OF **EXPERTS** WITH THE EXPERIENCE TO DELIVER THE BEST SOLUTION THAT IS **UNIQUELY CREVE COEUR** AND THAT IS **ON BUDGET** AND **ON SCHEDULE**.



WITH OUR **EXTENSIVE EXPERIENCE** & OUR TEAM OF EXPERTS, JEMA IS THE **NUMBER ONE** MUNICIPAL ARCHITECTURE FIRM IN THE MIDWEST.

