CITY OF ROYAL OAK, MICHIGAN
REQUEST FOR PROPOSAL
NORMANDY OAKS AND CENTRAL PARK LANDSCAPE ARCHITECTURAL,
ENGINEERING AND CONSTRUCTION SERVICES
RFP-SBP-RO-17-034

NORMANDY OAKS PARK AND CENTRAL PARK REQUEST FOR PROPOSAL

May 10, 2017 | Prepared for: The City of Royal Oak | Prepared by: livingLAB

livingLAB: a collaborative design studio

4444 second avenue
detroit, michigan 48201
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www.livingLABdetroit.com

CITY OF ROYAL OAK, MICHIGAN
REQUEST FOR PROPOSAL
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TO: FINANCE DEPARTMENT, CITY OF ROYAL OAK, MI

The undersigned hereby offers to furnish to the City of Royal Oak all materials and/or services at the prices quoted in conformance with the city's specifications described herein:

The firm certifies that this proposal is in complete compliance with all specifications except as specifically listed on the following lines (use additional sheet if necessary):

Please see Services Not Included and Project Assumption sections of RFP for more details

PROPOSAL FIRM FOR: 90 (LENGTH OF TIME-90 DAYS MINIMUM)

LEGAL IDENTIFICATION

NAME OF COMPANY: livingLAB, LLC

COMPANY ADDRESS: 4444 Second Avenue, Detroit, MI 48201

PHONE NO.: 313-974-7602 FAX NO.: EMAIL: jason@livinglabdetroit.com

PROPOSAL PREPARED BY: Jason Macdonald Landscape Architect + Principal
(Typed Name of Individual) (Title)

AUTHORIZED SIGNATURE:

DATE SUBMITTED: May 10, 2017

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Cost proposals shall include all anticipated costs for services including, but not limited to external costs (customer surveys, external research, travel, etc.), and shall include a not to exceed fee total for the proposed NORMANDY OAKS LANDSCAPE ARCHITECTURAL, ENGINEERING AND CONSTRUCTION SERVICES.

Please attach a detailed itemization of all costs for services in the scope of work and deliverables.

NOT TO EXCEED FEE TOTAL
FOR NORMANDY OAKS AND CENTRAL PARK LANDSCAPE ARCHITECTURAL, ENGINEERING AND CONSTRUCTION SERVICES:

NORMANDY $ 374,570.00

CENTRAL PARK $ 702,770.00

If any additional services are proposed by your company, please outline these and their costs as separate from those services originally requested.

ADDITIONAL PROPOSED SERVICES:

_____
_____
_____
_____
_____
_____
_____

livingLAB:
a collaborative design studio

May 10, 2017

City of Royal Oak
211 S Williams Street
Royal Oak MI 48067

RE: Normandy Oaks and Central Park Landscape Architectural, Engineering and Construction Services - Request for Proposal

Mr. Jeff McCormick:

What an exciting year 2017 will be for the City of Royal Oak! Two projects that may be Royal Oak's biggest park and public space projects in decades are poised to move forward after years of anticipation. These projects will no doubt leave a lasting legacy and be enjoyed by the residents, and visitors alike, for generations to come.

Two of livingLAB's partners (myself and Leah Groya) are Royal Oak residents. We have been attending Parks and Recreation meetings, Task Force meetings, Council meetings, and of course, reading our Royal Oak Review - all in an effort to stay abreast of what might be the next step in the developement of these high profile public spaces.

We both voted in favor of selling off the 10 acres of Normandy Oaks Golf Course to support the betterment of Royal Oak Parks as a whole. We both have young families growing up here in Royal Oak and exploring Royal Oak parks. I have lived here my entire life, and I volunteer as a head coach for my daughter's and son's U8 and U6 ROYSA soccer teams (coincidentally, with games played at Normandy Oaks). We have spent many hours discussing our opinions on how a "central park" in heart of the Civic Downtown could be the final piece of the puzzle that ties the entire Downtown together with respet to traditional planning, pedestrian connectivity, useable open space, and the creation of a true civic center found only in the most notable traditional downtowns.

We are committed to the City and these projects - not only because we hope to work on the projects as designers and planners, but, because the pressure is on from our friends, family members and children to ensure that these projects are community driven and result in community assets that we all can be proud of!

We strongly believe that the development of Normandy Oaks Park and Central Park must be community driven and it must balance the need for desired physical improvements with budget realities. We are also particularly excited to work with our strategically selected team members to explore opportunities that demonstrate how we can reduce the amount of storm water that enters our sewer system with retention, detention and green infrastructure techniques bringing added value to the City.

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48201

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www.livingLABdetroit.com

We specialize in using focused community input to guide the planning and design of projects like Normandy Oaks Park and the Downtown Central Park. Our unique mobileLAB© process is an engaging and fun way for our team to become a part of your community and help facilitate the development of a innovative, contextual, beautiful and exciting park for all users! We look forward to the opportunity to speak with you more about the project and executing a vision for both Normandy Oaks Park and Central Park. Should you have any questions please do not hesitate to contact me at (313) 974-7602 or jason@livinglabdetroit.com.

Respectfully Submitted,

livingLAB
Jason Macdonald, PLA, ASLA
landscape architect + principal

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WHY livingLAB?

BACKGROUND.

livingLAB is a collaborative landscape architecture and planning studio focused on community-driven design and project realization. We find ourselves focused on the core practices of open space planning and landscape design; pedestrian and bike safety and mobility; community engagement and collaboration; and urban design underpinned with the sustainable practice of green infrastructure. We are inspired by the outcomes of our efforts in these core areas because of their direct impact on community.

Our studio, located within the sustainable professional community of the Green Garage in Midtown Detroit, is always abuzz with creative energy. On any given day, you will find us discussing new ideas, developing concept sketches together at the working table, or brainstorming our next big idea over a big cup-o-joe. We believe that the nature of our open-format design studio, coupled with a dedication to community outreach and engagement, supports better project outcomes through collaboration.

PHILOSOPHY.

Our studio and design practice are based on the following principles:

- **Creativity** must be at the core of everything we do.
- Mind the triple bottom line. We place equal value on being **profitable**; being **socially responsible** and supporting our communities; and implementing **sustainable** environmental practices.
- Support a **flexible, team approach** to every project. Hey, we understand and appreciate that each community, neighborhood and project is different!
- Bring a broad range of services to the table to help our clients meet their goals. And if we don't specialize in it, we find **partners** that do.
- **Value the relationship.** Be that with a client, collaborator, stakeholder or resident.
- **Love what we do.** It will show in our projects and plans.

UNDERSTANDING OF THE PROJECT

Normandy Oaks Park and Central Park are arguably the two most significant public park projects that will be built in Royal Oak in a generation. The design of these two spaces demands an approach that is inclusive of both citizens and stakeholders, while remaining within the constraints of the properties and financing. Equally, or perhaps more importantly, the design team needs to support the City as it identifies active and passive programming goals, strategies for activation and management of the spaces, and long-term physical and programmatic sustainability.

NORMANDY OAKS

There is a tremendous opportunity at Normandy Oaks to work with the community to create a world class park that focuses on environmental restoration, habitat creation and ecological diversity while making improvements that will be inclusive of all ages and abilities. We understand that a number of features have been discussed at the park including a splash pad, play structures, accessible trail systems, soccer fields, and pavilions. We have assembled a team of experts that will assist in accomplishing the Task Force goals and exploring a number of opportunities, including:

Above all, we believe the process at **Normandy Oaks must be focused on engagement and outreach**. This includes understanding the City's goals and framework, understanding the Robertson Brothers project to ensure connectivity, engaging the Task Force, and re-engaging the residents and stakeholder organizations to create a consensus plan for Normandy Oaks.

- A **universally accessible** park – a park where people and families with children of all abilities can come to recreate together. We believe there is tremendous support (including financial support) in the City to accomplish this.
- A **multi-generational** park that will be designed not to offer separate spaces for the old and young, rather to design amenities that will be inviting to all ages and encourage interaction and integration.
- A park to **showcase green infrastructure** and the management of stormwater in a way that looks natural and provides for habitat creation and ecological diversity.

CENTRAL PARK

Strong urban parks are at the core of our most thriving and engaging communities. Royal Oak's desire to plan and design their own, unique Central Park is no doubt an opportunity of a lifetime for the community. livingLAB has had the unique experience of working together with some of the most experienced park programmers in the country during recent years and is thrilled to be able to bring that experience to the table for this project.

Central Park must be rooted in a **365-day-a-year program** that can be managed and maintained by the City and its partners. This includes understanding the City's goals, the DDA's participation, stakeholders and partners, funding mechanisms and capacity to staff and manage an active urban park.

We understand that the park will be the heart of a new Civic Develpment vision including a new City Hall, Police Station, and Mixed-Use private devleopment. In addition it will tie together existing uses such as the Library, Court House, and Farmers Market. The park will be utilized for events and activities. We have assembled a team of experts that will assist in exploring how to develop a program and execute a strong design that meets the needs of the community within the capacity of the City and its partners.

To offer a better understanding of the organization and the roles that each design team member plays in the overall project, livingLAB has developed an organizational chart that can be seen on the opposite page

PROPOSED ORGANIZATIONAL CHART

City of Royal Oak & Advisory Committee

City of Royal Oak Project Manager

NORMANDY OAKS

livingLAB: a collaborative design studio

Project Manager

CENTRAL PARK

livingLAB: a collaborative design studio

Project Manager

LEAD DESIGN TEAM

Civil Engineer

ANDERSON, ECKSTEIN AND WESTRICK, INC.
Engineering Strong Communities

Landscape Architect

livingLAB: a collaborative design studio

Architect

Architect TBD Based on Specific Project Programs and Proposed Park Facilities

SPECIALTY SUPPORT TEAM

Peter Basso/Illuminart
Mechanical and Electrical Engineering, Lighting Design

Drummond Carpenter
Green Infrastructure and Stormwater BMP's Advisor

Natural Community Services (NCS)
Ecological Restoration and Environmental Assessment & Planning

Administrative Controls Management (ACM)
Cost Estimating

Somat Engineering
Geotechnical Engineering and Soils Investigation

Advanced Lighting and Sound
Audio, Video, and Lighting Systems Engineering

Penchura/Kanics Inclusive Design Services
Inclusive Play Area and Playground Design

YOUR LEAD DESIGN TEAM

The Normandy Oaks and Central Park projects will be worked on by a hand-picked team of professionals. Your project managers - Courtney Piotrowski and Jason Macdonald - will be the City's contact people and coordinators throughout the course of your project. Full resumes for the Lead Design Team as well as the Specialty Support Team can be can be found at the back of this proposal.

It should be noted that livingLAB has made a deliberate decision to reserve the selection of a Building Architect until after conceptual planning when a specific style/type of building, program, and management plan are identified for the two parks. livingLAB feels that because of the vastly different nature of each park, architecture will play a very important role in defining the space and character of the park. We would like to have the flexibility in helping the City select an architect with a portfolio that matches the style of any buildings that may be proposed.

COURTNEY R. PIOTROWSKI

project manager + lead designer

livingLAB

Courtney's experience managing urban park development projects serve her well to act as project manager and lead designer for the Central Park phase of the project.

Recognized for her unique ability to balance the art of design, the technical aspects of construction and the emotion of planning public spaces and places; Courtney promotes innovation in design, sustainable construction practices and context-sensitive planning in order to create the best possible outcomes for her clients and the communities she works in.

JASON P. MACDONALD

project manager + lead designer

livingLAB

Jason offers extensive park design experience in his role as project manager and lead designer for the Normandy Oaks Park project.

With a strong background in community engagement, design development, construction plans and detailing, and field experience; he can steer a project from the early stages of design through to the built environment and assure that the stakholder's project goals and visions are achieved. His experience in each aspect of project development, and knowledge of construction are valuable as a part of the collaborative design effort.

LEAH M. GROYA

recreational and urban planner

livingLAB

Leah Groya will be the lead planner and assist the team during the early stages of design development and community engagement. She will ensure that functionality remains and that opportunities for sustainable practices and/or materials are considered. Leah will lead stakeholder engagement and project visioning efforts for both park projects.

Leah is seen as a leader in Parks and Recreation planning in Michigan and uses her lifelong love of the outdoors to focus her professional expertise and career.

LAUREN HOFFMAN

landscape designer + ecologist

livingLAB

Lauren will assist the team throughout the duration of both Normandy Oaks and Central Park projects with natural system assesment, landscape design, habitat restoration, and sustainable design.

She has over 7 years of field experience surveying and monitoring plants, pollinators, macroinvertebrates, threatened and endangered species, invasive species, prairies, natural and mitigation wetlands, and habitat suitability. She has designed natural habitats on corporate and municipal properties, parkland, and residential properties.

LYLE E. WINN, PE

senior project engineer

Anderson, Eckstein and Westrick, Inc.

Lyle will be the lead engineer on the Normandy Oaks and Central Park projects. His experience for more than 34 years focuses on all phases of site development and municipal infrastructure. He is a veteran in dealing with public agencies in regard to obtaining required construction permits and approvals.His responsibilities include project management, planning, design, and building.

His specialty areas of expertise include municipal engineering, sanitary sewer projects, stormwater facilities, water supply systems, and roadway and pedestrian projects.

KEVIN E. ZAUEL, PE

senior project engineer

Anderson, Eckstein and Westrick, Inc.

Kevin will serve as the project Structural Engineer, including all design and materials analysis in each of the park projects

He has more than 25 years of valued engineering experience, and leads AEW's Structural Engineering department. He serves as a lead engineer and project manager for both municipal and private clients on a broad range of projects.

Under Kevin's leadership, AEW's Structural Engineering team can also prepare estimates, scoping studies, investigations and reports, and contract documents and specifi ations, in addition to construction administration services.

JULI SALA, PE, LEED AP-BD+C

licensed engineer

Anderson, Eckstein and Westrick, Inc.

Juli lends a strong background in green infrastructure and sustainable design to the Royal Oak park projects. His five years of experience as a Civil Engineer, and his responsibilities in both project development and management give him a well rounded, detailed approach to municipal projects.

Juli is a LEED Accredited Professional, and brings valuable insight to projects that are engineered and designed to optimize the use of our valuable natural resources, including water, energy, and construction materials.

Juli has signifi cant resources in his software portfolio including AutoCAD, Autoturn, and Civil 3D, Hydrafl ow Storm Sewers, and Excel/Visual Basic.

MICHAEL A. TRUAX, PS

professional surveyor

Anderson, Eckstein and Westrick, Inc.

Mike has more than 13 years of experience, and is the director of AEW's survey department. His responsibilities on this project would include the coordination of field personnel with design staff requirements, along with management and quality control of our survey crews

His specialty areas of expertise are Topographical Surveys, Construction Layout, Boundary Surveys, and Written descriptions. In addition, he is knowledgeable in GPS and robotic surveying for global positioning mapping of large areas.

SPECIALIZED LAB PARTNERS

livingLAB has partnered with a specialized group of professionals to develop a design and technical team that offers a broad knowledge base and strong design and construction background. In the arena of park design, Normandy Oaks and Central Park are two very different animals. We think it is fair to say that what is perfect for one park, will not necessarily be perfect for the other.

With that in mind, livingLAB has assembled a diverse team that can approach the community engagement and design of each park with the confidence that only comes with having the right professionals in place to produce specific, great designs. The partnership is a well rounded team that strategically targets areas of planning and design that are of importance and concern to the City. Areas such as stormwater management, natural ecosystems, and uses for all ages and abilities at Normandy Oaks. Design considerations such as lighting and sound, fit-and-finish materials, spatial scale, and connectivity will prove to be design drivers in Central Park.

A brief introduction to each member of the livingLAB team can be seen on the following pages:

Anderson, Eckstein, and Westrick, Inc. (AEW) advisors will offer the livingLAB Team as-needed engineering services consisting of topographic survey, structural engineering, site-civil design (including grading, paving, utilities and storm water management improvements), traffic engineering, construction administration and observation; structural engineering.

AEW has been providing professional engineering design services for more than 48 years. Their success is attributed to a philosophy of providing their clients a level of service and expertise that exceeds their expectations

AEW is one of the leading municipal engineering firms in southeastern Michigan, representing over 28 communities in five counties. - including The City of Royal Oak.

The **Peter Basso/Illuminart** team will serve as the team's electrical and mechanical engineers, and lighting designers for the project as a whole. PBA/Illuminart play a key role in the collaboration with the rest of the design team to ensure seamless coordination between architecture, site planning, and civil engineering.

PBA possess an in-depth knowledge of best practices that extends across multiple disciplines. Recognized as a leader in mechanical engineering and electrical engineering, Peter Basso Associates is an MEP Consulting Firm at the forefront of application of new technology, and balancing performance with cost.

The professionals at Illuminart have dedicated their careers to the art and science of lighting design. Their designers work to balance energy efficiency and lighting quality, both of which add value to projects and protect the environment and the public good. To this end, Illuminart designers are active members in the U.S. Green Building Council, and endeavor to create cost effective lighting solutions that stimulate and motivate people while conserving natural resources.

Illuminart provides design services to projects locally and globally and is recognized by receiving over 54 International Lighting Design awards.

Drummond Carpenter will serve on the livingLAB team in a senior advisory role in the areas of Green Infrastructure, Water Resources, and Stormwater Best Management Practices (BMPs). Dr. Carpenter has extensive experience in community engagement and planning, and will assist in stakeholder facilitation and education of the community during the public engagement process.

Their expertise and experience allow Drummond Carpenter to assist communities in planning, designing, and implementing green infrastructure; stormwater management plans and monitoring investigations; and implementing sustainability master plans.

Drummond Carpenter specializes in environmental and water resources engineering and applied research. Their expertise ranges from conceptual site design based on community forums to hydrologic modeling of structural green infrastructure for improved sustainable watershed management to monitoring to establish stormwater BMP effectiveness. Stormwater management plans and performance monitoring are necessary for communities who struggle with flood control, water quality issues, and combined sewers.

livingLAB has teamed with **Natural Community Services (NCS)** to provide expert consultation for the Normandy Oaks Park project in the fields of Environmental Assessment/Planning/Design, Ecological Restoration, Native Habitat/Forestry Management, and Green Infrastructure Design. NCS brings a valuable and unique "design-build" perspective to the collaborative design team.

Natural Community Services' environmental scientists and ecologists use best management practices of site assessment, sustainable design/planning, and ecological restoration to enhance and restore wetlands, woodlands, prairies and other environmental, social, and agricultural resources in natural areas and in urban settings. They design solutions for soil-water quality, biodiversity, green infrastructure, public program management and nature interpretation. They also plan/design and or restore conservation buffers, native landscaping and other LID features naturalized detention basins, streambank stabilizations/natural shorelines, natural areas/natural features setbacks, phytoremediation, and create wetlands.

Natural Community Services collaborates with design professional to work on environmental projects for the preservation and restoration of natural resources, urban ecological restoration, water quality controls, and environmental remediation.

Administrative Controls Management (ACM) will play critical support role for the design team throughout the development of the Normandy Oaks Park and Central Park Design Development and Construction Document phases. This important aspect of the pre-construction phases will help create a baseline construction budget that the projects can be continually checked against to maintain constructability.

ACM's innovative approach to preparing an estimate is a combination of experienced in-house construction personnel capable of envisioning and preemptively solving constructability issues. ACM evaluates and researches cost effective solutions for any constructability problem. ACM works with a group of contractors, suppliers, and erectors to verify that their estimates are accurate and dependable.

ACM provides numerous construction cost estimating services including pre-construction estimate types that range from Conceptual (Order of Magnitude), to Opinion of Probable Construction Costs, to Statement of Probable Construction Costs. ACM also performs Design Development and Construction Document level cost estimates as well as Detailed Take-offs and Cost Estimating

As a member of the design and technical team, **Somat Engineering** will be providing expertise in the areas of Geotechnical and Environmental Engineering. Subsurface soil conditions are always unpredictable, and livingLAB will make sure that the most experienced consultants are on the team to perfom soil testing prior to design developement, and that they are available if and when trouble arises during construction.

For more than two decades, Somat has been investigating existing subsurface conditions and materials; assessing risks posed by site conditions; designing earthworks and structure foundations; and monitoring site condition. They also maintain a significant role in delivering design solutions for environmental issues for due care/due diligence. They address issues regarding the proper treatment and disposal of waste, pollution control, and remediation of sites based on risk based corrective action. This could prove to be a valuable asset when dealing with and understanding the unknown underground conditions of properties that haven't been disturbed for decades such as Normandy Oaks.

Somat provides comprehensive Geotechnical Engineering, Civil, Structural, Environmental Engineering Services and Material Testing and Inspection Services for all aspects of their projects. They specialize in subsurface investigations focusing on infrastructure that includes in-situ testing, groundwater evaluation and monitoring, and laboratory soil and rock testing.

livingLAB feels that **Advanced Lighting & Sound (ALS)** will add value to the Central Park design team with their unique expertise and experience in the realm of audio, video, and lighting systems. Civic parks and public plazas often incorporate sound, video, and lighting systems throughout the space. Whether it be theatrical lighting for an amphetheater, or live concert sound systems, it is imperative to have the right people on the team that have an intricate knowledge of these systems and controls.

Advanced Lighting & Sound has a complete engineering team capable of designing and integrating a variety of production solutions, and they are well known for their unique experiences in theatrical and architectural lighting design and control, engineered sound systems, video production and display systems.

ALS was founded in 1983 under the principal of providing integrated sound, lighting and video solutions for its customers, and are considered valuable members of the design team for their extensive knowledge of real world solutions they can bring to problems faced in the design process.

Penchura, LLC & Kanics Inclusive Design Services, LLC are important design team members that will lead the design of play spaces that are more than just play equipment. Their collaborative team of professionals offer the knowledge, experience, resources and working relationships that make them leaders in Inclusive Play design where people of all ages and abilities can recreate together. They create superior, exciting and innovative play environments, as well as an exemplary customer experience comprised of premier products, and exceptional service.

They are leaders in the industry of recreation and play, and often partner with Public and Private Schools, Churches, Park and Recreation Professionals, Developers, Engineers, Architects, Landscape Architects, to improve communities with cutting-edge and exceptional recreational environments.

Learn more about their team and specialized services in the Firm + Team Member Qualifications Section.

APPROACH

PRELMINARY SCOPE

livingLAB always works with clients to personalize our scopes and mold the approach to the needs of the community, the proposed project schedule and goals. So although we have specific thoughts about how we can apply our ideas to your project - the best approach will come by having a one-on-one discussion with you and working together to customize our public engagement and design process.

Both the Normandy Oaks and Central Park projects require collective expertise in landscape architecture, civil engineering, environmental design, and parks programming to be successful. They diverge when it comes to the specific design activities that will be a part of the park: Normandy Oaks focused on discovery play, universal design principles, recreational/sporting spaces, balancing use and access with native landscape restoration, and stormwater management . Central Park will likely focus more on traditional (or non-traditional!) urban park programming such as concerts, ice skating, outdoor dining, movies, food trucks, human-scale foosball, interactive light installations, fire pits and the like! Our team has the experience developing a variety of highly activated parks to assist the city in furthering discussion regarding goals and capacity.

We will accomplish this through the approach outlined on the following pages.

PHASE ONE: SURVEY AND SOILS TESTING

TOPOGRAPHIC SURVEY AND SOILS INVESTIGATION REPORT

Under this task, the project team will obtain topographic information to design the projects. Topographic, utility, tree, and boundary survey will be completed for both sites, and any additional areas requested by the City. We have assumed that topographic survey of the Central Park site will not occur until after the City Hall and associated parking areas have been demolished. We also understand that a portion of Normandy Oaks has been surveyed already and will be shared with the team. Our team will complete survey for the remainder of Normandy Oaks. Sufficient information will be gathered to complete the detailed design at this stage. Specific work efforts are as follows:

- Field topographic survey will be obtained to design and prepare future construction plans for improvements.
- Identify any easements that exist on the property.
- Obtain topographic field data to provide a one-foot contour interval plan. Collected information will include elevation points, storm sewer structures (rim elevations, invert elevations and pipe sizes), sanitary sewer structures (rim elevations, invert elevations and pipe sizes), water main structures, visible franchised utilities, trees (per Royal Oak ordinance), property corner monuments (where located), limits of parking lots, fences, and topographic information in the adjacent roadways and properties where connections are anticipated.
- Process field collected data and create an existing conditions plan for the area slated to be constructed.
- Obtain 9 borings in specific locations at Normandy Oaks, and 5 borings at the Central Park site. These will be conducted at various depths as a preliminary step to determine potential soils constructability issues. Obtain samples in critical areas where drainage is/may be directed, including proposed stormwater infiltration areas. Obtain soil log reports for each sample, along with estimates for infiltration rates. If soils appear to be inconsistent, additional borings can be completed as an additional service.

PHASE TWO: SITE ASSESSMENT

SITE INVENTORY & ANALYSIS

Our research will begin with an analysis of each site and its natural features, context, and assets. Our belief is that the successful development of a place is contingent upon an understanding of the site and its potential. In addition to the traditional site and boundary survey, and tree inventory, our team will complete analysis of the following:

- Site Views (in and out of site)
- Documentation of site opportunities and constraints
- Assessment of soils and conservation areas
- Green infrastructure opportunity assessment
- Evaluation and summary of exisiting utilites and their impact on site development
- Neighborhood connectivity opportunities

In addition to our site analysis, our team will collect all relevant current planning documents, covenants, and maps at a Kick-off meeting with City Staff followed by conversations with key stakeholders. More than simply a catalogue of conditions, our staff will determine the opportunities and constraints that may affect the project(s) goals.

During this phase we will conduct an initial evaluation of existing conditions and possibilities for the parks. We will also conduct up to two project initiation meetings with City Staff, Task Force, and Commissions to finalize the project schedule and work plan, identify key stakeholders, and review existing information. We will present our initial evaluation of existing conditions and possibilities for the parks at this stage of the process. It is understood and assumed that the Normandy Oaks and Central Park projects will proceed on different schedules.

PHASE THREE: CONSENSUS PLAN DEVELOPMENT

PUBLIC OUTREACH/ENGAGEMENT

The public will be a cornerstone of the design phase and act as a collaborative partner. Interested residents will have the opportunity to influence the design of the park(s). The following section describes our specific methods for engaging the public and building consensus.

For both park projects we intend to deploy our on-site participatory mobileLAB©. Much like a doctor would provide house calls, mobileLAB© allows our team to immerse ourselves in a community. We set up shop in a local town hall, vacant storefront or perhaps on site in a tent (weather dependent) and complete our site investigations, stakeholder meetings, public workshops and design in plain sight. All mobileLAB© sessions are open to the community and drop-in engagement is welcome and encouraged. Held over several days, the mobileLAB© **(see proposed schedules)** provides options for participation that are flexible enough to accommodate hectic schedules and allows participants to see the immediate impact of their time and ideas on the final recommendations.

livingLAB will develop Public Engagement Promotion for the events. We typically develop a press release; print posters to be placed in local businesses and activity areas a few weeks in advance; develop invitation letters for focus groups and stakeholder meetings; and work with your social media to promote the events prior to our arrival in town. Once we get into town we place yard signs in front of our location along with things like balloons and sidewalk chalk messages around the area to get people to pop in to events. We've also hosted happy hour for young professionals, lunch for City Officials, and breakfast before businesses open for the day – food and drink is always a motivator!

We know your staff are busy with other responsibilities, so livingLAB simply asks for a project manager from your end to distribute posters, post milestones on your website and social media and coordinate quotes for press releases. We would need you to coordinate a location for the mobileLABs and work with us to schedule meetings with the appropriate community stakeholders and mail out the invitations we've developed (so they come from you – not a consultant).

During the mobileLAB workshops we ask for staff, stakeholders and committee members to participate as much as they are able, knowing that folks are busy with many other things. It is again helpful to have a project manager available from the City for introducing the project to the public during the major meetings and certainly to be available at kick-off.

VISION AND GOALS

livingLAB will conduct a lively town hall meeting at the onset of the mobileLAB©. This event is intended to both inform citizens about the process and to gather input from the wider community on their desires for each park (we anticipate that the processes will likely not run concurrently – rather one mobileLAB for Normandy Oaks and a separate one for Central Park). Our belief is that this type of town hall meeting can be a positive start to a process that brings folks together around common hopes and desires. These feelings will guide the development of a vision statement and goals for the project. This vision will be displayed throughout the mobileLAB© and all future activities and ideas will be tested against it. Thus, ensuring that the resulting designs are faithful to the communities' vision.

STAKEHOLDER PARTICIPATION

While the town hall meeting will focus on broad consensus and vision, the stakeholder meetings will be focused on pointed input. Adjacent residents, athletic leagues, City officials, community groups, teens, seniors, disability advocates, City Staff and broader residents, to name a few, all have important, yet different concerns regarding the park and its development and maintenance. Our team of designers is skilled in consensus building and will conduct topical one-on-one interviews with these various stakeholders. Their input will be valuable in the development of conceptual plans and ideas as our team moves forward giving form to the community's vision and goals.

FOCUS GROUPS

Organized by specific topics such as Playscapes, Parking, Stormwater, Habitat, Active Uses, Programming, Maintenance and Landscape Design our focus group meetings are intended to provide various stakeholders, staff and citizens the opportunity to explore physical design options with the livingLAB team. These sessions will focus on aspects of the final design that are of common interest and/or are hot button issues that need consensus to move forward. By facilitating these sessions our team is able to focus disparate stakeholders on the common vision and the compromise that is needed to move forward in a positive way.

We anticipate an additional level of engagement with the DDA, City, Developer (if included in the project), and Recreation Department regarding the programming for Central Park. Our experience developing highly activated, year-round urban parks gives us a depth of understanding regarding the operational and programming issues that require conversation and consensus prior to engaging the public on design issues. Questions discussed for Central Park may be as follows:

- Who will primarily program events for the park? DDA, City, Recreation Dept., etc.?
- What is the programming budget? How is it anticipated to be funded?
- What level of programming is anticipated for the 4 seasons?
- Let's talk about what programmed activities or infrastructure can support the City Recreation goals and draw folks to the DDA district.
- What is the maintenance and staffing capacity of the City?

WORKING SESSIONS

During the course of the mobileLAB©, our team of designers will be working on design ideas that reinforce the vision and goals for the projects, while addressing stakeholder concerns. We pride ourselves on creating designs that do just that. Our sessions are always open to the public for drop in review and lively discourse. In fact, in many communities we get our best ideas from members of the community. Which is precisely why we developed mobileLAB©. We bring professional experience and creativity to every project, but in the end, it's the knowledge, vision and enthusiasm of the community itself that leads to the most successful projects.

FINAL PRESENTATION

The culmination of the mobileLAB© sessions is a celebratory event. The event, held a few weeks post-mobileLAB, will display the fruits of the community's efforts. All the products of the mobileLAB© will be displayed for comment and review. This format allows participants to follow the process and see first-hand how their input resulted in the draft recommendations. Everything from Vision Statements to plans, sketches and 3D models will be displayed along with comment cards for further input.

DESIGN WRAP-UP

A final wrap-up meeting will be held to discuss the outcomes of the mobileLAB© and the next steps for the Team. We will present the final consensus plan, associated cost estimates and a preliminary look at potential funding mechanisms to expand the projects' construction budget.

DELIVERABLES

- Consensus Master Design Plan and enough explanatory wraparound information to convey essential information about the project and the process.
- Itemized cost estimate for the selected consensus plan.

PHASE FOUR: CONSTRUCTION DOCUMENTS AND BIDDING

DESIGN DEVELOPMENT & PERMIT REVIEW PLANS

Building on the consensus Master Plan, the livingLAB Team will take the project design to the next stage of detail by creating Design Development (DD) plans. This DD plan set will also serve as the tool to finalize materials selection, fit and finish, finalize cost and to prepare preliminary, permit review level planning and engineering plans for the projects. The DD level program is anticipated to include the following tasks:

- site layout and design with dimensions
- selection of paving and/or surface material
- selection of site furniture and other site amenities (benches, tables, chairs, trash receptacles, bike racks, etc.)
- lighting selection and preliminary layout
- preliminary grading plans
- preliminary landscape plan & details
- general project and construction notes
- standard construction details
- installation details for any proposed custom construction items
- design, play piece selection, and color palette for the splash pad areas (if necessary)
- design, play piece selection, and color palette for dry play areas
- erosion control plan and details
- building and site demolition/removal plan coordination
- architectural floor plans, elevations and materials selection (if required)
- preliminary utility plans, calculations, and details as necessary per the DD level plan - including but not limited to: stormwater management computations, electrical, municipal water, mechanical, etc.
- vehicular and heavy-duty pavement cross-sections, plans, and details
- attend (2) two meetings with staff to review proposed DD plans
- DD level cost estimate

SITE PLAN AND SUBMITTAL DRAWINGS

livingLAB and sub-consultants will prepare the necessary plans with information required for review and permit application submittal per each governing agency's requirements. The application(s) will be prepared with the City of Royal Oak identified as the applicant. Some applications will not be submitted until Construction Documents are completed. It is anticipated that the following permits and agency approvals may be required for these projects:

- Planning Commission
- City Council
- Building Department (including electrical, plumbing, and mechanical review)
- Engineering Department
- Oakland County Soil Erosion and Sedimentation Control Permit
- Oakland County Health Department- Spray/Splash Water elements (if necessary)

All fees associated with the applications and obtaining local/county/state permits will be the responsibility of the City of Royal Oak.

CONSTRUCTION PLANS AND SPECIFICATONS

Following the completion and approval of the Design Development plans, livingLAB will prepare signed and sealed construction plans and specifications in a format suitable for use in bidding letting for construction of the project.

The team will develop 30% | 60% | 90% submittal packages for review by the city with the final package addressing the vision identified in the conceptual planning phases. We've built a team that we believe addresses the key needs based on the current city dialog. We anticipate adding an architect to the team, in collaboration with the City, as the conceptual planning phases identify the need for structures. We will select an architect, from a variety of folks we've worked with in the past, with a design style, expertise and portfolio to support the goals as they are identified. The final package of documents will include the following:

Landscape Architecture and Site Design

- Further develop amenity cut sheets and technical specifications
- Selection of materials and finishes for site elements, including furniture, playscapes, signage, surface materials, etc.
- Lighting layout
- Landscape Plan & Details
- Raingarden & Bio-retention Plan & Details (if part of consensus plan)
- Construction Details
- General Notes & Specifications

Civil Engineering

Prepare detailed engineering plans and technical specifications in coordination with the design team for:

- Erosion Control Plan
- Grading Plan
- Layout Plan
- Site Demolition Plan & Notes
- Utility Plan (including storm, sanitary, ,and water service)
- Pavement Plan and Details.

Architecture (if required)

Prepare detailed architectural plans and technical specifications for potential:

- Restroom and Changing Room Facility
- Service Buildings
- Splash Pad Equipment Room
- Shade Pavilions
- Concessions Structure
- Additional Facilities Identified Through Conceptual Planning

Mechanical, Electrical and Plumbing

Prepare detailed service plans and technical specifications in coordination with the design team for:

- Appropriate services (MEP) to support the Splash Pad and Prefabricated Buildings
- General Site Electrical
- Additional Support as identified during the master plan phase.

COST ESTIMATING

Construction cost estimates will be developed by the design team at the 100% Design Development stage, as well as at 60% and again at 90% construction documents.

BID ASSISTANCE AND CONTRACTOR SELECTION

livingLAB team will assist the City in developing the documents for bidding. The livingLAB team will assist the City in developing the request for proposals, attend a pre-bid meeting for the construction project, prepare addenda incorporating questions and providing clarifications as needed, review and evaluate received construction bids and provide a recommendation to the City on the selection of a contractor or contractors. Additionally, our team will review and make recommendations on any alternates presented by the bidders.

PHASE FIVE: CONSTRUCTION

CONSTRUCTION AND CONTRACT ADMINISTRATION

Following the award of the construction contract by the City, the livingLAB team can assist in a variety of capacities during construction. We are structured to assist in a Construction and Contract Administration role reviewing submittals, processing pay applications, inspection assistance and observations, contract modifications, review of shop drawings (from the General Contractor), and record plan documents. **It is assumed that the City will be providing full time inspection on site, with the livingLAB team providing part time support when needed.**

For large projects, as these likely will be, we prefer the city bids them with a Construction Manager on board who oversees the General Contractor. This can save the client money by ensuring the job runs on schedule and with a high level of oversight for adherence to construction documentation.

In order to develop a fee proposal, for Normandy Oaks we have estimated 20 total visits during construction and have assumed construction will take 26 weeks to complete. For Central Park, we have estimated 50 total visits during construction and have assumed construction will take 32-46 weeks. We have also assumed that the project will be managed by a General Contractor

The consultant will:

- Work with the City to identify any necessary permits required to be submitted and obtained by the contractor. Owner is responsible for all permit fees.
- Attend a preconstruction meeting with the contractor and your Staff.
- If a separate testing agency needs to be engaged for this project, we will prepare specifications for quotes.
- Review and approve shop drawings and submittals.
- Coordinate and attend progress meetings on a weekly basis, and oversee field construction on a regular basis to assure construction to specifications. We assume the project will be bid to a General Contractor and that a Construction Manager will be responsible for overall site construction, coordination of field testing and the like.

RECORD SET CONSTRUCTION PLANS

The livingLAB team will review the contractor's red lines and provide record plan document plans reflecting actual field measurements and installation. Plans will be provided to livingLAB in a suitable digital format. livingLAB team will also complete a final walk-thru with the City and the Contractor to prepare a final punch list for correction of incomplete or unacceptable workmanship and/or materials.

CLIENT RESPONSIBILITIES

It is understood that the City of Royal Oak will provide the following information and/or assistance:

- Assignment of a single Project Manager to serve as a liaison between Client and the livingLAB.
- Development of front end bid information and forms identifying the legal and contracting needs of the City
- Construction manager and full-time inspection

PROPOSED TIMELINE

Based on the information provided and our familiarity with these types of projects, we have developed the following proposed schedules for each of the parks. It is understood that while Normandy Oaks is ready to go, there are still some details to be ironed out related to the Central Park project before a construction date can be targeted. A proposed schedule for each park is outlined on the following pages:

NORMANDY OAKS

PROJECT KICKOFF (PER RFP CONTRACT AWARD DATE):	SEPTEMBER 13, 2017
PHASE ONE: SURVEY AND SOILS TESTING	SEPTEMBER 18 - OCTOBER 6, 2017
PHASE TWO: SITE ASSESSMENT	OCTOBER 9 - OCTOBER 27, 2017
PHASE THREE: CONSENSUS PLAN DEVELOPMENT	OCTOBER 30 - DECEMBER 6, 2017
MobileLAB WEEK (to be confirmed with City)	NOVEMBER 9 - NOVEMBER 15, 2017
PHASE FOUR: DD, CD'S, SITE PLAN REVIEW & PERMITTING	DECEMBER 2017 - MARCH 2018
DESIGN DEVELOPMENT PLANS	DECEMBER 11, 2017 - JANUARY 12, 2018
SITE PLAN SUBMITTALS AND REVIEW	JANUARY - FEBRUARY, 2018
CONSTRUCTION DOCUMENTS	JANUARY - MARCH, 2018
PHASE FIVE: BIDDING	APRIL 27, 2018
AWARD CONTRACT	JUNE 15, 2018
CONSTRUCTION (MOBILIZATION - SUBSTANTIAL COMPLETION)	START CONSTRUCTION - JULY

CENTRAL PARK

PROJECT KICKOFF:	TBD
PHASE ONE: SURVEY AND SOILS TESTING	4 WEEKS
PHASE TWO: SITE ASSESSMENT	4 WEEKS
PHASE THREE: CONSENSUS PLAN DEVELOPMENT	6 - 8 WEEKS
MobileLAB WEEK (to be confirmed with City)	1 WEEK - TBD
PHASE FOUR: DD, CD'S, SITE PLAN REVIEW & PERMITTING	5 - 6 MONTHS TOTAL
DESIGN DEVELOPMENT PLANS	1 - 2 MONTHS
SITE PLAN SUBMITTALS AND REVIEW	1 - 2 MONTHS
CONSTRUCTION DOCUMENTS	3 - 4 MONTHS
PHASE FIVE: BIDDING	4 - 6 WEEKS
AWARD CONTRACT	2 WEEKS
CONSTRUCTION (MOBILIZATION - SUBSTANTIAL COMPLETION)	9 - 12 MONTHS

TOTAL ESTIMATED FEES

NORMANDY OAKS

Please note that our proposal includes a fee proposal for PHASES 1-3 - getting through a consensus Master Plan approved by the City. After that, our proposal includes *estimated fees* related to DD, CD, BIDDING and CA services based on an **estimated $3 million construction budget** for Normandy Oaks. livingLAB proposes to submit a revised scope of work with more defined fees for Phases 4-5 *after* Master Plan approval, when the scope of work is better understood by the City and our Team.

TASK	FEE
PHASE ONE: SURVEY AND SOILS TESTING	
PHASE ONE SUB-TOTAL	**$28,400**
PHASE TWO: SITE ASSESSMENT	
PHASE TWO SUB-TOTAL	**$14,500**
PHASE THREE: CONSENSUS PLAN DEVELOPMENT	
PHASE THREE SUB-TOTAL	**$30,300**
PHASES 1 - 3 REIMBURSABLE COSTS (Estimated)	
Printing	$500
Mileage	$500
Supplies for mobileLAB	$1,200
SUB - TOTAL	**$2,120**

Because the design elements and programming for the redevelopment project will evolve during the master planning process, we are proposing to initially engage in a contract to complete **ONLY PHASES 1 - 3** as described in the Approach section. We will work with the City during the cost estimating task of the master planning phase to develop a set fee for the remaining phases including DD plans, site plan approval, construction documents and construction administration that fits within the budget for this park and responds to the complexities of the design.

PHASE FOUR: CONSTRUCTION DOCUMENTS AND BIDDING	
livingLAB and TEAM MEMBERS	6.3 - 6.8% OF ESTIMATED CONSTRUCTION COSTS
PHASE FOUR SUB-TOTAL	**ESTIMATED $ 190,000 - $205,000**
PHASE FIVE: CONSTRUCTION	
livingLAB and TEAM MEMBERS	3.5 - 4.0% OF ESTIMATED CONSTRUCTION COSTS
PHASE FIVE SUB-TOTAL	**ESTIMATED $ 95,000 - $107,000**
PROJECT MANAGEMENT: PHASES 4-5	5% OF PHASE 4 & 5 TOTAL
PROJECT MANAGEMENT SUB-TOTAL	**$14,250 - $15,600**

Please see individual design team member's breakdown of Estimated Fee, Scope of Work, and Assumptions for Normandy Oaks Park on the followng pages

TOTAL ESTIMATED FEES

CENTRAL PARK

Please note that our proposal includes a fee proposal for PHASES 1-3 - getting through a consensus Master Plan approved by the City. After that, our proposal includes *estimated fees* related to DD, CD, BIDDING and CA services based on an **estimated $6.5 million construction budget** for Central Park. livingLAB proposes to submit a revised scope of work with more defined fees for Phases 4-5 *after* Master Plan approval, when the scope of work is better understood by the City and our Team.

TASK	FEE
PHASE ONE: SURVEY AND SOILS TESTING	
PHASE ONE SUB-TOTAL	**$17,300**
PHASE TWO: SITE ASSESSMENT	
PHASE TWO SUB-TOTAL	**$14,500**
PHASE THREE: CONSENSUS PLAN DEVELOPMENT	
PHASE THREE SUB-TOTAL	**$33,600**
PHASES 1 - 3 REIMBURSABLE COSTS (Estimated)	
Printing	$500
Mileage	$500
Supplies for mobileLAB	$1,200
SUB - TOTAL	**$2,120**

Because the design elements and programming for the redevelopment project will evolve during the master planning process, we are proposing to initially engage in a contract to complete **ONLY PHASES 1 - 3** as described in the Approach section. We will work with the City during the cost estimating task of the master planning phase to develop a set fee for the remaining phases including DD plans, site plan approval, construction documents and construction administration that fits within the budget for this park and responds to the complexities of the design.

PHASE FOUR: CONSTRUCTION DOCUMENTS AND BIDDING	
livingLAB and TEAM MEMBERS	5.5 - 6.0% OF ESTIMATED CONSTRUCTION COSTS
PHASE FOUR SUB-TOTAL	**ESTIMATED $ 365,000 - $395,000**
PHASE FIVE: CONSTRUCTION	
livingLAB and TEAM MEMBERS	3.7 - 4.0% OF ESTIMATED CONSTRUCTION COSTS
PHASE FIVE SUB-TOTAL	**ESTIMATED $ 240,000 - $265,000**
PROJECT MANAGEMENT: PHASES 4-5	5% OF PHASE 4 & 5 TOTAL
PROJECT MANAGEMENT SUB-TOTAL	**$30,250 - $33,000**

Please see individual design team member's breakdown of Estimated Fee, Scope of Work, and Assumptions for Central Park on the followng pages

ESTIMATED FEE DETAIL
NORMANDY OAKS

PHASE ONE: SURVEY AND SOILS TESTING

Anderson, Eckstein and Westrick	$14,000
Somat Engineering	$14,400

PHASE TWO: SITE ASSESSMENT

livingLAB	$6,610
Anderson, Eckstein and Westrick	$3,400
Peter Basso / Illuminart	$1,000
Natural Community Services	$2,300
Drummond Carpenter	$1,360

PHASE THREE: CONSENSUS PLAN DEVELOPMENT (see notes)

livingLAB	$24,440
Anderson, Eckstein and Westrick	$2,400
Natural Community Services	$2,300
Drummond Carpenter	$2,040

PHASE FOUR: CONSTRUCTION DOCUMENTS AND BIDDING

livingLAB	$40,500 - $42,000
Anderson, Eckstein and Westrick	$52,000 - $56,000
Peter Basso / Illuminart	$9,000 - $10,000
Architecture Allowance (see notes)	$18,000 - $20,000
Natural Community Services	$10,000 - $12,000
Somat Engineering (contingency fee)	$3,500 - $4,000
Drummond Carpenter	$5,440 - $6,000
Administrative Controls Management	$50,000 - $54,000

PHASE FIVE: CONSTRUCTION

livingLAB	$30,000 - $33,000
Anderson, Eckstein and Westrick	$42,000 - $45,000
Peter Basso / Illuminart	$5,000 - $7,000
Architecture Allowance (see notes)	$6,750 - 7,500
Natural Community Services	$10,000 - $12,000
Drummond Carpenter	$1,500 - $2,500

Notes:
1. Consultant fees for Phases 1-3 are based on estimated hours for scope of work described. Fees shown for Phases 4-5 are fees based on an estimated construction cost of $3,000,000 for Normandy Oaks Park, and are subject to change in response to a change in the overall scope and program.
2. Estimated fee is an allowance for Architectural services on as-needed basis in Phases 4-5
3. Estimated fee is for a week long MobileLAB as described in the Approach section. Additionally requested charrette-style stakeholder meetings outside of the MobileLAB will be an additional cost of approximately $2,000 - $3,000 based on a 4 hour meeting, attendance of 4-6 consultants (depending on meeting discussion) at an average hourly rate of $125/hr., and meeting preparation

ESTIMATED FEE DETAIL
CENTRAL PARK

PHASE ONE: SURVEY AND SOILS TESTING

Anderson, Eckstein and Westrick	$9,700
Somat Engineering	$7,600

PHASE TWO: SITE ASSESSMENT

LivingLAB	$6,610
Anderson, Eckstein and Westrick	$4,500
Peter Basso / Illuminart	$1,400
Drummond Carpenter	$2,040

PHASE THREE: CONSENSUS PLAN DEVELOPMENT (see notes)

livingLAB	$26,620
Anderson, Eckstein and Westrick	$4,000
Peter Basso / Illuminart	$2,300
Drummond Carpenter	$2,720

PHASE FOUR: CONSTRUCTION DOCUMENTS AND BIDDING

livingLAB	$78,000 - $85,000
Anderson, Eckstein and Westrick	$92,000 - $99,000
Peter Basso / Illuminart	$62,400 - $65,000
Architecture Allowance (see notes)	$39,000 - $45,000
Natural Community Services	$4,000 - $6,000
Somat Engineering (contingency fee)	$3,500 - $4,000
Drummond Carpenter	$6,800 - $9,000
Administrative Controls Management	$70,000 - $75,000
Advanced Lighting & Sound	$4,600 - $8,000

PHASE FIVE: CONSTRUCTION

livingLAB	$75,000 - $82,000
Anderson, Eckstein and Westrick	$107,000 - $112,000
Peter Basso / Illuminart	$29,500 - $33,500
Architecture Allowance (see notes)	$18,200 - $22,500
Natural Community Services	$4,000 - $8,000
Drummond Carpenter	$2,100 - $3,500
Advanced Lighting & Sound	$1,900 - $3,500

Notes:
1. Consultant fees for Phases 1-3 are based on estimated hours for scope of work described. Fees shown for Phases 4-5 are estimated fees based on an estimated construction cost of $6,500,000 for Central Park, and are subject to change in response to a change in the overall scope and program.
2. Estimated fee is an allowance for Architectural services on as-needed basis in Phases 4-5
3. Estimated fee is for a week long MobileLAB as described in the Approach section. Additionally requested charrette-style stakeholder meetings outside of the MobileLAB will be an additional cost of approximately $2,000 - $3,000 based on a 4 hour meeting, attendance of 4-6 consultants (depending on meeting discussion) at an average hourly rate of $125/hr., and meeting preparation

SCOPE OF WORK DETAIL
NORMANDY OAKS

Scope of work breakdown is supplemental to the Approach section of this RFP. Please see Approach section for a more detailed description of services to be provided. Any additionally requested work outside of the scope described in Phases 1-5 will be charged at a flat hourly rate per each consultant's hourly rate fee, or a lump-sum additional services contract will be developed with a defined scope of services . No work outside of what is identified in this proposal will be completed without prior requested and/or written approval from The City of Royal Oak.

PHASE ONE: SURVEY AND SOILS TESTING

ANDERSON, ECKSTEIN AND WESTRICK

• Site survey on north half of property, verify existing survey for ongoing develpment, tree inventory per city ordinance.

SOMAT ENGINEERING

• Review preliminary design information for both Normandy and Central Park Sites and coordinate soil boring locations with the client,
•Stake boring locations,
• Coordinate underground utility clearance through the MISSDIG system and City personnel,
• Coordinate field work times with the Client, City personnel and drilling subcontractors, and
• Schedule drilling subcontractor for geotechnical fieldwork.
• Mobilize an ATV drill rig and crew to the Normandy Site,
• Perform a total of nine (9) borings for 210 linear feet of soil drilling as follows:
    • Drill eight (8) borings and obtain semi-continuous split spoon soil samples (ASTM D1586) every 2.5 feet to 20 feet below existing grades.
    • Drill one (1) boring to 50 feet below grade. Obtain split spoon soil samples every 2.5 feet to the top 10 feet and every 5 feet thereafter, (ASTM D1586).
• If encountered, record groundwater levels during drilling and upon completion of field work,
• Backfill the borings with a mix of bentonite and soil cuttings,
• Spread the remaining cuttings evenly on site around the boring locations
• Perform the following laboratory testing:
    • Visually classify soil samples in accordance with the Unified Soil Classification System,
    • For cohesive samples, estimate the unconfined compressive strength with a hand penetrometer or torvane,
    • Perform up to fourteen (14) moisture content tests by oven drying samples (one per boring),
    • For granular soils, perform up to fourteen (14) grain size analysis in accordance to ASTM D422 (one per boring)
• Analyze field and laboratory data, and prepare a geotechnical data report (GDR), including the following:
• A description of the field investigation and laboratory testing procedures,
• Logs of the soil borings and a soil boring location diagram,
    • A description of the prevailing subsurface characteristics of the site, including soil stratigraphy and consistency, groundwater conditions and any unusual conditions.

PHASE TWO: SITE ASSESSMENT

livingLAB

• Coordination and development of base site information and base maps
• Coordination and management of kick-off meeting with City/Stakeholders
• Coordination and management of design team meeting
• Development of Site Inventory and Analysis Plan and supporting documents
• Attendance at (1) meeting to present findings, opportunities and constraints to City/Stakeholders

ANDERSON, ECKSTEIN AND WESTRICK
• Provide written summary of existing conditions
• Maps of existing utilities.
• Evaluate the impacts of the utilities on the site development.
• Attendance at kick-off meeting with City
• Attendace at (1) design team meeting
• Attendace at (1) meeting to present findings to City/Stakeholders

PETER BASSO / ILLUMINART
• Site assessment visit, review surrounding light sources, light levels, and exsisting conditions

NATURAL COMMUNITY SERVICES
• Inventory and analysis, evaluation of existing & historic, natural systems, soils, site features, conditions
• Provide info for base maps and site analysis.

PHASE THREE: CONSENSUS PLAN DEVELOPMENT

livingLAB
• Coordination meeting for scheduling and management of MobileLAB with City/Stakeholders and design team
• Preparation of base information, marketing materials, and presentation materials for MobileLAB
• Attendance and management of all MobileLAB stakeholder meetings, public meetings and presentations
• Development of Consensus/Conceptual Plan and supporting graphics, documents, and presentation materials
• Attendance at (3) meeting with individual City/Stakeholders to present Consensus Plan
• Revise plan per comments received from City/Stakholders, fee includes (1) revision
• Development of conceptual cost estimate
• Attendance at (1) public meeting for presentation of Consensus Plan

ANDERSON, ECKSTEIN AND WESTRICK
• Attendance at (2) coordination meetings with City
• Attendace at (1) design team meeting
• Provide assistance at select MobileLAB stakeholder meetings related to engineering
• Assistance with preparation of base data and presentation materials if needed
• Assistance with conceptual cost estimate
• Attendance at (1) public meeting for presentation of Consensus Plan

PETER BASSO / ILLUMINART
• Assistance and consultation at select MobileLAB stakeholder meetings related to electrical engineering and lighting design
• MobileLAB follow-up deliverables

NATURAL COMMUNITY SERVICES
• Provide assistance/expertise at select public/stakeholder meetings related to specific environmental and ecological discussions
• Assistance with public outreach educational documents
• Assistance with conceptual cost estimate
• Assistance with information, data, and materials for presentation as needed

DRUMMOND CARPENTER
• Provide assistance at select MobileLAB stakeholder meetings related to stormwater BMP's and green infrastructure
• Assistance and consultation with conceptual design
• Identification of opportunities through stormwater design

PENCHURA/KANICS DESIGN
• Assistance and consultation at select MobileLAB stakeholder meetings related to Inclusive Play and

PHASE FOUR: CONSTRUCTION DOCUMENTS AND BIDDING

livingLAB

• Create and manage development of Design Development and Construction Document Plans based on agreed upon Consensus Plan
• Demo/Removals
• Site Layout and Design
• Preliminary Grading Plan
• Landscape Plan and Details
• Selection of paving and/or surface material
• Selection of site furniture and other site amenities (benches, tables, chairs, trash receptacles, bike racks,
• etc.)
• Assist with lighting selection and preliminary layout
• General project and construction notes
• Standard construction details
• Installation details for any proposed custom construction items
• Design, play piece selection, and color palette for the splash pad areas (if needed)
• Design, play piece selection, and color palette for dry play areas
• Cost estimate development at DD, 60% and Pre-Bidding stages
• Assist with bidding the project and recommendations for contract award
• Coordinate RFI and addenda and/or bulletins
• Attendance and coordination of (2) Design Development Plan review meetings with City/Stakeholders
• Attendance and coordination of 30/60/90% document review meetings with City
•Prepare documents and/or plans for required permitting and review submittals (owner responsible for application, fees, and delivery for submittals per City of Royal Oak requirements)
• Attendance and coordination of (1) public meeting for presentation purposes

ANDERSON, ECKSTEIN AND WESTRICK

• Provide all site engineering design with supporting calculations, including but not limited to: stormwater management computations, municipal water, etc. (including coordination with other utilities not specifically listed)
• Erosion control plans and details
• Building and site demolition/removal plans coordination
• Final grading
• Vehicular and heavy-duty pavement cross-sections, plans, and details
• Technical and material specifications
• Assistance with cost estimating
• Limited revisions
• General engineering consultation, and QA/QC assistance
• Assist architect with utilities for public restrooms/concession/shelter building (if needed)
• Develop contract book per city standards
• Assist with bidding the project and recommendations for contract award.
• Attendance at 30/60/90% document review meetings with City
• Attendance at (1) City/Stakeholder presentation meeting
• Attendance at (1) public meeting (if needed)

PETER BASSO / ILLUMINART

• Electrical system design
• Attendance at up to (3) project meetings with the City and design team.
• Field work to observe the layout and operation of existing systems, and field conditions for demolition and new installation.
• Development of bidding documents to include plans and specifications (on plan) as one bid package.

• Provide lighting concepts narrative
• Present lighting design concepts
• Provide project management and coordination
• Refine lighting design concepts
• Develop initial lighting plans
• Develop initial lighting specifications
• Generate lighting calculations
• Attend ongoing design team working meetings – (2) meeting anticipated
• Review of lighting plans with design team
• Review lighting specifications with design team
• Review/comment on lighting controls from design team

ARCHITECTURAL SERVICES
• Architectural floor plans, elevations, materials selection, and information suitible for permitting and review submittal per the City of Royal Oak requirements
• Attendance at 30/60/90% document review meetings with City
• Attendance at (1) City/Stakeholder presentation meeting
• Attendance at (1) public meeting (if needed)

NATURAL COMMUNITY SERVICES
• Site/Ecological design
• Specialized planting plans
• Restoration and conservation design
• General ecological consultation and recommendations
• Installation and management specifications
• Assistance with cost estimating
• Limited revisions
• Attendance at (1) City/Stakeholder presentation meeting
• Attendance at (1) public meeting (if needed)

SOMAT ENGINEERING
• Geotechnical Investigation Report, Including recommendations for the proposed design (if required)
• Construction Specifications related to geotechnical aspects (if required)

ADMINISTRATIVE CONTROLS MANAGEMENT
• Construction cost estimating at 100% DD, 60% CDs, and 90% CDs

DRUMMOND CARPENTER
• Plan review, QA/QC, and comment at 30% & 90% documents
• Specification review, QA/QC, and comment at 90%
• Attendance at (2) City/Stakeholder review meetings

PENCHURA/KANICS DESIGN
• Play area layout, design, and specifications
• Play equipment selection and specifications
• Play area safety and accessibility study
• Standard construction details
• Installation details for any proposed custom construction items
• Design, play piece selection, and color palette for the splash pad areas (if needed)
• Design, play piece selection, and color palette for dry play areas
• Cost estimate development at DD, 60% and Pre-Bidding stages
• Assist with bidding the project and recommendations for contract award
• Coordinate RFI and addenda and/or bulletins
• Attendance and coordination of (2) Design Development Plan review meetings with City/Stakeholders
• Attendance and coordination of 30/60/90% document review meetings with City

•Prepare documents and/or plans for required permitting and review submittals (owner responsible for application, fees, and delivery for submittals per City of Royal Oak requirements)
• Attendance and coordination of (1) public meeting for presentation purposes

PHASE FIVE: CONSTRUCTION

livingLAB

• Coordinate with the City to Identify any necessary permits required to be submitted and obtained by the contractor. Owner is responsible for all permit fees
• Prepare specifications for consultant sub-contractor quotes for additional services
• Review and approve shop drawings and submittals.
• Coordinate and attend progress meetings on a weekly basis, and oversee field construction on a regular basis to assure construction to specifications. livingLAB assumes the project will be bid to a General Contractor who will be responsible for overall site construction, coordination of field testing, etc.
• Part time inspection
• Review progress and assist in processing pay applications.
• Review and recommend claims.
• Review and recommend on final payment.
• Review and comment on recommended design modifications

ANDERSON, ECKSTEIN AND WESTRICK

• Coordinate and assist City with Pre-Construction Meeting
• Attend Pre-Construction meeting
• Provide contract administration
• Part time inspection
• Coordinate submittals
• Process pay applications and contract modifications
• Record plan document coordination
• Review and comment on recommended design modifications

PETER BASSO / ILLUMINART

• Part time inspection and consulting
• Respond to RFI
• Submittal Review and approval

SCOPE OF WORK DETAIL
CENTRAL PARK

Scope of work breakdown is supplemental to the Approach section of this RFP. Please see Approach section for a more detailed description of services to be provided. Any additionally requested work outside of the scope described in Phases 1-5 will be charged at a flat hourly rate per each consultant's hourly rate fee, or a lump-sum additional services contract will be developed with a defined scope of services . No work outside of what is identified in this proposal will be completed without prior requested and/or written approval from The City of Royal Oak.

PHASE ONE: SURVEY AND SOILS TESTING

ANDERSON, ECKSTEIN AND WESTRICK

• Site survey on north half of property, verify existing survey for ongoing develpment, tree inventory per city ordinance.

SOMAT ENGINEERING

• Review preliminary design information for both Normandy and Central Park Sites and coordinate soil boring locations with the client,
• Stake boring locations,
• Coordinate underground utility clearance through the MISSDIG system and City personnel,
• Coordinate field work times with the Client, City personnel and drilling subcontractors, and
• Schedule drilling subcontractor for geotechnical fieldwork.

PHASE TWO: SITE ASSESSMENT

livingLAB

• Coordination and development of base site information and base maps
• Coordination and management of kick-off meeting with City/Stakeholders
• Coordination and management of design team meeting
• Development of Site Inventory and Analysis Plan and supporting documents
• Attendance at (1) meeting to present findings, opportunities and constraints to City/Stakeholders

ANDERSON, ECKSTEIN AND WESTRICK

• Provide written summary of existing conditions
• Maps of existing utilities.
• Evaluate the impacts of the utilities on the site development.
• Attendance at kick-off meeting with City
• Attendace at (1) design team meeting
• Attendace at (1) meeting to present findings to City/Stakeholders

PETER BASSO / ILLUMINART

• Site assessment visit, review surrounding light sources, light levels, and exsisting conditions

SOMAT ENGINEERING

• Mobilize an ATV drill rig and crew to the Normandy Site,
• Perform a total of nine (9) borings for 210 linear feet of soil drilling as follows:
    • Drill eight (8) borings and obtain semi-continuous split spoon soil samples (ASTM D1586) every 2.5 feet to 20 feet below existing grades.
    • Drill one (1) boring to 50 feet below grade. Obtain split spoon soil samples every 2.5 feet to the top 10 feet and every 5 feet thereafter, (ASTM D1586).
• If encountered, record groundwater levels during drilling and upon completion of field work,
• Backfill the borings with a mix of bentonite and soil cuttings,
• Spread the remaining cuttings evenly on site around the boring locations

• Perform the following laboratory testing:
    • Visually classify soil samples in accordance with the Unified Soil Classification System,
    • For cohesive samples, estimate the unconfined compressive strength with a hand penetrometer or torvane,
    • Perform up to fourteen (14) moisture content tests by oven drying samples (one per boring),
    • For granular soils, perform up to fourteen (14) grain size analysis in accordance to ASTM D422 (one per boring)
• Analyze field and laboratory data, and prepare a geotechnical data report (GDR), including the following:

PHASE THREE: CONSENSUS PLAN DEVELOPMENT

livingLAB

• Coordination meeting for scheduling and management of MobileLAB with City/Stakeholders and design team
• Preparation of base information, marketing materials, and presentation materials for MobileLAB
• Attendance and management of all MobileLAB stakeholder meetings, public meetings and presentations
• Development of Consensus/Conceptual Plan and supporting graphics, documents, and presentation materials
• Attendance at (3) meeting with City/Stakeholders to present Consensus Plan
• Revise plan per comments received from City/Stakholders, fee includes (1) revision
• Development of conceptual cost estimate
• Attendance at (1) public meeting for presentation of Consensus Plan

ANDERSON, ECKSTEIN AND WESTRICK

• Attendance at (2) coordination meetings with City
• Attendace at (1) design team meeting
• Provide assistance at select MobileLAB stakeholder meetings related to engineering
• Assistance with preparation of base data and presentation materials if needed
• Assistance with conceptual cost estimate
• Attendance at (1) public meeting for presentation of Consensus Plan

PETER BASSO / ILLUMINART

• Assistance and consultation at select MobileLAB stakeholder meetings related to electrical engineering and lighting design

NATURAL COMMUNITY SERVICES

• Provide assistance at select MoblieLAB stakeholder meetings related to specific environmental and ecological discussions
• Assistance with public outreach educational documents
• Assistance with conceptual cost estimate
• Assistance with information, data, and materials for presentation as needed

DRUMMOND CARPENTER

• Provide assistance at select MobileLAB stakeholder meetings related to stormwater BMP's and green infrastructure
• Assistance and consultation with conceptual design
• Identification of opportunities through stormwater design

PHASE FOUR: CONSTRUCTION DOCUMENTS AND BIDDING

livingLAB

• Create and manage development of Design Development and Construction Document Plans based on agreed upon Consensus Plan
• Demo/Removals
• Site Layout and Design
• Preliminary Grading Plan

• Landscape Plan and Details
• Selection of paving and/or surface material
• Selection of site furniture and other site amenities (benches, tables, chairs, trash receptacles, bike racks,
• etc.)
• Assist with lighting selection and preliminary layout
• General project and construction notes
• Standard construction details
• Installation details for any proposed custom construction items
• Design, play piece selection, and color palette for the splash pad areas (if needed)
• Design, play piece selection, and color palette for dry play areas
• Cost estimate development at DD, 60% and Pre-Bidding stages
• Coordinate and assist City with Pre-Bid meeting
• Attend Pre-Bid Meeting
• Assist with bidding the project and recommendations for contract award
• Coordinate RFI and addenda and/or bulletins
• Attendance and coordination of (2) Design Development Plan review meetings with City/Stakeholders
• Attendance and coordination of 30/60/90% document review meetings with City
•Prepare documents and/or plans for required permitting and review submittals (owner responsible for application, fees, and delivery for submittals per City of Royal Oak requirements)
• Attendance and coordination of (1) public meeting for presentation purposes

ANDERSON, ECKSTEIN AND WESTRICK

• Provide all site engineering design with supporting calculations, including but not limited to: stormwater management computations, municipal water, etc. (including coordination with other utilities not specifically listed)
• Erosion control plans and details
• Building and site demolition/removal plans coordination
• Final grading
• Vehicular and heavy-duty pavement cross-sections, plans, and details
• Technical and material specifications
• Assistance with cost estimating
• Limited revisions
• General engineering consultation, and QA/QC assistance
• Assist architect with utilities for public restrooms/concession/shelter building (if needed)
• Develop contract book per city standards
• Assist with bidding the project and recommendations for contract award.
• Attendance at 30/60/90% document review meetings with City
• Attendance at (1) City/Stakeholder presentation meeting
• Attendance at (1) public meeting (if needed)
• Coordinate and assist City with Pre-Bid meeting
• Attend Pre-Bid Meeting

PETER BASSO / ILLUMINART

• Electrical system design
• Attendance at up to (3) project meetings with the City and design team.
• Field work to observe the layout and operation of existing systems, and field conditions for demolition and new installation.
• Development of bidding documents to include plans and specifications (on plan) as one bid package.
• Provide lighting concepts narrative
• Present lighting design concepts
• Provide project management and coordination

• Refine lighting design concepts
• Develop initial lighting plans
• Develop initial lighting specifications
• Generate lighting calculations
• Attend ongoing design team working meetings – (2) meeting anticipated
• Review of lighting plans with design team
• Review lighting specifications with design team
• Review/comment on lighting controls from design team

ARCHITECTURAL SERVICES
• Architectural floor plans, elevations, materials selection, and information suitible for permitting and review submittal per the City of Royal Oak requirements
• Attendance at 30/60/90% document review meetings with City
• Attendance at (1) City/Stakeholder presentation meeting
• Attendance at (1) public meeting (if needed)

NATURAL COMMUNITY SERVICES
• Urban Site/Ecological design
• Planting plans
• Restoration and conservation design
• General ecological consultation and recommendations
• Installation and management specifications
• Assistance with cost estimating
• Limited revisions
• Attendance at (1) City/Stakeholder presentation meeting (if needed)
• Attendance at (1) public meeting (if needed)

SOMAT ENGINEERING
• Geotechnical Investigation Report, Including recommendations for the proposed design (if required)
• Construction Specifications related to geotechnical aspects (if required)

ADMINISTRATIVE CONTROLS MANAGEMENT
• Construction cost estimating at 100% DD, 60% CDs, and 90% CDs

DRUMMOND CARPENTER
• Plan review, QA/QC, and comment at 30% & 90% documents
• Specification review, QA/QC, and comment at 90%
• Attendance at (2) City/Stakeholder review meetings

ADVANCED LIGHTING AND SOUND
• Coordinate control system interface with the park lighting elements.
• Prepare complete equipment specifications, including accessories and wiring.
• Develop load specifications for all sound equipment that will be attached to buildings or lighting poles.
• Provide conduit and interface box information to EE for inclusion in base electrical bids.
• Provide information regarding position and layout recommendations for the audio control equipment.
• Architectural accommodations report which will outline detailed electrical, space and cooling requirements for the technical systems.
• Provide a refined sound system budget for review.

PHASE FIVE: CONSTRUCTION

livingLAB
• Coordinate with the City to Identify any necessary permits required to be submitted and obtained by the contractor. Owner is responsible for all permit fees
• Prepare specifications for consultant sub-contractor quotes for additional services
• Review and approve shop drawings and submittals.

• Coordinate and attend progress meetings on a weekly basis, and oversee field construction on a regular basis to assure construction to specifications. livingLAB assumes the project will be bid to a General Contractor who will be responsible for overall site construction, coordination of field testing, etc.
• Part time inspection
• Review progress and assist in processing pay applications.
• Review and recommend claims.
• Review and recommend on final payment.
• Review and comment on recommended design modifications

ANDERSON, ECKSTEIN AND WESTRICK
• Coordinate and assist City with Pre-Construction Meeting
• Attend Pre-Construction meeting
• Provide contract administration
• Part time inspection
• Coordinate submittals
• Process pay applications and contract modifications
• Record plan document coordination
• Review and comment on recommended design modifications

PETER BASSO / ILLUMINART
• Part time inspection and consulting
• Respond to RFI
• Submittal Review and approval
• Review and comment on recommended design modifications

ARCHITECTURAL SERVICES
• Attend a preconstruction meeting with the contractor and City Staff
• Part time inspection
• Record plan documents
• Review and approve shop drawings and submittals.
• Review and comment on recommended design modifications

NATURAL COMMUNITY SERVICES
• Part time inspection and consulting
• Respond to RFI
• Submittal Review and approval
• Review and comment on recommended design modifications

DRUMMOND CARPENTER
• Part time inspection and consulting
• Respond to RFI
• Submittal Review and approval
• Review and comment on recommended design modifications

ADVANCED LIGHTING & SOUND
• Review / approve / coordinate shop drawings and equipment submittals.
• Review final system tuning, testing, and documentation.
• Demonstrate performance and measurement to verify compliance with specifications.
• Assist owner in operation of the system during initial opening event. Provide training on all systems to owner and designated representatives.

SERVICES NOT INCLUDED IN PROPOSAL

Any additionally requested work outside of the scope described in Phases 1-5, or will be charged either at a flat hourly rate per each consultant's hourly rate fee, or a lump-sum additional services contract will be developed with a defined scope of services . No work outside of what is identified in this proposal will be completed without prior requested and/or written approval from The City of Royal Oak.

The following services are not included in this fee proposal for each park project (all consultants):

- Work in excess of scope described in Phases 1-5
- Trips for review, coordination, and/or construction meetings in excess of the scope described in Phases 1-5
- Advertising for bid or posting of bid documents
- Mechanical/Plumbing systems design
- Structural Engineering for structures and buildings
- Topographic and other survey services not specifically stated above
- Full time construction inspection
- Preparation of traffic impact statements or the collection of traffic data for traffic studies
- Structural design of pavement and foundations
- Environmental impact study
- Geotechnical recommendation report
- Construction staking
- Materials testing
- Cost estimating in excess of the scope described in Phases 1-4
- Completion of energy and life cycle cost analysis.
- Submittal documentation for LEED certification.
- Providing services in connection with evaluating substitutions proposed by the Contractor and making subsequent revisions to drawings, specification and other documentation resulting there from.
- Providing services made necessary by the default of the Contractor, by major defects or deficiencies in the Work of the Contractor, or by failure of performance of either the Owner or Contractor under the Contract for Construction.
- Any grant agency requirement submittals, or meetings related to grant opportunities
- Attendance at meetings to secure approval of agencies other than for code compliance and those already listed in the Scope of Work.
- Wetland delineation/flagging
- livingLAB team attendance at meetings in excess of what is described in Phases 1-5
- Construction staking
- Construction Material Testing: earthwork testing, compaction testing, concrete placement, asphalt paving testing
- No offsite disposal of drilling spoils is included in fee proposal
- Survey of boring locations
- Geotechnical engineering proposal does not include the preparation of drawings or cross sections.
- Geotechnical investigatino will not include any environmental exploration for the presence or absence of contamination, hazardous or toxic materials in the air, surface water, groundwater or soil, in or around the site area.

CLIENT RESPONSIBILITIES:

1. Assignment of a single Project Manager for each project to serve as a liaison between Client and the livingLAB design team
2. Development of standard City of Royal Oak contractual documents, or “front end” contract documents and forms identifying the legal and contracting requirements of the City
3. Full-time Construction Inspection
4. Operational and Maintenance personnel during investigative site visits
5. Confirmation and approval of project schedule and timeline management
6. Coordination with any major utilities servicing sites
7. Application for all necessary permits associated with the projects that aren’t the responsibility of the potential contractor(s)
8. Application fees for all permits and reviews required

PROJECT ASSUMPTIONS

The following assumptions were made when developing the proposed fees for Normandy Oaks Park and Central Park:

- fees for Construction Documentation and Construction phases (4 and 5) are based off of assumed construction costs of $3,000,000 for Normandy Oaks, and $6,500,000 for Central Park. If the overall construction budgets and scope changes, professional fees will change accordingly.
- The City will provide full time inspection for construction of parks, with livingLAB team providing part time inspection as needed. If full time inspection by livingLAB team is requested by the city, a proposed fee for full time inspection will be submitted to the City for approval.
- These projects will be bid out to, and managed by a General Contractor with a Construction Manager
- It is assumed that structures/buildings will be a included in the design of each park. The style and use of the buildings is unknown at this time. An additional allowance for Architectural design fees has been included in the proposed fee.
- Topographical Survey for both sites will be required
- The completed survey and site plans for the south side of Normandy Oaks Park will be made available for review and to incorporate additional survey for the remaing portion of the park.
- It is assumed that all demolition scheduled for the Normandy Oaks and Central Park sites will be completed prior to survey work being performed.
- All stormwater detention/retention design for proposed housing developement, and regional stormwater management at Normandy Oaks Park has been completed as a part of another contract. No addtional stormwater detention/retention design is required for work outside of the Normandy Oaks Park project.
- The livingLAB team will be allowed to work with and communicate with any private developer and their consultants to coordinate work and designs that may impact the Central Park master plan.
- Proposed fees for Phases 4 & 5 will be reevaluated and revised as necessary after the conclusion of the MobileLAB public engagement/master planning design process, when there is a clear idea of project scope and programming.
- The overall schedule, program, and approach to the project may change over time depending on a variety of factors. Additional project scope resulting from changes may result in additonal services requests. It is assumed that the City will work with the livingLAB team in good faith to identify appropriate compensation for any change in scope.
- The City will work with livingLAB team to coordinate all stakeholder meetings and distribute announcements related to meetings, workshops, public engagement. Additional stakeholder and presentation meetings outside of original scope will be an additional service.
- Because the vision of the project at this point hasn't been developed, construction cost estimating fees are based on hourly rates at an estimated 2 hours per page of architectural drawings.
- Cost estimating is billed solely on the hours it takes to produce a deliverable plus any outside purchase incurred on the client's behalf. If the project should run longer (or shorter) than anticipated, the costs will change accordingly.

- Any structures and buildings proposed for the park will be simple in nature and will be considered to be “constructable” by general construction means and methods
- Actual number, location and depth of soil borings may be revised during design phase, though staying within the overall drilling scope proposed
- All fieldwork for soils testing will be coordinated with the client.
- Soil boring fieldwork will be performed in two (2) mobilizations; one each for the Normandy and Central park Sites.
- No tree or brush clearing will be required to access the proposed soil boring locations.
- No property access permits or traffic control will be required for soil borings. All parcels will be owned by the City at the time of the field investigation.
- Since locations of the borings are unknown at the time of the proposal, it is assumed that the soil borings will be performed with an all terrain vehicle (ATV) mounted drill rig.
- All drilling spoils will remain onsite, either to backfill the boreholes or to be spread evenly at the surface around the boreholes.
- Ground surface elevations will be provided to Somat by the project surveyor or will be estimated using an existing site topographic map
- No pavement coring will be required.
- A Somat engineer or geologist will observe all fieldwork.
- All field work will be performed during weekdays, 8 am to 5 pm. However, the proposed location of Central Park is currently the Royal Oak Police Department and City Hall. Coorination for the access and blocking of the parking lot will be make thru the Client.
- It is estimated that the soil boring fieldwork at the Normandy Site will be completed in four (4) days and at the Central park Site will be completed in two (2) days

FIRM + TEAM MEMBER QUALIFICATIONS

The following pages include resumes and experience of key team members.

COURTNEY R. PIOTROWSKI:

PLA, ASLA, LEED GA
landscape architect + principal

Creative Thinker.
Energy Seeker.
Git 'R Dun Attitude.
This is Courtney.

Courtney has had her hands in it all: planning, landscape architecture, public participation, management, client communication and coordination. Her strength over the last 17 years has been developing and fostering client relationships through successful project implementation and a commitment to excellence.

Courtney has a particular talent for coordinating teams of architects, planners and engineers on large scale, multi-disciplinary projects. Recognized for her unique ability to balance the art of design, the technical aspects of construction and the emotion of planning public spaces and places. She promotes innovation in design, sustainable construction practices and context-sensitive planning in order to create the best possible outcomes for her clients and the communities she works in.

Courtney's unwavering commitment to providing the best possible design alongside a positive, fun and energetic working relationship is why clients keep comin' back.

EDUCATION, REGISTRATIONS + TRAINING:

Education

Bachelors of Landscape Architecture, with honors, Michigan State University: 1999

Registrations and Certificates

State of Michigan Licensed Landscape Architect: #3901001353

LEED Green Associate

Form Based Code Institute Training

PROFESSIONAL GOAL:

Foster the creation of memorable 'people-places' through the balance of good design and a commitment to energetic and engaging relationships with both my client and their community.

LABpartners:

American Society of Landscape Architects

Michigan Chapter of the American Society of Landscape Architects

Michigan Recreation and Parks Association

US Green Building Council

HONORS + PUBLICATIONS:

Honors

AIA Detroit Design Award, Grand River Public Space, Detroit, Michigan: 2015

Michigan Recreation and Parks Association Design Award Rigg's Heritage Park, Van Buren Township, Michigan: 2010

ASLA Certificate of Merit for Design, Green Oak Village Place: 2008

Michigan ASLA Emerging Professional of the Year: 2007

Michigan Recreation and Parks Association Design Award Ford Field, Northville, Michigan: 2004

Pocket Park Design Competition Winner, Rochester, Michigan: 2004

Publications

Smith, Chip and Courtney Piotrowski. "Urban Design – Creating Mainstreet Novi". The Review. Michigan Municipal League, September - October 2008.

Piotrowski, Courtney. "Chair Bombing and Guerilla Placemaking" Metromode. Issue Media Group, LLC, 2012. Web. 22 Mar 2012.

NOTED EXPERIENCE:

Landscape Architecture

Grand River Public Space, DTE Energy, Detroit, MI

Hillel Day School Outdoor Classrooms, Farmington Hills, MI

Commons Corner Plaza Renovation, Garden City, MI Southfield

Public Library Children's Garden, Southfield, MI

White Chapel Memorial Cemetery Mausoleum Plaza, Troy, MI

University Center, University of Michigan, Dearborn, MI

Jewish Family Services Center, West Bloomfield, MI

Streetscape Design

Emmett Steetscape Design, Petoskey, MI
Ecorse Road Streetscape, City of Allen Park, MI
Philomene Streetscape, City of Allen Park, MI
Mack Ave Streetscape, City of Grosse Pointe, MI
Seven Mile Streetscape, City of Detroit, MI

Urban Design and Planning

Downtown Vision Plan, City of Harbor Springs, MI
WaterHub Visioning Project, Mt. Clemens, MI
Village Vision Plan, Ephraim, WI
MainStreet Novi, City of Novi, MI: Triangle Development
Brightmoor Neighborhood Plan, City of Detroit, MI
Lyon Center Vision Plan, Lyon Township, MI
City of Northville Downtown Plan, Northville, MI

Parks and Recreation Planning and Design

Grand River Public Space and Circle Park, DTE Energy, Detroit, MI
Gainsboro Park, Pleasant Ridge, MI
Oakland Township, MI Parks, Recreation, Open Space & Trails Plan
Hillel Day School Outdoor Learning Environment, Farmington, MI
Parks and Recreation Master Plan, City of Farmington Hills, MI
Millenium Park, Northville Township, MI
Old Village School Accessible Playground, Northville, MI
Heritage Park, Hartland Township, MI
Settlers Park, Hartland Township, MI
Chaldean Camp of the United States of America Master Plan
Merrill-Palmer Children's Garden, Wayne State University, MI
Grand Blanc Middle Schools Athletic Facilities, Grand Blanc, MI
Marsh View Park Master Plan, Oakland Township, MI

Public Engagement

Village Vision Plan Public Engagement, Ephraim, WI
Grand River Public Space Public Participation Process, Detroit, MI
Downtown Vision Plan, Harbor Springs, MI
MDOT University Region Non-Motorized Plan Engagement Process
SEMCOG Non-Motorized Plan Engagement Process
Township Master Plan, Pittsfield Township, Washtenaw County, MI
Stadium Boulevard Public Input, City of Ann Arbor, MI
Ecorse Road Streetscape Public Participation, Allen Park, MI

Wayfinding Planning and Design

The Link Bike/Walk Wayfinding Design Guide, Northville, MI
Detroit Bike Wayfinding Design Guide, Detroit, MI
Green Oak Village Plan Branding and Wayfinding Plan, Green Oak, MI
City of Cheboygan Branding and Wayfinding, Cheboygan, MI
Walled Lake DDA Branding and Wayfinding, Walled Lake, MI
Lyon Township Wayfinding Analysis and Design, Lyon Township, MI
Allen Park DDA Wayfinding, City of Allen Park, MI
Interprative Panels, West Bloomfield Township, MI

JASON P. MACDONALD:

PLA, ASLA
landscape architect + partner

Developer of Designs.
Roll-Up-My-Sleeves Kinda Guy.
Professional Coffee Drinker.
This is Jason.

As a designer, Jason pays special attention to form + scale, balance + rhythm, harmony + repetition as a way of evaluating surroundings. Landscape Architecture allows him to use all the elements and principles of design to create unique, memorable, relevant, enjoyable, and inspiring "spaces and places" in our world.

During his 17 years of experience designing and planning the world in which we live, work, and play Jason has influenced a wide range of projects. He believes the most successful and interesting places develop and grow from a design development seed. His ability to shepherd a project from the early stages of design through to the built environment by way of the approval, coordination and construction processes assure that a project team's goal and vision is achieved.

Jason provides technical leadership for our team and clients. His strengths are preliminary design and 3D modeling/massing, graphic presentations and renderings, CAD, development of final construction documents, and construction observation & inspection.

EDUCATION, REGISTRATIONS + TRAINING:

Education

Bachelor of Landscape Architecture, Michigan State University: 1998

Registrations

Professional Landscape Architect, MI #3901001519

PROFESSIONAL GOAL:

Provide leadership to partners and clients with the goal of realizing a vision for a better living environment.

Build a synergistic environment that is diverse in scope and forward-thinking in design approach and management philosophy.

LABpartners:

American Society of Landscape Architects

Congress for the New Urbanism

HONORS + PUBLICATIONS:

MiASLA Honor Award, Flint Riverfront Restoration Plan: 2011

Guest Lecturer for MiASLA "Each One, Reach One" Program

Sigma Lambda Alpha Honor Society for Landscape Architects

NOTED EXPERIENCE:

Streetscape Design

Downtown Flint & Broadway Streetscape, Village of Lake Orion, MI

Ecorse Road Streetscape, Allen Park, MI

Philomene Blvd. Streetscape, Allen Park, MI

Trumbull Avenue Streetscape, Detroit, MI

Five Mile & Beech Daly Streetscape, Redford, MI

Downtown Eaton Rapids M-50/M-99 Streetscape, Eaton Rapids, MI

Palm Bay Road, Downtown Palm Bay, FL

Downtown Allen Park Street Amenities Plan, Allen Park, MI

Beech Daly Road Landscape Enhancement, Dearborn Heights, MI

Streetscape Pattern Book, Davison, MI

Wick Road Enhancement Plan, Taylor, MI

Kettering University Gateway Project, Flint, MI

Urban Design and Planning

Grand River Public Space, DTE Energy, Detroit, MI

Flint River & Hamilton Dam Restoration, City of Flint, MI

Village Vision Plan, Ephraim, WI

Chevy Commons Master Plan, Flint, MI

MDOT University Region Non-Motorized Plan, MI

West Bloomfield Non-Motorized Trail Extension, West Bloomfield, MI

Hamtramck Bike Lane Planning & Grant Application, Hamtramck, MI

Detroit Bike Share Feasibility Study, Detroit, MI
Compass Rose Intersection & Pedestrian Crosswalks, Plymouth, MI
Façade Improvement Program, Gibraltar, MI
Highland Park Civic Park, Highland Park, MI
Frankfort Master Plan, Frankfort, MI

Site Design

Center Street Smart Park Concept Plan, Royal Oak, MI
Gainsboro Park, Pleasant Ridge, MI
El Moore Green Alley, Detroit, MI
High Velocity Sports Expansion, Canton, MI
Maple Glen Park Phase One, Commerce, MI
Wise Road Park Master Plan, Commerce, MI
Children's Park, Village of Lake Orion, MI
Richard A. Young Recreation Center Rain Garden Plan, Dearborn Heights, MI
Monroe Plaza Redevelopment, Durand, MI
Manistee River Bank Stabilization, Wellston, MI
West Creek Confluence Site Floodplain Restoration, Cleveland, OH
Public Parking Green Space Enhancement, Allen Park, MI
Harbor Beach Waterfront Park, Harbor Beach, MI
JFK Library Expansion Design, Dearborn Heights, MI

Presentation Graphics and 3D Massing Studies

I-275 Metro Trail Sign Graphics, Wayne & Monroe Co., MI
Davison Township Gateway Redevelopment, Davison Township, MI
Inner Circle Greenway Map & Brochure, Detroit, MI
Clinton River Water Trail Map, Oakland & Macomb Co., MI
Form Based Code Massing/Setback Guidelines & Exhibits, Frankfort, MI
Henry Ford Health Systems North/South Campus Expansion Modeling, Detroit, MI
Downriver Linked Greenways Trail Map, Wayne County, MI
M-5 Trail Presentation, Novi, MI
Oakland County Trail Master Plan, Oakland County, MI
Monroe Plaza Redevelopment Models, Davison, MI

Public Engagement & Facilitation

Center Street Plaza Design Visioning Session, Royal Oak, MI
Gainsboro Park Visioning Session MobileLAB, Pleasant Ridge, MI
Grand River Public Space Public Participation Process, Detroit, MI
City of Gibraltar Downtown Redevelopment Design Workshop, Gibraltar, MI
Village Vision Plan - Public Engagement Charrette, Ephraim, WI
Water Street - Hwy 42 Visioning Session, Ephraim, WI
Paint Creek Trail Master Plan Public Engagement, Oakland Co., MI
Frankfort Master Plan Charrette, Frankfort, MI
Maple Glen and Wise Road Parks Design Charrettes, Commerce Twp., MI
Pittsfield Township Master Planning Charrette, Pittsfield Township, MI

LEAH M. GROYA:

AICP, LEED AP
professional planner + partner

Grantsmanship guru.
Recreation nut.
Management maven.
This is Leah.

Using her lifelong love of the outdoors to focus her professional expertise and career, Leah has had enormous success in planning and project funding. Over the past 18 years, she has specialized in marketing and managing non-motorized transportation projects and parks and recreation plans; she has successfully secured $4.46 million in project funding for her clients; and has worked to restore our environment through successful watershed planning and ecosystem restoration efforts. Her passion for finding and embracing the balance between environmental restoration while maintaining public use, access, and enjoyment of the natural resource and open space systems is what sets her apart from the rest.

In addition to business development and project management expertise, as a founding partner of livingLAB, Leah has accumulated experience in the management and operations of a planning and design firm. Her leadership skills make her a sought after project manager and business partner.

EDUCATION, REGISTRATIONS + TRAINING:

Education

BS, Urban and Regional Planning, Michigan State University: 1997

Registrations

American Institute of Certified Planners
LEED Accredited Professional: June 2007

Special Training

Safe Routes to School: Michigan Training March 2006
Professional Certificate in Watershed Management, Michigan State University, Institute of Water Research: 2004
AASHTO Bicycle Facility Design Training: 2011
SHPO Environmental Review Assistance: 1995-1997

PROFESSIONAL GOAL:

To work as part of a collaborative partnership in order to implement inspired physical change in our communities. To develop implementation-oriented plans that capture the desires and vision of individual communities.

LABpartners:

American Planning Association
Michigan Association of Planning
Michigan Recreation and Parks Association
Association of Pedestrian and Bicycle Professionals
Michigan Trails and Greenways Alliance
MRPA Trail Committee Member: 2009

NOTED EXPERIENCE:

Parks and Recreation Planning

Gainsboro Park, Pleasant Ridge, MI
518-Acre Wise Road Master Plan: Commerce, MI
Birmingham Recreation Master Plan: Birmingham, MI
West Bloomfield Recreation Master Plan: West Bloomfield, MI
Maple Glen & Hickory Glen Park Concept Plans: Commerce, MI
Plymouth Recreation Master Plan: Plymouth, MI
Pontiac Recreation Master Plan: Pontiac, MI
Commerce Township Recreation Master Plan: Commerce, MI
Redford Township Recreation Master Plan: Redford, MI
Orion Township Recreation Master Plan: Orion Township, MI
Milford Township Recreation Master Plan: Milford, MI
Village of Lake Orion Recreation Master Plan: Lake Orion, MI
100-Acre Woods Master Plan: Davison Township, MI

Non-Motorized Planning

MDOT University Region Non-Motorized Plan: MI
Detroit Bike Wayfinding Guidelines: Detroit, MI
Jefferson Avenue Protected Bike Lanes Design: Detroit, MI
Inner Circle Greenway TIGER grant: Detroit, MI
MDOT Regions' Bicycle and Pedestrian Committee Facilitation: Statewide
Detroit Bike Share Feasiblity Study: Detroit MI
SEMCOG Region Non-Motorized Master Plan: Southeast MI
Bike Hamtramck!: Hamtramck MI
I-275 Trail Asset Management Study: MDOT
Oakland County Trails Master Plan: Oakland County, MI
Novi Non-Motorized Master Plan: Novi, MI
Battle Creek Non-Motorized Master Plan: Battle Creek, MI
Mt. Pleasant Area Non-Motorized Plan: Mt. Pleasant, MI
Downriver Linked Greenways Initiative: Wayne County, MI
Lapeer Non-Motorized Master Plan: Lapeer, MI
I-275 Metro Trail Design Build: Wayne County, MI
M-5 Non-Motorized Trail: Novi, MI
Milford-Kensington Non-Motorized Trail: Milford, MI
Davison Township Connectivity Study: Davison, MI
Clinton River Trail Gap Analysis: Pontiac, MI
Thumb Region Non-Motorized Master Plan: Tuscola County, MI
Macomb County Trails Master Plan: Macomb County, MI
Henry Ford Hospital: Path to Wellness Master Plan: West Bloomfield, MI

Public Engagement & Facilitation

Outreach Meetings: MDOT University Region Regional Non-Motorized Plan: MI
Focus Group Meetings and Online Opinion Survey: Recreation Master Plan: Commerce, MI
Birmingham Community Workshops: Recreation Master Plan: Birmingham, MI
Focus Group Meetings: West Bloomfield Recreation Master Plan: West Bloomfield, MI
Design Charettes: Maple Glen Park & Hickory Glen Park Concept Plans: Commerce, MI
Public Open House: Paint Creek Trail Master Plan: Rochester, MI
Public Education Committee Facilitation: Alliance of Downriver Watersheds, MI
Stakeholder Committee Facilitation: Michigan Development Impact Study: Michigan Association of Planning
Public Input Meeting Facilitation: I275 Metro Trail Design Development, MI
MDOT Regions' Non-Motorized Advisory Committee's Facilitation: Statewide
Irish Hills Community Center Feasibility Study: Brooklyn, MI

LAUREN L HOFFMAN:

ASLA
landscape designer

Native Plant Nerd.
Stormwater Retainer.
Fitness Maven.
This is Lauren.

A life-long outdoorsman, Lauren has spent the past 7 years assessing and enhancing natural resources through design. Her assessment activities have included a myriad of survey and monitoring work including plants, pollinators, macroinvertebrates, threatened and endangered species, invasive species, prairies, natural and mitigation wetlands, and habitat suitability. She has designed habitat on corporate, municipal, parkland, and residential properties. Her designs have been constructed in urban centers and state parks; in rivers and forests; on Great Lakes shorelines and brownfield sites. She has developed creative solutions for issues surrounding water quality, accessibility, recreation, parking, circulation, combined sewer overflows, irrigation, education, and contamination.

Lauren is a designer, advocate, team member, and friend. She is a trusted advisor and solution-oriented in her actions. Justice and equal opportunities are not expendable. She is honest, ethical, responsive, and invested in her projects and community. She thrives in collaborative creative environments.

EDUCATION, REGISTRATIONS + TRAINING:

Education

MLA, Landscape Architecture, University of Michigan: 2009
MS, Terrestrial Ecosystems, University of Michigan: 2009
BS, Resource Ecology Management, University of Michigan: 2006

Registrations

Certified Floodplain Manager No. US-13-06906
Certified Natural Shoreline Professional

PROFESSIONAL GOAL:

To guide and implement collaborative design solutions for human space that support the landscape ecology of our region through sustainable retention of stormwater, ample supply of food resources, and intentional conservation and allocation of space to native communities.

LABpartners:

American Society of Landscape Architects
Michigan Chapter of the American Society of Landscape Architects
The Association of State Floodplain Managers
The Michigan Natural Shoreline Partnership
Michigan Entomological Society

NOTED EXPERIENCE:

Master Planning & Stormwater Design

Chrysler Beach Stormwater & Recreation Improvements: Marysville, MI
City Park Master Plan: Marysville, MI
Chandler Park Stormwater Master Plan: Detroit, MI
Sherman Park Beach Restoration: Sault Ste. Marie, MI

Habitat & Natural Resource Planning

Pollinator Survey Studies: Multiple sites, Southeast MI
Invasive Species Management & Planning: Multiple sites, MI
Wildlift Habitat Council Vegetation Surveys: Multiple sites, MI
Threatened & Endangered Species Inventory: Multiple sites, MI
Wetland Mitigation Monitoring: Multiple sites, Southeast MI
Natural Features Survey & Analyses: Multiple sites, Lower MI
Macroinvertebrate Surveys: Multiple sites, Southeast MI
Tree Surveys: Multiple sites, Southeast MI

Public Engagement & Education

Annual Pollinator Walks: Novi & Belleville, MI

Annual Rare Species & Habitats Training: Various locations, Lower MI

Native Plant Management Guide: Okemos, MI

Native Prairie Management Guide: Clinton Township, MI

Rain Garden Maintenance Reference Book: Marysville, MI

Green Infrastructure Analysis & Modeling

The Nature Conservancy Hypothetical Comparisons: Detroit, MI

Green Infrastructure Early Planning Tool: Great Lakes Region

Ford Motor Company Plant Stormwater Analysis & Concept Design: Ypsilanti, MI

Permitting

USACE Section 10 Rivers & Harbors Act, 33USC 403: Bay County, MI

USACE Section 10 Rivers & Harbors Act, 33USC 403: Beaver Island, IA

USFWS Bald & Golden Eagle Protection Act, 50 CFR Part 22: Beaver Island, IA

MDEQ/USACE 1994 PA 451 Natural Resources & Environmental Protection Act, Part 301 Inland Lakes & Streams and Part 303 Wetlands Protection: Ann Arbor, MI

MDEQ/USACE 1994 PA 451 Natural Resources & Environmental Protection Act, Part 303 Wetlands Protection: Romulus, MI

MDEQ/USACE 1994 PA 451 Natural Resources & Environmental Protection Act, Part 33 Aquatic Nuisance Control: Romulus, MI

Lyle E. Winn, PE - Senior Project Engineer

Lyle has more than 34 years of valuable experience in all phases of site development projects and municipal infrastructure. He is a veteran in dealing with public agencies in regard to obtaining required construction permits and approvals.

He provides all engineering services for Ray and Richmond Townships, and the city of St. Clair Shores, and he also serves as a consultant for local governmental units and planning commissions, and attends public hearings and meetings.

His responsibilities include project management, planning, design, and building, along with construction for paving, bicycle paths, drainage, sewer and water supply projects.

Education:

B.S. Civil Engineering, 1982
Michigan Technological University

Professional Registration:

Professional Engineer
Michigan, 1986

Professional Membership:

National Society of Professional Engineers

Michigan Society of Professional Engineers

American Water Works Association

Michigan Water Environment Association

Leadership Macomb

Professional Development:

Project Manager Bootcamp I
PSMJ Resources, Inc.

Roundabouts, Designing and Implementing
University of Wisconsin

Interpretation and Enforcement of Construction Contracts
University of Wisconsin

Bicycle Facility Design Workshop
Northwestern University

Geometric Designs for Very Low Volume Roads and Bicycle Facilities
Michigan Technological University

Engineering Management
Michigan State University

Construction Specifications
University of Wisconsin

AREAS OF SPECIAL EXPERTISE:

Municipal Engineering: Lyle is an expert in many areas, including project management, engineering design, and construction administration for many infrastructure improvements, and he also develops and maintains construction specifications for municipal construction.

Sanitary Sewer Projects including those ranging from eight to 42 inches, pump stations, force mains, rehabilitation of existing and deteriorated sewer lines and master plan development.

Stormwater Facilities include detention basins, pump stations, collection systems, stormwater quality, and floodplain control.

Water Supply System designs include storage facilities, connections to the DWSD system, booster pumps, pressure-reducing valves, new pipeline construction, rehabilitation of existing pipes, and the use of trenchless technologies.

Roadway and Pedestrian Projects for municipalities, county road departments and commissions, and the Michigan Department of Transportation (MDOT) have included intersection redesigns, roundabouts, reconstruction, bike trail systems, sidewalks, and pedestrian bridges.

Expert Eyewitness: Lyle has served as an expert witness for local municipalities in cases regarding engineering and land regulation ordinances.

AEW's Guarantee: *"We will listen in order to provide a product that meets our client's needs, expectations, vision and budget."*

Kevin E. Zauel, PE - Senior Project Engineer

Kevin has more than 25 years of valued engineering experience, and leads our Structural Engineering department. He serves as a lead engineer and project manager for both municipal and private clients on a broad range of projects, and also performs stand-alone consulting services. Additionally, he and his team provide valued expertise to other AEW project managers for both internal and external clients.

The Structural Engineering team, under Kevin's leadership, also has responsibility for the preparation of proposals, estimates, scoping studies, investigations and reports, and contract documents and specifications, in addition to construction administration services.

He brings a strong knowledge of industry standard software applications, as well as our state-of-the-art AutoCAD Civil/Architectural and MicroStation CAD platforms, all of which are instrumental in the plan development process.

Kevin's experience includes expertise in working with structures created from a number of materials that include concrete, steel, timber and masonry, and foundations that include shallow spread and wall footings, deeper drilled pier and driven pile varieties.

His extensive project experience also includes the design, analysis and rehabilitation of commercial, educational and industrial buildings, vehicular and pedestrian bridges and boardwalks, waste treatment plants, municipal infrastructure projects, and equipment support structures.

AREAS OF SPECIAL EXPERTISE:

Bridge Inspection and Design: Certified in safety inspections of in-service bridges, Kevin performs inspections, scour analysis and load ratings for a number of local agencies in accordance with Michigan Department of Transportation (MDOT) and federal requirements. He also assists communities in securing funding through the MDOT Local Bridge Program and has overseen literally hundreds of bridge inspection, reconstruction and rehabilitation projects.

Automotive and Industrial Facilities: With more than 15 years of experience in the automotive and industrial arena, Kevin has completed a significant number of projects for some of our area's leading manufacturers. These projects varied from process changeovers to complete design services for both new facilities and additions. He is also skilled in steel truss design and reinforcement, crane runway upgrades, conveyor and slab loading analysis, and stamping press, pit and floor replacement.

AEW's Guarantee: *"We will listen in order to provide a product that meets our client's needs, expectations, vision and budget."*

Education:

B.S. Civil Engineering, 1991
Michigan Technological University

Professional Registration:

Professional Engineer
Michigan, 1997

Professional Membership:

American Institute of Steel Construction

American Concrete Institute Greater Michigan Chapter

Structural Engineers Association of Michigan

Professional Development:

Bridge Annual Conference (2015) LTAP

Bridge Element Inspection and Annual Conference (2014) LTAP

Confined Space Entry Training (2012) OSHA

ACI 318-11 Building Code Seminar - ACI/PCA

2011 MDOT Bridge Load Rating Workshop

Local Concrete Seminar (2011) MCA

Designing and Retrofitting Bridges for Active Transportation (2011) APBP

Engineered Masonry Joint Design (2010) SEAMI

Fracture Critical Inspection Techniques for Steel Bridges (2009) FHWA and NHI

LRFR Load Rating (2008) FHWA and MDOT

Safety Inspection of In-Service Bridges (2007) FHWA and NHI

LRFD Highway Bridge Design (2007) University of Wisconsin

Juli Sala, PE, LEED AP BD+C - Licensed Engineer

Juli has more than five years of experience as a Civil Engineer, and his responsibilities include the many facets of both project development and management. These include design, permitting, and compliance with local, state and federal requirements, and preparation of project proposals.

His project experience includes working with our semi-public and private clients on residential and commercial developments, and K-12 and higher educational institutions. His knowledge of site feasibility and project management are valuable resources in his project design work.

Education:

M.S. Civil Engineering, 2015
University of Detroit Mercy

B.S. Civil Engineering, 2011
Purdue University

Professional Registration:

Professional Engineer
Michigan, 2015

Professional Certification

Leadership in Energy and Environmental Design - Building Design and Construction (LEED AP BD+C)

Juli is a "Leadership in Energy & Environmental Design Accredited Professional" with a specialty in Building Design and Construction (LEED AP BD+C), and he brings valuable insight to our clients and their "Green" projects. These "sustainable" projects are engineered and designed to optimize the use of our valuable natural resources, including water, energy, and construction materials, along with lowering air, ground, and water pollution by reducing greenhouse gas emissions, enhancing storm water quality management, and producing savings on life-cycle costs.

Juli has significant resources in his software portfolio including AutoCAD, Autoturn, and Civil 3D, Hydraflow Storm Sewers, and Excel/Visual Basic.

AREAS OF SPECIAL EXPERTISE:

Private Engineering: Performs site plan approval, design and specifications, and construction engineering support for private and semi-public client projects. Projects include K-12 and higher educational institutions, small and large retail projects including fuel centers, big box stores, and industrial automotive plants. He represents clients and appears on their behalf before Planning Commissions, Zoning Boards of Appeals, City Councils and Township Trustees for zoning and site plan project approvals.

Technical Specialties: Experienced with storm water quality and quantity management, including Operations and Maintenance Manual preparation, and he also has expertise with geometric products designed with stringent site and/or zoning requirements and Americans with Disabilities (ADA) design standards and regulations.

AEW's Guarantee: *"We will listen in order to provide a product that meets our client's needs, expectations, vision and budget."*

Michael A. Truax, PS - Licensed Surveyor

Mike has more than 13 years of experience, and is the director of our survey department. His responsibilities include the coordination of field personnel with design staff requirements, along with management and quality control of our survey crews, which can number up to nine.

He also supervises preparation of subdivision plats, condominium documents, construction control drawings, and ALTA surveys. In addition, he is knowledgeable in GPS and robotic surveying for global positioning mapping of large areas, Michigan Department of Transportation (MDOT) projects, and private and municipal construction staking.

Mike has additional responsibility where he performs data research, maintains accurate notes, records and sketches to describe and clarify completed work, as well as construction layout for pavement and all utilities. He also assists in deciding the methods and procedures used for the establishing survey controls. He is skilled in the use of Terramodel and Autodesk Land Desktop software programs.

Education:

B.S. Surveying Engineering Technology, 2005
Ferris State University

Professional Registration:

Professional Surveyor
Michigan, 2013

Professional Certification:

Confined Space Entry Supervisor/Entrant/Attendant
Metro Occupational Trainers

Professional Membership:

Michigan Society of Professional Surveyors

American Council of Surveying and Mapping

AREAS OF SPECIAL EXPERTISE:

Topographical Surveys: He has a wealth of experience in data collection needed to prepare topographical surveys for developments of differing size and complexity, and he is also skilled in roadways, acreage parcels, and buildings.

Construction Layout: Qualified in all areas of layout that are required for residential and commercial developments that require sanitary and storm sewers, water mains, and paving.

Boundary Surveys: Mike has served as a crew chief and assistant crew chief on many boundary and ALTA/NSPS surveys.

Written Descriptions: He has extensive experience in writing legal descriptions for boundary parcels, ALTA/NSPS surveys, condominium projects and a variety of easements.

AEW's Guarantee: *"We will listen in order to provide a product that meets our client's needs, expectations, vision and budget."*

Eric M. Graettinger, PE, LEED AP BD+C
Vice President

Eric's responsibilities as Lead Electrical Engineer include the technical production of a project, such as system design and layout, product research, documentation and drawing review submittals, and field investigations. He also monitors the budget and schedule throughout the course of a project.

Eric has been involved in the design of specialty indoor and outdoor lighting systems; medium- and low-voltage power distribution systems; fire alarm systems; emergency power distribution systems; power system evaluations; studies for existing primary and secondary distribution systems; and facility condition studies.

Eric's 19 years of electrical engineering experience includes both new construction and renovation of retail, commercial, institutional, government, corporate, and prototype facilities.

Project Role
Lead Electrical Engineer

Education
Bachelor of Science in Electrical Engineering, University of Detroit Mercy

Professional Registrations
Professional Engineer - MI, AZ, IN, FL (PE)

Professional Accreditations
USGBC LEED Accredited Professional (LEED AP BD+C)

Professional Memberships
Illuminating Engineering Society - Board of Manager Member; Past-President of Detroit Section; Annual Conference Committee Member (IESNA)

Relevant Project Experience

- **DTE Energy, Detroit, MI**
  Grand River Park Site
  Grand River Park Building
  Circle Park
  Campus Enhancements
- **City of Northville, Northville, MI**
  Town Square Improvements
- **City of Charlevoix, Charlevoix, MI**
  East Park Site Improvements
  East Park Trout Stream Electrical Completion
  Marina Park Development
- **City of Detroit, Detroit, MI**
  Butzel Playfield Renovations
- **City of Southgate, Southgate, MI**
  Southgate Community Recreation Center
- **Blue Water Area YMCA, Port Huron, MI**
  New YMCA Facility
- **City of Royal Oak, Royal Oak, MI**
  Eagle Plaza Park Site Electrical & Lighting
- **City of Novi, MI**
  Civic Center and DPS Lighting Design Improvements
- **Cranbrook Education Community, Bloomfield Hills, MI**
  Quad Restoration - Sidewalk Replacement; Snow Melt Heating Pavers

George A. Hopkins
Principal

Project Role
Lead Mechanical Engineer

Education
Studies towards an Associate of Science Degree, Macomb Community College
Studies towards an Architectural Design Degree, Lawrence Technological University

Professional Memberships
American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE)

As Lead Mechanical Engineer, George is involved in the mechanical design and layout of HVAC, piping and control systems; the computer analysis of building heating and cooling loads and equipment selection; and central heating, chilled water and plumbing system design.

George's work experience of 31 years includes whole building energy simulations using multiple energy software platforms for both new and existing buildings to evaluate potential energy saving strategies. This includes the evaluation of building envelope enhancement, lighting energy reduction and lighting control, HVAC system selection, HVAC energy recovery system, solar heating hot water, solar domestic hot water, etc.

Relevant Project Experience

- **DTE Energy, Detroit, MI**
  Grand River Park Building
  Grand River Park Site
  Campus Enhancements
- **City of Dearborn, Dearborn, MI**
  Hemlock Park Pavilion
  Ford Community and Performing Arts Center
- **City of Warren, Warren,MI**
  Park Pavilion
- **1600 Cass Avenue, Detroit, MI**
  Vinton Building Adaptive Reuse
- **Rock Ventures, Detroit, MI**
  New Global Center for Learning and Achievement
  28 West Grand River Micro Lofts
- **Olympia Development of Michigan, Detroit, MI**
  Office Space Master Planning
- **Blue Cross Blue Shield of Michigan, Southfield, MI**
  Blue Care Network Commons Renovation Master Plan
- **The Eyde Company, Toledo, OH**
  Tower on the Maumee Renovations
- **Ferris State University, Big Rapids, MI**
  South Commons Rock Cafe Renovations

Brienne E. Willcock, Hon. AIA, MIES, LC
Designer

Project Role
Education

Professional Accreditations
Professional Memberships

Lighting Designer
Bachelor of Science in Art and Interior Design Eastern Michigan University
Certified in Lighting Design **(LC)**
Illuminating Engineering Society of North America **(IESNA)** - Past President, 2016
National IES Annual Conference Chair,
Honorary Affiliate of the American Institute of Architects **(AIA)**

Brienne's background in Fine Art and Interior Design lends a unique combination of technical skill in both 2d and 3d design to projects. She is an integral part of each phase of the design process from initial client interaction to final site focus.

In addition to lighting design, Brienne excels in computer aided design, graphic design, photo editing, BIM modeling, 3D rendering, and photometric calculations.

Brienne often serves as project manager for in-depth investigation of LED product research, comparative analysis of products, and evaluation of performance data. Her efforts have led her to participate in the US Department of Energy's CALiPER (Commercially Available LED Product Evaluation and Reporting) Program. She has been invited to speak about specification integrity and economics of LED at multiple events including LightFair.

Relevant Project Experience

- **DTE Energy, Detroit, MI**
  Grand River Park Site
  Grand River Park Building
  Circle Park
  Lighting Installation Concepts
- **Blue Cross Blue Shield of Michigan, Detroit, MI**
  Campus Lighting
- **Hyundai Exhibit Lighting 2012, National**
  2012 Auto Show Lighting
- **General Motors Corporation, Global**
  Lighting Design Guide for Facilities
- **IHM Motherhouse, Monroe, MI**
  Chapel Lighting Renovation
- **Greektown Casino, Detroit, MI**
  Brizola Restaurant Lighting
- **Detroit Developmental Authority, Detroit, MI**
  Facade Lighting Design
- **Detroit Institute of Arts, Detroit, MI**
  Kresge Court Renovation
- **New Holland Brewery, Holland, MI**
  Interior & Exterior Lighting
- **City of Grand Rapids, Grand Rapids, MI**
  Lyon Square Plaza & Riverfront Renovation

Donald Carpenter, Ph.D., P.E., LEED AP
Principal & Vice President of Water Resources
Drummond Carpenter, PLLC

Donald D. Carpenter is an accredited green design professional and professional engineer whose expertise includes green infrastructure, stormwater best management practices (BMPs), hydrologic modeling and design, and field data collection. Dr. Carpenter's has 20 years' experience working with diverse clients across the United States as a researcher and practicing professional. As a NCI Certified Charrette Facilitator, he has extensive experience in community engagement and planning. His efforts have facilitated community implementation of green infrastructure and the development of community socio-economic sustainability plans. Dr. Carpenter routinely provides professional lectures and short courses on stormwater BMP design and green infrastructure implementation. Professionally, Dr. Carpenter is an active committee leader for the ASCE Environmental and Water Resources Institute and several regional green infrastructure committees dedicated to improving stormwater management.

Since 2001, Dr. Carpenter has been a professor of civil engineering at Lawrence Technological University where he taught numerous water resources courses and serves as Director of the Great Lakes Stormwater Management Institute. In this capacity, he conducts research on stormwater BMP effectiveness and advises communities on how to implement green infrastructure and manage stormwater. His University appointments included serving as University Director of Assessment (2009 to 2012) and founding Director of the Center for Teaching and Learning (2006 to 2009). Innovation, problem solving, communication, and assessing efficacy are hallmarks of his academic career that he leverages as a water resources professional.

Fields of Specialization

- Green Infrastructure
- Stormwater Best Management Practices (BMPs)
- Hydrologic and Watershed Modeling
- Stormwater and Environmental Flow Monitoring and Assessment
- River Restoration and Sediment Transport
- Leadership in Energy and Environmental Design (LEED)
- Low Impact Development (LID)
- Community Planning, Placemaking, Outreach and Education
- Design Manual Guidance

Education

- Ph.D., Environmental and Water Resources Engineering, University of Michigan (2001); M.S. Civil Engineering, Oregon State University (1996); B.S. Civil Engineering, Purdue University (1993)

Licensure and Certifications

- Registered Professional Engineer (PE #77517), Florida Board of Professional Engineers
- Registered Professional Engineer (PE #6201056764), Michigan Board of Professional Engineers
- Leadership in Energy and Environmental Design Accredited Professional (LEED AP)
- NCI Charrette Facilitation Certified, National Charrette Institute, Portland OR

Professional Affiliations

American Society of Civil Engineers

American Society of Engineering Education

U.S. Green Building Council

Chi Epsilon, Civil Engineering Honor Society

Society of American Military Engineers

Academic Experience

Professor, Civil Engineering Department and Director, Great Lakes Stormwater Management Institute, 2001-present, Lawrence Technological University, Southfield, Michigan

Visiting Scholar, Civil Engineering Department, Gonzaga University 2015-2016

Sample Professional Committees

Vice Chair, Green Roof Task Committee, ASCE/EWRI (2008-present)

LID Technical Committee, ASCE/EWRI (2008-present)

Member, State of Michigan Green Infrastructure Planning Committee

Board of Directors, Pure Oakland Water

WILLIAM P. GRIDER, FE
Senior Estimator

Over 13 years of project management, estimating, planning and scheduling, and auditing experience in the automotive and construction industries. Performed numerous estimates, for projects ranging in cost from $100,000 to $52,000,000, within the commercial, institutional, and industrial industries. Computer skills include WinEst and Microsoft Word, Excel, PowerPoint, and Access.

REPRESENTATIVE EXPERIENCE

Administrative Controls Management, Inc. (ACM) - 2007 – Present. Provides cost estimating services for various construction projects for The University of Michigan and has assisted with estimates for a major materials manufacturer and a major nuclear generation utility as well as architectural firms. Performs quantity take-offs for mechanical, electrical, civil, architectural, structural, and site work; assists in assigning items to the correct CSI divisions; and contacts contractors and suppliers to obtain pricing on items and materials. Estimate reports are structured such that the Owner can perform budget cost and bid price comparisons. Performs estimate reconciliation, if requested, where areas of issue are initially identified by CSI division, then line-by-line accounting of quantities, material and equipment cost, and labor costs is performed. Significant differences prompt a second calculation of quantities, verification of cost, and/or verification of questionable design elements within the construction documents.

BEI Associates - Full range of engineering and architectural design services from conceptual drawing to final bid documents, construction specifications, as well as construction management support. Provided project estimating/scheduling services for commercial, institutional, and industrial projects ranging from $100,000 to $20,000,000. Projects included new construction and larger renovation projects. Conducted cost studies for clients including services for existing facilities and facility relocation, which included estimating site work, demolition, underground utilities, foundations, structural, architectural, mechanical, and electrical. Provided on-site project management for a $13,000,000 construction phase of a $1,200,000,000 airport terminal project. Achieved 20% client cost savings through comprehensive review of contractor's quote, from actual material cost, labor cost, mark-ups, and acceleration costs.

EXPERIENCE HIGHLIGHTS

Cost Estimating
Scheduling
Project Management
Planning

MAJOR CLIENTS

DTE Energy
Indiana Michigan Power
The University of Michigan
W. Soule
Northwest Airlines (NWA)
DaimlerChrylser
General Motors Corporation
Ford Motor Company
City of Detroit
Detroit Zoological Institute

EDUCATION

Bachelor of Science
Civil Engineering
Wayne State University

CERTIFICATIONS

Fundamentals of Engineering (FE)

Ingrid Kanis is an occupational therapist who strives to help communities create and run amazing places where people of all abilities can play together. This journey began when she acquired a spinal cord injury while in the U.S. Army, resulting in spinal surgery and 18 months of rehab. Despite her recovery, Ingrid still experiences deficits from her injury. To reduce fatigue, she alternates her mobility between walking and rolling (in a wheelchair).

When walking, she depends upon her right side for sensory information, and upon her left side for stability. This daily mental dance, her bi-mobility and other experiences related to her injury deeply influence her work of helping communities expand their understanding of inclusion for all.

Besides a Masters of Occupational Therapy from Duquesne University, Ingrid has a Masters of Interior Architecture with an emphasis on inclusive, sustainable design from Chatham University. She owns her own consulting business, Kanics Inclusive Design Services, LLC, focusing on the creation and operation of inclusive indoor and outdoor play spaces. Ingrid presents at local, state and national conferences on the topics of play, sensory processing and Universal Design.

Tiffany co-founded Shane's Inspiration and was responsible for catalyzing the first universally accessible playground on the West Coast, raising more than $1 million for the project through corporate, foundation and community support. Since the first playground opened in 2000, she has helped raise millions of dollars to support the development of more than 90 universally accessible playground projects throughout the United States, Ecuador, Mexico and Russia.

Through her leadership, Shane's Inspiration has grown into an international nonprofit organization, serving as a leader in universal playground design and sustainability programming. Today, Tiffany is leading the organization's involvement with the Clinton Global Initiative, committing to bring social inclusion to five continents by 2018 through the vehicle of inclusive playgrounds and programs.

John McConkey serves as Market Research and Insights Manager at Landscape Structures. He provides more than 15 years of experience in the healthcare field, and offers a unique perspective on health, fitness and children's play on the playground. Since 2002, John has researched and tracked societal and industry trends to help create solutions that address evolving market needs. His recent efforts focus on playground accessibility and inclusiveness, health and fitness and environmental sustainability.

Penchura is a premier, privately owned and operated recreation solutions provider. Our team is made up of Recreation Professionals with more than 100 years combined experience in the business. Our staff includes Professional Engineers, Licensed Landscape Architects, LEED Accredited Professionals, Certified Installers and Support Specialists. We are Certified Playground Safety Inspectors for the State of Ohio. We have more than 4,100 playgrounds by Landscape Structures, Inc. installed in Michigan and Ohio.

Key Staff

Lance A. Shipman - Recreation Consultant

Lance Shipman at Penchura will be your prime contact and local representative for this project.

Mr. Shipman is a Licensed Landscape Architect and is CPSI Certified. Lance has over 21 years of professional experience in both the public and private sectors as a Landscape Architect and Recreational Designer.

Mr. Shipman has been involved in the design and development of a wide variety of projects including urban, park, streetscape, waterfront, school and residential development designs.

Lance is a graduate of Michigan State University, a Licensed Landscape Architect and a member of the American Society of Landscape Architects. He lives in South Lyon with his wife and two sons. He enjoys the outdoors, cycling and coaches baseball in the Junior League. Lance has taught music in several Michigan schools and has been a volunteer with the Make-A-Wish Foundation for several years

Somat Engineering, INCORPORATED

Jonathan Zaremski, PE

Geotechnical Group Leader

Jonathan Zaremski has been advising and managing a wide range of projects, from Federal and State Department of Transportations to large public works projects. Mr. Zaremski is well versed and experienced in managing and executing engineering projects for both public agencies and private owners from the conceptual and pre-design stage through construction. Mr. Zaremski has been involved with a wide variety of geotechnical explorations providing engineering analyses for pavements, deep foundations, underground piping, sign and signal pole foundations, retaining walls, and below grade structures. Additionally, Mr. Zaremski has provided to our clients his value engineering technical insight and experience with soil design/engineering properties and associated construction applications.

Education

BSE Civil & Environmental Engineering,

University of Michigan, Ann Arbor, MI 1998

Certifications

Professional Engineer Licenses:
Michigan 2002, (6201049269)
Ohio, 2007, (72002)
Indiana, 2008 (1080930)
Maryland, 2014 (45227)
Virginia, 2014 (0402053421)
District of Columbia, 2014 (PE907610)

Years Experience

18 with Somat Engineering
0 with other firms

Milliken State Park Bike and Pedestrian Path Extension

Detroit, Michigan
Michigan Department of Natural Resources
Budget $31,900; 2/2013 to 2/2014

Project Manager: The project consisted of the extension of the existing Detroit River Walk from Tricentennial Park at Rivers, through the empty parcel east of Riopelle and connected to the Dequindre Cut near the Globe Building. The paths will include about 900 feet of asphalt bike path and 900 feet of concrete pedestrian path. A part of this path extension will include re-grading of an existing soil berm, containing impacted soils, changing from existing by 5 to 7 feet. Responsible for oversight and review of the geotechnical investigation report including pavement design parameters for the new pathway.

Blue Heron Lagoon Restoration & South Fishing Pier Habitat Restoration

Detroit, Michigan
Friends of the Detroit River
Budget $23,000; 10/2011 to 4/2013

Project Manager: The project consisted of the restoration and rehabilitation of the habitats at the Blue Heron Lagoon. The Blue Heron Lagoon is located on the east side of Belle Isle. The proposed rehabilitation consisted of creating fish access to high quality wetlands with shallow and deep water habitat. A pedestrian bridge was proposed to span the location of the channel inlet/outlet restoration to maintain the existing walking path around the lagoon. Responsible for the geotechnical investigation for the proposed improvements to the lagoon and the proposed pedestrian bridge.

Interpretive Trail and Station Development Project
Pedestrian Trail Bridge over Fleming Creek, Parker Mill Park

Ann Arbor Township, Michigan
Washtenaw County Parks and Recreation Commission
Subconsultant $5,000 7/08 -9/10

Project Manager: Responsible for the geotechnical recommendations on the design of the bridge foundations for the new interpretive pedestrian trail connecting to the new paved path through Parker Mill County Park. Primary features of the trail will include the path itself, a pedestrian bridge over Fleming Creek, and interpretive stations/pavilions along the path.

I-275 Trail from Edward Hines Road to Michigan Avenue

Oakland and Wayne County, Michigan
Michigan Department of Transportation
Subconsultant $25.000 7/09– 1/11

Project Engineer: Responsible for the geotechnical recommendations for the design of the pedestrian bridge foundations and trail subgrades and reconstruction of approximately 7 miles

of bike path adjacent to I-275. The project included reconstruction of the trail, pedestrian bridge rehabilitation, replacement and installation of pedestrian traffic signals at selected intersections, upgrading ADA ramps, installation of pavement markings, and trail blazing sign along the trail.

RCOC Avon Road & Livernois Road over the Clinton River
Rochester Hills, Michgian
Parsons Brinckerhoff of Michigan, Inc.
This project consisted of the replacement of the Avon and Livernois Road bridges over the Clinton River. Somat was responsible for the geotechnical investigation for the design of the pile foundations, utilizing the AASHTO LRFD design guidelines and MDOT Pile Special Provision, and bridge approach subgrade recommendations. Also performed an analysis of the existing sheet pile wall between the bridges, providing the existing thickness and estimated service life. The field exploration program consisted of a total of seven (7) soil borings and twelve (12) hand augers for the proposed bridge abutments, sidewalk evaluation and along the banks of the river for evaluation of the retained soils behind the existing retaining wall. In addition to the soil boring and hand augers, two (2) sediment samples were collected from the Clinton River for grain size analysis.

RCOC Green Lake Road 3R Rehabilitation Project
West Bloomfield, Michigan
Parsons Corporation
This project includes rehabilitation and widening of approximately 1.75 miles of Green Lake Road between Pontiac Trail and Commerce Road, and Replacement of the existing culvert located between Field View Avenue and Colony Drive in West Bloomfield Township, Oakland County, Michigan. Somat performed a geotechnical investigation for the roadway including 14 soil borings, laboratory testing and report.

M-1 Rail Owners Representative and General Engineering Services
Wayne County, Michigan
HNTB Corporation
This project consists of construction of the 3.3 mile, M-1 Rail Streetcar along Woodward Avenue between Congress and West Grand Boulevard Streets in Detroit, Michigan. Somat performed the geotechnical investigation for the rail track subgrade preparation, and performed Closed Camera Televising Video (CCTV) and walk-through inspection of the Detroit Water and Sewerage Department (DWSD) sewers and manholes along the proposed M-1 track alignment to evaluate the overall structural and physical condition. Additional services include providing material testing and construction inspection services of the rail components including utility relocations/upgrades and complete reconstruction of two (2) major overpass bridges for I-75 and I-94 freeways.

Huron-Clinton Metroparks - Milford Hike / Bike Trail Connector
Milford Township, Michigan
Somat Fees: $3,000 Service Dates:12/2004 – 04/2005
The project consisted of the construction of approximately 3.9 miles of a pedestrian hike/bike trail. A portion of the trail runs through Kensington Metropark while the remainder extends out into Milford Township to connect with existing pedestrian trails. The pathway generally followed the Huron River and extended from about Huron River Parkway to General Motors Road (at its intersection with South Milford Road). There were also portions of the trail alignment that crossed existing wetland areas. These areas of the pathway were constructed as elevated boardwalks supported by timber pile foundations. Project Manager for the Geotechnical Investigation for the proposed hike/bike path, consisting of performing several auger probes along the path alignment for the design of the pavement section. Additionally, several soil borings were taken through the wetland areas for the design of piling systems for the support of the elevated boardwalks.

Robert Sullivan
Advanced Lighting & Sound

Advanced Lighting & Sound was founded in 1983 under the principal of providing integrated sound, lighting and video solutions for its customers. Advanced has extensive experience in providing solutions for Houses of Worship, Performance Venues, Local Government and Educational facilities. We have an in house design staff that can provide complete document packages and bid specifications for projects. We actively pursue the latest technology and are members of many AV trade groups. Over the years we have developed relationships with many architectural firms and are considered valuable members of the design team for the extensive knowledge of real world solutions we can bring to problems faced in the design process.

Bob Sullivan, President of Advanced Lighting & Sound is a founding principal of the firm. Bob comes from a background of live theater with experience in all aspects of production. He is the principal designer for the company's integrated solutions for larger performance spaces.

Affiliations:
CAM Construction Association of Michigan
IES Illuminating Engineering Society
Infocomm International

PROJECTS:

Campus Martius Park

We designed and integrated a park wide audio and lighting system capable of supporting year round activity. In the winter an ice rink operates November through March and in the summer various concerts and events happen throughout the park. We worked to design a custom weatherproof speaker system that would meet the needs of the park. We designed the balance of the audio and lighting systems and integrated them into a park wide control system that allows for automatic or manned operation of the various technical systems. We continue to provide system support and upgrades as needed.

DTE Grand River Space

We designed a park wide audio system to support year round programming. We designed audio and video systems for the onsite restaurant that blended into the unique architecture of the space. A park wide control system that allows for automated as well as user interface was designed ot meet the operational needs of the park and the staff.

PROJECT PROFILES

The following pages include team member's representative project examples and experience which share a similar scope of work, and program to the proposed Normandy Oaks and Central Park projects.

livingLAB:
a collaborative design studio

Grand River Public Space:
Detroit, Michigan

location:
detroit, michigan

client:
DTE Energy

scope:
public engagement
master planning
visualization
landscape architecture
project management
construction documentation
construction administration

completion date:
expected summer 2017

DTE Energy made a commitment years ago to 'Energize Detroit' through an initiative to reimagine the neighborhood in which the corporate headquarters resides. A major part of that initiative is focused on connecting the neighborhood - physically and socially.

Through an inclusive community engagement process a team comprised of the Downtown Detroit Partnership, Project for Public Spaces, the DTE Planning team and livingLAB listened to stakeholders, residents, businesses and employees to hear what was needed and wanted in the neighborhood.

The Grand River Public Space was designed to provide a place for residents to gather, for events and activities to be programmed, to energize the neighborhood through activity and community interaction and to provide a greater sense of place to the west downtown neighborhood.

Amenities include a LEED Gold Restaurant, rain gardens, food truck plaza, interactive art, a performance venue, gardens and an open lawn for activities and concerts.

livingLAB:
a collaborative design studio

Gainsboro Park:
Pleasant Ridge, Michigan

location:
pleasant ridge, mi

client:
the city of pleasant ridge

scope:
mobileLAB public engagement
stakeholder meetings
park master planning
open working sessions
online engagement

completion date:
fall 2016

lab partner:
aew engineering

Gainsboro Park is a linear greenspace which flanks the Canadian National Railway along the eastern edge of the City of Pleasant Ridge. Although the park stretches for nearly a half-mile in total length, it remains an underutilized gem for residents of the community. The park is so important to residents that in 2014 they voted to approve a millage that would fund the redevelopment of Gainsboro Park. As a part of the park redevelopment process the City partnered with livingLAB to facilitate a robust community engagement, public visioning, and park master plan design as a part of a week long mobileLAB process.

livingLAB immersed themselves in the community and worked with City leaders to direct a number of community visioning activities including an Idea Quilt, Walking Tours of the park, and a Prioritization Pit Stop. The result after a week of concentrated public engagement and plan alternatives was the development of a conceptual master plan for Gainsboro Park that reflects the resident's vision for their prized park.

livingLAB:
a collaborative design studio

Maple Glen Park Phase One:
Commerce Township, Michigan

location:
commerce township, mi

client:
commerce township

scope:
tree tagging
construction documents
specifications
construction observation

completion date:
spring 2016

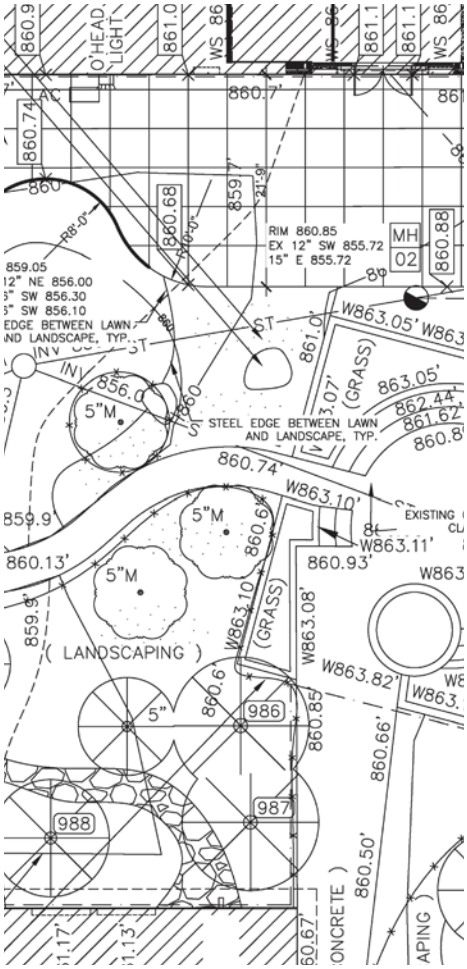
lab partner:
giffels webster engineering

The 102-acre Maple Glen Park is a destination for the local baseball and softball leagues and has evolved over time without direction from a comprehensive master plan. Issues at the park include inefficient and unorganized parking, lack of pedestrian system, single ingress/egress, and inconsistent design treatments.

After assisting in the development of a long-term master plan for the park, livingLAB worked with the Township to develop construction documents and specifications for Phase One improvements including a new entry to the park; a new parking lot incorporating infiltration basins, bioswales, and porous pavement; native plants, an internal circulation drive; and custom, milled on-site benches and wayfinding signs re-using timber removed for the parking lot. Construction will be completed in 2015.

livingLAB:
a collaborative design studio

Hillel Day School Outdoor Learning:
Farmington Hills, Michigan



location:
farmington hills, mi

owner:
hillel day school

scope:
stakeholder engagement
site plan
construction documents

completion date:
2014

client:
felding nair international

livingLAB worked with architects at Felding Nair International and the Hillel Day School Administration to create gathering space, an outdoor learning lab and innovation hubs in 3 existing courtyards.

livingLAB worked with school staff to understand the needs of the students and teachers, to identify the maintenance needs of the administration and develop a plan that led to interactive spaces that supported classroom learning and curriculum in the outdoor setting.

The spaces incorporated science exploration, arts and culture, native Michigan landscapes, reading circles, vegetable gardens, learning labs and activity decks, as well as a quiet waiting area for parents while waiting for students.

livingLAB:
a collaborative design studio

Children's Park:
Lake Orion, Michigan

location:
lake orion, mi

client:
lake orion dda

scope:
grant writing
design
plans and specifications
construction observation

completion date:
2011

LABpartner:
wade trim

Improvements to Children's Park were partially funded through a Land and Water Conservation Grant from the Michigan Department of Natural Resources and National Park Service. While at Wade Trim, livingLAB staff wrote the grant application, developed conceptual design plans and construction documents for this 1.54-acre urban park along the shores of the Paint Creek in the heart of historic Lake Orion.

Improvements include terraced, native stone seating for event viewing, an at grade slide for entry into the park, new stairways from the street into the park, landscaping, a park archway sign, and decorative fencing.

Lake St. Clair Metropark Playground Redevelopment

Harrison Township, Michigan

Key Staff:

Project Manager
Kyle M. Seidel, PE, CFM

Quality Assurance
Stephen V. Pangori, PE

Engineering
Brett D. McDonald, EIT
Kevin E. Zauel, PE

Architecture
Brandy L. Chirco

This redevelopment project is primarily focused within the children's play area (3.5 acres), and along the west side portion of the boardwalk that traverses Lake St. Clair Metropark. Located on a sprawling 770 acres, this park provides diverse recreational opportunities, including: playground access, beach access, tennis, shuffleboard, running, walking, hiking, picnicking and pavilion rental. Existing play equipment is outdated, damaged and in need of upgrading in order to make this a safe and enjoyable playground. Main concerns and driving factors of this project are to increase visitor safety, increase the efficiency of maintenance of the park's amenities, and preservation of existing trees and the existing perimeter boardwalk.

Existing Play Structures

AEW has successfully received schematic design approval from the HCMA Board of Commissioners, and is currently in the design stage of the project.

The project scope includes:

- Removing and replacing existing play equipment
- Removing and replacing Tennis courts
- Removing and replacing Shuffleboard courts
- Construction of new Pickle Ball courts
- Construction of a new open canopy structure
- Construction of a new concession stand
- Installation of new perimeter site lighting and lighting of tennis courts
- Introduction of adult fitness equipment

Approved Schematic Design for Redevelopment

Key design considerations include:

- Safety Fall Zones of the play structures
- ADA accessibility for all structures
- ADA accessible restrooms
- Site security, maintenance, and emergency access routes
- Future planning of the park system

Approved Schematic Design of a Play Structure

Contact:

Huron Clinton Metropolitan Authority (HCMA)
13000 High Ridge Drive
Brighton, MI 48114

Laura Martin
Supervising Design Engineer
(810) 494-6056

Project Highlights:

Original Budget
$1.6M

Final Cost:
ongoing

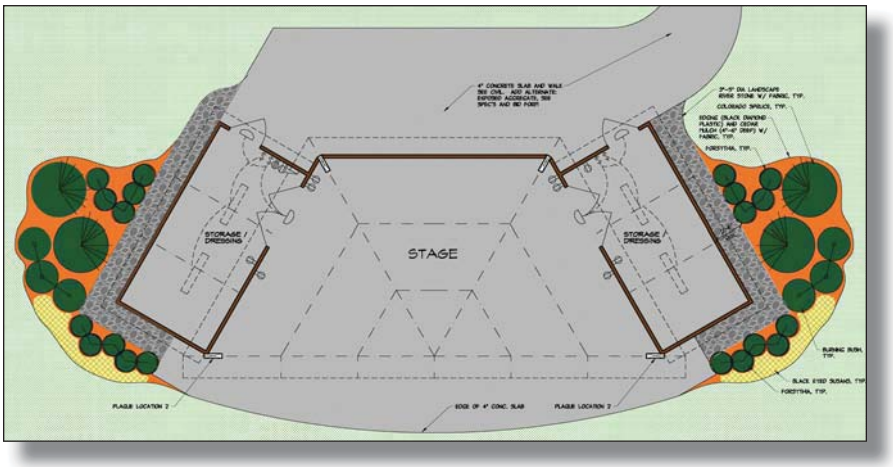
Started
Fall 2016

Expected Completion
Summer 2017

AEW Project No.
0215-0039

Municipal Park Band Shell

Rochester, Michigan



Key Staff:

Project Manager
Gordon B. Wilson, PE, CFM

Quality Assurance
Roy C. Rose, PE, EXW

Engineering
Jeffrey L. Allegoet

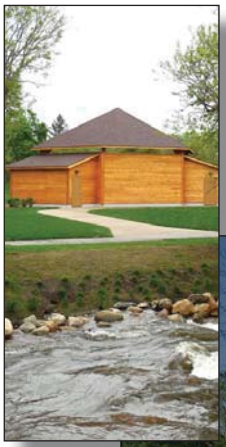
Architectural Design
Jason R. Arlow, AIA, LEED AP

Structural Engineering
Kevin E. Zauel, PE

Surveying
Robert H. Birkett, PS

The City of Rochester prepared a section in their Municipal Park for a 60 ft. by 25 ft. pre-fabricated band shell, for family friendly community based events.

Nestled in the park, near the Paint Creek, this timber structure has a stage that faces a natural hill, which provides seating for 800 to 1,000 people. Additionally, the band shell includes two 200 sq. ft. dressing rooms which surround the 750 sq. ft. stage.



Contact:

City of Rochester
1141 N. Wilcox
Rochester, MI 48307

Bill Bohlen
Director of Public Works
(248) 651-9061
BBohlen@rochestermi.org

Project Highlights:

Original Budget
$300,000

Final Budget
$280,000

Started
November 2014

Completed
May 2014

AEW Project No.
0270-0028

Comfort Station Renovation

Rochester, Michigan

Key Staff:

Project Manager
Gordon B. Wilson, PE, CFM, EXW

Architectural Design
Jason R. Arlow, AIA, LEED AP

AEW designed an interior and exterior renovation for this existing comfort station in Rochester's municipal park. The 26 ft. by 50 ft. structure has two family restrooms, a drinking fountain with water bottle filler, and a covered pavilion which is frequently used for family picnics and small company outings..

Located in the northeast corner of the municipal park, the restrooms also conveniently serve the adjacent Kiwanis Pavilion and the Tot-Lot.

The natural cedar and stone materials compliment the existing park context and the newly constructed band shell.

Contact:

City of Rochester
400 Sixth Street
Rochester, MI 48307

Nik Banda
Acting City Manager
(248) 651-9061
citymanager@rochestermi.org

Project Highlights:

Original Budget
$210,000.00

Final Budget
$241,800.00

Started
April 2015

Completed
September 2015

AEW Project No.
0270-0073

Brandenburg Park Improvements

Chesterfield Township, Michigan

Key Staff:

Project Manager
Gordon B. Wilson, PE, CFM, EXW

Quality Assurance
Roy C. Rose, PE, EXW

Engineering
Aseel A. Putros, PE, CFM

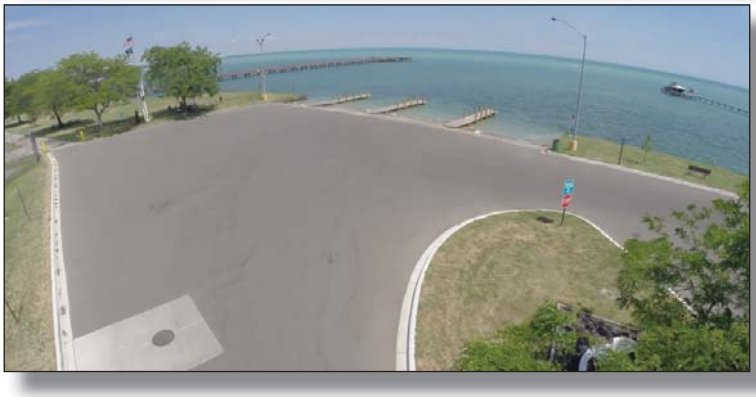
Surveying
Robert H. Birkett, PS

Construction Services
Bradley M. Smith

AEW designed and implemented several improvements for Brandenburg Park including:

- Picnic Pavilions
- Playscape
- Comfort station
- Roof replacement on existing concession building
- Design and installation of 10ft. wide bituminous bike path
- Tennis Court and Basketball Court

AEW also largely improved the efficiency and aesthetic of the parking lot for residents and other users of the park. This complete redesign included removal and replacement of entire parking lot with asphalt pavement over aggregate base, removal and replacement of concrete curb and gutters, and improving the grading and drainage throughout. Storm drainage improvements included the installation of a Stormceptor (stormwater treatment structure) prior to discharge into Lake St. Clair.



Contact:

Charter Township of Chesterfield
Department of Public Works
52216 Sierra Drive
Chesterfield Township, MI 48047

Donald Coddington
Superintendent
(586) 949-0400
DCoddington@chesterfieldtwp.org

Project Highlights:

Original Budget
$1,670,835.55

Final Budget
$1,641,541.22

Started
September 2014

Completed
June 2015

AEW Project No.
0126-1109

Brandenburg Splash Pad

Chesterfield Township, Michigan

This 3,500 sq. ft. splash pad was generously donated by the Wayne and Joan Webber Foundation, residents of Chesterfield Township for nearly 40 years. AEW was pleased to aid the Webber Foundation with the design of the equipment, building, and initial layout, along with state and local permitting.

All 16 nautical themed water features were custom designed and built in-house by The Webber Group. The stainless steel tubing features were powder coated to ensure sustainability. As an added benefit, the water is heated for comfort during cooler Michigan summer days.

The 400 sq. ft. equipment building houses a 3,000 gallon water tank, multiple pumps, a chemical feeder and control equipment. The water used by the features is collected, chlorinated, filtered, and then recycled by the splash pad, cutting down on water consumption and treatment.

Key Staff:

Project Manager
Gordon B. Wilson, PE, CFM

Quality Assurance
Roy C. Rose, PE, EXW

Architectural Design
Jason R. Arlow, AIA, LEED AP

Engineering
Jeffrey L. Allegoet

Construction Services
Performed by the Township

Contact:

Charter Township of Chesterfield
Department of Public Works
52216 Sierra Drive
Chesterfield Township, MI 48047

Donald Coddington
Superintendent
(586) 949-0400
cmyers@chesterfieldtwp.org

Project Highlights:

Original Budget
Not Applicable

Final Budget
$320,000

Started
July 2012

Completed
May 2013

AEW Project No.
0126-1043

McKinley Park Improvements

GROVE STREET NEAR 13 MILE AND HAYES ROADS

Fraser, Michigan

Key Staff:

Project Manager
Scott P. Lockwood, PE

Quality Assurance
Roy C. Rose, PE, EXW

Engineering
Michael A. Vigneron, PE, PTOE

Architecture Design
Jason R. Arlow, AIA, LEED AP

Structural Engineering
Kevin E. Zauel, PE

Surveying
Robert H. Birkett, PS

Construction Services
Charles L. Myslinski

Contact:

City of Fraser
Department of Public Works
31250 Kendall
Fraser, MI 48026

B.J. VanFleteren
Superintendent
(586) 293-1977
bjv@fraser.govof ce.com

Project Highlights:

Original Budget
$571,000

Final Budget
$605,000

Started
November 2012

Completed
October 2015

AEW Project No.
0190-0329

Plans to create this barrier-free facility began in 2009 when a group of residents formed a booster club to assist the City in seeking a grant to fund development. In 2012, the Michigan Natural Resources Trust Fund awarded a $300,000 grant for the rst phase of improvements.

The 14-acre park formerly had a basketball and tennis court, small playscape for toddlers and rink for inline skating. An extreme makeover for the first phase included a new paved path, a cover pavillion, handicap accessible rest rooms and a parking lot with a turnaround for buses making this facility manageable to more than 25,000 Macomb County children with special needs and challenges.

With the community assisting the City in raising funds it is expecting to begin phase two in the summer of 2016. Expected to be the centerpiece of this phase is a 30,000 sq. ft. barrier-free playscape area. One piece of the playscape will resemble a re truck with interactive panels and features to teach re safety to children. Once completed, the park will be the rst of its kind in Macomb County.

Utica - Shelby Trail

Utica, Michigan
Shelby Township, Michigan

AEW provided construction engineering services for the 1.4 mile trail within the Shelby Township Riverbends Park, and in the City of Utica. The trail was located in a remote area of Riverbends Park while traversing steep terrain and meandering along the Clinton River.

Trail components included wooden board walks, a culvert to cross a railroad, a retaining wall along the Clinton River, and embankment stabilization. AEW construction engineering efforts included shop drawings reviews and evaluation of alternate products and construction methods, including:

- » Helical piles verses timber piles;
- » Pipe materials;
- » Fencing materials for scenic areas;
- » Geotextiles to address weak subgrades.

AEW's ability to pay attention to the details, and to make sound decisions to resolve field related conditions allowed the project to move forward in a positive manner. We addressed:

- » Abandonment of old well systems;
- » Excavating through an undisclosed landfill;
- » Grade and alignment adjustments to save trees and eliminate retaining walls;
- » Eliminating river excavation needs;
- » Simplify boardwalk foundation construction.

Key Staff:

Project Manager
Lyle E. Winn, PE

Quality Assurance
Roy C. Rose, PE, EXW

Engineering
Joseph P. Eberle

Surveying
Robert H. Birkett, PS

Construction Services
Bradley M. Smith

Contact:

Macomb County
Department of Roads
117 South Groesbeck Highway
Mount Clemens, MI 48043

John Crumm, AICP
Director of Planning
(586) 463-1982
jcrumm@rcmcweb.org

Project Highlights:

Original Budget
$2,420,000

Final Budget
$2,640,000

Started
March 2015

Completed
November 2015

AEW Project No.
0213-0118

Clawson City Park

Clawson, Michigan

Comfort Station

AEW has assisted the City with the design and construction of multiple park improvement projects, most of which used Community Development Block Grant (CDBG) funding. The projects encompassed civil, architectural and electrical design services, and included the exercise path that winds through the park, a picnic pavilion, a comfort station, fencing, lighting and electrical upgrades throughout the park. Administration of these projects included ensuring compliance with Oakland County and federal requirements for projects using CDBG funds.

Baseball Field Lighting - Electrical Panel Upgrades

Due to deterioration and an inability to replace circuit breakers, the City updated the electrical panel at the community baseball eld. Based on eld measurements and calculation, AEW recommended and designed a 600 amp, three phase, 480/227 volt, four wire control/service panel to meet the existing needs and allow for a 25% expansion. A stainless steel cabinet was speci ed to provide an extended, low maintenance service life. Project was completed in 2006 for $32,250.

Tennis /Volleyball Court Lighting – Electrical Panel and Controls Upgrades

In 2008, AEW designed the next phase of the electrical improvements which consisted of replacing the electrical panel and controls for the existing tennis and volleyball courts. This project included a 400 amp, single phase, 120/240 volt, three wire control/service panel to meet the existing needs and allow for a 25% expansion in a stainless steel cabinet. This panel also included an adjustable timer to provide users the ability to turn on lighting for intervals of play beyond dark, with an override for a xed shut off time, established by the City. Project completed with CDBG funds in 2008 for $19,215.

Parking Lot Lighting Upgrades

In 2008 the City removed and salvaged decorative, pedestrian level lighting from the downtown. In 2011, AEW assisted with design and contract documents for refurbishing the light poles and installing them along the main parking spaces in the City Park, along with other electrical upgrades park. The 22 refurbished lights were installed along with upgrades to the existing control system to operate the lights from a photocell. The controls were also upgraded to set up alternating zones of every other light, to maintain minimal lighting after the park closed. Project was completed with CDBG funds in 2011 for $64,000.

Key Staff:

Project Manager
Jennifer L. Chehab, PE

Quality Assurance
Roy C. Rose, PE, EXW

Engineering
Aseel A. Putros, PE, CFM

Architectural Design
Jason R. Arlow, AIA, LEED AP

Electrical
William L. Edwards, PE

Surveying
Robert H. Birkett, PS

Construction Services
Bradley M. Smith

Contact:

City of Clawson
635 West Elmwood
Clawson, MI 48017

Harry Drinkwine
Director of Engineering Services
(248) 288-3222
clawsondpw@m80.net

Project Highlights:

Original Budget
Varies by project

Final Budget
Varies by project

Started
Varies by project

Completed
June 2011

AEW Project No.
0810-0167

City Wide Bike Routes

Royal Oak, Michigan

Key Staff:

Project Manager
Michael D. Smith, PE

Quality Assurance
Scott P. Lockwood, PE

Construction Services
William M. Wines
Jeffery B. Mannor

The City of Royal Oak was awarded a Transportation Alternatives Program (TAP) grant through the Michigan Department of Transportation (MDOT) and SEMCOG, the Southeast Michigan Council of Governments for the installation of new bicycle route signage and pavement markings throughout the City of Royal Oak. The highly visible bicycle route will guide residents to connect with the downtown area, major streets and adjacent communities.

AEW was hired by the City of Royal Oak to perform Construction Administration and Inspection services. Our Construction Services staff provided administration, inspection and documentation of all Contractor field construction work on the project including quality control and conformance with the plans and specifications.

Contact:

City of Royal Oak
211 Williams Street
Royal Oak, MI 48067

Matthew J. Callahan, PE
City Engineer
(248) 246-3260
mattc@romi.gov

Project Highlights:

Original Budget
$151,200

Final Cost
$145,000

Started
June 2015

Completed
June 2016

AEW Project No.
1350-0002

Town Square Improvements
Northville Township Northville, MI

Completion:
2007

Project Description

The City of Northville implemented site and landscape improvements to their Town Square area in 2007, including the adjacent section of Main Street.

Improvements included:

- Renovation of the area surrounding the existing clock in the median of Main Street.
- Electrical support systems for a water feature in Town Square.
- Addition of a permanent performance pavilion including permanent, non-theatrical lighting and "road show" electrical connections.
- Addition of power to two future event kiosks.
- Receptacles in the planters for holiday lighting
- Control systems for lighting and power based on photocell and time of day control

Peter Basso Associates provided electrical engineering services, incorporating the lighting product specifications (lighting specified by others) into the electrical bid documents. PBA also designed raceways and power requirements to support the audio/visual systems designed by audio/visual consultant.

City of Charlevoix
East Park Development Charlevoix, MI

Completion:
2009

Client Contact:
Mr. Mark Buday
(231) 526-0223

Project Description

Peter Basso Associates provided electrical engineering services for the East Park Site work. The scope of work includes:

- Lighting design for site areas including pole mounted lighting along the shoreline of a similar style to existing street lighting on the site; step light fixtures at the steps in the park.
- Power design for site areas including power connections on the site for tent use during festivals, power connection to a fish pond pump, power connection to an irrigation pump, conduits and wire to pier bulkheads to feed the piers.
- Telecommunications for the site areas including provisions for telephone service for tent use during festivals.

Following the renovations, East Park was selected by the American Planning Association as one of the 2009 Public Spaces "Great Places in America."

Representative Exterior Lighting Projects

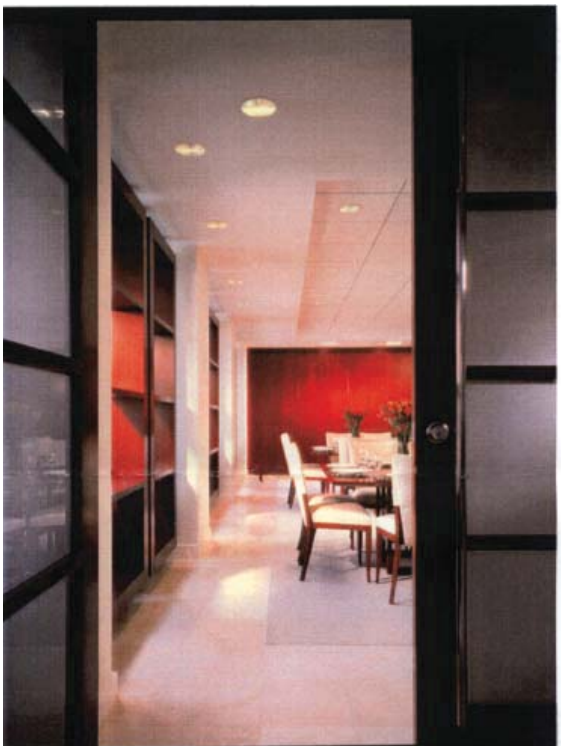
Municipality/Government

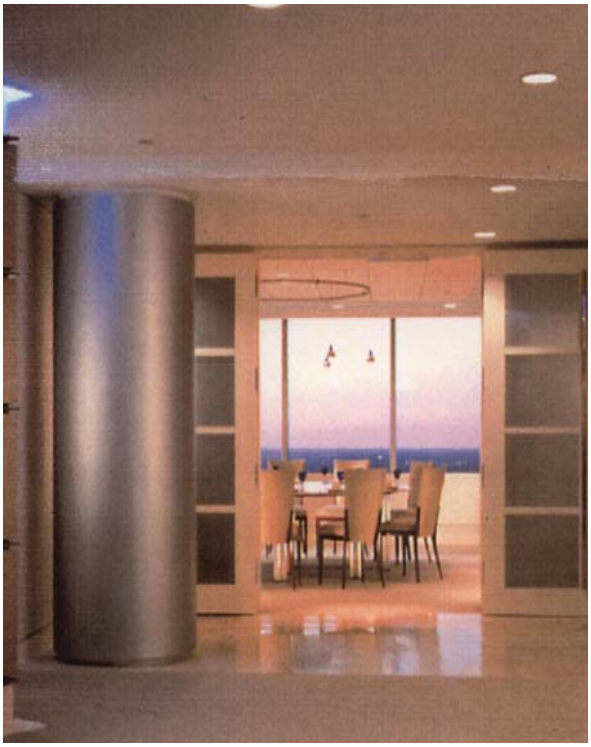
- **Blissfield Township, MI**
  Municipal Site Lighting
- **City of Charlevoix, MI**
  East Park Site Improvements
- **City of Northville, MI**
  Town Square Site Improvements
- **City of Royal Oak, MI**
  Eagle Plaza Park Site Electrical & Lighting

- **Detroit-Wayne County Building Authority, Detroit, MI**
  Coleman A. Young Municipal Center Electrical Site Analysis
- **City of Freeland, MI**
  Municipal Streetscape
- **Blissfield Township**, MI
  Municipal Site Lighting
- **City of Marlette, MI**
  Downtown Development Authority Streetscape Lighting
- **Village of Dexter, MI**
  Main Street Streetscape Lighting
  Alpine St. & Farmer's Market Electrical Renovations

- **Village of Dundee, MI**
  Streetscape Lighting
  Dundee, MI
- **City of Troy, MI**
  Boulan Park Upgrade/Replacement of Athletic Field Lighting System
- **Monroe Public Library, Monroe, MI**
  Site Lighting
- **Michigan Department of Transportation, Pleasant Ridge, MI**
  Parks Lighting


GRAND RIVERVIEW BALLROOM





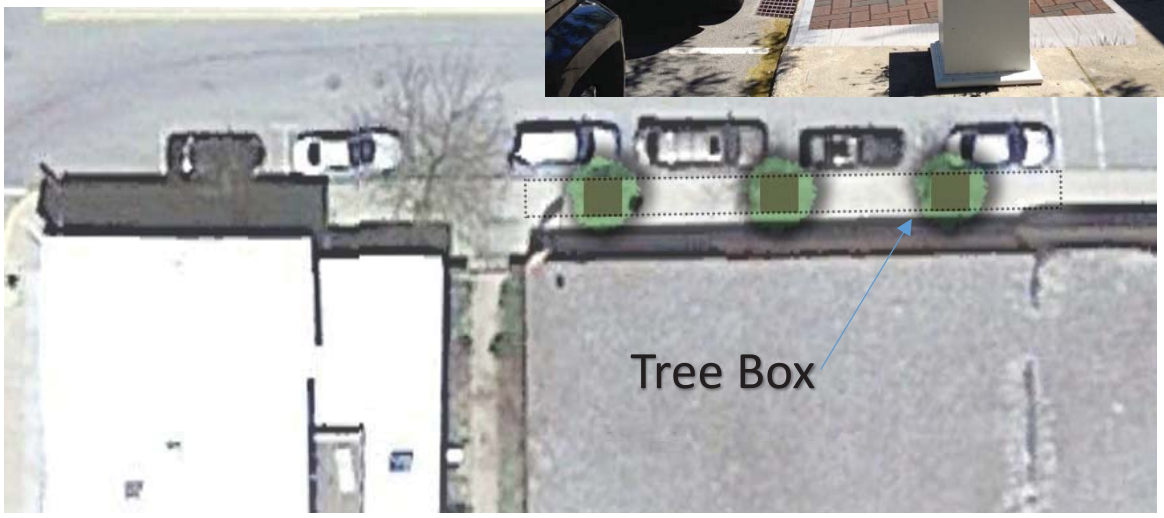
STATEMENT OF QUALIFICATIONS

DRUMMOND CARPENTER
engineering + research

Village of Northport Stormwater Reduction Project

Client: The Watershed Center of Grand Traverse Bay, Traverse City MI

Project Manager and lead Civil Engineer on a project that is integrating green infrastructure in a downtown streetscape to reduce stormwater runoff and pollutant loading into Grand Traverse Bay. Green infrastructure design features include tree boxes, infiltration beds, and porous pavement. Project included significant community engagement to meet aesthetic and maintenance performance goals in addition to stormwater reduction goals. Final project outcomes include a complete construction documents and bid package.



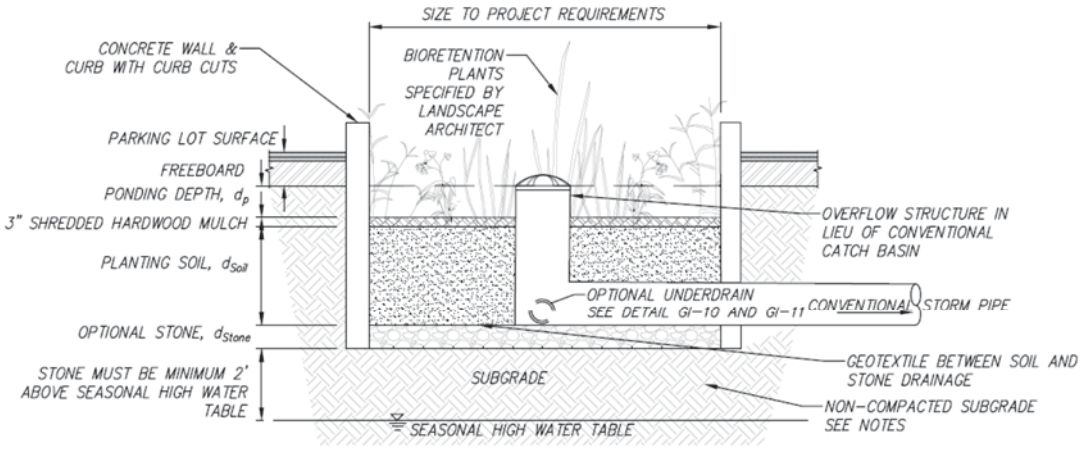
STATEMENT OF QUALIFICATIONS

DRUMMOND CARPENTER
engineering + research

Green Infrastructure Design for Meijer Corporation

Client: Meijer Corporation, Grand Rapids MI

Project Manager for a project has two basic components – updating Meijer civil site design documents to include green infrastructure and recommending specific green infrastructure design techniques for new store construction in Wisconsin, Michigan, and Ohio. Deliverables included the development of a green infrastructure design and maintenance manual, a green infrastructure site suitability evaluation forms, and typical construction design details for infiltration based design techniques including bioretention cells, bioswales, infiltration basins, and porous pavement. In several locations, the recommended conceptual designs and cost estimates are being advanced to final design stages for site implementation.



GI-1 PARKING LOT BIORETENTION CELL TYPICAL SECTION
NTS

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT			
a.	(1) FIRM NAME **Natural Community Services**	(2) FIRM LOCATION *(City and State)* **West Bloomfield, MI**	(3) ROLE **DesignConsulting**

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)

20. EXAMPLE PROJECT KEY NUMBER
3

21. TITLE AND LOCATION *(City and State)*
Fair Park Green Infrastructure Design

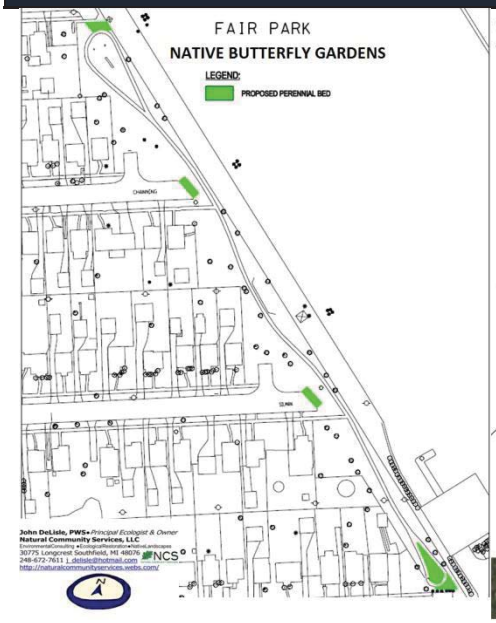
22. YEAR COMPLETED

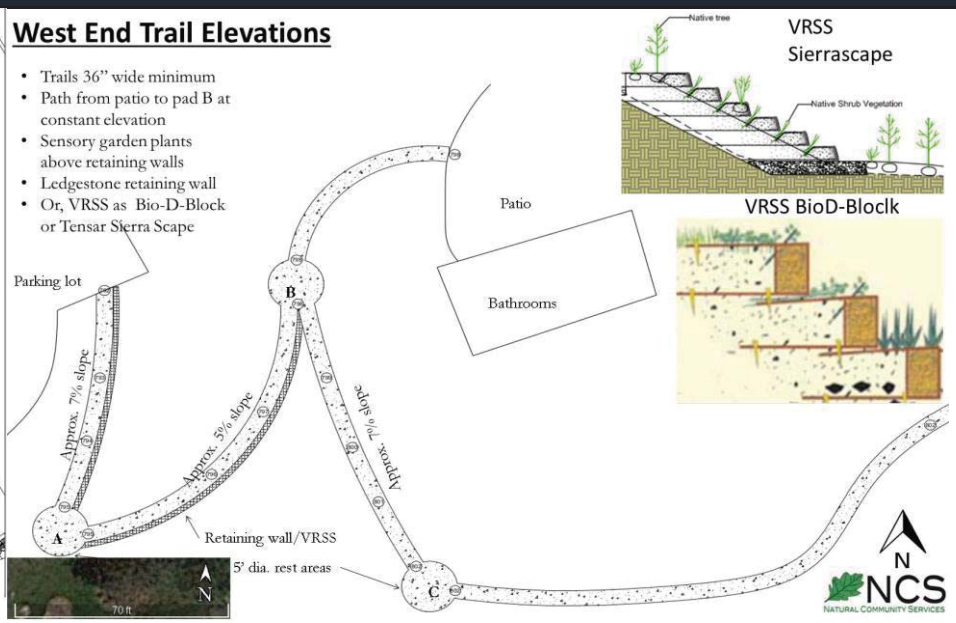
PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
2015	2015

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
City of Ferndale	**Matt Davis**	**Phone (248) 546-2519** **mdavis@ferndalemi.gov**

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*





Fair Park Bioswale Design/build project took runoff from park and adjacent land impervious surfaces and directed it to native planting swale-beds. NCS provided customized design, plant selection, and installation.

Cost-study and long-term budget

Livonia Green Streets GrowZone Cost-study

Item	Zone	Month	Unit	Quantity	Cost
Design, include plant list	all	March	EA	1	$ 500.00
GrowZone Interpretive signage	all	April	EA	20	$ 120.00
5 Mile Site prep spray & follow-up		April	EA	12	$ 545.00
5 Mile Rd. Low Prairie seed		April	AC	2	$ 4,400.00
5 Mile Native groundcover edging		May or Oct	AC	0.1	$ 1,000.00
Native Garden intersections w/ plugs		May or Oct	SY	100	$ 2,000.00
Farmington Rd. Site Prep spray					$ 775.00
Farmington Rd. Low Prairie seed		April	AC	3	$ 5,845.00
Farmington Savanna seed mix		May or Oct	AC	0.3	$ 1,000.00
Farmington groundcover edging		May or Oct			$ 1,000.00
Woodland edging plants		May or Oct	AC	0.1	$ 1,000.00
1-YEAR Establishment Maintenance					$ 7,845.00
TOTAL					$ 26,030.00

AVG. COST COMPARISON

Turf
Average turf installation per acre (seed): $3,000
Average turf installation per acre (sod): $8,000
Annual turf maintenance per acre: $1,000
Annual turf maintenance for homeowner: $500

Native Prairie Seeding
Average prairie seeding per acre: $1,500
Annual prairie maintenance per acre: $200

Mulched Native Groundcover Planting
Average planting per 1,000 sq. ft. $2,500
Annual maintenance per 1,000 sq. ft. $200

Standard Mulched Planting Bed
Average planting per 1,000 sq. ft. $3,500
Annual maintenance per 1,000 sq. ft. $400

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT *(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)*	20. EXAMPLE PROJECT KEY NUMBER **5**

21. TITLE AND LOCATION *(City and State)*	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
Macomb County – Metro Parkway Green Infrastructure	**2013**	$60,000

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Macomb County	**John Crumm** **Environmental Planner**	**(586) 463-8671**

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

Natural Community Services worked with the County to design, install, and establish green infrastructure practices funded by Environmental Protection Agency (EPA) grants through the Southeast Michigan Council of Governments (SEMCOG). The project replaced turf with native plantings that reduced the total volume of runoff from Metropolitan Parkway road infrastructure, lowering the amount of volume of runoff that will reach the ditches through infiltration and absorption by the native plants; and reduce the speed at which the runoff enters the ditches that will assist in reducing erosion in the ditches. NCS provided design-build and monitoring services: A. Pesticide Application to Planting Area B. Preparation of Planting Area – removing bionmass C. Planting of Shrubs. D. Planting of Native Wildflower Seed Mix and Grass Seed MixE. Erosion control: was provided by Trine Environmental

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION *(City and State)*	(3) ROLE
a.	**Natural Community Services**	**West Bloomfield, MI**	**Green infrastructure**

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT			
a.	(1) FIRM NAME **Natural Community Services**	(2) FIRM LOCATION *(City and State)* **West Bloomfield, MI**	(3) ROLE **Design Consulting**

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project.)

20. EXAMPLE PROJECT KEY NUMBER
10

21. TITLE AND LOCATION *(City and State)*
Detention Pond Retrofit Design/Build for HOA

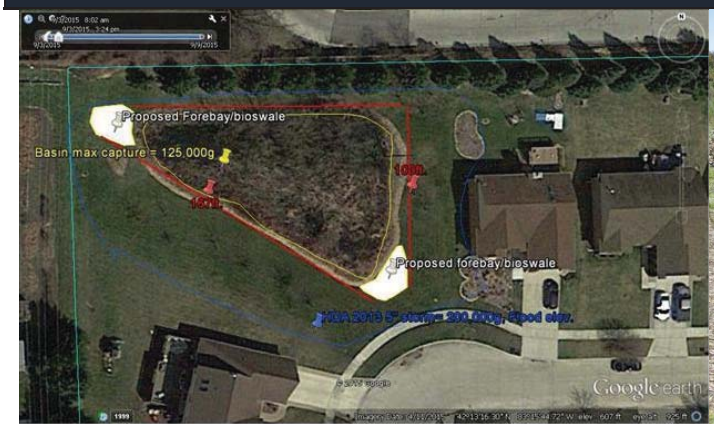
22. YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION *(If applicable)*
2015	2015

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Taylor Heatherwoods HOA	**Paula Boase**	313-903-0049, : Paula.Boase@dccwf.org

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*



NCS assessed designed, composed construction plans for and assisted in the construction of an Extended Detention Basin retrofit. We also developed an Inspection and Maintenance Checklist . NCS evaluated site stormwater data, benthic indicator species, and controlled invasive plants. NCS performs monitoring regularly to avoid costly oversights in cover and function. NCS has also performed detention basin retrofit design/build services for HOAs in Farmington Hills, Southfield, Novi, and Northville.

DESIGN & MAINTENANCE OPTIONS	Unit	Model	User	Chosen Option
Choose Level of Maintenance *("H"=high; "M"=medium; "L"=low)*	-	M	M	M
Forebay Size (Pct. of Total Pool) [**Enter 0% if no forebay** or if not maintained separately from main pool]*	pct	0%	10	1000%
Forebay Volume	yd^3	0	10	10
Main Pool Volume	yd^3	93	75	75
Pct. Full when sediment removed from Forebay/Main Pool**	pct	25%	25%	25%
Quantity of Sediment Removed from Forebay	yd^3	3	3	3
Quantity of Sediment Removed from Main Pool	yd^3	19		19

* Model is no separate maintenance of the forebay.

** Can adjust to be higher if expect heavy soils/sediment deposition to basin.

WHOLE LIFE COST OPTIONS	Unit	Model	User	Chosen Option
Discount Rate	%	5.50	5.0	5

CLIENT:	The University of Michigan
PROJECT:	Department of Intercollegiate Athletics Operations Center New Construction
PROJECT ESTIMATED COST:	$6,000,000
LOCATION:	Ann Arbor, Michigan
DATES:	June 2014
REFERENCE:	Rick Reichman

DESCRIPTION: Administrative Controls Management, Inc. (ACM) was retained by The University of Michigan to provide Construction Document (CD) level construction cost estimating services for the Athletic Operations Center's new building project.

The project consisted of constructing a new building to centralize and increase operational efficiency for functions currently undersized and housed in various locations across the Stephen M. Ross Athletic Campus. A building of approximately 18,000 square feet was planned to accommodate maintenance shops, offices, laundry, shipping and receiving, and equipment storage.

The scope of this project includes the architectural, mechanical, and electrical work necessary to accomplish these improvements.

ACM provided construction cost estimating services based on direct material quantity take-offs, estimated labor hours to install material quantities, and vendor consultation on material and installation costs of proprietary systems. Additionally, frequent contact with the architectural and engineering firms was integral to obtain scope clarifications in producing an accurate estimate.

CLIENT:	The University of Michigan
PROJECT:	Elmer D. Mitchell Field Improvements
PROJECT ESTIMATED COST:	$8,000,000
LOCATION:	Ann Arbor, Michigan
DATES:	January – February 2014
REFERENCE:	Crystal Kokx, Project Manager

DESCRIPTION: Administrative Controls Management, Inc. (ACM) was retained by The University of Michigan to provide Design Development (DD) and Construction Document (CD) level construction cost estimating services for the Elmer D. Mitchell Field Improvements Project.

Mitchell Field on North Campus is a major hub for intramural and club sports for students, typically hosting up to 800 users each evening. The improvements project was developed to increase usage flexibility of the fields, increase capacity, and extend the operating hours and operating season. The project consisted of repurposing four softball fields into four artificial-turf soccer/multi-purpose sports fields. Existing multi-purpose fields were improved for team practices and sports that prefer natural turf, such as rugby. All of the fields were enclosed with fencing to controls access, protect turf, and keep balls contained and lighting was installed with shields to illuminate the fields with minimal spill-over onto adjacent non-university property. Other site work included drainage improvements, on-site storm water management, and underground utilities. The existing building was renovated for use as storage and a 3,200 square foot building was constructed to improve bathroom facilities and provide on-site maintenance, storage, and operational support.

ACM performed a detailed quantity take-off and then priced all of the work required for the project based on the direct material quantity take-offs, estimated labor hours to install material quantities, and vendor consultation on material and installation costs of proprietary systems. ACM used industry standard databases for unit costs and factors relative to the project as well as ACM's own experience. Frequent contact with the architectural and engineering firms was integral to scope clarifications in producing an accurate estimate. The estimate report was structured such that the Owner could perform budget cost and bid price comparisons.

ACM met with the Architect to reconcile the estimate to agree on scope and verify cost within the University's estimate reconciliation guidelines.

REFERENCES

The communities and clients listed below have worked with livingLAB and can speak directly to you about our quality of work, design philosophy, work ethic and collaborative process.

Please note that additional references and client contact information for other team members can be found in their specific Firm Profiles and/or Project Profiles

CITY OF PLEASANT RIDGE

Jim Breuckman, City Manager
[o] 248.541.2901
citymanager@cityofpleasantridge.org
livingLAB staff brought our mobileLAB in July of 2015 to conduct a significant community engagement process focused on a vision and plan for Gainsboro Park. From there, livingLAB steered the project through the design developement and construction document phases of the project. Finally, livingLAB assisted the City of Pleasant Ridge in grant funding applications and studies, as well as landscape construction observation.

DTE ENERGY

Harold Domke, Manager Capital Projects
One Energy Plaza, Detroit, MI 48226
[o] 313.235.3567
domkeh@dteenergy.com
livingLAB led the development of conceptual designs, site plan documents, construction documents and specifications for the Grand River Public Space project. As with many urban parks, the balance of programming and design played a critical role in the development of the final plans. livingLAB managed the project in a way that united the design and programming needs, and helped navigate the project through a very complicated and tight construction schedule. The project includes development of a key public space in the heart of downtown Detroit. Many of design team members for this project have brought their experience and teamed up again for the Royal Oak Parks projects. We have built a knowledgeable team and work well together from conceptual design to construction administration - this adds to the overall efficiencies and quality of the project.

COMMERCE TOWNSHIP

Emily England, Parks and Recreation Director
[o] 248.926.0063
eengland@commercetwp.com
livingLAB staff has worked with Commerce Township on their last two 5-Year Parks and Recreation Master Plans, concept plans for 3 large parks as well as design of Phase I improvements to Maple Glen Park (2015 construction) as well as Phase I improvements at Wise Road Park (2015 construction).

CITY OF DETROIT

Karen Gage, Lead Planner - Central Region
City of Detroit Planning & Development Department
[o] 313.224.0472
gagek@detroitmi.gov
livingLAB has worked directly with the City of Detroit Planning and Development Department on the West Vernor Framework Plan. The plan includes improvements to Historic Clark Park, streetscape improvements and significant study of opportunity for a neighborhood-defining greenway. livingLAB has supported the department with quick and timely responses to elaborate study requested on limited timeframes in support of the Mayor.

APPENDIX

STANDARD CONTRACT FOR PROFESSIONAL SERVICES

Preliminary Provisions

Date
This Agreement is made as of , 2017, between the Client and the Consultant for Professional Services as provided herein.

Client

NAME

ADDRESS

RELATIONSHIP TO PROJECT OWNER

Consultant
livingLAB, llc
NAME
4444 SECOND AVENUE, Detroit, Michigan 48201
ADDRESS
Leah Groya, AICP, LEED AP
CONTACT PERSON

Project Description

Compensation
Compensation for the Scope of Services to be performed under this Agreement shall be the stipulated sum of $ plus Reimbursable Expenses.

Article 1
Professional Services

1.1 Standard of Care
The Professional Services shall be performed with care and diligence in accordance with the professional standards appropriate for a project of the nature and scope of this Project.

1.2 Scope of Services
Professional Services to be provided under this Agreement are:

1.3 Additional Services
Additional Services are beyond the scope of the basic Scope of Services, and when requested in writing by the Client, shall entail additional compensation beyond the Compensation stated above. Additional Services under this Agreement expressly include but are not limited to:

a. Site survey
b. Meetings in addition to those listed in the Scope of Services
c. Reproducible expenses in addition to those listed in the Scope of Services
d. Air travel and hotel expenses
e. Soil analysis and testing
f. Coordinating or preparing work for sub-consultants beyond the outlined scope of services

1.4 Changes to Approved Services

Revisions to drawings or other documents shall constitute Additional Services when made necessary because of Client-requested changes to previously approved drawings or other documents, or because of Client changes to previous budget parameters and/or Project requirements.

1.5 Schedule of Performance

The Client's signature on this Agreement shall be the basis for the Consultant to begin providing services for the Project. The Consultant shall perform the services as expeditiously as is consistent with professional quality.

Article 2
Client's Responsibilities

2.1 Information

The Client shall provide site and other information on which the design is to be based as well as Client's budget parameters for the Project. The Consultant shall be entitled to rely on the accuracy and completeness of information provided by the Client.

2.2 Budget

The Consultant shall reasonably strive to propose designs and prepare documents consistent with the Client's budget parameters. If provided by the Consultant as a part of the Scope of Services, opinions of probable construction costs are based on the designer's familiarity with the landscape construction industry and are provided only to assist the Client's budget planning; such opinions shall not be construed to provide a guarantee or warranty of the actual construction costs at the time construction bids are solicited or construction contracts negotiated.

2.3 Approvals

The Client's decisions, approvals, reviews, and responses shall be communicated to the Consultant in a timely manner so as not to delay the performance of the Professional Services.

2.4 Project Permit and Review Fees

The Client shall pay all fees required to secure jurisdictional approvals for the Project.

Article 3
Ownership of Documents

The Consultant shall be deemed the author and owner of all documents and deliverables developed pursuant to this Agreement and provided to the Client by the Consultant (collectively, the "Materials"). Subject to payment by the Client of all fees and costs owed to the Consultant, the Consultant grants to the Client a nonexclusive license to reproduce the Materials solely for the construction and use of the Project.

Article 4
Consultant Compensation

4.1 Compensation for the Professional Services performed under this Agreement shall be the stipulated sum indicated in the Preliminary Provisions plus Reimbursable Expenses as defined below. Additional Services, when requested in writing by the Client, shall entail additional compensation to be determined on an hourly basis or on the basis of a negotiated fee.

4.2 Reimbursable Expenses are expenditures for the Project made by the Consultant, its employees, and consultants in the interest of the Project plus an administrative fee of 5 %. Reimbursable Expenses include but are not limited to travel expenses, costs of reproduction, postage, services of professional consultants which cannot be quantified at the time of contracting, and other, similar direct Project-related expenditures.

4.3 Monthly payments to the Consultant shall be based on (1) the percentage of the Scope of Services completed, and shall include payments for (2) Additional Services performed, and (3) Reimbursable Expenses incurred.

4.4 Payments are due and payable 30 days from the date of the Consultant's invoice. Invoiced amounts unpaid 45 days after the invoice date shall be deemed overdue and shall accrue 1% interest per month. At the Consultant's option, overdue payments may be grounds for termination or suspension of services.

4.5 If through no fault of the Consultant the Scope of Services to be provided under this Agreement has not been completed within 30 days of the initially agreed upon project completion date , the compensation for services rendered after that time period shall be equitably adjusted.

Article 5
Indemnification

Client and Consultant each agree to indemnify and hold harmless the other, and their respective officers, employees, agents, and representatives, from and against liability for all claims, losses, damages, and expenses, including reasonable attorneys' fees, to the extent such claims, losses, damages, or expenses are caused by the indemnifying party's negligent acts, errors, or omissions. In the event claims, losses, damages, or expenses are caused by the joint or concurrent negligence of Client and Consultant, they shall be borne by each party in proportion to its negligence.

Article 6
Dispute Resolution

6.1 If a dispute arises out of or relates to this Agreement, the parties shall endeavor to resolve their differences first through direct discussions. If the dispute has not been settled within 14 days of the initial discussions, the parties shall submit the dispute to non binding mediation, the cost of which shall be shared equally by the parties. If the dispute is not settled through the mediation process, the parties agree to settle their dispute through the Arbitration process as administered by the American Arbitration Association.

6.2 Nothing in these provisions shall limit rights or remedies not expressly waived under applicable lien laws.

Article 7
Suspension/Termination
This Agreement may be terminated by either party on 7 days' written notice should the other party fail substantially to perform in accordance with its terms through no fault of the party initiating the termination, provided the defaulting party has not cured or in good faith diligently commenced to cure the breach during the 7-day notice period.

Article 8
Other Terms and Conditions

8.1 Assignment
Neither party shall assign their interest in this Agreement without the express written consent of the other, except as to the assignment of proceeds.

8.2 Governing Law
The law in effect at the Consultant's principal place of business shall govern this Agreement.

8.3 Complete Agreement
This Agreement represents the entire understanding between the Client and Consultant and supersedes all prior negotiations, representations, or agreements, whether written or oral. This Agreement may be amended only in a writing signed by both the Client and the Consultant.

livingLAB, llc _____
Consultant

By: _____

Date: _____

_____
Client

By: _____

Date: _____

APPENDIX B

CONSULTANT HOURLY RATES - 2017

CONSULTANT & EMPLOYEE CATEGORY	HOURLY CHARGE RATE
livingLAB	
Principal	$110.00
Licensed Landscape Architect/Planner	$90.00
Designer	$75.00
Intern	$50.00
Anderson, Eckstein and Westrick	
Principal Engineer/Surveyor/Architect	$147.00
Senior Project Manager/Surveyor/Architect	$134.00
Licensed Engineer/Surveyor/Architect	$121.00
Graduate Engineer/Surveyor/Architect	$99.00
Team Leader	$99.00
Engineering Aide III	$82.00
Engineering Aide II	$75.00
Engineering Aide I	$67.00
Engineering Aide Trainee	$48.00
Secretarial (special projects)	$41.00
Survey Field (3 person crew)	$200.00
Survey Field (2 person crew)	$167.00
Survey Field (1 person crew)	$130.00
Confined Space Entry Crew (2 person)	$192.00
Confined Space Entry (each additional person)	$64.00
Data Collector (survey crew)	$27.00
GPS Survey Equipment	$69.00
Peter Basso/Illuminart	
Principal	$161.00-$198.00
Senior-Level Engineer	$125.00-$156.00
Mid-Level Engineer	$94.00-$123.00
Junior-Level Engineer	$75.00-$84.00
Senior-Level Designer	$122.00-$156.00
Mid-Level Designer	$81.00-$123.00
Junior-Level Designer	$65.00-$84.00
CAD	$161.00-$198.00
Co-Op	$39.00-$60.00
Clerical	$44.00-$63.00
Architectural Lighting Designer	$98.00-$186.00
Natural Community Services	
CEO	$99.00
Principal Ecologist	$94.00
Design Manager	$75.00
Eco. Project Manager	$50.00
Designer	$50.00
Eco. Survey/GIS	$50.00

Administrative Controls Management	
Construction Estimator	$105.00

Drummond Carpenter	
Principal	$170.00

Advanced Lighting & Sound	
Design/Engineer	$120.00
CAD/Documentation	$85.00