Royal Oak
Life Now Playing

Proposal for

Normandy Oaks and Central Park

Landscape Architectural, Engineering and Construction Services

RFP-SBP-RO-17-034

Prepared for:

City of Royal Oak

211 S. Williams, Royal Oak, MI 48067

May 10, 2017

NF ENGINEERS

NF ENGINEERS

CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

May 10, 2017

Mr. Jeff McCormick
Purchasing Agent
City of Royal Oak
Finance Department
211 S. Williams Street
Royal Oak, MI 48067

RE: Proposal for Normandy Oaks and Central Park
Landscape Architectural, Engineering and Construction Services
RFP-SBP-RO-17-034

Dear Selection Committee:

Nowak & Fraus Engineers (NFE) is pleased to submit a proposal for Normandy Oaks and Central Park Landscape Architectural, Engineering and Construction Services. We will be teaming with Landscape Architects & Planners (LAP) for Normandy Oaks and with Grissim Metz Andriese Associates (GMA) for Central Park, and have had a good working relationship with both firms for many years. LAP will be heading up public involvement for both projects. Please accept our proposal as our interest in working on behalf of the citizens of Royal Oak and in cooperation with the city administration in developing "world-class" park designs for both Normandy Oaks and Central Park that will serve the citizens of Royal Oak for many generations to come.

All three firms have significant experience working with multiple stakeholders; building community consensus; preparing park programs, master plans and site development plans; and managing the implementation of construction projects. We attribute our success to our ability to carefully listen to our clients and stakeholders while providing our professional expertise when appropriate to help balance the realities of implementation and budgets. Our attention to detail has also been paramount to our success. Our design approach is based on crafting and testing design solutions offered by the public and the administration based upon our in-depth experience and by keeping up with the current trends within the recreation industry. We are willing to explore and research the many program and design elements that lead to important design decisions based upon your goals and objectives. We will also evaluate the functionality of the project, value engineering, project safety, maintainability, code compliance, and most importantly, the budget and project schedule.

It is with these points in mind that we have submitted our proposal for your consideration. Our Team incorporates the experience and expertise of major park designs and consulting engineering services which include: park master planning, aesthetics, "green infrastructure", parking lot design, recreational programming, site/park design, field layout, drainage design, earthwork sculpture, ADA compliance audits/design, storm water management, rain garden/bio-swale design, landscape architecture, utility design, specialty surveying, Civil 3D land modeling and computer aided design (CAD), detailed earthwork calculations and project management.

Our firms and the people that we have selected specifically for your project have extensive expertise and experience in all the facets of this project. We offer a unique and dynamic perspective by blending classical landscape architecture with time proven engineering in addressing your request. We will listen to your community's needs and desires, offer innovative solutions, test those concepts for feasibility, and help you prioritize/phase and review maintenance requirements while managing the projects milestones throughout the design, bid and construction process. Our Team is committed to work with you to develop your community's dream and make "world class" parks a reality at both Normandy Oaks and Central Park.

The fees and programming established for this project match the high quality the City has come to expect from NFE. Our fee for Normandy Oaks (the basis of the bulk of work) is below 8% which is a significant value to the City.

We look forward to the opportunity to discuss our design approach with the selection committee.

Respectfully submitted,

Jeffrey Huhta, PE, PS
Managing Partner
Nowak & Fraus Engineers

DESIGN TEAM/APPROACH HIGHLIGHTS – WHY US?

YOU SHOULD SELECT OUR TEAM BECAUSE WE ARE…

- **EXPERIENCED IN MASTER PLANNING/DESIGN DEVELOPMENT PROCESSES.** We have assembled a team of highly dedicated and qualified professionals specific to this project assignment. Our team consists of experts in all respective fields necessary to complete this project who have a passion for design excellence. We have significant experience working with multiple stakeholders and building consensus for dynamic design solutions. All three firms come with significant experience in developing master plans for major development. LAP will provide for a well-grounded master plan design development process centered around the Normandy Oaks development from a land planning/landscape architectural perspective while NFE will provide sound master planning efforts from an infrastructure/civil engineering/environmental perspective. Likewise, GMA will provide for a well-grounded master plan design development process centered around the Central Park development from a land planning/landscape architectural perspective while NFE will provide sound master planning efforts from an infrastructure/civil engineering/environmental perspective. NFE and LAP has successfully worked together on multiple projects most notably the master planning and master plan implementation for our Capital Complex in Lansing, Michigan where nearly $30 million in infrastructure and landscape upgrades have been identified. Likewise, NFE and GMA has also successfully worked together on multiple projects.

- **EXPERIENCED IN CITY OF ROYAL OAK PROCESSES, PROCEDURES AND REQUIREMENTS.** The NFE staff has been performing work within Royal Oak since our inception 48 years ago. In that time, NFE has completed over 1,000 projects within the city limits. Additionally, NFE has been selected by the City of Royal Oak's Community Development Department – Engineering Division as a consulting engineer where we have successfully completed over 50 different projects ranging from streetscape design, electrical design, utility design, roadway design, major surveying initiatives to major roadway reconstruction projects. There is no learning curve as it relates to the NFE Team understanding the restrictions and/or requirements that will be necessary to complete this project. Additionally, NFE has assisted in the design at the detention basin and surveying for the Normandy Oaks project. As a result of our involvement is the 10 acres parceled out for residential development

- **CREATIVE.** Our design approach is highly creative, but more importantly, grounded with a practical approach as it relates to your budgetary constraints, functionality, maintainability and constructability. There are specific elements of this project that will require creativity to solve difficult elements. The NFE Team will be on task to develop creative solutions to difficult problems.

- **THINKERS.** We are not afraid to think big and out of the box and challenge the status quo. We understand and will embrace the significance of both projects and the high profile nature to create "world class" parks.

- **FULL SERVICE.** The NFE Team is experienced in all facets of this project including: the ability to fully develop a master plan that engages the public throughout the process; the ability to perform all site analysis, evaluations and surveys (including environmental); the ability to support the preparation of grant funding applications; the ability to prepare all required design development drawings and specifications and to assist in the bidding process; and the ability to perform all construction administration services through the project development. Our attention

to detail and thoroughness has been paramount to our success. We regularly receive compliments for our plan development and ease of implementation through the construction process.

- **ENGAGING.** We have a very good knack for engaging the public's interest in the master planning process where we develop lasting relationships that will carry on well after completion of both projects. Specifically, we have had success in developing "friend's groups" who take on an ownership interest in assisting agencies in maintenance activities and promoting the park through social media.

- **ORGANIZED.** We have demonstrated on numerous occasions that our team leadership is very organized, engaged in the entire design process, and effectively manages the project development process from concept through completion.

- **DETAILED.** Our attention to detail and thoroughness has been paramount to our success. We regularly receive compliments for our plan development and ease of implementation through the construction process.

- **DRIVEN.** We are service driven and strive to exceed our client's expectations in all facets of the project.

- **FUN.** We believe the design process should be participatory, fun and engaging for all stakeholders. We will work diligently to inject FUN into the project development process whenever possible, and wherever appropriate.

Proposal for

Normandy Oaks and Central Park
Landscape Architectural, Engineering and Construction Services

RFP-SBP-RO-17-034

TABLE OF CONTENTS

Section 1 – Business Organization and Required Forms
- Royal Oak Form
- Insurance Form

Section 2 – Statement of Project Goals
- Normandy Oaks
- Central Park

Section 3 – Project Approach

Section 4 – Work Plan and Schedule
- Normandy Oaks
- Central Park

Section 5 – Relevant Experience

Section 6 – Capability and Qualifications
- Project Team Responsibilities and Sub-Consultants
- Organizational Charts
  - Normandy Oaks
  - Central Park
- Resumes for Project Team

Section 7 – References

Section 8 – Fee Structure

Section 1 – Business Organization and Required Forms

NF ENGINEERS

Section 1 – HIGHLIGHTS

- Award-Winning, Progressive Consultants with Demonstrated Excellence with Public and Park Spaces
- Consulting Engineers for the City of Royal Oak's Engineering Department (15 years)
- Land Surveying and Civil Engineering Firm with Many Designed and Built Private Development Projects within the Royal Oak Community
- Each Park Receives its Own Unique Industry-Leading Landscape Architectural Firm
- Inclusion of a Turf Grass Specialist from Michigan State University

1. BUSINESS ORGANIZATION AND REQUIRED FORMS

The NFE Team will be comprised of Nowak & Fraus Engineers (NFE) as primary consultant for both Normandy Oaks and Central Park, Landscape Architects & Planners (LAP) as lead design consultant on the Normandy Oaks project, Grissim Metz Andriese Associates (GMA) as lead design consultant on the Central Park project and Testing Engineers & Consultants (TEC) providing geotechnical for both projects. Each firm's contact information is below:

Nowak & Fraus Engineers (NFE)
46777 Woodward Avenue
Pontiac, MI 48342
PH: 248-332-7931

Landscape Architects & Planners (LAP)
809 Center Street, Suite 1
Lansing, MI 48906
PH: 517-485-5500

Grissim Metz Andriese Associates (GMA)
300 East Cady Street
Northville, MI 48167
PH: 248-347-7010

Testing Engineers & Consultants (TEC)
1343 Rochester Road
Troy, MI 48099-0249
PH: 248-588-6200

All firms listed above are licensed to operate and practice in the State of Michigan. The administration of this contract will be undertaken by:

Mr. Jeffrey J. Huhta, PE, PS (Michigan)
Email: jhuhta@nowakfraus.com
Cell: 248-635-6473

A corporate overview for each firm follows this page. At the end of this section is the Royal Oak form and our insurance certificate.

FIRM PROFILE

CIVIL ENGINEERS · LAND SURVEYORS · LAND PLANNERS

NF ENGINEERS

Nowak & Fraus Engineers (NFE) was established in 1969 to provide civil engineering, land surveying and consulting services within the Southeast Michigan area. Our firm's roots are based in the merger of several companies including: Urban Engineering Services, Hoyem-Basso Associates, Civil Engineering and Land Survey Department, McAlpine Engineering and Arthur W. Gillespie Associates. McAlpine Engineering and Gillespie Associates were two of the oldest firms in the Detroit/Southeast Michigan area at the time. Over our history of operation, NFE has developed a strong base of municipal clientele, including the following communities for which we currently serve as consulting engineer:

- City of Madison Heights (40 years)
- City of Huntington Woods (37 years)
- City of Hazel Park (33 years)
- City of Pontiac (25 years)
- City of Birmingham (18 years)
- City of Royal Oak (15 years)
- York Township (12 years)
- Village of Oxford (11 years)
- West Bloomfield Township (8 years)
- City of Rochester Hills (3 years)

In addition to the above, NFE has been providing municipal engineering services for eight years to the Department of Technology, Management and Budget (DTMB) and the Department of Natural Resources (DNR), as well as many other municipalities, road commissions, state agencies and county jurisdictions throughout the region. We have been prequalified by the Michigan Department of Transportation (MDOT) since 2005, and currently, are prequalified in 19 categories of land survey, engineering design and construction engineering. Through all of these relationships, our firm and staff have formed important contacts, and have vast knowledge of federal, state, county and local agency requirements.

NFE has been honored by our peers on multiple occasions with project awards including the following:

- 2016 ACEC/M Surveying Honorable Conceptor Award – Amtrak ADA Stations Program, Nationwide
- 2015 APWA Project of the Year – Oak Street Paving, Birmingham, MI
- 2014 APWA Project of the Year – North Eton Paving, Birmingham, MI
- 2013 APWA Project of the Year – Pierce and Merrill Street Reconstruct, Birmingham, MI
- 2013 MCA Award of Excellence – Pierce and Merrill Street Paving, Birmingham, MI
- 2013 MCA Award of Excellence – Royal Oak DDA Streetscape Improvements, Royal Oak, MI
- 2013 MCA Award of Excellence – Lincoln Avenue Paving, Birmingham, MI
- 2013 MCA Award of Excellence – Connie Avenue Paving, Madison Heights, MI
- 2012 APWA Project of the Year (MI Chapter) – Huntington Road Paving, Huntington Woods, MI
- 2012 APWA Project of the Year (MI Chapter) – Lincoln Avenue Paving, Birmingham, MI
- 2011 APWA Project of the Year (MI Chapter) – Shain Park Street Paving Program, Birmingham, MI
- 2011 MCA Award of Excellence – Shane Park Street Paving Program, Birmingham, MI
- 2010 APWA Project of the Year (Metro Branch) – South Boulevard Concrete Overlay, Pontiac, MI

- 2010 APWA Project of the Year (MI Chapter) – Maple/Chester Street Pocket Park, Birmingham, MI
- 2010 APWA Project of the Year (Metro Branch) – Shain Park Street Paving Program, Birmingham, MI
- 2010 MCA Award of Excellence – South Boulevard Concrete Overlay, Pontiac, MI

Operating as a partnership in the State of Michigan, NFE is dedicated to the development of not only client relationships, but also our talented staff, headed by:

Management Committee
Chad Findley, PE, PS
Tim Germain, PE
Jeff Huhta, PE, PS
Mike Peterson, PE

Associates
Brad Brickel, PE
Brett Buchholz, PE
Robert Fraus
Jason Longhurst, PE
David Miller, JD
Nabeel Naoum
George Ostrowski, Jr., RLA
Steve Sutton, PE, LSIT
Pat Williams, PE

NFE is supported by a staff of 65 professional engineers, surveyors, technical and administrative professionals. This wealth of in-house technical knowledge and expertise allows us to confidently tackle even the most challenging design projects; while the size and structure of our firm ensures that the senior staff and management are directly involved in the day-to-day activities and design. Our team consists of the following:

Professional Engineers	12
Civil Engineers	13
Engineering Technicians	8
Professional Land Surveyors	3
Land Surveying Technicians	16
Construction Inspectors	4
Arborist/Wetland Specialist	1
Planner/Landscape Architect	2
Administrative Support	6
Total	**65**

TEAM APPROACH

NFE embraces and effectively implements the team concept in our approach to all in-house and municipal projects. This concept requires that our surveyors, engineers, technical personnel and clients work together to execute a project. To achieve that end, NFE is continually evaluating and upgrading our staff, services and equipment to achieve the best available end product.

Part of this team approach concept is the development of effective communication. Our clients are able to communicate with us 24/7 through a variety of methods, including cell phones, email, voice mail and home phone numbers. This concept also requires that we listen and understand the requirements of our clients and provide them with information so that they can make an informed decision as it relates to the topic or project at hand.

DESCRIPTION OF FACILITIES AND EQUIPMENT

At NFE, we utilize the latest advances in engineering and surveying equipment technology and software. Our survey crews are equipped with reflectorless and robotic total stations, along with laptop computers. This equipment allows our surveyors to upload and download information at the jobsite, and to process topographic data prior to leaving the site. NFE also utilizes four (4) GPS units in performing ground control or topographic surveys on relatively open sites. Decisions on what equipment should be utilized on a particular project are based on timing and specific site characteristics.

The latest software is utilized by our engineers in caring out their engineering duties, including AutoCAD, Soft Desk, Civil 3D, Microsoft Office, Merl, Field Manager, ArcView, WaterCAD and AutoTURN. In addition, rigorous CAD standards and engineering controls have been implemented to assure that all products produced by NFE are consistent and accurate.

Our computer system is state-of-the-art, including control systems for nightly backups. We have implemented a backup procedure where external hard drives are brought on the project's site on a weekly basis. All together, the above described equipment, systems, software, etc. maximize security for the client while enabling our firm to provide low-cost services. We will continue to improve these systems for the benefit of our clients as new technologies are introduced.

QUALITY ASSURANCE/QUALITY CONTROL PLAN

NFE has been providing consulting "Civil Engineering and Land Surveying Services" within the State of Michigan for 47 years. Over this time, our Quality Assurance/Quality Control (QA/QC) program has evolved in to a program that has afforded us the opportunity to maintain a loyal client base that has come to expect only the highest level of quality and professionalism possible.

NFE has defined Quality Assurance (QA) as the process of regularly reviewing the quality control processes to assure that the products and services we provide meet or exceed the clients' expectations while keeping our processes current to industry standards and governing regulations.

NFE has defined Quality Control (QC) as a system to maintain the desired standards of our clients and our company. This system is referenced on every project, and is implemented to produce a quality and consistent product. This is achieved by constant supervision of the work in progress by senior staff and management, and then by a diligent review to assure completeness and accuracy.

Our QA/QC plan is a comprehensive written list of procedures, activities and training required so that our project delivery system functions effectively. As a means to this end, we have developed an electronic Computer Aided Design (CAD) library of details and standards to be utilized on all projects to achieve the expectations of our clients. In addition to our own internal library, we have access to all of the latest MDOT standard plans and specifications for reference and use.

The strength of our plan is based upon our ability to monitor the process and implement new ideas as they are required. Our team approach to collecting data, solving problems, completing designs and administering contracts is the strength that we bring to our consulting services.

PROJECT DESIGN CHECKLIST

INSTRUCTIONS: Responsible party shall initial in area provided as work is completed

PRELIMINARY DESIGN		
ITEM OF WORK	**COMPLETED BY:**	
Project manager assigns project to project engineer		
Project engineer performs research and procures MDOT design data/requirements	Yes____	No____
Obtain requirements for right-of-way	Yes____	No____
Obtain requirements for right-of-way	Yes____	No____
Obtain and review road design standards	Yes____	No____
Obtain and review approval process requirements	Yes____	No____
Obtain grade inspection checklists	Yes____	No____
Obtain municipal design standards	Yes____	No____
Obtain storm water detention/management requirements from jurisdictional authority	Yes____	No____

EXPERIENCE WITH STATE AND LOCAL AGENCIES

NFE, through its vast engineering experience in Southeast Michigan, has dealt significantly with regulatory agencies on the federal, state and local level. Our experience, knowledge and familiarity of applicable standards and requirements are extensive. Located in Pontiac, Michigan, our firm has first-hand working knowledge of local standards and regulatory requirements that apply to particular projects. Most major projects completed by NFE have involved state and local roadway improvements, storm drain construction, sanitary sewer and water main extensions, and land balancing/grading for both private and public clients in Southeast Michigan. All of these projects have required permits or review approvals from various federal, state and local regulatory agencies.

We have built lasting relationships with regulatory agencies at the local, state and federal level. For most projects, these relationships have proven to be invaluable as we navigate through the permit approval process. Also, we have the experience and ability to design projects that meet the applicable standards for securing permits/approvals from the following organizations:

- Michigan Department of Technology, Management and Budget (DTMB)
- Michigan Department of Transportation (MDOT)
- County Road Commissions
- Michigan Department of Environmental Quality (MDEQ)
- Michigan Department of Public Health
- County Drain Commissioners
- County Health Departments
- Local Government Agencies
- Detroit Water and Sewerage Department
- Local Utility Companies
- OSHA and MIOSHA

SERVICES

LAND SURVEYING

Equipped with a team of professional land surveyors, survey crews, technicians and supervisors many with over 30 years of experience, along with the latest cutting edge technology in equipment and practices, NFE is more than prepared to tackle any surveying challenge. We pride ourselves on providing our clients with unsurpassed quality, efficiency and accuracy in all areas of land surveying. Our Survey Department offers a full range of surveying services including:

- ALTA/ACSM Land Title Surveys
- Construction Staking
- Property Surveys
- Boundary/Easement Surveys
- Right-of-Way Surveys
- Road Design Surveys
- Topographical Surveys
- Floodplain Surveys
- Architectural Surveys
- Hydraulic Surveys
- Structure Surveys
- Tree Surveys
- Wetland Surveys
- GIS Surveys
- GPS Services
- Elevation Certificates

MUNICIPAL ENGINEERING

Working with governmental agencies, NFE understands the engineering needs and challenges of today's communities. Our staff is skilled in all phases of infrastructure development and rehabilitation from planning through design and construction. We are committed to improving our clients' communities by providing exceptional engineering services to make meaningful and lasting improvements. Our municipal engineering services include, but are not limited to:

- Municipal Consulting
- Site Development
- Master Plan Development
- Land Surveying and Mapping
- Utility Design and Coordination
- Road/Highway Design
- Storm Water Drainage and Detention
- Infrastructure Evaluation
- Municipal Facilities
- Grant Writing Assistance
- Manhole Rehabilitation
- Parking Lot Design
- Parks and Recreation Facilities
- Right-of-Way/Easement Acquisition
- Construction Engineering
- Environmental Permitting
- Landscape Architecture
- Special Assessment Districts
- Trenchless Technologies
- Sewer Rehabilitation



LAND PLANNING AND LANDSCAPE ARCHITECTURE

NFE believes in making the most of a site's natural beauty and attributes. Our land planning and landscape architecture services focus on creating exceptional environments for our clients. The advantage we bring to our clients is the in-house ability to coordinate a project from concept to reality while striving for functional design and creative solutions. The services offered by our Land Planning and Landscape Architecture Department include:

- Land Planning
- Site Planning
- Detailed Planting/Landscape Design
- Sustainable Design
- Tree Preservation and Tree Replacement Plans
- Streetscape Design
- Detailed Landscape Construction Drawings
- Parks and Recreation Design
- Wetland Mitigation
- Irrigation Design
- Graphic Presentations

ENVIRONMENTAL, WOODLANDS, WETLANDS AND LEED DEVELOPMENT

To better meet our clients' needs, NFE has incorporated environmental, woodlands, wetlands and LEED development into our suite of services. Over the last 10 years, we have become a well-respected authority in environmental sciences as it relates to consulting engineering and land development. Our certified staff has forged strong relationships within the environmental field which in turn helps us to serve our clients better. Our environmental staff provides a variety of services including:

- LEED Consulting/Design
- Bio-Design
- Wetland Design
- Phase II Storm Water Compliance
- SWPPP Plan Preparation
- Wetland Determinations and Delineations
- Wetland Mitigation Monitoring
- MDEQ "Joint Permit Application" Preparation
- Threatened and Endangered Species Reports
- Urban Forestry Consulting
- CMI Grant Applications and Assistance
- IDEP Programs
- SWPPI Implementation and Assistance
- Tree Survey to Comply with Local Woodland Ordinances

LAP – BACKGROUND OF THE FIRM

OVERVIEW

Delhi Veteran's Memorial Park

Landscape Architects & Planners, Inc. (LAP) is located in Lansing, Michigan and is a full service landscape architecture and planning firm. Robert Ford, President, formed the firm in 1994 with an experience base spanning over 100 years. As professionals we apply artistic and scientific principles to the research, planning, design and management of both natural and built environments. Our focus is client satisfaction by producing creative solutions to design challenges. We take a team approach to our projects, which allow us the ability to integrate a variety of disciplines. Staying abreast of the current trends and practices enables LAP to be successful in our diversified areas of specialization. The firm operates as an S corporation in the State of Michigan.

PEER RECOGNITION

Michigan State University Outstanding Alumni Award
Mr. Ford was presented with an Outstanding Alumni Award due to his contributions to the Landscape Architecture Department, founding the Landscape Architecture Alumni Association Board and his work efforts throughout the state.

Michigan Chapter of the American Society of Landscape Architects Merit Award
Landscape Architects and Planners, Inc. and the East Lansing Parks, Recreation and Forestry department were recognized with a 2014 Merit Award for their work on the innovative playground designed and installed at Patriarche Park in East Lansing.

Patriarche Park Playground

Michigan Chapter of the American Society of Landscape Architects Merit Award
Robert Ford, Principal of Landscape Architects & Planners, Inc. was recognized in 2010 for his outstanding contributions to the field of Landscape Architecture

Michigan Chapter, Recreation and Parks Association Master Plan Award
Landscape Architects & Planners, Inc. received an award for outstanding master planning. The firm facilitated 20 focus groups, provided unique demographic analysis, which exceeded the Michigan Department of Natural Resource standards. It was the first master plan recognized for this type of a planning effort.

LAP – BACKGROUND OF THE FIRM

Bend Area Rendering

Michigan Chapter of the American Society of Landscape Architects Merit Award

Bauer-Ford, a division of Landscape Architects & Planners, Inc. won a merit award for outstanding professional achievement for the site design and master plan for the Bend Area Park Plan. The plan united five mine sites together, which served as the area for which the park plan was created. The plan included creating wetlands, a swimming beach, picnic areas and miles of hiking trails.

Heart of Michigan Trails & Greenway Partnership

Mr. Ford was recognized in 2006 by the Heart of Michigan Trails & Greenways Partnership for his contribution of time and expertise in starting this new organization.

MNLA Merit Award

Landscape Architects & Planners, Inc. received recognition from HTA Companies which was awarded the Michigan Nursery and Landscape Association Industry Merit Award in the category of Special Commercial Projects.

Connecting Michigan

Mr. Ford was honored by the Michigan Trails & Greenways Alliance for his valuable leadership to the state trails planning partnership during 2006 and 2007.

Shigematsu Japanese Garden

Frances Park Shoreline Trail

2000 Michigan Medallion Award Winner

Only 20 Michigan Medallion Awards were presented by the Michigan Chapter of American Society of Landscape Architects (MASLA) representing the most significant projects in our state for the past 100 years. Landscape Architects & Planners, Inc. and the firm's president, Robert Ford, are proud to have contributed to the design and construction of 13.35 miles of the Lansing River Trail system.

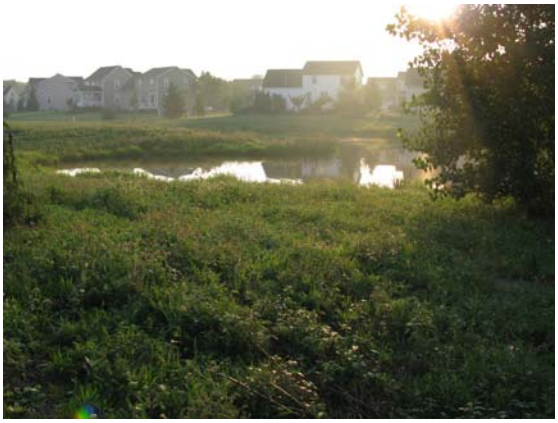
LAP – BACKGROUND OF THE FIRM

Michigan Chapter of the American Society of Landscape Architects Merit Award
Mr. Ford was recognized in 2010 for his outstanding contributions to the field of Landscape Architecture.

SERVICES

Areas of specialty include the following:

- Park Master Plans & Development
- Trail Design & Development
- Recreational and Sports Facilities
- Community Recreation Plans
- Interpretive Display Plans
- Playground Design
- Playground Safety Audits
- Playground Safety Training
- Playground Maintenance Plans
- Needs Assessment Studies
- Feasibility Studies
- Comprehensive Recreation Plans
- Downtown Development
- Streetscape Design
- Waterfront and Environmental Studies
- School Planning & Development
- Vehicular Traffic Studies
- Municipal Facilities Planning
- Office and Research Parks
- Industrial Parks and Facilities
- Commercial Site Planning
- Residential Site Planning
- Health Care and Correctional Facilities
- Civic and Governmental Facilities
- Land and Mine Reclamation
- Sand & Gravel Quarry Reclamation
- University Development
- Campus Planning



THE PROJECT TEAM

LAP operates on a strong project manger philosophy. Robert Ford is a "hands on" project manager and president of the firm. Matt Hull will play a key role in assisting Mr. Ford. He will be involved in all meetings and be aware of all correspondence throughout the course of the project. It will be the responsibility of Mr. Ford to coordinate the work efforts within the time schedule. Mr. Hull will assist Mr. Ford with all aspects of the plan. People who will be directly involved on your project are listed under Key Team Members.

KEY TEAM MEMBERS

Robert Ford, Registered Landscape Architect, Principal, and Authorized Contact Person.
Mr. Ford will coordinate the production of the planning project, concept development, task management, and administration. Mr. Ford has over 25 years of recreational planning and design experience, from recreational master plans for the State of Michigan, Oakland County, City of Lansing and dozens of other recreation plans for municipalities, counties, townships and cities.

Mathew Hull, Recreation Planner
Matt has worked on many park projects involving planning, design and construction. His analytical and graphic skills will be used to communicate effectively during the public presentations and throughout the project.

Nick Wallace, Technical Support
Nick has 2 years of work experience with LAP and will be the primary person in charge of research, plan production / design and graphics.

Hartrick Park

FIRM PROFILE

Grissim Metz Andriese Associates (GMA) is recognized nationally for distinguished design achievements in landscape architecture. The firm's award-winning reputation has grown through five decades of design excellence defined by artistic expression. Their work is represented by distinct, memorable spaces that enliven the human experience.

The firm's commitment to achieve harmonious and enduring design is evident in parks and recreation projects such as Heritage Park and Waterford Oaks Aquatic Park, as well as the Greenfield Village renovations completed in 2004. Corporate and healthcare settings include Ford World Headquarters Campus, DTE Energy Company Corporate Headquarters Campus, Saint Joseph Mercy Hospital and William Beaumont Hospital.

Their pioneering work in retail environments, such as The Somerset Collection – Troy, The Gardens – Palm Beach, and Mall at Millenia – Orlando, is widely known and well respected. GMA's expertise also extends into varied project types, including streetscapes, mixed-use developments, housing, schools, libraries, sports complexes and work in the Middle East.

With design innovation and service excellence as its hallmarks, the firm enjoys many longstanding relationships with owners and architects of distinction, who value the creative spirit embodied by the firm's team of professionals and its concept-driven approach to problem solving.

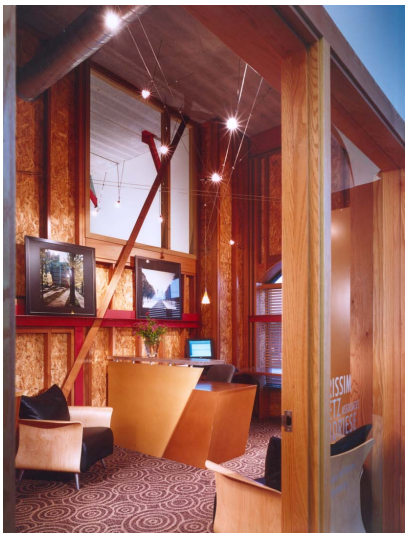
"Our work blends artistic expression with proven practices of engineering, technology, and sound business practice to deliver enduring design solutions admired by owners and peers alike. Integrating natural and man-made elements to achieve a fusion of architecture, culture and environment, we transform ordinary landscapes into engaging and celebratory spaces."

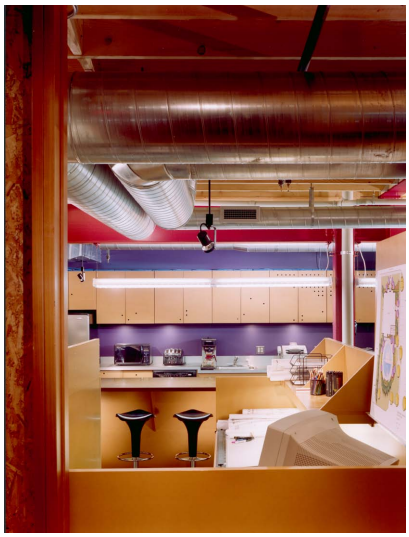
Innovative ideas are backed by depth of experience and the specialized knowledge of the firm's principals and associates. The diverse talents of its landscape architects enables Grissim Metz Andriese Associates to complete large complex projects, while maintaining individualized attention and personalized service to clients.

Services include Master Planning, Site Design, Landscape Design, Hardscape Design, Sustainable Design, Sports Facility Design, Environmental Graphics, Less Maintenance by Design and Interior Landscape Design.

"Landscape architecture is an integration of artistic expression, technology, sustainability, and business practice - it is an effective balance of these elements that constitutes the success of a project."

GRISSIM
METZ ASSOCIATES
ANDRIESE





SERVICES

Master Planning
Site Design
Landscape Design
Hardscape Design
Sustainable Design
Sports Facility Design
Environmental Graphics
Less Maintenance by Design
Interior Landscape Design

Grissim Metz Andriese Associates, P.C.
300 East Cady Street, Northville, Michigan 48167
P: 248.347.7010
E: mailbox@gma-la.com
W: gma-la.com

Date Founded: 1965
Certified Small Business
Wayne County Airport Authority Small Business Enterprise (SBE)

Registration
Arizona California Colorado Connecticut Florida Illinois Indiana Kansas Michigan South Carolina Tennessee Texas Virginia

GRISSIM
METZ ASSOCIATES
ANDRIESE

CORPORATE OVERVIEW

Engineering Client Success

From property acquisition through construction and renovation, we strive to be your single source for engineering consulting and testing services.

Testing Engineers & Consultants is a Certified Woman Business Enterprise, founded in 1966 in the State of Michigan with offices in Ann Arbor, Troy, and Detroit, MI.

Officers
Katherine Banicki, President
Ruben E. Ramos, PE, Vice President
Carey J. Suhan, PE, Vice President
John Banicki, PE, Founder & Chairman Emeritus

Certifications/Accreditations
Accredited by the American Association of State Highway & Transportation Officials (AASHTO) for Bituminous and Aggregate
Certified Detroit-Based Business (DBB)
Certified Woman-Owned Business Enterprise (WBE) - City of Detroit
Certified Woman-Owned Business Enterprise (WBE) - NWBOC National Certification
Certified Targeted Growth Community Enterprise (TGCE) and County Based Enterprise (CBE) - Wayne County
MDEQ Qualified Underground Storage Tank (UST) Consultant (QC)
Registered Woman-Owned Business Enterprise (WBE) - Wayne County
State of Michigan Certificate of Awardability

MDOT Prequalifications
Aggregate Testing
Asbestos Investigations
Bituminous Pavement Inspection
Density Inspection & Testing
Geotechnical Engineering Services
Portland Cement Concrete Inspection & Testing
Site Investigation
UST Removal Services

MSHDA Approved Environmental Consultant

TECHNICAL DISCIPLINES

Environmental Services
Baseline environmental assessment (BEA)
Contamination assessment
Due care compliance
Environmental, health, and safety regulatory compliance assistance
Environmental site assessment (Phase I & Phase II ESAs)
Expert witness testimony
Hazardous waste management
Hydrogeological and groundwater investigation
NPDES Phase II storm water management
Remedial investigation / Feasibility study
Storage tank management (above & underground)
Wetlands determination

Industrial Hygiene Services
Building materials locator
Document archiving
Environmental data management program
Indoor air-quality investigation
LEED building pre-occupancy indoor air quality (IAQ) management plan
Moisture intrusion study (Infrared technology)
Occupational exposure study
Water damage and mold assessment

Asbestos Services
Abatement specifications and compliance monitoring
AHERA inspections and management plans
Asbestos awareness training
Pre-renovation/pre-demolition building survey

Lead Paint Services
Lead-based paint inspections (XRF technology)
Lead-based paint risk assessment
Lead paint removal specifications and compliance monitoring

Training Services
Asbestos awareness and category-specific training
Environmental Health & Safety (EHS) training
Indoor Air Quality (IAQ) training
Lead awareness training

CORPORATE OVERVIEW

Geotechnical Services

Building movement and earth retention system monitoring
Construction monitoring and structural evaluation with automated data recovery and reporting
Construction recommendations for sites, dams, and earthwork structures Design verification
Direct push soil probing (Geoprobe™)
Environmental hollow stem auger drilling
Excavation, shoring, and dewatering consultation
Field testing of soils
Foundation and design recommendation
Geotechnical site exploration
Ground penetrating radar (GPR) survey
Monitoring and recovery well installation
Pavement investigation and design
Slope stability and settlement analysis
Soil borings (in-house fleet of drill rigs)
Soils laboratory

Construction Materials Testing & Special Inspections

Bituminous Concrete (Asphalt)
Asphalt mix design
Asphalt placement
Batch plant inspection

Concrete
Batch plant inspection
Floor flatness testing
Mix design
On-site testing and inspection
Pre-cast concrete inspection
Pre-stressed and post-tensioned concrete
Reinforcing steel inspection

Masonry
CMU testing
Grout and mortar testing
Masonry placement inspection
Mix design
Reinforcing steel placement

Soils/Aggregates
Foundation sub-grade verification
In-place density testing
Laboratory testing
Pile driving and caisson placement

Construction Materials Testing & Special Inspections Cont.

Structural Steel
Fabrication inspection
Field welding
High strength bolting
Non-destructive testing
Welder certification

Spray-Applied Fire Resistive Materials
Density testing
Intumescent fire resistant coating
Thickness and bond testing

Exterior Insulation and Finish Systems (EIFS)
Field installation inspection

Building & Infrastructure Services

Pavement Consulting Services
Construction contract administration
Pavement condition evaluation
Pavement design
Pre-construction condition survey
Sewer inspection/flow monitoring

Structural Engineering
Acoustical assessment and mitigation design
Fire, wind, and water damage assessment
Forensic engineering & failure analysis
Ground vibration testing and monitoring
Structural and architectural component testing
Structural instrumentation

Facility Asset Services
Facade and curtain wall evaluation
Infrared building assessment
Property condition assessment
Restoration and renovation design

Roofing Services
Infrared and nuclear moisture evaluation
Roof asset management
Roof condition assessment
Roof construction management
Roof quality control inspection
Roofing system design

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

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):

SEE ATTACHED

PROPOSAL FIRM FOR: 1 Year (LENGTH OF TIME-90 DAYS MINIMUM)

LEGAL IDENTIFICATION

NAME OF COMPANY: Nowak & Fraus, PLLC

COMPANY ADDRESS: 46777 Woodward Avenue
Pontiac, MI 48342

PHONE NO.: 248-332-7931 FAX NO.: 248-332-8257 EMAIL: jhuhta@nfe-engr.com

PROPOSAL PREPARED BY: Jeffrey J. Huhta, Managing Partner
(Typed Name of Individual) (Title)

AUTHORIZED SIGNATURE:

DATE SUBMITTED: May 10, 2017

Scope/Fee Clarifications/Conditions

Normandy Oaks

- Fee is broken into two sections; base scope and optional services. The base scope of work includes allowances for Architectural, Electrical, Splash Pad and for a Turf Management Specialist. The allowance established for Architectural services assumes that there will be simple – pre-manufactured structures identified for the project including simple restroom facilities and/or pavilion. Detailed architectural services for a stick build structure, concessions, etc. are not included. As for Electrical design, the allowance anticipates developing a electrical distribution system that supports the simple building structures and irrigation system. The allowance for Splash Pad assumes a construction budget of approximately $300,000 for this element of work. If a more elaborate system is desired, then the allowance will need to be increased.
- Fee provides for a base scope of work for a public input process. As stated in the prebid meeting, the City has had a robust process to date and the process moving forward is more of an affirmation of the public input process that has already been completed. We have identified optional services that could be considered should a more robust public input process be desired.
- Fee assumes that the storm water detention facility that will be constructed as a part of the residential development will be sufficient for the entire park development plan. We will enhance the storm water management system already contemplated to compliment what has already been designed. We will not re-design or alter the proposed detention system as a part of this project.
- Construction administration includes weekly inspections and inspections for critical operations. Our team will not provide full time inspection. It is expected that this project can be managed in that manner which will allow more of the available budget to be used for the construction of improvements.

Central Park

- Fee that is included only considers carrying the project through the public engagement process. Exhibits that aid in the public engagement process together with high level schematic design alternatives will be prepared. No detailed design is considered as a part of the identified fee. Precedent images, prior work, and schematic design graphics will all be used to assist in the public process. We have identified a base scope of work together with optional elements that could be considered as a comprehensive public engagement process.
- Fee excludes preliminary design, final design, project bidding, construction administration, geotechnical reports and/or analysis, etc.

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 7/6/2016

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Eric Moore Moore Insurance Services, Inc. 67 N. Howell P.O. Box 207 Hillsdale MI 49242	CONTACT NAME: Cyndi Armstrong PHONE (A/C, No, Ext): (517)439-9345 FAX (A/C, No): (517)439-5536 E-MAIL ADDRESS: info@mooreinsuranceservices.com
INSURED Nowak & Fraus, PLLC 46777 Woodward Ave. Pontiac MI 48342	INSURER(S) AFFORDING COVERAGE — NAIC # INSURER A : RLI Insurance Company — 13056 INSURER B : Accident Fund Insurance Company — 10166 INSURER C : INSURER D : INSURER E : INSURER F :

COVERAGES **CERTIFICATE NUMBER:** CL1663001378 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY [X] COMMERCIAL GENERAL LIABILITY [ ] CLAIMS-MADE [X] OCCUR [X] Railroad Right of Way GEN'L AGGREGATE LIMIT APPLIES PER: [ ] POLICY [X] PRO-JECT [ ] LOC			PSB0001130	06/30/2016	06/30/2017	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 2,000,000 $ 1,000,000 $ 10,000 $ 2,000,000 $ 4,000,000 $ 4,000,000
A	AUTOMOBILE LIABILITY [ ] ANY AUTO [X] ALL OWNED AUTOS [ ] SCHEDULED AUTOS [X] HIRED AUTOS [X] NON-OWNED AUTOS			PSA0001122	06/30/2016	06/30/2017	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) Uninsured motorist combined	$ 1,000,000 $ $ $ $
A	[ ] UMBRELLA LIAB [X] OCCUR [X] EXCESS LIAB [ ] CLAIMS-MADE [ ] DED [ ] RETENTION $			PSE0001047	06/30/2016	06/30/2017	EACH OCCURRENCE AGGREGATE	$ 4,000,000 $ 4,000,000
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N [N] (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N / A		WCV6092232	06/30/2016	06/30/2017	[X] WC STATU-TORY LIMITS [ ] OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 1,000,000 $ 1,000,000 $ 1,000,000
A	Professional Liability w/Pollution Incident			RDP0025384	06/30/2016	06/30/2017	Per Claim Aggregate	2,000,000 4,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

CERTIFICATE HOLDER

FOR INFORMATIONAL PURPOSES ONLY

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Eric Moore/CYNDI

Section 2 – Statement of Project Goals – Normandy Oaks

NF ENGINEERS

Section 2 – HIGHLIGHTS

- Normandy Oaks Goals: “World-Class”/Heritage Park, Environmental/ Sustainable, Unique and Innovative Park Experience, Low Maintenance Considerations and Fiscal Responsibility
- Central Park Goals: “World-Class Downtown Park”, Creative/Flexible Space, Classic/Timeless Design, Programming and Park Elements along with Low Maintenance Considerations and Fiscal Responsibility
- Consultants Conducted a Site Visit to Photographic and Document Opportunities & Constraints within Each Park
- Extensive Understanding of Service as Evident by the Detailed Phases of Work
- Conceptual/Functional Use Diagrams Provided for Each Park
- NFE Conducted a Survey for Normandy Oaks for the Private Residential Development

2. STATEMENT OF PROJECT GOALS – NORMANDY OAKS

The goal of the scope of work is to take the remaining 40 acres of "Normandy Oaks Golf Club" and transform the balance into a **"World-Class" Destination Park**. In order to transition this property from a passive recreation to a multi-use destination will take a **Strategic Plan** that utilizes an **Innovative and Collaborative Approach**. The collaborative approach should engage the community including, but not limited to: volunteers, city stewardship programs, and non-profit organizations, in addition to other partnerships – efficiently assisting with the development of the park features. Suggested park elements within the RFP include a splash pad, multi-use/universal accessible trails, play structures (all ages and ADA compliant), pavilions, soccer fields, enhanced park entrance, updated park signage, parking lots and support amenities. The underlining design considerations should focus on **Enhancing the Natural Features of the Park,** creating an **Environmental and Sustainable Park**, and providing **Unique and Innovative Park Experiences** while considering **Long-Term Maintenance and Fiscal Responsibility**. The long-term outcome of Normandy Oaks Park development is a Regional Recreation Destination Facility that the City of Royal Oak and neighboring communities may enjoy for future generations. In addition, it is conceivable that if in partnership with Oakland County, Normandy Oaks could evolve into an urban trail head for the overall Oakland County trail system and the future Iron Belle trail through the Michigan Department of Natural Resources which is a major funding initiative for the state of Michigan and grant supporters.

The following historical perspective has been provided relative to this project:

HISTORICAL PERSPECTIVE

Mike McConnell of the Daily Tribune stated in his article (not the complete article): City officials in February of 2014 decided to close the 50-acre facility because it draws only half as many golfers as the Royal Oak Golf Course, another municipal golf course a half mile away. The contractor who manages both courses for the city was losing money because of dwindling attendance at the Normandy course.

Existing Normandy Oaks

Task force recommendations call for building two soccer fields, a new parking lot, walking trails, a splash pad/water park area, a picnic pavilion and sledding hill. Most of the green space on the property would remain.

Money to convert the golf course into a recreational area would come from the sale of up to 54 lots to build homes. The city would need to sell 31 lots along Nakota Road, 9 on Woodland and 14 on Delemere.

City Manager Don Johnson estimates the sale of lots for houses would raise more than $4 million. Johnson said once homes in the $350,000 to $400,000 range are built they will generate about $160,000 in annual property tax revenue, $79,000 of which the city can earmark to subsidize improvements at Royal Oak's more than 50 public parks.

Mayor Ellison on Tuesday said Royal Oak lacks adequate full-size soccer fields, which are favored by the Royal Oak Youth Soccer Association.

The city rejected an offer from Oakland County to lease the land for $1 a year and create a county park on the Normandy Oaks property.

"This is all about recreation," Johnson said.

The following **Initial Scope of Work**, as outlined in the RFP, is a plan of action expected to be executed by the Prime Consultant (NFE/LAP Team):

a) Work Closely with City Staff, review committees and meet with city commission and other public groups as requested.
b) Prepare the necessary drawings and plans sufficient to depict the character of the design and to prepare budgets.
c) Perform soil investigation and provide an adequate topographic survey.
d) Develop preliminary construction costs and project budget.
e) Provide Presentation Drawings/Master Plan/Site Development Plans.
f) Assist in facilitating and presenting the concepts and obtaining public input.
g) Provide a complete construction drawing set for the project including specifications and cost estimates. This work would include all drawings and specifications for the normal civil, structural, mechanical, plumbing, electrical, streetscape and road portions of the project.
h) Provide full architectural and engineering services to carry out the project to completion. All work must conform to all applicable laws, ordinances and codes in the design and construction phase.
i) Provide all of the construction management for the project during construction.

UNDERSTANDING OF SERVCE

Inventory of Current Conditions and Storm Water Management Considerations

The current conditions of the park are reminiscent of an abandon golf course. Many mature trees which lined the fairway are still there as well as the berms and bunkers that flanked the greens. Tee boxes are still evident as well as the two water hazards/irrigation ponds. The chain link fence is now showing signs of rust and splits in the fence fabric that vandals have torn away to allow access to the abandoned property. The club house is tattered and tired as well as the parking lot that has given way to weeds in many cracks in the pavement. The property is definitely in need of renewal.

Existing Hard Surface Tennis Courts –
Tennis courts have curbing and drainage outlets that may suggest the courts were flooded at one point to provide winter ice skating opportunities

The existing topography is undulating and slopes approximately 8 feet from west to east. Storm water management facilities would be most appropriately located in the eastern half of the property.

The structural system which the programming will be built on is the overall drainage plan for the park. This drainage plan, if executed correctly, will provide a good solid foundation for Normandy Oaks Park's future

growth and development. The drainage plan is in essence the storm water management system that will be purposely and technically designed to interact with the other park elements. For example, where is the most appropriate place to construct bio-swales or rain gardens? Another aspect to consider is the amount of pipe and catch basins versus open vegetated swales; or maybe a combination of both depending upon the situation. The placement of the recreational fields will need to be analyzed using soil samples and existing contouring to aide in the development of a proposed sub-surface drainage section. Improving both the surface and sub-surface area of the recreational fields will allow the turf to be viable earlier in the growing season, repair more quickly and overall last longer through the playing season.

We understand that the City of Royal Oak is a leader in implementing innovative storm water drainage techniques. Due to the nature of the park as a proposed regional destination, it may take some time for the park to realize its full potential. Strong consideration should be given to phasing park development to help keep initial park development cost down while allowing expansion of facilities to grow with park use. Specifically, it would be appropriate to "Landbank" parking spaces (building only what is needed today) but provide for future needs in the overall comprehensive plan. This will reduce overall maintenance and strain on proposed facilities.

In addition, there is a unique opportunity within the park to consider drainage of surrounding surface streets. It is known that this area of Royal Oak is on combined sanitary/storm sewer. It will be difficult to perform any separation of utilities to create a significant improvement in this area, but it is conceivable that storm water drainage from adjoining surface streets can be redirected into a comprehensive storm water management system within the proposed park. These types of elements should be explored as a part of the comprehensive master plan.

Action Items:

- *Perform a site visit/field investigation to photograph and document existing conditions. Note items not found on existing drawings or documents and mark in the field to be located.*
- *Perform topographic survey of the project area and obtain any additional marked items during the field investigation.*
- *Prepare and verify a topographical survey for construction documents.*
- *Document current drainage conditions and patterns. Identify features that are not shown on the existing topographical survey.*
- *Note problem areas within the abandon golf course.*
- *Review drainage patterns and verify connection points and/or outlet points.*
- *Review drainage on adjoining streets and develop a comprehensive strategy for storm water management for the park and surrounding area.*
- *Identify specific improvements or areas that could be integrated into the drainage plan.*
- *Identify, tag and record existing trees in compliance with the City of Royal Oak tree ordinance.*
- *Review and identify any existing wetlands and/or water features that may be regulated by local authorities.*
- *Prepare and present a Findings report to the Normandy Oaks Committee based upon site investigation work.*

Existing Mature Trees – Identify and Record on Survey

Normandy Oaks at Nakota Road Viewing West – Consider Buffer along North Property Line of Park for Established Neighborhood

Land Planning
(Functional Use Diagram) Considerations

One of the most important factors in this phase of development is the overall land planning/functional use considerations for the park. The relationship between the existing fabric of the community and the proposed park elements have to be strategically placed to balance the change in use and long-term viability of the park itself. The included diagrams for **Primary Use Zones and Functional Use Diagram** are a simple way of expressing our initial thoughts about Normandy Oaks and our limited knowledge about the land, the culture and the principals of park design related to the space available. Of course, we will learn more during the public engagement process. A Strategic Plan should incorporate all of these considerations to successfully transition Normandy Oaks Golf Course to a "World Class" park destination.

- **Active Recreation** is placed near the new housing development complex and existing commercial/light industrial uses. It makes sense to locate a new activity away from the more established neighborhoods to the north and east. Here the new residents will have a choice to locate next to active recreation fields or not and will not be forced upon the long-term residents who have grown accustom to the solitude associated with the golf club that had been there before.

  The **Primary Use Zones** exhibit (refer to page 2-5) has been created to help community residents see how the activities are generally associated and featured within the park. These can be modified throughout the public engagement process of course, but they serve as a program benchmark to help residents and park users understand the uses and how they can be organized. These types of exhibits help the planner initiate the conversation with the community and also helps to better understand the concerns of the community, as well as their needs and priorities. It allows the community and the planners to negotiate through the pros and cons of the design process and to make decisions.

- **Open Space** can be used to separate activities and provide for natural areas to regenerate and be appreciated. They also can be used for educational purposes to help the community learn about the hydrological cycles, ground water recharge, infiltration, cleansing, habitat (flora / fauna) and other fundamental natural principles in nature.

Normandy Oaks Park

Royal Oak, Michigan

NF

LAP + CREATIVE
Landscape Architects and Planners.

Primary Use Zones

Active Recreation Elements

1. Soccer Fields
2. Playground
3. Splash Pad
4. Pickleball
5. Ice Skating
6. Sledding Hill

Passive Recreation Elements

1. Walking/Jogging Trails
2. Picnic Areas
3. Amphitheater
4. Nature Trails
5. Observation Decks/Boardwalks
6. Interpretive Learning Areas

- **Passive Recreation** can occur in multiple forms. There are picnic pavilions, an art walk, an ecological garden, a grand water feature (pond) in the SE portion of the park, small short pedestrian bridges and walking paths for strolling or walking your dog or with your family? Add some park benches, park tables, some casual viewing areas, a drinking fountain and you have a wonderful urban park in the center of the city. Here you can walk, stroll, read a book, sunbath, throw a Frisbee, watch the natural wildlife or simply enjoy the quiet views. Passive is leisure. Most of us long for a leisure in a park setting but cannot usually get away to find it. Normandy Oaks is in the center of the urban area and will allow you to refresh your mind and your body.

- **Active/ Passive Zone** allows for both active and passive areas to co-exist and transition from one to the other. You will notice that the more active recreational components such as; children's amphitheater, playgrounds, shelters, restroom and ice skating areas are related to the main parking lot in the NW portion of the site so that the more active areas are starting to transition to the passive areas toward the SE portion of the site. This is primarily for convenience for the park user. Supplies such as coolers, food, lawn chairs, etc. only need to be transported a short distance from the vehicle to make the loading and unloading as easy as possible.

Elks Park & Existing Golf Course Property Line – Opportunity for Transition Zone to Blend the Two Parks Together

- **The Buffer Zones** can be created wherever there is a need. We anticipate the periphery areas near the residential neighborhoods will benefit from screening. This will take some discussions with the residents, but it seems logical to incorporate either earth berms and/or landscaping to provide views into the park at specific points but screening to block out others. We can preserve a significant number of trees that will help with screening, provide mature shade during the hot summer months, and allow sunlight in the colder months.

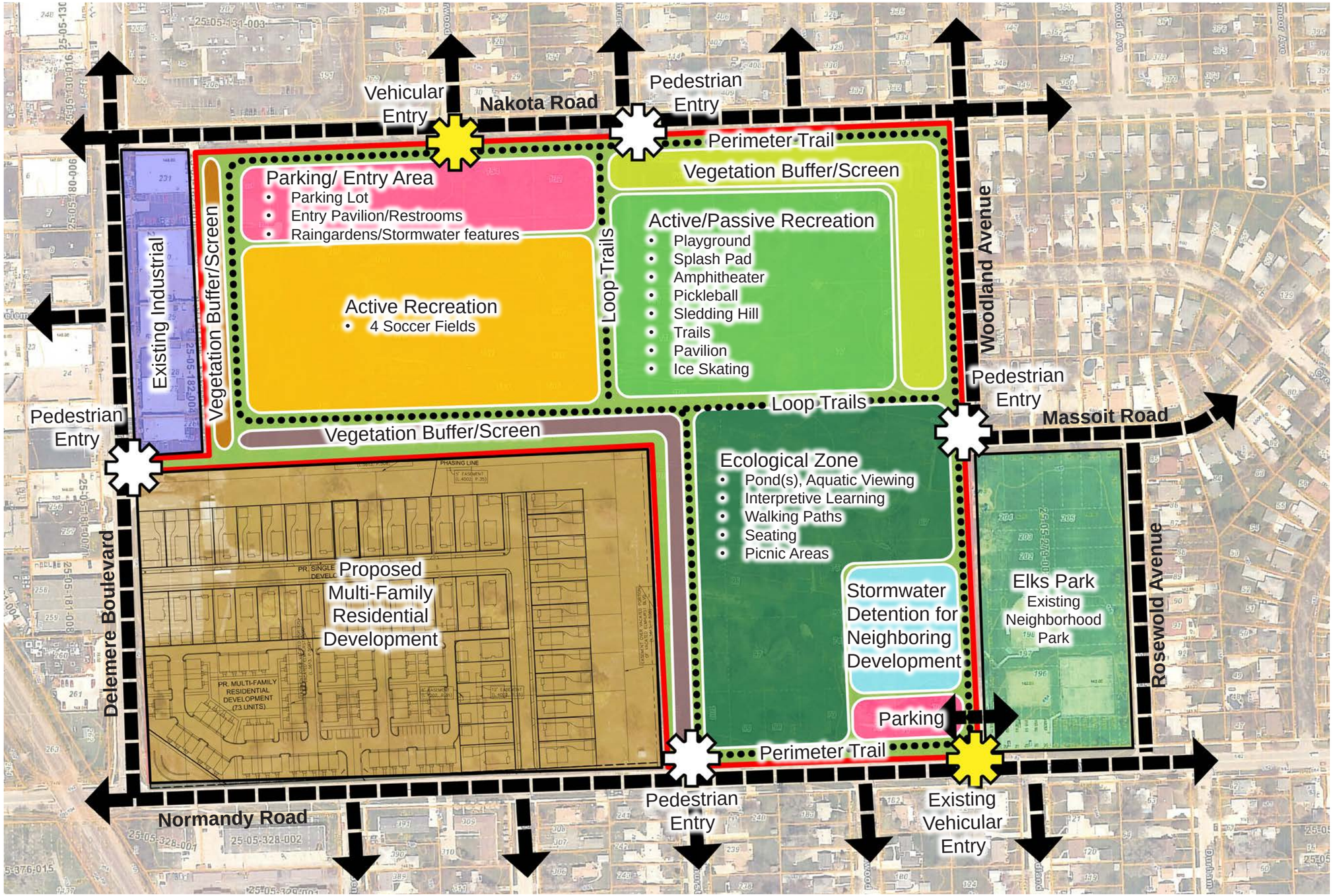
- **Entry Areas** should be welcoming and inviting. We should consider an artful display, as well as including some natural materials. This unique blend will allow for the community to make some place-making statements or branding of their park, while at the same time create a more permanent statement that implies that this park is built to last and is a form of pride for the community.

Existing Entry Node into Elks Park – New Place making Opportunities

Normandy Oaks Park

Royal Oak, Michigan

Functional Use Diagram



KEY

Park Boundary

Vehicle Traffic

Perimeter/Loop Trails

Note: Perimeter Trail is approximately 1 mile

NORTH

0 100 200 300

Existing Parking Lot to Elks Park – Upgrade and Introduce Storm Water Management Features such as Rain Gardens/ Bio-Swales

- **Parking Area** is a must, especially if you are going to attract users from beyond the immediate neighborhood. We don't want to overdo the parking but meet the capacity of the users. We think it makes sense to place the parking along the edges of the park near the light industrial areas, or on the fringes of the park edge with strategic entries to the street so that there is minimal interference with the existing residences. Since vehicular access is limited along Normandy Road due to grade changes, storm water retention (pond) and traffic flow, maybe Nakota Street would be an option? This would have to be vetted through the public engagement process of course, but if the community can agree this arrangement would serve the soccer fields and the more active areas of the park via Delemere Boulevard to Nakota Street. The entry to the parking lot could be shifted toward Delemer. This NW parking lot would also serve a variety of other functions within the park such as: playgrounds, small amphitheater, picnic pavilions and a good place to park your car and start your walk. The existing lot in Elks park might be able to expanded to the west to serve the SE side of the park.

- **A trail system** is envisioned along the perimeter, as well as the interior. We envision trails linking the neighborhood to and through Normandy Oaks Park. A one-mile perimeter loop trail along with a series of interior looped pathways with sequential viewing will allow for opportunity for exercise (measured distances), subtle views of the pond, the woods, the play areas and the natural landscapes. Run, walk, roller blade, bicycle, tricycle, skate board, scooter, baby stroller and any other form of exercise you can think of can use these trails. Trails are the number one request of recreational opinion surveys without question. People want short trails, long trails, loop trails, maze trails and off-trail trails. People will use these trails, guaranteed.

Existing North Property Line Along Nakota Rd – Proposed Interlinking Multi-Use Trail System

- **Art in the park** can be an integral part of the park program or branding. Royal Oak is a Royal Culture and it should be displayed. Why not begin by offering places for art to be displayed and have them rotate over the years. This has been successful in many other park projects. How can people express themselves is an ongoing quest of the human spirit? There can be art pods that allow for sculpture to be placed and viewed. In the park environment, there can be pavilions that will allow for outdoor summer programs and/or classes that are run by the local artisan groups, colleges, schools, nonprofits and volunteer organizations. Art in the park can take on all types and forms from sculpture, literature, painting, theater, yoga, etc. The people will have something to say about this aspect of the program for sure.

Action Items:

- *Gather information obtained within the current conditions tasks and provide a Findings report that will identify conflicting use areas, areas of concerns and opportunities.*
- *Based upon the findings, develop a refined Functional Use Diagram to present to the Normandy Oaks Committee for review and consideration.*

Public Consensus

Following the refinement of the program elements is the inclusion and consensus building of the citizens of Royal Oak and stakeholders. The strength of the Preliminary Design Plan will be the overall acceptance factor within the community. The NFE Team excels at conducting and developing support for the final plan.

The NFE/LAP Team expects that the project will need at least one public meeting as called for in the RFP. Although the City has reached out to constituents and has held previous meetings, it is important to allow for reaction to concepts early on in the process so that consensus can be meaningful and productive. We propose to develop concepts in advance of the first public meeting based upon what has transpired in the recent past. Our intent is to provide 1-3 design scenarios for the park that will help define the program and location of park components. This will fetter out the most practical and feasible components and what location is most probable based upon the given conditions of the park (i.e., neighborhood buffers, existing entry location to the park, land uses, etc.). Following that meeting the consultants will refine the concepts into one preliminary plan. This plan will then be presented at a second meeting having an idea of the magnitude of costs and phasing for the public to view and add comments before developing a final plan. Should the process require more meetings these will be added as a reimbursable fee.

Action Items:

- *Clearly define past public input history and events leading up to the present project request.*
- *Develop 1-3 concept plans suggesting recreational components and locations within the property.*
- *Identify all stakeholders that have an interest in the park project.*
- *Coordinate with the city and all stakeholders to advertise and promote a public input meeting.*
- *Conduct the first public input meeting.*
- *Consultants will refine the 1-3 concepts into one Preliminary Plan.*
- *Conduct a second public meeting to capture all remaining public comments.*

Design Development

The umbrella encompassing all of the initial work and public consensus input is design development of the Park. The NFE Team will listen diligently to understand the needs and issues regarding recreation development. Prior to the development of the Final Preliminary Plan, the geotechnical investigation work will be performed to confirm design details for parking/roads, trails, pavilions and other structural considerations. It is during this phase that the RFI programming and any new ideas are considered and explored for validity, fiscal responsibility, ecological sustainability and land planning considerations. As part of an interview conversation starter, the NFE/LAP Team has included a **Concept Plan** that incorporates some our limited knowledge regarding existing conditions overlaid with land planning considerations and proposed program elements. The following concept plan reveals some insight into our thinking.

Action Items:

- *Engage all professional disciplines to provide 2-3 concept plans (50% schematic level) to be reviewed with the NOC and stakeholders.*
- *Refine the concept plans to produce one (1) Preliminary Plan including a preliminary cost estimate.*
- *Perform geotechnical investigation work based upon the direction of the Preliminary Plan.*
- *Conduct and present concept plans and preliminary plan to the NOC and stakeholders.*

Normandy Oaks Park

Royal Oak, Michigan

Conceptual Layout Plan

KEY

1. Parking Lot
2. Entry Pavilion/Restrooms
3. Soccer Fields
4. Winter Ice Skating Area
5. Perimeter Trail
6. Amphitheater
7. Streams Connecting Water Features
8. Boardwalk
9. Small Sledding Hills Created from Pond Excavation
10. Pavilion
11. Splash Pad
12. Playground
13. Pickleball Courts
14. Observation Deck
15. Stormwater Detention Ponds
16. Pavilion
17. Connection to Elks Park
18. Pedestrian Entry
19. Raingardens
20. Water-side Interpretive/Picnic Area
21. Nature Trails
22. Pedestrian Entry
23. Pedestrian Entry
24. Pedestrian Entry

Master Plan

Upon acceptance, a Final Preliminary Plan, a Master Plan will be developed and ultimately approved by City Council. The Master Plan will take into account all of the information gleaned from the Public Consensus phase and Design Development process. The approved Master Plan will become the design basis for the development of construction drawings.

Action Items:

- *Produce a Master Plan from the Final Preliminary Plan.*
- *Refine cost estimate to reflect any changes.*
- *Attend meeting for the presentation and acceptance of the Master Plan to City Council.*

Surveying Processes and Procedures

The City of Royal Oak previously secured the services of NFE to provide a boundary survey of Normandy Oaks Park (refer to included boundary survey). The NFE Team will build on top of this boundary survey to provide the required topographic survey of the project area. Surveying data secured as a part of this project will be used for detailed design services by the NFE/LAP Team and to populate ArcGIS data files. All work will be prepared within the Michigan State Plane Coordinate system under the NAD 1983 datum. Survey control for this project will come from elevations previously established for other permanent improvements within the facility. The NFE/LAP Team will establish a benchmark system for use in future projects as a part of this contract, and it will be established utilizing NAVD 88 datum.

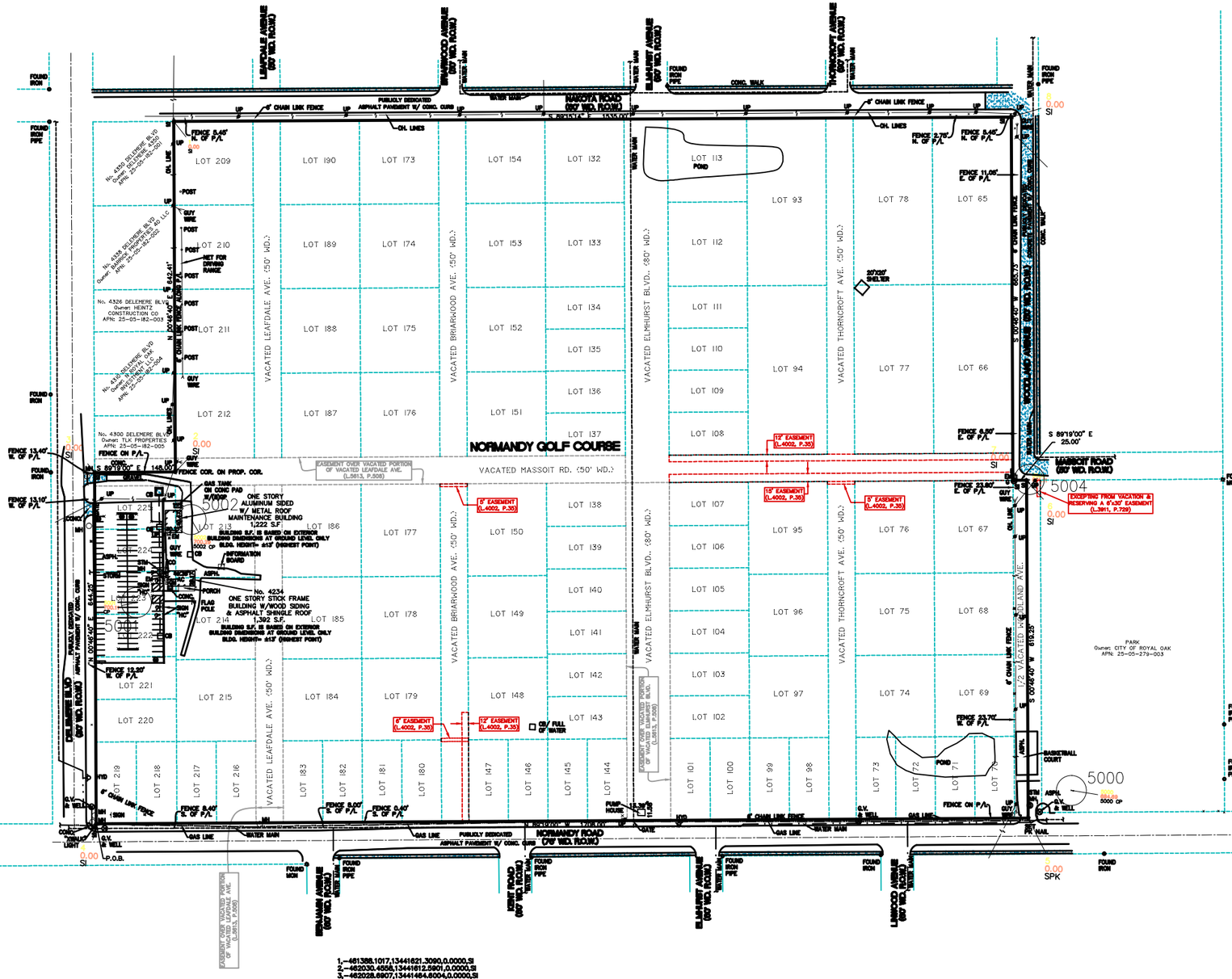
In order to achieve the desired results, it will be required to utilize state-of-the-art RTK GPS equipment. A permanent coordinate system shall be established within the project limits for purposes of perpetuating the design through the construction process. All of the above must be understood when developing a comprehensive survey plan for this project.

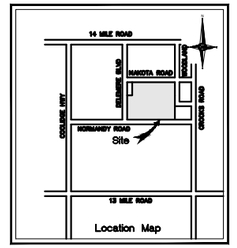
Action Items:

- *Research and recover existing benchmark reference system.*
- *Establish new benchmark network for use by contractor, and for future projects in NAVD 88 Datum.*
- *Establish ground control and elevation reference system utilizing state-of-the-art RTK GPS procedures and by establishing connection to the Michigan Department of Transportation CORS reference system.*
- *Perform required mapping of the project area.*
- *Post process all collected data utilizing GPS Least Squares Adjustment software.*

Geotechnical Investigation

Our testing consultant, Testing Engineers and Consultants (TEC) will perform a geotechnical investigation of the park once the initial master planning process has been completed. The previous development at the site will also be considered in determining sampling locations. We propose a combination of soil borings at various depths to effectively identify subsurface conditions. It is estimated that 4 borings will be to 20-foot depth in areas of proposed structures; 10 borings will be to a 10-foot depth in the proposed parking areas; and 20 soil borings to a 5-foot depth in areas of the recreational fields and pathways. NFE/LAP understands that if additional soil borings are needed for potential pavilion foundations, spray park, trails and/or other critical spots as determined by the City and that these will be considered additional scope items and will be calculated by the fee schedule.





NF ENGINEERS
CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

NOWAK & FRAUS ENGINEERS
46777 WOODWARD AVENUE
PONTIAC, MI 48342
TEL. (248) 332-7931
FAX. (248) 332-8257
EMAIL: rfraus@nowakfraus.com

LEGAL DESCRIPTION

Land situated in the County of Oakland, City of Royal Oak, State of Michigan, is described as follows:

Lots 65 through 78, inclusive, Lots 93 through 113, inclusive, Lots 132 through 154, inclusive, Lots 173 through 190, inclusive, Lots 209 through 225, inclusive, also 1/2 vacated Massoit Road adjacent Lot 225, and all of vacated Massoit Road, Leafdale Avenue, Briarwood Avenue, Elmhurst Blvd., and Thorncroft Avenue lying adjacent to remaining lots. Also 1/2 vacated Woodland Avenue adjacent to Lots 67 through 70, inclusive, NORDWOOD ESTATES SUB., according to the plat thereof as recorded in Liber 13 of Plats, page 31, Oakland County Records.

Tax Item No. 25-05-251-002

BASED ON A FIELD SURVEY, ALL OF THE ABOVE IS BEING MORE PARTICULARLY DESCRIBED AS:

Beginning at the Southeast corner of said Lot 219 (said point also being the Northeast corner of the intersection of the Easterly right-of-way line of Delemere Boulevard (80 feet wide) and the Northerly line of Normandy Road (76 feet wide); thence North 00 degrees 46 minutes 40 seconds East, 544.25 feet along the Easterly right-of-way line of said Delemere Boulevard to a point on the centerline of vacated Massoit Road (50 feet wide); thence South 89 degrees 19 minutes 00 seconds East, 148.00 feet along said centerline of vacated Massoit Road; thence North 00 degrees 46 minutes 40 seconds East, 842.41 feet to the Northeast corner of said Lot 209 (said point also being on the Southerly right-of-way line of Nakota Road (80 feet wide); thence South 89 degree 19 minutes 00 seconds East, 1335.00 feet along the Southerly right-of-way line of said Nakota Road to the Northeast corner of said Lot 65 (said point also being on the Westerly right-of-way line of Woodland Avenue (50 feet wide); thence South 00 degree 46 minutes 40 seconds West, 865.73 feet to the Northeast corner of said Lot 67 (said point also being on the Southerly right-of-way line of said Massoit Road); thence South 89 degree 19 minutes 00 seconds East, 25.00 feet to a point on the centerline of vacated Woodland Avenue (50 feet wide); thence South 00 degrees 46 minutes 40 seconds West, 810.25 feet along the centerline of said vacated Woodland Avenue to a point on the Northerly right-of-way of said Normandy Road; thence North 89 degree 19 minutes 00 seconds West, 1708.00 feet along the Northerly line of said Normandy Road to the point of beginning.

BASIS OF BEARING NOTE

The basis of bearing for this survey was established by the Northerly line of Normandy Road, according to the aforesaid recorded Plat of Norwood Estates.

SITE DATA

Gross Land Area: 2,084,566 Square Feet or 47.855 Acres.
Zoned: One Family
Total Parking: 101 spaces including 4 barrier free spaces.

TITLE NOTES

1. Rights or claims of parties in possession not shown by the public records.

3. Easements, or claims of easements, not shown by the public records.

Part Two: Specific Exceptions

1. Terms, covenants, conditions, restrictions and other provisions but omitting restrictions, if any, based on race, color, religion, sex, handicap, familial status or national origin as disclosed by instrument recorded in Liber 566, Page 363 [SAID DOCUMENT DOES NOT DESCRIBE ANY PLOTTABLE EASEMENTS OR PLOTTABLE RESTRICTIONS, EXCEPT: NO BUILDING SHALL BE ERECTED NEARER THAN 30 FEET FROM THE FRONT LOT LINE THEREOF]; and Liber 1819, page 172 SAID DOCUMENT DOES NOT DESCRIBE ANY PLOTTABLE EASEMENTS OR PLOTTABLE RESTRICTIONS].

2. Easement for public utilities over that portion of land included in the vacated streets as evidenced by instrument recorded in Liber 3911, page 729. [SAID EASEMENT IS PLOTTED HEREON].

3. Easement for public utilities over that portion of land included in the vacated streets as evidenced by instrument recorded in Liber 4002, page 35. [SAID EASEMENTS ARE PLOTTED HEREON].

4. Easement for public utilities over that portion of land included in the vacated streets as evidenced by instrument recorded in Liber 5613, page 508. [SAID EASEMENTS ARE PLOTTED HEREON].

5. Agreement in favor of Detroit Edison Company and the Covenants, Conditions and Restrictions contained in instrument recorded in Liber 3489, page 385. [LOCATION OF SAID AGREEMENT IS DESCRIBED AS POLES TO BE SET ON THE PROPERTY LINES AT THE REAR OF ALL LOTS IN THE NORDWOOD ESTATES SUBDIVISION].

6. Rights of the United States, State of Michigan and the public for commerce, navigation, recreation and fishery, in any portion of the land comprising the bed of ponds, or land created by fill or artificial accretion.

7. The nature, extent or lack of riparian rights or the riparian rights of riparian owners and the public in and to the use of the waters of ponds.

8. Loss or damage arising out of any discrepancy between the legal description of the property as insured and the legal description of the property as assessed on the Oakland County tax rolls.

9. The rights of the lot owners of Nordwood Estates Sub. in and to the use of the vacated portion of Massoit Road, Leafdale Avenue, Briarwood Avenue, Elmhurst Blvd, Thorncroft Avenue and Woodland Avenue.

10. Rights of tenants, if any, under any unrecorded leases.

All exceptions shown or noted on this survey were obtained from Title Commitment No. 597345, date printed 04-15-2015, with an effective date of 03-30-2015, issued by First American Title Insurance Company.

SURVEYOR'S CERTIFICATION

To:

City of Royal Oak, a Municipal corporation
First American Title Insurance Company

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2011 Minimum Standard Detail Requirements for ALTA/ACSM Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 6(a), 7(a), 7(b1), 7(c), 8, 9, 11(a), 13, 14, 16, 17, & 18 of Table A thereof.

The field work was completed on 03-31-2015.

Kevin Navaroli, P.S.
No 53503
Dated: 04-21-2015

KEVIN NAVAROLI
PROFESSIONAL SURVEYOR
No. 53503
STATE OF MICHIGAN
LICENSED PROFESSIONAL SURVEYOR

LEGEND

ASPH	=	Asphalt
C	=	Cable
CATV	=	Cable TV/Box/Riser
CB	=	Catch Basin
CO	=	Clean Out
CONC	=	Concrete
E	=	Electric
EM	=	Electric Meter
EC	=	Electric Conduit/Riser
F.I.	=	Found Iron
G	=	Gas
GM	=	Gas Meter
GL	=	Ground Light
GP	=	Guard Post
GV	=	Gate Valve
HYD	=	Hydrant
LP	=	Light Pole
L/S	=	Landscape
MH	=	Manhole
MON.	=	Monument
MW	=	Monitor Well
OH LINES	=	Overhead Lines
P	=	Phone/Box/Riser
PH	=	Physically Handicapped
PIV	=	Post Indicator Valve
P/L	=	Property Line
PM	=	Parking Meter
ROW	=	Right of Way
SAN	=	Sanitary Sewer
SB	=	Stop Box (Water)
S.I.	=	Set Iron
SO	=	Shutoff (Water)
STM	=	Storm Sewer
TRANS	=	Transformer
UP	=	Utility Pole
WM	=	Water Main
(R)	=	Record Measurement
(M)	=	Surveyed Measurement
(C)	=	Calculated

FLOOD HAZARD NOTE

The Property described on this survey is not located in a Special Flood Hazard Area as defined by the Federal Emergency Management Agency. The property lies within Map No.: 26125C0543F. According to the Map Index for Oakland County, Michigan, dated 01-16-2009, Map No.: 26125CIND2B is not printed and is indicated as being a No Special Flood Hazard Area.

SURVEY NOTES

There was no observable evidence of current earth moving work, building construction or building additions.

There are no known proposed changes in street right-of-way lines available from the controlling jurisdiction.

There was no observable evidence of recent street or sidewalk construction or repairs.

There was no observable evidence of site use as a solid waste dump, sump or sanitary landfill.

CEMETERY NOTE

There was no observable evidence of cemeteries or burial grounds within the subject property.

UTILITY NOTE

All utilities are underground unless otherwise noted.

The utilities shown on this survey were determined by field observation. All locations are approximate. The location of any other underground services which may exist can only be depicted if a Utility Plan is furnished to the surveyor.

PROJECT
Normandy Golf Course

C:\DOWNLOAD\ScreenShot.jpg

PROJECT LOCATION
No. 4234 Delemere Blvd
Part of the N.E. 1/4 of Section 5, T.1N., R.11E., City of Royal Oak, Oakland County, MI

SHEET
ALTA/ACSM Land Title Survey

REVISIONS

DRAWN BY: D.MCCONKEY
DESIGNED BY: -
APPROVED BY: RJF/K.N.
EMAIL: rfraus@nowakfraus.com
DATE: 04-21-2015
SCALE: 1" = 100'

NFE JOB NO. 1519
SHEET NO. 1 of 1

The NFE/LAP Team will then collaborate regarding the findings and TEC will document the analysis in a report of the recommended geotechnical design parameters and pavement reconstruction including:

- Evaluation of existing pavement and base thicknesses;
- Stabilization requirements for subgrade materials;
- Recommended pavement types and thicknesses;
- Evaluation of ground water conditions and its effect on construction and the design of the parking lots and other park components;
- Parameters affecting site grading and drainage;
- Parameters for excavation slope design;
- Geotechnical factors affecting construction of the project; and
- Gradation analysis of existing soils and base proposed to be incorporated into the project.

Action Items:

- *Perform condition survey and identify boring and core locations.*
- *Obtain MISS DIG clearance, mobilize and perform subsurface exploration.*
- *Perform a laboratory investigation to determine the strength, compressibility and physical characteristics of the soils encountered and analyze the results of the field and laboratory investigation.*
- *Memorialize all findings and recommendations in a written report.*

CAREFUL Design

CAREFUL stands for Complete, Accurate, Reliable, Effective, Functional, Understandable and Lasting. NFE/LAP works towards completing CAREFUL designs for all of our projects. The NFE/LAP Team has significant experience working with multiple stakeholders building consensus, preparing design development plans and managing the implementation of project designs through the use of standard protocols in conjunction with the appropriate checks and balances. We attribute the successes of our work in our ability to carefully listen to our clients and stakeholders while providing our professional expertise, which balances the realities of implementation and budgets. Our attention to detail has also been paramount to our successes. NFE/LAP will work with the Royal Oak staff to better understand how they perceive the challenges for this project and recommend possible solutions. As called for in our detailed work plan, we will hold a meeting early in the process to better familiarize ourselves with the design intent and challenges. The meeting will enable us to better understand Royal Oak's concerns, as well as visualize and discuss possible design options. We will use this information coupled with research, technology and expert opinions to reduce the options to the best solution that can be implemented within the parameters of the project.

Action Items:

- *Clearly define all recommendations and present to NOC.*
- *Coordinate with all stakeholders to incorporate all project related concerns into the plans and specifications.*
- *Perform QA/QC audit of proposed plans and specifications.*

Effective Communication Plan

NFE/LAP understands that a spotlight will be cast upon this project as it will become a major hub of activity during the busy summer season, as well as activities being proposed for the winter or "all seasons park". We also understand that multiple individuals will be questioned from time to time with respect to the progress of the work and schedule of activities. It will be very important to identify all logistical issues well in advance

and adequately address them in the proposal documents. Addressing these issues during construction must be avoided.

In addition, NFE/LAP has successfully implemented pay items such as "Maintaining Access to Facilities" or "Coordination" that effectively require the contractor to adequately coordinate their activities with stakeholders that are being impacted. In these cases, if the contractor does not perform in these elements of work, then there are substantial penalties built into the contract. For this project, it is highly advisable that daily briefings be implemented either by e-mail or by electronic media to keep the Royal Oak staff appraised as to the progress of the work. NFE/LAP has successfully implemented an email notification system on past projects where all stakeholders were kept appraised to the status of the work. This system virtually eliminated user complaints as they were engaged in the overall construction process throughout the development of the project. For this project, we would advise that a similar system be implemented to keep the Royal Oak staff and other stakeholders appraised as to the progress of the project and changes in parking requirements/traffic control. As appropriate, these notifications can be posted to a website to keep the general public apprised of the project development. Additionally, telephone conferences can be held to address specific issues that may arise.

Action Items:

- *Effectively communicate with all stakeholders throughout the entire design development and construction process.*
- *Establish email contact list for email list serve distribution.*
- *Prepare specifications and contract documents that require effective communication from the contractor.*

Construction Documents

Upon approval of the Master Plan by City Council, the NFE Team will completely design the project and prepare all construction drawings, specifications and project cost estimate. All technical and professional disciplines will be coordinated for the project completion. All proposed work will comply to local/state laws, ordinances and codes in design and construction. Plans will conform to ADA requirements and any environmental regulations.

Action Items:

- *Produce construction drawings and specifications for contractors to bid from.*
- *Refine cost estimate to reflect any changes.*

Non-Conforming Parking Areas/Site Accessibility

As it relates to ADA compliance, it will be required to identify all accessible routes to facilities and other site connection points. ADA modifications shall be made to assure ADA code compliance is addressed. Specifically, NFE/LAP will identify on the proposed paving and grading plan all ADA compliant parking spaces together with accessible routes into the facilities/site. All existing accessible routes will be surveyed and verified for compliance with existing codes. Corrective measures will be recommended and/or implemented as a part of the design. Some specific design elements to consider assuring code compliance are:

- Detectable warning domes with an appropriate color contrast constructed at the proper locations and dimensions for all sidewalk ramps.
- ¼-inch maximum lip at curbed transitions for ramps.
- 6-inch maximum rise in 6 feet for curbed ramps.

- 5% maximum running slope with special consideration of how transverse slope affects the running slope and calculation of the diagonal slope.
- 42-inch clear width requirements for accessible routes which impacts placement of landscape amenities furniture and other accessories.

Action Items:

- *Identify accessible routes within the parking area, within the park, at facilities, at park access points and along the perimeter of the park.*
- *Perform an ADA compliance audit to identify all ADA non-compliance issues and memorialize findings within a written report.*

Permitting and Approvals

The Normandy Oaks project will involve several steps of approvals. NFE/LAP will prepare and present the plans, documents and graphics needed to secure the necessary approvals and permits from the City. It is expected that approvals will be needed from the advisory committee, Park & Recreation Department, and possibly the Planning Department and City Council. Approvals will be expected for the grading and drainage plan of the recreational fields and implementation of a storm water management system. This project will involve work within the adjacent road right-of-way. These streets are under the jurisdiction of the City, and as such, will require a ROW permit for construction. NFE has been addressing ROW requirements over the 48 years of our history. Our standard library of details contain all required improvement details for roadway and subgrade preparation, curb and gutter details, standard notes, etc. required to complete this design. This coupled with our significant City of Royal Oak experience the NFE Team has effectively removes any learning curve for obtaining necessary permits and approvals.

In addition, the City of Royal Oak is an authorized agency under the Environmental Protection Act to administer the Soil Erosion and Sedimentation Control (SESC) program on behalf of the City. As the total amount of disturbance will exceed 5 acres of land, an NPDES permit will be required from the MDEQ.

Action Items:

- *Submit preliminary plans to City for review and comment.*
- *Incorporate all review comments into the proposed plans and submit to the City for required approvals and/or permits.*
- *Obtain necessary SESC and NPDES permits.*

Contract Time and Phasing

The Contract Time and Phasing of this project will be critical in the successful integration of the site improvements and the existing recreational play programming. NFE/LAP recommends and does have experience in phasing all the site improvements (parking, pedestrian systems, storm management and grading/drainage) while keeping the park open for public use, if desired. This type of project construction management is streamlined through the preliminary and final construction documentation phase. NFE/LAP will intentionally design and manage the plans so that when the work is to be implemented it will be integrated like a puzzle, piece by piece until the whole picture is complete. Accessibility and alternate routes may be needed and planned ahead of time for this type of implementation. We will also be mindful of the condominium project that is likely to be constructed within the same general timeframe. We will communicate with the selected developer and work with them to institute a plan that dovetails with one another. This will reduce the confusion and congestion with each development.

Action Items for a Contract Time and Phasing:

- *Develop phasing plans and specifications for consideration by Royal Oak.*
- *Review proposed phasing plans with contractor knowledgeable in constructing this type of project to obtain concurrence of constructability/timing.*
- *Perform pedestrian safety analysis of proposed phasing plans and modify as required to address pedestrian safety.*

Bidding Services

The NFE Team will provide and assist the City of Royal Oak to successfully advertise and solicit competitive bid pricing for Normandy Oaks Park.

Action Items:

- *Produce bidding documents (plans, specifications, bidding forms and documents).*
- *Assist City of Royal Oak with bidding documents.*
- *Conduct Pre-Bid Meeting on-site.*
- *Prepare and distribute any addendums and/or clarifications.*
- *Prepare letter of recommendation to City of Royal Oak for Bid Award.*

Grant Writing Assistance

The funding strategies of Normandy Oaks will primarily be the source of revenue generated from the sale of the western 10-acre parcel. However, there are many potential local, state and federal grant opportunities to offset the construction costs. The inclusion of utilizing grant funding could provide a greater connection to the community and gain awareness of this World Class Park on the county and state level. The NFE Team continually demonstrates our ability to successfully win competitive grant funding. We have received approvals and monies from the MDNR and MDOT for park and trail development, road beautification, pocket parks and pedestrian improvements within the road right-of-way. We commit to providing the City of Royal Oak direction in soliciting grant funding sources and writing assistance.

Action Items:

- *Research and provide a list of potential funding sources and program elements that qualify.*
- *Provide grant writing and graphic assistance to secure grant monies.*

Construction Administration

After the Award of Contract to the successful Bidder, the NFE Team will quickly coordinate with the City of Royal Oak to proceed with the construction of Normandy Oaks. Once contract documents are in place, the NFE Team will follow the construction schedule and conduct a Pre-Construction meeting. The NFE Team has extensive experience with construction administration services within the City of Royal Oak having completed multiple projects on behalf of the City of Royal Oak Engineering Division. Additionally, the NFE/LAP team assigned to this contract regularly completed Construction Administration services for the MDNR and other communities for park development and rehabilitation work. We will utilize our effective communication protocols and QA/QC processes to ensure a seamless implementation of construction documents.

Action Items:

- *Coordinate with City of Royal Oak to verify all required contractual documents are in place.*
- *Conduct a Pre-Construction meeting.*
- *Coordinate and verify Contractor has secured all required permits.*
- *Verify all site preparation elements are in place prior to the start of construction.*
- *Provide daily/weekly project oversight and communicate with the City of Royal Oak.*

- *Attend weekly progress meetings.*
- *Review and approve/reject payment schedules.*
- *Address and resolve with the City of Royal Oak any layout, structural or engineering issues.*

Section 2 – Statement of Project Goals – Central Park

NF ENGINEERS

2. STATEMENT OF PROJECT GOALS – CENTRAL PARK

The goal of the scope of work is to take a current service-centered area and transform the space into an iconic **"World-Class" Downtown Destination Park**. In order to transition this property from a service environment into a creative gathering spot will take a **Strategic Plan** that utilizes an **Innovative and Collaborative Approach**. The collaborative approach should engage the community including, but not limited to: volunteers, city stewardship programs, and non-profit organizations, in addition to other partnerships efficiently assisting with the development of the park features. Suggested park themes for the park include environmental (materials, storm water, landscape, re-purposing), sustainable (maintenance, fiscal, vitality of space) and unique/innovative park experiences. The underlining design considerations should focus on the **Human Experiences of the Park**, **Creative and Flexible Space** considerations**, Programming and Park Elements, Classic/"Timelessness" of the design, Community Collaboration, and Long-Term Maintenance and Fiscal Responsibility**. The long-term outcome of Central Park is an innovative gathering spot for the Royal Oak community and guests to enjoy, experience and talk about for future generations.

Royal Oak Central Park
Existing Conditions

NFE HISTORICAL WORK SURROUNDING CENTRAL PARK

NFE has a long, positive history with the City of Royal Oak. Most notably, the areas adjacent to the new Central Park location has NFE's fingerprints all over it. NFE is currently designing and seeking City approvals for the new professional office building and supporting parking structure within the surface lots next to the library and police station. This new innovative design encompasses the building, infrastructure, utilities, storm water management, landscape, site amenities and exterior hardscapes/walkway promenade. NFE has also produced line drawings from architectural concept plans of what Central Park may look like one day. It is exciting to think that another NFE Team could take up the reins and build upon the already gathered ideas and opinions to create a space that not only compliments the new office building design, but also performs as a downtown destination and is celebrated. In addition, over the years NFE Teams have designed and implemented new streetscapes, landscape and walkway construction along Troy street from 11 Mile Road to 4th Street, 2nd Street from Main Street to the new police station, 4th street from Main to Campbell and parts of Main Street. NFE has access to all of the working and construction drawings, but more importantly,








Royal Oak Central Park
Existing Conditions

retains all of the history, conversations and hours of effort to produce the design and successful implementation.

The following **Initial Scope of Work**, as outlined in the RFP, is a plan of action expected to be executed by the Prime Consultant (NFE/GMA Team). However, as directed by the City of Royal Oak at the Pre-Bid Meeting held on April 19, 2017, a reduced Scope of Work was identified encompassing only tasks a and b below (tasks 1 and 2 of work plan):

NFE implemented streetscape work along 4th and Troy

a) Community Collaboration/Outreach: Work closely with City Staff, review committees, meet with City Commission, public groups and foster public input, as requested.

b) Prepare a Strategic Plan based upon the findings from the Community Collaboration/Outreach.

c) Prepare the necessary drawings and plans sufficient to depict the character of the design and to prepare budgets.

d) Perform soil investigation, if necessary, and provide an updated topographic survey.

e) Develop preliminary construction costs and project budget.

f) Provide Presentation Drawings/Master Plan/Site Development Plans.

g) Assist in facilitating and presenting the concepts and obtaining public input.

h) Provide a complete construction drawing set for the project, including specifications and cost estimates. This work would include all drawings and specifications for the civil, structural, mechanical, plumbing, electrical, landscape, site amenities, artwork, streetscape and road portions of the project.

i) Provide full architectural/landscape architectural and engineering services to carry out the project to completion. All work must conform to all applicable laws, ordinances and codes in the design and construction phase.

j) Provide all construction management for the project during construction.

UNDERSTANDING OF SERVCE

Inventory of Current Conditions and Storm Water Management Considerations

The current conditions of the proposed park location consist of two civil service buildings that house many departments (city clerk, human resources department, water department, treasurer and police station), surface parking lots, sidewalks, plaza area and landscape/buffer areas. As part of on-going design work, the proposed police station is being relocated at the corner of 11 Mile and Knowles Street. NFE is currently working on the streetscape/promenade which starts at Main Street, continues north of the proposed Central Park and terminates at the new police station.

View Looking Southeast of Proposed Central Park Area along with Ex Farmer's Market, Surface Parking Lots and Ex Edges

In general, the area is generally flat with raised ramps to allow for ADA routes to the building entrances, a sunken service area for trucks and

outdoor sitting areas. The existing storm water system is collected over land, directed to catch basins and contributes to the existing combined storm and sewer system. Improvements for this park will incorporate Best Management Practices for storm water management (bio-swales, rain gardens, sediment separation chambers, permeable pavers, etc.) to reduce the load of the existing drainage system.

Royal Oak's premiere Farmer's Market is within 200 feet of the new Central Park and will provide synergy to this downtown destination. It is very likely that the Farmer's Market could "spill" into this park and provide more depth and experience to this seasonal event. The edges to this location consist of surface parking lots, businesses and restaurants. As Royal Oak transforms its downtown area, the surrounding uses of Central Park will showcase and strengthen the connection to the Park via outdoor eateries, balconies, decorative architectural facades, etc.

GMA: Rendering of Downtown Detroit Urban Redevelopment – High Quality Materials, Use of Water, Sculpture and Landscaping

Action Items:

- *Perform a site visit/field investigation to photograph and document existing conditions. Note items not found on existing drawings or documents and mark in the field to be located.*
- *Review NFE's existing topographic survey of the project area and obtain any additional marked items during the field investigation.*
- *Prepare and verify a topographical survey for construction documents.*
- *Document current drainage conditions and patterns.*
- *Note problem areas within the area.*
- *Identify, tag and record existing trees in compliance with the City of Royal Oak tree ordinance.*
- *Prepare and present a Findings report to the City of Royal Oak Committee based upon site investigation work.*

Land Planning
(Functional Use Diagram) Considerations

One of the most important factors in this phase of development is the overall land planning/functional use considerations for the park. The relationship between the existing fabric of the community and the proposed park elements have to be strategically placed to balance the change in use and long-term viability of the park itself. A **Functional Use Diagram** is a simple way of expressing initial thoughts about Central Park and the knowledge about the land, the culture and the principals of park design related to the space available. A Strategic Plan should incorporate all of these considerations to successfully transform the existing service area to a "World Class" downtown park destination.

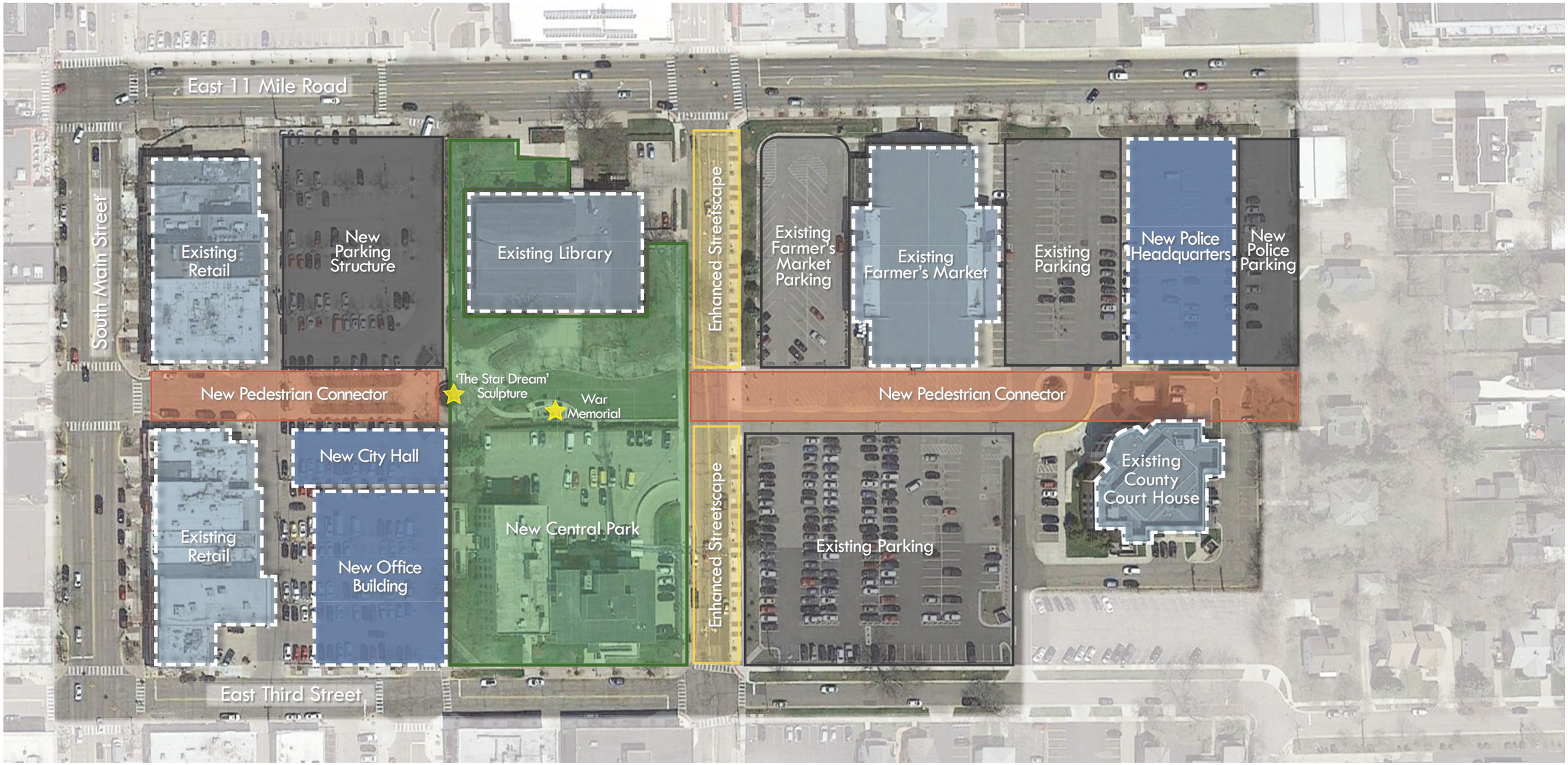
GMA: Northville Town Square – Human Experience at its Maximum!

- **<u>Human Experience</u>** The design of the park should acknowledge how users will use/experience the park. User experiences can be in the forms of concerts, festivals and gatherings to programmed

activities like yoga, karate and dancing. Urban parks are great for lunch dates, reunions with friends, youth programming, reading/relaxing and simply people watching. The more room you make for people to rest and socialize, the greater opportunity for the park to become a "World Class" destination. The most important feature of this park is the user itself; not necessarily the fancy materials, pieces of artwork and/or green features. The park must relate to the human experience, or it will simply not be used.

- **Open/Flexible Space** will be important to the success of this park. Designs that are too specific/ defined will not allow the park to be easily transformed from hosting the local girl scouts club meeting to the night time jazz show. It is difficult to balance the volume of the space and the placement of critical park elements, such as fountains, stages, seating, storm water area, plaza, art work, lighting, etc. In addition, the views into and out of the park from the programmed park elements will either support the human experience or hinder it.
- **Entry Areas/Edges** should be iconic and inviting. The edges of Central Park should celebrate this new destination and encourage users to enter into the space. Art work, high quality material selection, use of water and color, and site amenities will assist in developing an iconic image for Central Park. Users should be able to identify Central Park by its designed edges. The edges provide synergy with the current and future businesses.
- **Buffering/Screening** can be implemented wherever there is a need. This will evolve during the design process as the edges of the park are discussed with the City of Royal Oak. We will preserve as many existing healthy trees as possible. The mature trees establish a canopy to the space, provide shade during the hot summer months and allow sunlight in the colder months.
- **Parking Area** will be compensated by the surrounding parking infrastructure: on-street parking, surface lots and parking structures within one to two block radius. It may be prudent to offer on-street parking on the edges of Central Park to provide ADA spaces, including expectant Mom spaces.
- **Pedestrian Circulation** is envisioned along the perimeter, as well as the interior. Due to the size and urban aspect of this park, pedestrian circulation will occur throughout the entire plaza. Defined trails/walkways may not be as apparent versus large flexible hardscape areas which allow for many future uses. Comfort and rest areas will be important to the pedestrian circulation system. These areas will vary from decorative forms/functional art work which a user can sit on to bright canopy areas with tables and chairs. Public restrooms should also be discussed as part of the comfort/rest element.
- **Art in the park** will be an integral part of the park program or branding. Art work will play a role in the branding/iconic imaging of Central Park. Temporary/ traveling art work versus permanent art work is possible within this urban park. There is great opportunity to use high quality materials and functional art to supply the much needed benches, tables and lighting that is needed in urban settings. Traditional site furniture could be

GMA Center for Creative Studies – Innovative and Flexible Space For People & Art



Royal Oak Central Park
Site Diagram


© City of Birmingham


© City of Birmingham


© Grissim Metz Andriese

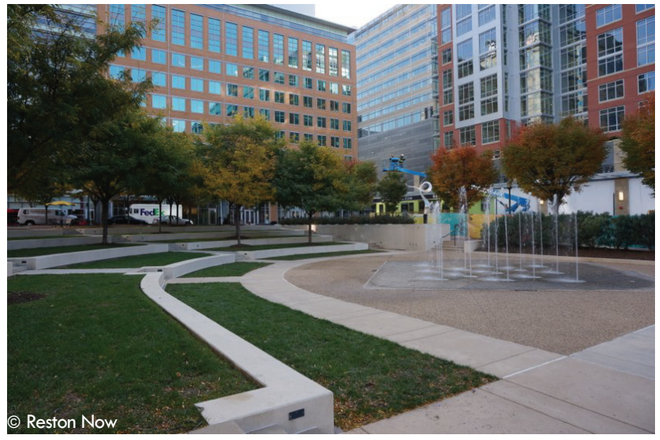

© Grissim Metz Andriese


© Grissim Metz Andriese


© Illumni Lighting


© Sanlitun Village


© OLIN / Sahar Coston-Hardy


© Reston Now

Royal Oak Central Park
Precedent Images

- reserved for Normandy Oaks, but Central Park could be designed to read as one piece of collective art work. Art work could include the use of light, water and/or music.

Action Items:

- *Gather information obtained within the current conditions tasks and provide a Findings report that will identify conflicting use areas, areas of concerns and opportunities.*
- *Based upon the findings, develop a refined Functional Use Diagram to present to the Central Park Committee for review and consideration.*

Public Consensus

Following the refinement of the program elements is the inclusion and consensus building of the Citizens of Royal Oak and stakeholders. The strength of the Preliminary Design Plan will be the overall acceptance factor within the community. The NFE Team excels at conducting and developing support for the final plan.

The NFE/GMA Team expects that the project will need more than one public meeting as called for in the RFP. We propose to develop concepts in advance of the first public meeting based upon our findings with the City of Royal Oak and stakeholders. Our intent is to provide 1-3 design scenarios for the park that will help define the program and location of park components. This will fetter out the most practical and feasible components and what location is most probable based upon the given conditions of the park. Following that meeting the consultants will refine the concepts into one preliminary plan. This plan will then be presented at a second meeting having an idea of the magnitude of costs and phasing for the public to view and add comments before developing a final plan. Should the process require more meetings, these will be added as a reimbursable fee.

Action Items:

- *Clearly define past public input history and events leading up to the present project request.*
- *Develop 1-3 concept plans suggesting proposed park elements.*
- *Identify all stakeholders that have an interest in the park project.*
- *Coordinate with the city and all stakeholders to advertise and promote a public input meeting.*
- *Conduct the first public input meeting.*
- *Consultants will refine the 1-3 concepts into one Preliminary Plan.*
- *Conduct a second public meeting to capture all remaining public comments.*

Design Development

The umbrella encompassing all of the initial work and public consensus input is design development of the park. The NFE Team will listen diligently to understand the needs and issues regarding the park development. Prior to the development of the Final Preliminary Plan, geotechnical investigation work will be performed, as needed, to develop any plaza, road and/or structural details. It is during this phase that the RFI programming and any new ideas are considered and explored for validity, fiscal responsibility, ecological sustainability and land planning considerations.

Action Items:

- *Provide 2-3 concept plans (50% schematic level) to be reviewed with the CPC and stakeholders.*
- *Refine the concept plans to produce one (1) Preliminary Plan including a preliminary cost estimate.*
- *Perform geotechnical investigation work based upon the direction of the Preliminary Plan.*
- *Conduct and present concept plans and preliminary plan to the CPC and stakeholders.*

Master Plan

Upon acceptance of a Final Preliminary Plan, a Master Plan will be developed and ultimately approved by City Council. The Master Plan will take into account all of the information gleaned from the Public Consensus phase and Design Development process. The approved Master Plan will become the design basis for the development of construction drawings.

GMA: Berkley Master Plan Rendering – Classical Approach to Flexible and Accessible Urban Space

Action Items:

- *Produce a Master Plan from the Final Preliminary Plan.*
- *Refine cost estimate to reflect any changes.*
- *Attend meeting for the presentation and acceptance of the Master Plan to City Council.*

Surveying Processes and Procedures

The City of Royal Oak previously secured the services of NFE to provide a topographic survey of the Central Park area (refer to included topographical survey). The NFE Team will build on top of this survey to provide the required topographic survey of the project area. Surveying data secured as a part of this project will be used for detailed design services by the NFE/GMA Team and to populate ArcGIS data files. All work will be prepared within the Michigan State Plane Coordinate system under the NAD 1983 datum. Survey control for this project will come from elevations previously established for other permanent improvements within the facility. NFE/GMA will establish a benchmark system for use in future projects as a part of this contract, and it will be established utilizing NAVD 88 datum.

In order to achieve the desired results, it will be required to utilize state-of-the-art RTK GPS equipment. A permanent coordinate system shall be established within the project limits for purposes of perpetuating the design through the construction process. All of the above must be understood when developing a comprehensive survey plan for this project.

Action Items:

- *Research and recover existing benchmark reference system.*
- *Establish new benchmark network for use by contractor, and for future projects in NAVD 88 Datum.*
- *Establish ground control and elevation reference system utilizing state-of-the-art RTK GPS procedures and by establishing connection to the Michigan Department of Transportation CORS reference system.*
- *Perform required mapping of the project area.*
- *Post process all collected data utilizing GPS Least Squares Adjustment software.*

Geotechnical Investigation

Our testing consultant, Testing Engineers and Consultants (TEC) will perform a geotechnical investigation of the park once the initial master planning process has been completed. The previous development at the site will also be considered in determining sampling locations. We propose a combination of soil borings at various depths to effectively identify subsurface conditions. It is estimated that 4 borings will be to 20-foot depth in areas of proposed structures; 10 borings will be to a 10-foot depth in the proposed parking/plaza

areas. NFE/GMA understands that if additional soil borings are needed for additional park elements, as determined by City, they will be considered additional scope items and will be calculated by the fee schedule.

The NFE/GMA Team will then collaborate regarding the findings and TEC will document the analysis in a report of the recommended geotechnical design parameters and pavement reconstruction including:

- Evaluation of existing pavement and base thicknesses;
- Stabilization requirements for subgrade materials;
- Recommended pavement types and thicknesses;
- Evaluation of ground water conditions and its effect on construction and the design of the parking lots and other park components;
- Parameters affecting site grading and drainage;
- Parameters for excavation slope design;
- Geotechnical factors affecting construction of the project; and
- Gradation analysis of existing soils and base proposed to be incorporated into the project.

GMA: "Downtown" Rochester Hills – Creation of People Spaces Mixed with Retail, Restaurants, Color, Movement & Music

Action Items:

- *Perform condition survey and identify boring and core locations.*
- *Obtain MISS DIG clearance, mobilize and perform subsurface exploration.*
- *Perform a laboratory investigation to determine the strength, compressibility and physical characteristics of the soils encountered and analyze the results of the field and laboratory investigation.*
- *Memorialize all findings and recommendations in a written report.*

CAREFUL Design

CAREFUL stands for Complete, Accurate, Reliable, Effective, Functional, Understandable and Lasting. NFE/GMA works towards completing CAREFUL designs for all of our projects. The NFE/GMA Team has significant experience working with multiple stakeholders building consensus, preparing design development plans and managing the implementation of project designs through the use of standard protocols in conjunction with the appropriate checks and balances. We attribute the successes of our work in our ability to carefully listen to our clients and stakeholders while providing our professional expertise, which balances the realities of implementation and budgets. Our attention to detail has also been paramount to our successes. NFE/GMA will work with the Royal Oak staff to better understand how they perceive the challenges for this project and recommend possible solutions. As called for in our detailed work plan, we will hold a meeting early in the process to better familiarize ourselves with the design intent and challenges. The meeting will enable us to better understand Royal Oak's concerns, as well as visualize and discuss possible design options. We will use this information coupled with research, technology and expert opinions to reduce the options to the best solution that can be implemented within the parameters of the project.

Action Items:

- *Clearly define all recommendations and present to CPC.*
- *Coordinate with all stakeholders to incorporate all project related concerns into the plans and specifications.*
- *Perform QA/QC audit of proposed plans and specifications.*

Effective Communication Plan

NFE/GMA understands that a spotlight will be cast upon this project as it will become a major hub of activity during the busy summer season, as well as activities being proposed for the winter or "all seasons park". We also understand that multiple individuals will be questioned from time to time with respect to the progress of the work and schedule of activities. It will be very important to identify all logistical issues well in advance and adequately address them in the proposal documents. Addressing these issues during construction must be avoided.

In addition, NFE/GMA has successfully implemented pay items such as "Maintaining Access to Facilities" or "Coordination" that effectively require the contractor to adequately coordinate their activities with stakeholders that are being impacted. In these cases, if the contractor does not perform in these elements of work, then there are substantial penalties built into the contract. For this project, it is highly advisable that daily briefings be implemented either by e-mail or by electronic media to keep the Royal Oak staff appraised as to the progress of the work. NFE/GMA has successfully implemented an email notification system on past projects where all stakeholders were kept appraised to the status of the work. This system virtually eliminated any user complaints as they were engaged in the overall construction process throughout the development of the project. For this project, we would advise that a similar system be implemented to keep the Royal Oak staff and other stakeholders appraised as to the progress of the project and changes in parking requirements/traffic control. As appropriate, these notifications can be posted to a website to keep the general public apprised of the project development. Additionally, telephone conferences can be held to address specific issues that may arise.

Action Items:

- *Effectively communicate with all stakeholders throughout the entire design development and construction process.*
- *Establish email contact list for email list serve distribution.*
- *Prepare specifications and contract documents that require effective communication from the contractor.*

Construction Documents

Upon approval of the Master Plan by City Council, the NFE Team will completely design the project and prepare all construction drawings, specifications and project cost estimate. All technical and professional disciplines will be coordinated for the project completion. All proposed work will comply to local/state laws, ordinances and codes in design and construction. Plans will conform to ADA requirements and any environmental regulations.

GMA: Iconic Bell Tower Plaza, Oakland University –
Fully Designed and Constructed Plaza that is ADA Compliant, Sustainable, Intriguing, Flexible and "Timeless"

Action Items:

- *Produce construction drawings and specifications for contractors to bid from.*
- *Refine cost estimate to reflect any changes.*

Non-Conforming Parking Areas/Site Accessibility

As it relates to ADA compliance, it will be required to identify all accessible routes to facilities and other site connection points. ADA modifications shall be made to assure ADA code compliance is addressed. Specifically, NFE/GMA will identify on the proposed paving and grading plan all ADA compliant parking spaces together with accessible routes into the facilities/site. All existing accessible routes will be surveyed and verified for compliance with existing codes. Corrective measures will be recommended and/or implemented as a part of the design. Some specific design elements to consider assuring code compliance are:

- Detectable warning domes with an appropriate color contrast constructed at the proper locations and dimensions for all sidewalk ramps.
- ¼-inch maximum lip at curbed transitions for ramps.
- 6-inch maximum rise in 6 feet for curbed ramps.
- 5% maximum running slope with special consideration of how transverse slope affects the running slope and calculation of the diagonal slope.
- 42-inch clear width requirements for accessible routes which impacts placement of landscape amenities furniture and other accessories.

Action Items:

- *Identify accessible routes within the parking area, within the park, at facilities, at park access points and along the perimeter of the park.*
- *Perform an ADA compliance audit to identify all ADA non-compliance issues and memorialize findings within a written report.*

Permitting and Approvals

The Central Park project will involve several steps of approvals. NFE/GMA will prepare and present the plans, documents and graphics needed to secure the necessary approvals and permits from the City. It is expected that approvals will be needed from the advisory committee, Park & Recreation Department, possibly the Planning Department and the City Council. Approvals will be expected for the grading and drainage plan, including the implementation of a storm water management system. This project will involve work within the adjacent road right-of-way. These streets are under the jurisdiction of the City and as such will require a ROW permit for construction. NFE has been addressing ROW requirements over the 48 years of our history. Our standard library of details contain all required improvement details for roadway and subgrade preparation, curb and gutter details, standard notes, etc. required to complete this design. This coupled with our significant City of Royal Oak experience the NFE Team has effectively removes any learning curve for obtaining necessary permits and approvals.

In addition, the City of Royal Oak is an authorized agency under the Environmental Protection Act to administer the Soil Erosion and Sedimentation Control (SESC) program on behalf of the City. As the total amount of disturbance will be less than 5 acres of land, an NPDES permit will not be required from the MDEQ.

Action Items:

- *Submit preliminary plans to City for review and comment.*
- *Incorporate all review comments into the proposed plans and submit to the City for required approvals and/or permits.*
- *Obtain necessary SESC and NPDES permits.*

Contract Time and Phasing

The Contract Time and Phasing of this project will be critical in the successful integration of the site improvements and the existing recreational play programming. NFE/GMA recommends and does have experience in phasing all the site improvements (parking, pedestrian systems, storm management and grading/drainage) while keeping the park open for public use, if desired. This type of project construction management is streamlined through the preliminary and final construction documentation phase. NFE/GMA will intentionally design and manage the plans so that when the work is to be implemented it will be integrated like a puzzle, piece by piece until the whole picture is complete. Accessibility and alternate routes may be needed and planned ahead of time for this type of implementation. We will also be mindful of any

additional proposed work within the edges of the project that is likely to be constructed within the same general timeframe. We will communicate with the selected developer and work with them to institute a plan that dovetails with one another. This will reduce the confusion and congestion with each development.

Action Items for a Contract Time and Phasing:

- *Develop phasing plans and specifications for consideration by Royal Oak.*
- *Review proposed phasing plans with contractor knowledgeable in constructing this type of project to obtain concurrence of constructability/timing.*
- *Perform pedestrian safety analysis of proposed phasing plans and modify as required to address pedestrian safety.*

Bidding Services

NFE Team will provide and assist the City of Royal Oak to successfully advertise and solicit competitive bid pricing for Central Park.

Action Items:

- *Produce bidding documents (plans, specifications, bidding forms and documents).*
- *Assist City of Royal Oak with bidding documents.*
- *Conduct Pre-Bid Meeting on-site.*
- *Prepare and distribute any addendums and/or clarifications.*
- *Prepare letter of recommendation to City of Royal Oak for Bid Award.*

GMA: Northville Town Square –
Top: Aerial View of Dynamic Space
Bottom: View of Stage for Various Seasonal Events

Grant Writing Assistance

There are many potential local, state and federal grant opportunities to offset Central Park's construction costs. The inclusion of utilizing grant funding could provide a greater connection to the community and gain awareness of this World Class Park on the county and state level. The NFE Team continually demonstrates our ability to successfully win competitive grant funding. We have received approvals and monies from the MDNR and MDOT for park development, road beautification, pocket parks and pedestrian improvements within the road right-of-way. We commit to providing the City of Royal Oak direction in soliciting grant funding sources and writing assistance.

Action Items:

- *Research and provide a list of potential funding sources and program elements that qualify.*
- *Provide grant writing and graphic assistance to secure grant monies.*

Construction Administration

After the Award of Contract to the successful Bidder, the NFE Team will quickly coordinate with the City of Royal Oak to proceed with the construction of the Central Park. Once contract documents are in place, the NFE Team will follow the construction schedule and conduct a Pre-Construction meeting. The NFE Team has extensive experience with construction administration services within the City of Royal Oak having completed multiple projects on behalf of the City of Royal Oak Engineering Division. Additionally, the NFE/GMA team assigned to this contract regularly completed Construction Administration services for the MDNR and other communities for park development and rehabilitation work. We will utilize our effective communication protocols and QA/QC processes to ensure a seamless implementation of construction documents.

Action Items:

- *Coordinate with City of Royal Oak to verify all required contractual documents are in place.*
- *Conduct a Pre-Construction meeting.*
- *Coordinate and verify Contractor has secured all required permits.*
- *Verify all site preparation elements are in place prior to the start of construction.*
- *Provide daily/weekly project oversight and communicate with the City of Royal Oak.*
- *Attend weekly progress meetings.*
- *Review and approve/reject payment schedules.*
- *Address and resolve with the City of Royal Oak any layout, structural or engineering issues.*

Section 3 – Project Approach

NF ENGINEERS

Section 3 – HIGHLIGHTS

- LEADERSHIP: The NFE Team has Proven Its Leadership in Project Management Through Design, Planning, Bidding and Construction Administration
- COMMUNICATION: NFE Team has an Effective Communication Plan
- EXPERIENCE: NFE Team Has Experience Designing Both Regional/ Suburban Site and Downtown Sites for Sustainability
- KNOWLEDGE: Extensive Knowledge of the Regulatory Codes, Building Codes/Ordinances and Construction Standards

  RESPONSIVE: NFE Team has the Ability to Respond Immediately When Questions Arise

3. PROJECT APPROACH

The NFE Team has **significant experience working with multiple stakeholders** building consensus, preparing master plans, design development plans and managing the implementation of project designs. We attribute the successes of our work in **our ability to carefully listen to our clients and stakeholders** while providing our professional expertise, which balances the realities of implementation and budgets. **Our diligent attention to detail has also been paramount to our successes**. The following pages are dedicated to documenting our design approach for this project.

EXPERIENCE

The first element in completing a successful design is relying upon our collective experiences with projects of similar nature or projects that contain elements similar to the project at hand. Together, the **NFE Team staff brings over 150 years of practical municipal and governmental experience and expertise to this project**. The City of Royal Oak will be able to rely upon this experience as partially represented in the prior experience section of this proposal. With over 150 years of collective experience, the City can be assured that the **NFE Team understands that a total team effort will be necessary to complete this project**. We are able to bring our clients the quality and insight they expect with new technologies and the ideas they desire with design innovation. Our satisfied clients include large and small municipalities, corporations, private individuals and governmental bodies. Our approach is simple – we listen to our clients. We then tailor the project to meet the specifics of each job. **Our clients can rely on their project team for the technical skills, experience and education necessary to successfully complete the project on time, within budget, and to their satisfaction**.

COMMUNICATION

The NFE Team understands that paramount to a successful project is a detailed and **effective communication plan**. We understand that the majority of problems that arise on a project are due to poor or a breakdown in communication. This is why our team implements a strong and effective communication plan. This plan includes important and significant owner involvement throughout the design process. We anticipate meeting frequently with the city departments and other stakeholders of the Normandy Oaks and Central Park projects to assure that design elements are effectively communicated. Additionally, **we will take steps to effectively communicate with our personnel and consultants to assure that all project elements are addressed**. Our collective experience has proven that there is a direct correlation between the time spent planning a project, and the success of that project.

We also understand that communication is ongoing throughout the project. At no time will your staff be in question of where we are at in the design process. Regular scheduled meetings are attended by key project members with various other means of communication (voicemail, email, etc.) implemented throughout the project.

BUILDING AND ZONING

NFE has evolved into one of the premier engineering consultants in Southeast Michigan. We have accomplished this through delicate balance between completing both private and public projects on behalf of our clients. This is significant in that through NFE's representation of public entities, our personnel receive in-depth training in all facets of public engineering and standards. Our staff is **thoroughly knowledgeable in zoning ordinances, building ordinances, public codes, ADA compliance standards**, etc. that will be required to complete both projects. Furthermore, NFE is very adept at working in a team environment always

keeping a watchful eye out with respect to other disciplines and their tasks to assure the overall success of the project.

NFE will incorporate this experience and expertise into our overall work product, and it will prove to be invaluable as it relates completing these important projects on behalf of the City of Royal Oak.

SUSTAINABILITY

The NFE Team has **considerable experience in designing sites for sustainability**. Several members of the Team are LEED certified and/or environmental specialists and are very knowledgeable in Best Management Practices. Specifically, NFE has site planned and completed numerous designs as it relates to Low Impact Development (LID), Best Management Practices (BMP's) and sustainable designs. As it relates to civil design, NFE has significant experience in these areas and will utilize this expertise in completing our site design for the City of Royal Oak.

The NFE Team will bring our sustainability experience to both projects to assure that the overall designs are both sound and innovative.

KNOWLEDGE

The NFE Team understands that our experience becomes our knowledge. We have worked on many projects with different site constraints, building types and programming requirements. We have worked with many different end users and always have successfully coordinated them together to accomplish the project goals and needs. **Our extensive knowledge of regulatory requirements, building codes, construction standards and project management skills will become an instant asset to the project**. We continue to expand our understanding of all local, state and national requirements as they relate to projects of all types to assure our knowledge base is firmly rooted in understanding design trends and theories so that we can successfully implement designs that are both innovative and unique.

Our job specific experience with projects of this nature is invaluable with the NFE Team as a part of the design team. We have been involved in a multitude of projects involving park planning and design, comfort station design, park renovation, field renovation, maintenance storage buildings, etc. as we have completed many projects on behalf of our municipal and governmental clients over the past 48 years. This particular job type experience becomes essential in the development of similar programs for the City of Royal Oak Normandy Oaks and Central Park project as defined in the RFP.

NFE Team will utilize our in-depth knowledge and **48 years of firm experience** to create a premier design on behalf of the city.

RESPONSIVE

The NFE Team understands that our dedication to being responsive to each of our clients makes us an asset to the City of Royal Oak design team. Our collective ability to **respond immediately when questions arise**, or when problems may occur, will be paramount to a successful completion of this project. We will be there for all of your departments, end users, stakeholders, and the maintenance and facilities personnel who will be taking care of this facility and its structures answering all questions as a supporting team member with a strong network of resources.

Section 4 – Work Plan and Schedule – Normandy Oaks

NF ENGINEERS

Section 4 – HIGHLIGHTS

- Demonstrated Understanding of Work Scope Through the Provided Detailed Work Plans
- Normandy Oak's Work Plan Provides Services From Community Collaboration/Planning to Construction Administration
- Central Park's Work Plan Provides Services for a Strategic Plan and Community Collaboration/Public Consensus

4. WORK PLAN AND SCHEDULE – NORMANDY OAKS

The NFE/LAP Team will utilize the following work plan and referenced checklists in completing our assignments. The implementation of the work plan and checklists is consistent for all NFE/LAP Team collaborative design projects and is a part of our QA/QC program. *A detailed layout of the "Public Input Process" for Normandy Oaks is provided at end of the Work Plan chart.*

PROPOSED WORK PLAN AND MILESTONE SCHEDULE FOR PROJECT IMPLIMENTATION AND DESIGN DEVELOPMENT

TASK	COMPLETION DATE
01 PROJECT KICK-OFF MEETING *(Public Input Process Detailed After Work Plan Chart)	
❑ **Meeting #1**: Team meets with the City of Royal Oak/Normandy Oaks Committee for project debriefing and to discuss the scope of the project, overall schedule, specific needs and cost budget items necessary for the work. The work plan is thoroughly reviewed at this meeting to assure that initial work items are consistent with City of Royal Oak requirements. Also, a framework for communication is established moving forward. Schedule a stakeholder meeting to establish program elements, if necessary.	August 3, 2017
02 INVENTORY OF EXISTING CONDITIONS	
❑ Team performs a detailed analysis and review of existing project records and related documentation, including: • Hard copies and or electronic of all reports and existing plans • Boundary maps and property deeds • Historical maps • Existing topographical survey	August 17, 2017
❑ Conducts site visit(s) to record and analyze existing conditions with respect to design concerns for use in design development and public consensus building. Simultaneously with obtaining existing conditions, NFE will perform field work to prepare the required topographic survey.	
❑ Based on all testimony and information gathered from above, prepare a draft report to effectively communicate how the design approach addresses specific project requirements. Report to include research data of available technologies for recreation/park development. Said report shall clearly identify the challenges such as: identify conclusions with respect to research findings, proposed recommendations for consideration, and the underpinnings for the conceptual design and the types of details needed to support the design.	
❑ The Team prepares a pre-preliminary cost estimate utilizing preliminary quantities to verify understanding of project costs and existing estimates. Note: This is the first step in preparing a detailed cost estimate for the project. As the reader continues through this work plan, they will note that this estimate will be updated and/or modified numerous times throughout the design development	

process of the project. This first run at the estimate will be detailed, but schematic in form, and will serve as the base for future estimating.

TASK	COMPLETION DATE
❑ **Meeting #2:** Conduct a Pre-Design Meeting with Normandy Oaks Committee and any other interested stakeholders based upon the findings from the inventory phase and report. At this meeting, the work plan will be discussed and modified as required to meet common objectives and to discuss preliminary cost estimates/budget issues of concern, including: ***(Public Input Process Detailed at End of Work Plan Chart)** • Refine program elements from findings • Known maintenance concerns within the project limits which require correction • Discussion on traffic control concerns • Discussion relative to storm water management for the park and surrounding areas • Project phases (if applicable at this time) • Discussion on issues surrounding existing utilities, including maintenance and construction concerns • Fire Department concerns for fire, life and safety • Police Department access for enforcement and safety • Ideas for project cost savings • Other important issues as determined by the City of Royal Oak	August 31, 2017
❑ Based on commentary from the preliminary report presentation, address all questions, perform additional research and obtain additional testimony from Royal Oak/Committee and stakeholders that have been involved in the project to develop a final report refining the ideas presented at the Pre-Design Meeting.	
❑ Develop a design program responding to the issues and program desires expressed by the City of Royal Oak/Committee and stakeholders.	
❑ Upon concurrence and overall satisfaction with respect to the draft report and its findings and recommendations, the Team revises the study report and submits final copies for City of Royal Oak records.	September 14, 2017
03 PRELIMINARY DESIGN	
❑ Based on concurrence of project direction from Normandy Oaks Committee, the Team shall initiate and complete schematic design drawings for appropriate alternatives with respect to achieving all project related goals and objectives. Utilizing data obtained from research, findings, and meetings to date, develop 50% complete schematic design drawings and project details including the following items of work: • Prepare existing condition plans • Prepare 2-3 concepts for the overall park design and layout responding to the program developed by the City of Royal Oak/Committee, the Team and Stakeholders	October 12, 2017

- Prepare storm water management/utility layout
- Prepare preliminary grading plans
- Prepare typical cross sections and preliminary details
- Prepare schematic phasing plans and narrative

Note: At this stage, the above identified plans and details will be schematic/conceptual in nature and will be used as a platform for future work under this contract. The intent will be to provide sufficient detail to convey the design intent moving forward, and to assist in the preparation of a detailed cost estimate for construction and design fees.

TASK	COMPLETION DATE
❑ **Meeting #3**: Conduct Preliminary Public Design Meeting with citizens of Royal Oak/ Committee with 50% complete schematic designs. At this meeting, the following discussion points will be considered: • Review of work plan, program elements and current status of the project • Review of constructability issues and constraints • Review of preliminary project cost estimate • Discuss preliminary project phasing • Discuss code compliance requirements • Review of project permitting requirements	October 12, 2017
04 PUBLIC CONSENSUS	
❑ Based on commentary from the Preliminary Design Meeting #3, address all questions, perform additional calculations, analysis and revise to provide one (1) Preliminary Plan to present at Meeting #4.	
❑ **Meeting #4**: Present the Preliminary Plan to the Normandy Oaks Committee for comments. Provide any revisions to the Preliminary Plan for presentation to the Public Meeting Input #5.	October 26, 2017
❑ Conduct geotechnical investigation for proposed elements based upon the Preliminary Plan.	
❑ **Meeting #5:** Presentation of the Preliminary Plan with the citizens of Royal Oak. At this meeting, the goal is to gain public consensus.	November 21, 2017
05 FINAL DESIGN – "MASTER PLAN"	
❑ Based on commentary from the Public Consensus Process meeting, refine the Preliminary Plan into a Final Master Plan with updated construction costs/project budget.	December 13, 2017
❑ **Meeting #6**: Present the Master Plan drawing to the City of Royal Oak City Council for approval and gain authorization to proceed into construction documents.	December 20, 2017
06 CONSTRUCTION DOCUMENTS	
❑ Based upon all input to date, secured approvals, permits, etc., the Team will prepare 90% complete detailed design documents and specifications for construction bidding and submit same to owner for final review.	February 14, 2017

- ❑ Hold final project design development meeting to review 90% complete design development drawings, specifications and cost estimate.
- ❑ Prepare projected construction schedule for incorporation into the bid documents.

TASK	COMPLETION DATE
07 BIDDING SERVICES	
❑ Finalize all bidding documents.	3/14/2017
❑ Assist the City of Royal Oak with solicitation and bid process.	3/14/2017
❑ Complete bid process, issue Notice of Award.	4/4/2017
08 CONSTRUCTION ADMINISTRATION	
❑ Schedule, oversee and document the pre-construction meeting.	4/9/2017
❑ Monitor completed contractor progress, attend scheduled progress meetings and authorize contractor's monthly pay estimates for City of Royal Oak processing.	
❑ Evaluate and respond to any/all contract claims; attend field meetings as necessary to resolve field items/concerns.	
❑ Prepare and oversee the completion of a project punch list.	
❑ Perform periodic field inspections to oversee contract completion and verify quality control. Report findings to City of Royal Oak.	
❑ Attend scheduled progress meetings during construction.	
❑ Complete project final inspection and provide close-out documents, if necessary.	Fall 2017

The above schedule and accompanying checklist constitute a general synopsis of our overall work plan. The work plan that the NFE Team implements for this project will be based on the overall project requirements as defined through the design development process, and will be developed collectively with all project stakeholders and professionals.

The following documents supplement our work plan and are a part of NFE's overall comprehensive QA/QC program. For sake of brevity, these documents are not included in the bound response to the RFP. However, these documents can be provided at any time they are requested.

- Attachment A Quality Assurance/Quality Control Program
- Attachment B Job File Preparation Checklist
- Attachment C Survey Specific QA/QC Program
- Attachment D Project Design Checklist
- Attachment E Project Inspection Checklist
- Attachment F Project Survey Checklist

The above checklists will be modified prior to implementation to adhere to current changes in legislation and to match specific project requirements.

PUBLIC INPUT PROCESS

The methodologies on how stakeholders and the public are informed throughout the design process is probably one of the most important and challenging elements for the development of the park development process. We understand and acknowledge that the City of Royal Oak has put forth time and effort with the community to foster input, build consensus and understand what the citizens are looking for. We are proposing a public process that acknowledges the historical engagement, but provides one more platform to introduce Normandy Oaks as a project that is now moving forward.

The first public engagement workshop will build upon the input received by the City of Royal Oak and illustrate the park's potential development options/alternatives. The public will see many of their ideas reflected in the conceptual designs that will help show that the designers are listening and reacting to the public's concerns which will instill confidence and verify that the design is reactive to the community's thoughts and ideas.

LAP will coordinate, schedule, lead and document the one (1) public meeting for the Normandy Oaks project. It is recommended that the meeting be held at City Hall or other type large meeting hall, or possibly on-site, weather permitting.

OVERVIEW OF THE PUBLIC INPUT PROCESS

Landscape Architects and Planners, Inc. (LAP) will lead this portion of the planning process and provide the following services/work program which will include the orientation/kick-off and the one fundamental public engagement workshop as part of the minimum service for the facilitation.

- Orientation and "Kick-Off" meeting with Administration Team (*fundamental service).
- Public Engagement Workshops (*fundamental service): Provide one public engagement workshop to engage with the public specifically for Normandy Oaks.

Orientation and "Kick-Off"

The successful execution of any project relies on a clear plan of action and a mutual understanding how each team member will be involved and what role they are expected to play. LAP will lead a project kick-off meeting that is essential to ensure a successful facilitation process, including proposed schedule, roles and outcomes. This meeting will review the overall goals and specific objectives, collect staff input and discuss ideas on how to communicate with the general public, administration and key stakeholders that are fundamental to the success of the project. LAP will provide a detailed description, role identification, tasks and project schedule following this meeting.

Public Engagement Workshops (Modified Charrette – 2 Public Meetings)

LAP will facilitate one public meeting for Normandy Oaks. The workshop will be designed as a series of interactive "stations" that offer participants the opportunity to be involved in reacting to concepts designed to enhance the visitor experience, as well as proposing their own original ideas for what works and what needs work at Normandy Oaks. The LAP staff will facilitate the workshops with an initial PowerPoint presentation, designed as a continuous loop for the remainder of the open house. The LAP staff and City planning and management staff will be available to answers questions and discuss participant ideas and ensure that participant comments are recorded for further evaluation. A modified Charrette process will allow participants to make suggestions while designers actively engage in sketching different ideas and/or perspectives for the park designs. Citizens can either watch and/or participate in generating and/or enhancing design ideas live and in person.

Public Engagement Workshop #1 (Open House – Drop in Style)
Late Summer, 2017 – Approximately 3 p.m. to 8 p.m. +/-

Notifications/Advertisement of Meeting:

- Meeting times and dates shall be advertised on the City website and in the local newspaper.
- Request an interview with the local press to stimulate interest in the community section of the newspaper.
- Provide links to background information on City's website.

Preliminary Agenda:

- Conduct and facilitate a public engagement workshop meeting for Normandy Park with project station and graphic exhibits for informal dialogue (key professionals and members of the City shall facilitate the public at the station).
- Exhibit Station for Normandy Park:
  - Existing conditions and site analysis displays for the park.
  - Design criteria/programming (functional uses and operational needs) for the park.
  - Concept planning station (modified Charrette area with visual display of work in progress developing design ideas for the park).
- Post summary of the meetings and minutes to City's website.

*LAP and the NFE design team will prepare high quality graphics for the Public Meetings to clearly illustrate all of the background research findings and proposed schematic design concepts.

Section 4 – Work Plan and Schedule – Central Park

NF ENGINEERS

4. WORK PLAN AND SCHEDULE – CENTRAL PARK

The NFE/GMA Team will utilize the following work plan and referenced checklists in completing our assignments. The implementation of the work plan and checklists is consistent for all NFE/GMA Team collaborative design projects and is a part of our QA/QC program. *A detailed layout of the "Public Input Process" for Normandy Oaks is provided at end of the Work Plan chart.*

PROPOSED WORK PLAN AND MILESTONE SCHEDULE FOR PROJECT COMMUNITY COLLABORATION/ PUBLIC CONSENSUS

TASK	COMPLETION DATE
01 PROJECT KICK-OFF MEETING *(Public Input Process Detailed At the end of Work Plan Chart)	
❑ **Meeting #1**: Team meets with the City of Royal Oak/Central Park Committee for project debriefing and to discuss the scope of the project, overall schedule and specific needs. The work plan is thoroughly reviewed at this meeting to assure that initial work items are consistent with City of Royal Oak requirements. Also, a framework for communication is established moving forward.	August 3, 2017
❑ This initial meeting will visit the baseline work scope of one (1) Public Meeting in addition to any other public input strategies. A game plan for the next meeting will be established.	
02 COMMUNITY COLLABORATION/OUTREACH	
❑ **Meeting #1**: NFE Team to bring preliminary information gathered during their site visit along with ideas for Community Collaboration. This meeting will establish the approved game plan to engage the Public, Stakeholders and any Special Interest Groups to bring forth any issues, constraints, opportunities and general ideas from the Public.	August 17, 2017
❑ Prepare presentation materials, surveys, etc. for Central Park as determined within the initial meetings.	TBD
❑ Conduct presentations, meetings, public displays as required based upon the scope of work developed through the initial meetings.	TBD
03 INVENTORY OF EXISTING CONDITIONS (TASKS TO BE PRICED AND COMPLETED AT A LATER DATE)	
❑ Team performs a detailed analysis and review of existing project records and related documentation including: • Hard copies and or electronic of all reports and existing plans • Boundary maps and property deeds • Historical maps • Existing Topographical Survey	2 Weeks After Contract Approval
❑ Conducts site visit(s) to record and analyze existing conditions with respect to design concerns for use in design development and public consensus building. Simultaneously with obtaining existing conditions, NFE will perform field work to prepare the required topographic survey.	

TASK	COMPLETION DATE
❑ Based on all testimony and information gathered from above, prepare a draft report to effectively communicate how the design approach addresses specific project requirements. Report to include research data of available technologies for recreation/park development. Said report shall clearly identify the challenges such as: identify conclusions with respect to research findings, proposed recommendations for consideration, and the underpinnings for the conceptual design and the types of details needed to support the design.	
❑ The Team prepares a pre-preliminary cost estimate utilizing preliminary quantities to verify understanding of project costs and existing estimates. Note: This is the first step in preparing a detailed cost estimate for the project. As the reader continues through this work plan, they will note that this estimate will be updated and/or modified numerous times throughout the design development process of the project. This first run at the estimate will be detailed, but schematic in form, and will serve as the base for future estimating.	
❑ Meeting #2: Conduct a Pre-Design Meeting with Central Park Committee and any other interested stakeholders based upon the findings from the inventory phase and report. At this meeting, the work plan will be discussed and modified as required to meet common objectives and to discuss preliminary cost estimates/budget issues of concern including: • Refine Program Elements from Findings • Known maintenance concerns within the project limits which require correction • Discussion on traffic control concerns • Discussion relative to storm water management for the park and surrounding areas • Project Phases (if applicable at this time) • Discussion on issues surrounding existing utilities including maintenance and construction concerns • Fire Department concerns for fire, life and safety • Police Department access for enforcement and safety • Ideas for project cost savings • Other important issues as determined by the City of Royal Oak	4 Weeks
❑ Based on commentary from the preliminary report presentation, address all questions, perform additional research and obtain additional testimony from Royal Oak/Central Park Committee and stakeholders that have been involved in the project to develop a final report refining the ideas presented at the Pre-Design Meeting.	
❑ Develop a design program responding to the issues and program desires expressed by the City of Royal Oak/Central Park Committee and stakeholders.	

TASK	COMPLETION DATE
❑ Upon concurrence and overall satisfaction with respect to the draft report and its findings and recommendations, the Team revises the study report and submits final copies for City of Royal Oak records.	6 Weeks
03 PRELIMINARY DESIGN	
❑ Based on concurrence of project direction from Central Park Committee, the Team shall initiate and complete schematic design drawings for appropriate alternatives with respect to achieving all project related goals and objectives. Utilizing data obtained from research, findings, and meetings to date, develop 50% complete schematic design drawings and project details including the following items of work: • Prepare existing condition plans • Prepare 2-3 concepts for the overall park design and layout responding to the program developed by the City of Royal Oak/Central Park Committee, the Team and Stakeholders • Prepare storm water management/utility layout • Prepare preliminary grading plans • Prepare typical cross sections and preliminary details • Prepare schematic phasing plans and narrative Note: At this stage, the above identified plans and details will be schematic/conceptual in nature and will be used as a platform for future work under this contract. The intent will be to provide sufficient detail to convey the design intent moving forward, and to assist in the preparation of a detailed cost estimate for construction and design fees.	10 Weeks
❑ **Meeting #3**: Conduct Preliminary Public Design Meeting with Citizens of Royal Oak/ Committee with 50% complete schematic designs. At this meeting, the following discussion points will be considered: • Review of work plan, program elements and current status of the project • Review of constructability issues and constraints • Review of preliminary project cost estimate • Discuss preliminary project phasing • Discuss code compliance requirements • Review of project permitting requirements	10 Weeks
04 PUBLIC CONSENSUS	
❑ Based on commentary from the Preliminary Design Meeting #3, address all questions, perform additional calculations, analysis and revisions to provide one (1) Preliminary Plan to present at Meeting #4.	
❑ **Meeting #4**: Present the Preliminary Plan to the Central Park Committee for comments. Provide any revisions to the Preliminary Plan for presentation to the Public Meeting Input #5.	12 Weeks
❑ Conduct geotechnical investigation for proposed elements based upon the Preliminary Plan.	

TASK	COMPLETION DATE
❑ **Meeting #5:** Presentation of the Preliminary Plan with the Citizens of Royal Oak. At this meeting the goal is to gain public consensus.	16 Weeks
05 FINAL DESIGN – "MASTER PLAN"	
❑ Based on commentary from the Public Consensus Process meeting, refine the Preliminary Plan into a Final Master Plan with updated construction costs/project budget.	19/20 Weeks
❑ **Meeting #6**: Present the Master Plan drawing to the City of Royal Oak City Council for approval and gain authorization to proceed into construction documents.	20 Weeks
06 CONSTRUCTION DOCUMENTS	
❑ Based upon all input to date, secured approvals, permits, etc., the Team will prepare 90% complete detailed design documents and specifications for construction bidding and submit same to owner for final review.	28 Weeks
❑ Hold final project design development meeting to review 90% complete design development drawings, specifications and cost estimate.	
❑ Prepare projected construction schedule, for incorporation into the bid documents.	32 Weeks
07 BIDDING SERVICES	
❑ Finalize all bidding documents.	2 Week Time Allowance
❑ Assist the City of Royal Oak with solicitation and bid process.	4-6 Week Time Allowance
❑ Complete bid process, issue Notice of Award.	1-2 Week Time Allowance
08 CONSTRUCTION ADMINISTRATION	
❑ Schedule, oversee and document the pre-construction meeting.	TBD
❑ Monitor completed Contractor progress, attend scheduled progress meetings and authorize contractor's monthly pay estimates for City of Royal Oak processing.	TBD
❑ Evaluate and respond to any/all Contract claims; attend field meetings as necessary to resolve field items/concerns.	TBD
❑ Prepare and oversee the completion of a project punch list.	TBD
❑ Perform periodic field inspections to oversee contract completion and verify quality control. Report findings to City of Royal Oak.	TBD
❑ Attend scheduled progress meetings during construction.	TBD
❑ Complete project final inspection and provide close out documents, if necessary.	TBD

The above schedule and accompanying checklist constitute a general synopsis of our overall work plan. The work plan that the NFE Team implements for this project will be based on the overall project requirements as defined through the design development process and will be developed collectively with all project stakeholders and professionals.

The following documents supplement our work plan and are a part of NFE's overall comprehensive QA/QC program. For sake of brevity, these documents are not included in the bound response to the RFP. However, these documents can be provided at any time they are requested.

- Attachment A Quality Assurance/Quality Control Program
- Attachment B Job File Preparation Checklist
- Attachment C Survey Specific QA/QC Program
- Attachment D Project Design Checklist
- Attachment E Project Inspection Checklist
- Attachment F Project Survey Checklist

The above checklists will be modified prior to implementation to adhere to current changes in legislation and to match specific project requirements.

PUBLIC INPUT PROCESS

The methodologies on how stakeholders and the public are informed throughout the design process is probably one of the most important and challenging elements for the future development of a new Central Park development process. Developing a transparent process to inform the stakeholders and public is a critical element of this planning assignment. Although we are proposing a process for public input for Central Park, we will be open to looking at the City of Royal Oak for guidance on refining this process based on historical experiences with similar projects.

Our team also feels it is necessary during the first public engagement workshop to provide factual site information, display analytical site related drawings, show precedent imagery, and include an interactive Charrette process that will engage with the public and show the City's desire to listen to its citizens. The second public engagement workshop will build upon the input received during the first workshop and illustrate the park's potential development options/alternatives. The public will see many of their ideas reflected in the conceptual designs that will help show that the designers are listening and reacting to the public's concerns which will instill confidence and verify that the design is reactive to the community's thoughts and ideas.

LAP will coordinate, schedule, lead and document the two (2) public meetings for the Central Park project. It is recommended that the meetings be held at City Hall or other type large meeting hall, or possibly on site, weather permitting.

OVERVIEW OF THE PUBLIC INPUT PROCESS

Landscape Architects and Planners, Inc. (LAP) will lead this portion of the planning process and provide the following services/work program which will include the orientation/kick-off and the two fundamental public engagement workshops as part of the minimum service for the facilitation. The remaining services can be selected ala cart or mixed as determined by the City and the Consultant:

Base Proposal Service:

- Orientation and "Kick-Off" meeting with Administration Team (*fundamental service).

- Public Engagement Workshops (*fundamental service): Provide two public engagement workshops to engage with the public specifically for Central Park.

Additional Public Input Services:

- User Opinion Survey (UOS) Initiation: Development, distribution and data consolidation of the user survey and protocol.
- "Picture This" Component: Setting up and coordinating the collection of public impressions, photographs and other public initiated examples of potential public park ideas.
- "On-site Exhibit/Engagement" will engage the public at an event and/or festival to capture people's ideas while using the downtown to gain insight and invite them to take the survey.
- Six Interviews with Key Stakeholders within the community. Administration will help LAP to identify key representatives within the City's downtown and/or other pertinent organizations as appropriate.

BASE PROPOSAL SERVICES

Orientation and "Kick-Off"

The successful execution of any project relies on a clear plan of action and a mutual understanding how each team member will be involved and what role they are expected to play. LAP will lead a project kick-off meeting that is essential to ensure a successful facilitation process, including proposed schedule, roles and outcomes. This meeting will review the overall goals and specific objectives, collect staff input and discuss ideas on how to communicate with the general public, the administration and key stakeholders that are fundamental to the success of the project. LAP will provide a detailed description, role identification, tasks and project schedule following this meeting.

Public Engagement Workshops (Modified Charrette – 2 Public Meetings)

LAP will facilitate two public meetings for Central Park. The workshop will be designed as a series of interactive "stations" that offer participants the opportunity to be involved in reacting to concepts designed to enhance the visitor experience, as well as proposing their own original ideas for what works and what needs work at Central Park. LAP staff will facilitate the workshops with an initial PowerPoint presentation, designed as a continuous loop for the remainder of the open house. The LAP staff and City planning and management staff will be available to answers questions and discuss participant ideas and ensure that participant comments are recorded for further evaluation. A modified Charrette process will allow participants to make suggestions while designers actively engage in sketching different ideas and/or perspectives for the park designs. Citizens can either watch and/or participate in generating and/or enhancing design ideas live and in person.

ADDITIONAL PUBLIC INPUT SERVICES

User Opinion Survey (UOS)

The public opinion survey will need assistance from the City of Royal Oak. The details will be discussed during the orientation meeting and will be followed by a more in-depth discussion of how to interface with the existing tools the City has to offer such as: website page development, connection to social media and/or other similar tools (Story-Map, "Padlet", act.). This initiation will provide the means and methods to develop a "user friendly" method of capturing information such as: images, descriptions, story boarding and the like that will lead to a more meaningful and thoughtful way to communicate with the public in a setting of their choice.

An administrative survey will also be used to obtain impressions from city staff, contract vendors and others who help administer and/or maintain these types of public facilities. Staff has a different perspective when it comes to maintenance, operations and programming. The City needs to be aware of the long-term costs and consequences of each park component, so they can plan for the lifecycle costs that accompany each facility.

LAP will develop a user survey that will be distributed to park users leading up to the project meetings and throughout the entire public engagement process. The UOS will be administered online in an easy and quick user friendly format. It will capture vital information including: city resident by zip code, pertinent demographics, use patterns, pedestrian/vehicle information, preferences, suggestions and concerns. A combination of "closed and open" questions will be used to provide a balanced and defensible approach to the future program for the parks.

In addition, a paper survey will be made available for those who may be inclined to respond in that format.

"PICTURE THIS"

The survey will also include a suggestion that users send us photos of what they like best at Central Park and what they vision to make their visitor experience more enjoyable and meaningful. Photos sent from individual camera phones or digital pictures will be displayed on a link that will add to the storyboard. LAP will have administrative protocols to prevent devious behavior prior to posting. **"Picture This"! Exhibit** will be used as a creative and open-minded forum in receiving all types of citizen based ideas.

On-Site Exhibit & Engagement (1 Public Engagement during a Major Public Event or Festival)

LAP will provide staff to facilitate a booth and/or exhibit at a public event and/or festival, i.e., "Arts, Beats & Eats" or "Beer Fest", etc. The workshop will be one more way to engage with the public making them aware of the project and asking for input. We intend to have graphic illustrations that will entice people to stop and engage with our staff members about the project and obtain their thoughts and ask them to take the survey. We plan to have laptop computer available so they can take the survey on site and/or a paper survey if they prefer.

Six Interviews with Key Stakeholders (Community Organization/Business Representatives)

LAP will provide up to six interviews with key representatives of stakeholder groups/organizations, such as the DDA, Boji Development Group, festival organizers, business owners and/or others requested by the City. The interviews will be conducted either in person or by phone, and will last approximately 1 hour each. A pre-cursor will be provided to allow the participant time to anticipate the questions that will be asked. A summary memo will be generated following each interview and given to the respondent to review before publishing.

Public Engagement Workshop #1 (Open House – Drop in Style)
Late Summer, 2017 – Approximately 3 p.m. to 8 p.m. +/-

Notifications/Advertisement of Meeting:

- Meeting times and dates shall be advertised on the City website and in the local newspaper.
- Request an interview with the local press to stimulate interest in the community section of the newspaper.
- Provide links to background information on City's website.

Preliminary Agenda:

- Conduct and facilitate a public engagement workshop meeting for Central Park with project stations and graphic exhibits for informal dialogue (key professionals and members of the City shall facilitate the public at the appropriate stations).
- Exhibit Station for Central Park:
  - Existing conditions and site analysis displays for the park.
  - Design criteria/programming (functional uses and operational needs) for the park.
  - Concept planning station (modified Charrette area with visual display of work in progress developing design ideas for the park).
- Post summary of the meetings and minutes to City's website.

Public Engagement Workshop #2 (Open House – Drop in Style)
Late Fall, Early Winter, 2017 – Approximately 3 p.m. to 8 p.m. +/-

Notifications/Advertisement of Meeting:

- Meeting times and dates shall be advertised on the City website and in the local newspaper.
- Request a follow up interview with the local press to stimulate interest in the community section of the newspaper.
- Provide links to background information on City's website.

Preliminary Agenda:

- Present overview of project and schematic concepts at set times (on the hour).
- Public comments – gather public input and comments.
- Notify public of future steps.
- Open-house after meeting with project stations, graphic exhibits for informal dialogue.
- Prepare and post meeting minutes City's website.

*LAP and the NFE design team will prepare high quality graphics for the Public Meetings to clearly illustrate all of the background research findings and proposed schematic design concepts.

Section 5 – Relevant Experience

NF ENGINEERS

Section 5 – HIGHLIGHTS

- Award-Winning Projects from Design through Installation
- Demonstrated Experience of Projects Built within Budget and On-Time
- Local, Regional and State-Wide Scale of Projects
- Demonstrated Knowledge of Working within Environmental Sensitive Sites
- Successful at Incorporating Park Elements and Community Consensus into a Manageable and Fiscally Responsible Plan
- Long-Term Working Relationship with the City of Royal Oak

5. RELEVANT EXPERIENCE

The following is a sampling of projects that the various members of the design collaborative have completed. This project listing is not conclusive as there are many projects completed by team members that incorporate the standards and design elements required for this project. This project is unique in many respects. As such, it is important that the team members have a thorough understanding of the overall project goals and objectives and that team members have the overall expertise to carry out the project work plan. We believe the following demonstrates our team's ability to understand the need associated with specialty projects, and we respectfully submit our prior experience for your consideration.

For the success of this project initiative, the City of Royal Oak should carefully consider retaining a team of professionals which will evaluate your objectives with the goal of balancing critical program elements and environmental issues with those of functional requirements and available funding. NFE will implement a process which engages the project team when required to address your goals and exposes all opportunities and constraints to ensure a consensus is met pertaining to the final design solutions.

The following highlights are worthy of mentioning as they pertain to your selection criteria, design objectives and project considerations.

5. RELEVANT EXPERIENCE: Project Examples of Budgeting, Cost Estimating and Results

May 10, 2017

Project Example	Estimated Design & Planning Services	Final Design Fees	Estimated Construction Cost	Project Final Construction Costs	Year Completed
NFE Projects					
Romeo Athletic Fields, Romeo Community Schools - Romeo, MI Athletic field rehabiliation for drainage and grading issues for an existing high school athletic field built orginally in the 1970's.	$70,000	$70,000	$1,500,000	$1,450,000	2008
Highland Recreation Area Trail Development - White Lake/ Highland Township, MI Design, surveying and construction adminstration to implement a fully accessible trail throughout the park.	$45,000	$50,000	$900,000	$878,000	2014
Pine Street Parking Lot Improvements - Lansing, MI Reconstruction of a 1,000 employee vehicle parking lot (7 acres) through surveying, engineering and construciton administration	$186,000	$227,000	$1,805,000	$1,735,000	2013
Wilderness State Park, Lakeshore Campground Masterplan - Carp Lake, MI Conducted a comprehensive study, design and construction administration services for the redevelopment of Wildnerness State Park campground.	$550,000	On-going (within budget)	$4,500,000	$4,300,000	2013
LAP Projects					
Capitol Complex - Lansing, MI Facilitated consensus building for the design of an area immediately west of the Capitol known as "Capital Complex", as part of a landmark facility inventory, analysis and visioning plan that serves primarily state employees, the adjacent neighborhoods, adjacent office, commercial district, Lansing School Admin complex and the City of Lansing CBD.	$44,390	$50,000	$38,114,976	On-going (phased project)	2014
Dickinson, Riverview and Whirlpool Centennial Parks - St. Joseph, MI Facilitated the simoutaneous development of 3 park master plans. There were three public engagement opportunities, opinion survey and approval process.	$42,475	On-going (within budget)	N/A		In Process
Scott Park Sunken Garden Relocation - Lansing, MI Assisted the utility company in delivering the public relations and communication to the public for the Lansing Board of Water and Light regarding the relocation a historic garden and creation of park space that offered more amenities in 50% of the park space.	T/M	$102,731	$6,200,000		In Process
East Lansing Soccer Complex - East Lansing, MI Facilated a master planning effort for 8 soccer fields, pavilion, concession, team rooms and award plaza. Other amenities included 2 tournament size soccer fields with wind screens, bleachers, parking lot, lighting, press boxes, ticket booth and sound system. (MDNR grant)	$148,614	$135,000	$1,602,464	$877,807	2008

Project Example	Estimated Design & Planning Services	Final Design Fees	Estimated Construction Cost	Project Final Construction Costs	Year Completed
Patriarche Park Playground - East Lansing, MI. (Constructed) Facilitated a series of public design charettes and public meetings for the community build playground that we coordinated. The project included the play ground and environs, walks, donor plaza, picnic areas, rain garden, sensory garden and seating areas. (MDNR grant)	$15,500	$17,000	$584,362	$502,795	2014
Camp Sea Gull Lake Park - Hayes Township, MI Facilated consulting and design services for a park master plan along Lake Charlevoix with 40' vertical elevation changes. The plan included a boat launch, trail system, rental cabins, play area, sports fields and interpretation areas.	$19,848	$430	$6,852,760	N/A	2014
Memorial Park - New Buffalo, MI (Phase 1 Constructed) Master and phasing plan for a 22-acre park. MDNR grant, community workshops, construction documents and observation including shelter, playground, nature trails, ballfield, basketball and volleyball court, shuffleboard, horse shoe pits, and trail.	$53,697	$55,000	$1,105,500	$222,162	2009
Hawk Island Snow Park - Lansing, MI (County provided most construction services) Provided the 20 acres park master plan and assisted the county in the final design and "prime professional" for the MDNR grant implementation for a snow tubing hill at Hawk Island County Park incluiding: earth sculpting, tow lift, walks, fire pit and parking.	$23,200	$3,221	$286,776	$42,712	2011
Alpine Hills Adventure Park - Rockford, IL (Phase 1 Constructed) Comprehensive site plan for winter activities such as snow tubing, snowboarding, cross country skiing and snow shoeing and summer adventure sports like fishing, youth learning golf course and a dog park.	$70,458	$72,000	$3,444,178	$2,055,626	2014
GMA Projects					
Madonna Soccer Field & Parking Lot, Madonna University - Livonia, MI Comprehensive site planning, city submission, construction documents and construction phase services for synthetic turf soccer field, parking lot, landscape and irrigation design.			$1,500,000	$1,559,700	2012
Elliott Tower Plaza, Oakland University - Rochester, MI Site design, construction documents and construction phase services for pedestrian plaza, landscape and irrigation.			$900,000	$759,777	2014
Summer Village, Country Club of Detroit - Grosse Pointe Farms, MI Comprehensive site planning, city submission, construction documents and construction phase services for pedestrian hardscape, sports courts, playground, pool deck, landscape and irrigation design.			$753,340	$775,800	2015
Grand River Avenue Streetscape, City of Farmington - Farmington, MI Streetscape design, construction documents and construction phase services for pedestrian paving, planters, landscape and irrigation design.			$356,000	$369,000	2010
Mack Avenue Medians, City of Grosse Pointe Farms - Grosse Pointe Farms, MI Median landscape and irrigation design, including construction documents and construction phase services.			$114,000	$119,000	2016
Howell Parking Lot #1, City of Howell - Howell, MI Site design, construction documents and construction phase services for pedestrian paving, masonry walls, fencing, landscape and irrigation.			$566,000	$537,000	2010

MICHIGAN LAW ENFORCEMENT OFFICERS MEMORIAL DEVELOPMENT

CIVIL ENGINEERS · LAND SURVEYORS · LAND PLANNERS

NF ENGINEERS

Project Type
Memorial Park

Project Location
Lansing, Michigan

Owner
State of Michigan
- Department of Technology Management and Budget

Contact
Joel Gordon
517-242-0761

Services Performed
Topographic Survey
Site Plan Documents
Construction Documents
Landscape Plan

Construction Cost
$3,000,000

Service Budget
$170,000

Year Completed
Design Completed 2016
Construction Scheduled for 2017/2018

NFE Project No.
I498

The Michigan Law Enforcement Officers Memorial is located within the grounds of the State of Michigan's Capital Complex, and was approved for construction by our state legislation to honor all of the men and women police officers that have been killed in the line of duty.

NFE partnered with David Miller Architects located in Ann Arbor, Michigan who won a statewide design competition for the memorial design. NFE was responsible for all site design associated with the memorial, including hardscape, utility, subsurface drainage, electrical and landscape. Assisting NFE was Land Design Studio located in Southfield, Michigan with landscape design, and Berbiglia Associates located in Farmington Hills, Michigan with electrical and sight lighting design.

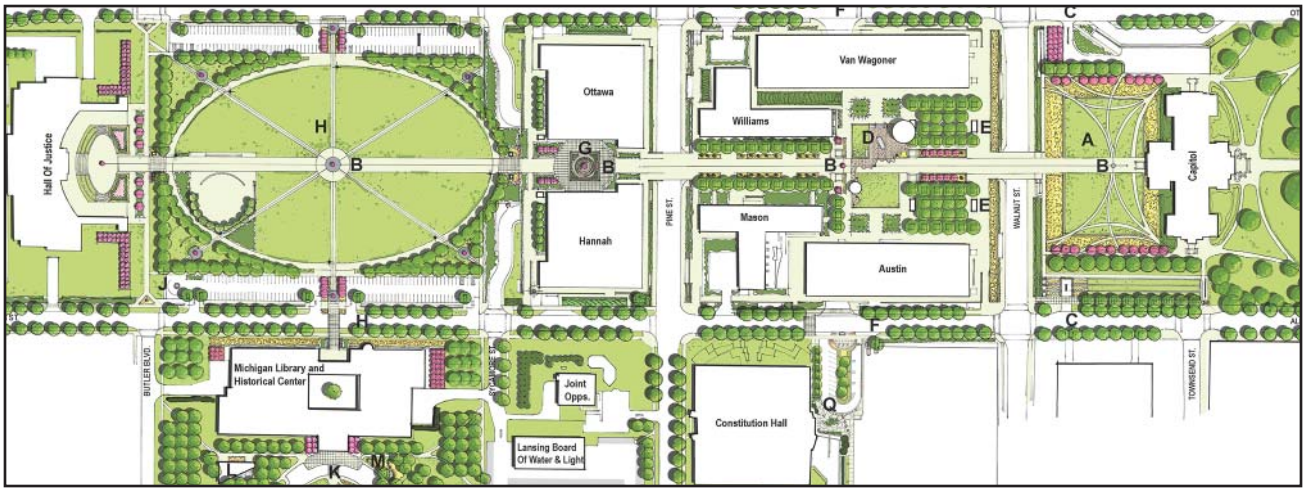
A critical design component of this project was designing a monument that honored the officers and families who have been impacted by tragic circumstances while respecting ease of maintenance, long-term sustainability and ADA compliance, as well as aesthetically honoring the surrounding monuments and building structures.

Currently the project is designed and available for bid. The Michigan Law Enforcement Officers Memorial Commission is currently fundraising to raise funds for the construction of the monument.

STATE OF MICHIGAN
CAPITOL COMPLEX MASTER PLAN

CIVIL ENGINEERS · LAND SURVEYORS · LAND PLANNERS

NF ENGINEERS



Project Type
Master Plan
Master Plan Implementation

Project Location
Lansing, Michigan

Owner
State of Michigan
- Department of Technology Management and Budget

Contact
Joel Gordon
Project Director
517-242-0761

Services Performed
Design and Planning Study
Schematic Design
User Survey
Final Design/Bidding Documents
Construction Administration

Estimated Construction Cost
$50,000,000

Service Budget
$700,000

Year Completed
Ongoing

NFE Project No.
H471

The State of Michigan's Capitol Complex in Lansing is the symbolic center of the state's democracy. With over 1.5 million visitors per year and approximately 14,355 state employees, the desire was to develop a Master Plan that honors and uplifts visitors and employees, while also supporting state activities and programs.

NFE provided the State of Michigan's DTMB with design and implementation of the Capitol Complex Master Plan. NFE's design team used a creative approach for redeveloping the site, addressing elements such as pedestrian circulation, parking, irrigation and ornamental horticulture. In order to ensure the project would ultimately add value to the environment of everyday users, NFE's team performed a user survey of employees and staff, gaining insider knowledge of relevant services.

Top priorities for the design and implementation was considering cost, functionality and sustainability. The project will create a safe, functional and aesthetically pleasing campus environment for government leaders, state employees and visitors.

Project Highlights
- Introduction of additional green space
- Integrate systems and technology
- Improved way-finding
- Additional aesthetic characteristics
- Simplify long-term maintenance
- Improved lighting, security and ADA access

ROMEO COMMUNITY SCHOOLS
NEW BARNABO ATHLETIC FIELD

CIVIL ENGINEERS · LAND SURVEYORS · LAND PLANNERS

NF ENGINEERS

Project Type
Education

Project Location
Romeo, Michigan

Owner
Romeo Community Schools
316 North Main Street
Romeo, MI 48065

Contact
Don Gratton
Executive Director of
Facilities and Quality
586-752-0221

Services Performed
Surveying
Design
Construction Administration

Estimated Construction Cost
$1,500,000

Service Budget
$70,000

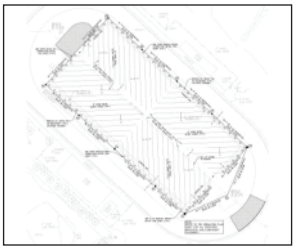
Year Completed
2008

NFE Project No.
E457

Student athletes within the Romeo Community Schools district are now on a more "even" playing field as they enjoy their new football field at Dan Barnabo Athletic Field. NFE worked in conjunction with the District Superintendent, Athletic Director and the District's contractor E. Gilbert & Sons to design and construct a new athletic field that both the students and community can be proud of to call their "home field".

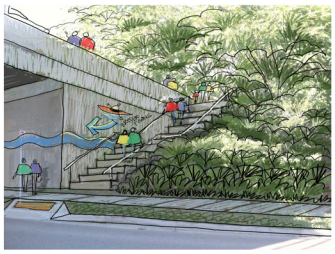
The existing field at Barnabo Stadium was originally built in the early 1970's, and had served the community of Romeo/Washington Township for many years. By 2007, it had begun to show its age, and because of this, was poorly drained and misshapen. Athletic Director Greg Brynaert described to NFE that when looking from sideline to sideline, one could "only see the helmets of the teams on the opposite side of the field".

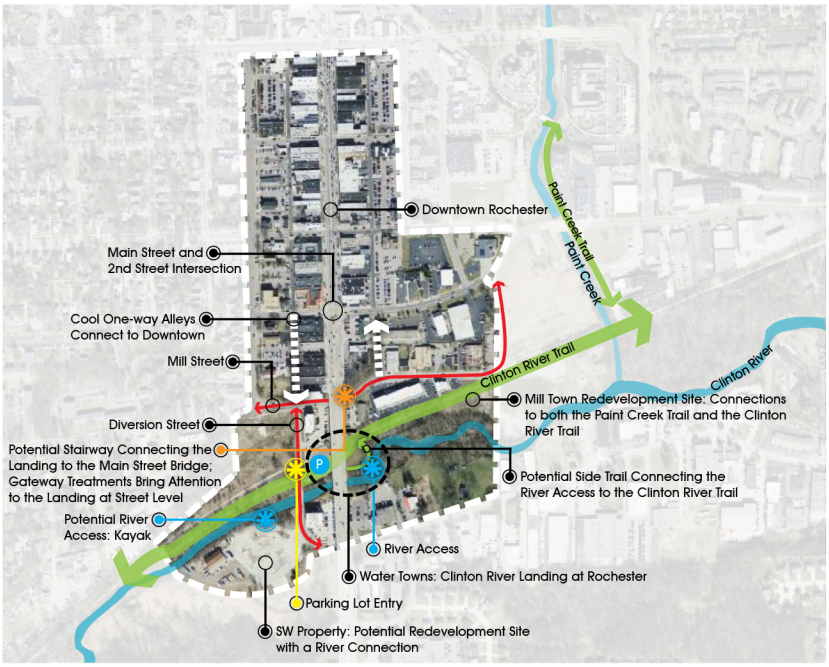
In early February 2007, NFE was asked to investigate the causes for the drainage issues and develop solutions that would be designed, constructed and operational by early September for the fall soccer, lacrosse and football teams, pursuant to MHSAA requirements. E. Gilbert & Sons broke ground on the project in early May 2007, and completed construction by mid-July that same year. NFE was proud to be a part of the team that brought this first class facility to the Romeo Community Schools district.



UNDER THE BRIDGE - CLINTON RIVER LANDING

ROCHESTER, MICHIGAN



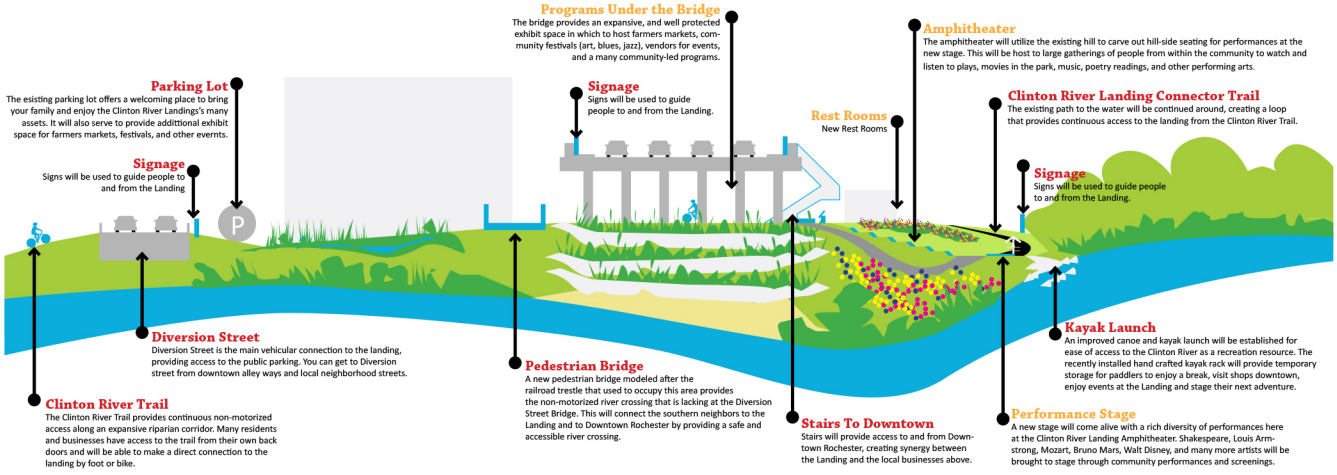


The Clinton River Landing at Rochester:
is a ***WaterHub***- a place for bringing people and waterways together. Enhancing the places where the community can access their waterway establishes a sense of place where users are closer to nature and can experience the natural environment within a downtown area these areas also demonstrate green infrastructure to the public and help explain why protecting our water resources is so important.

The location of the Clinton River Landing at Rochester, at the intersection of the Clinton River, the Clinton River Trail, and Downtown Rochester, makes it the perfect place to introduce this concept; synthesizing opportunities for making strong downtown connections, providing recreational amenities, promoting green infrastructure, and celebrating the history and culture of the City while providing the community with better access to the Clinton River.

CONTEXT MAP LEGEND

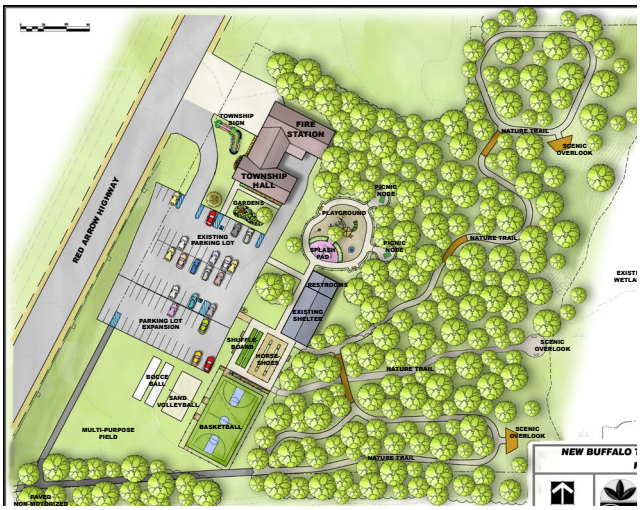
- **Potential stairway connects the Clinton River Landing at Rochester to the Main Street Bridge & Downtown**
- **Connections to the Clinton River enhance the WaterTowns experience and provide many unique opportunities**
- **Access to on-site parking**
- **Parking**
- **Cool Alleys connect to Downtown Rochester**
- **Adjacent streets- vehicular access**
- **Side trail connects the river access to the Clinton River Trail**



Landscape Architects & Planners, Inc.
Landscape Architecture • Site Design • Land Planning

MASTER PLAN

MEMORIAL PARK
NEW BUFFALO, MICHIGAN



Improved Pavilion and Restroom Building

Memorial Park is a 10 acre community park located in New Buffalo Township. LAP held community workshops, and a public hearing for the master plan and prepared the construction drawings for the project to be bid. Proposed park improvements included improvements to the existing shelter and addition to the shelter with unisex restrooms and kitchen facilities, a universally accessible playground and splash pad, concrete walkways to connect the proposed amenities, volleyball court, 8' wide asphalt trail with bridges over ravines and overlooks into the forest, fencing, picnic areas with tables and grills, landscaping and benches, horse shoes and shuffle board and a basketball court/ice rink.

Shuffle Board

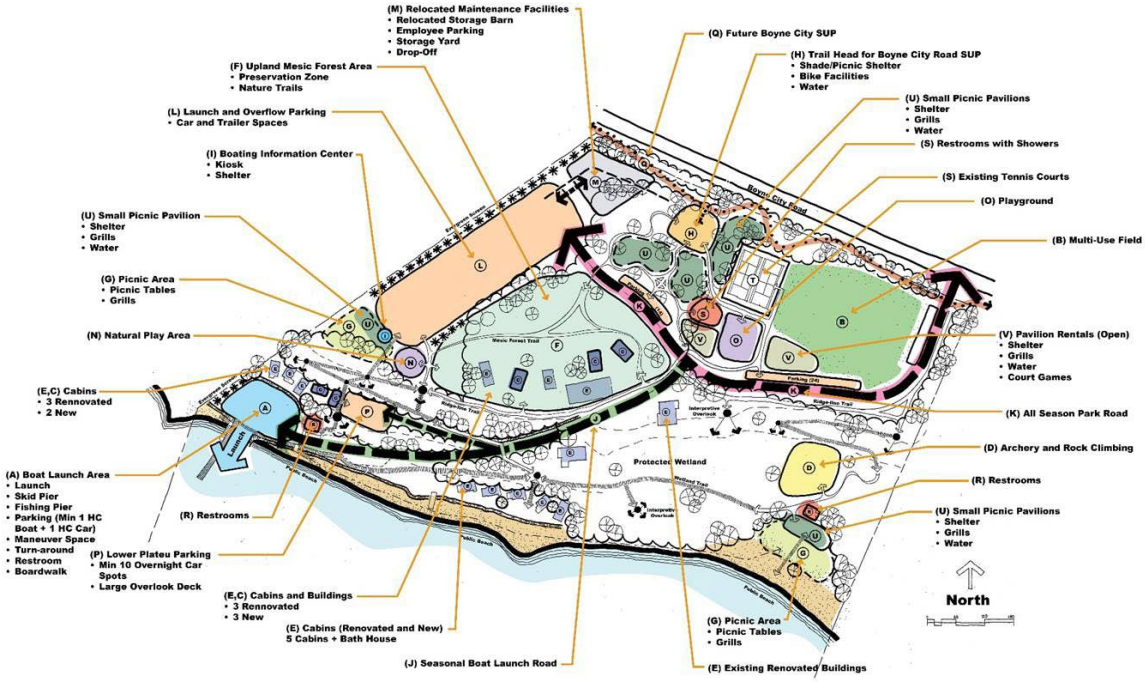
Amphitheater

Splash Pad

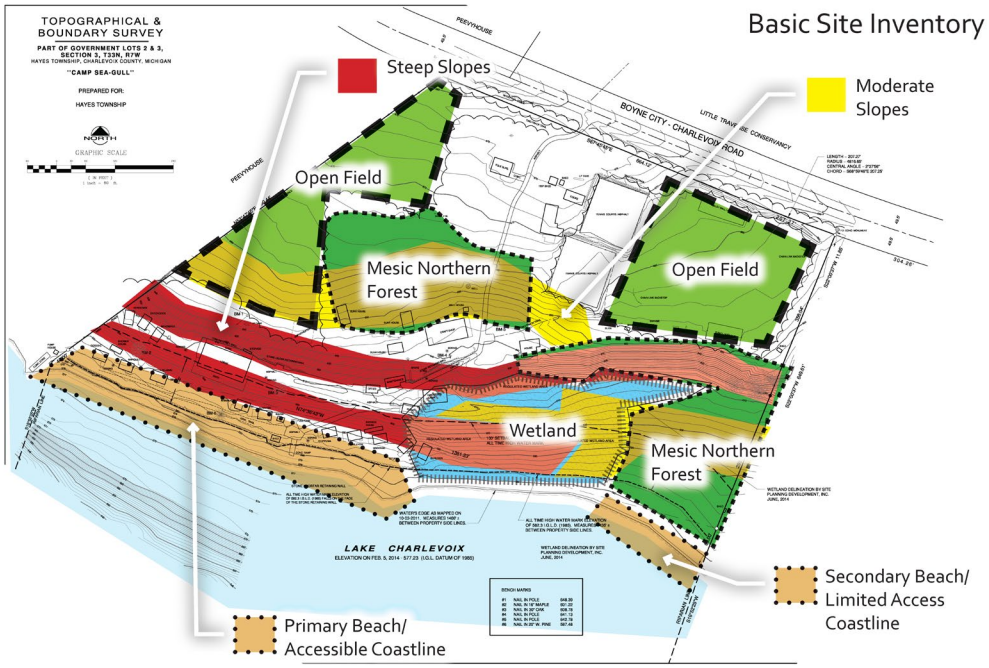
Playground

CAMP SEA GULL LAKE PARK MASTER PLAN

Camp Sea-Gull is located in Hayes Township along the north shore of Lake Charlevoix. Once a privately owned summer camp, the park was acquired by Hayes Township in 2013 with the assistance of a DNR Trust Fund Grant. LAP was selected to provide a master plan for the property outlining a planning process and proposed projects for future conversion of the park for public use. Public meetings indicated that residents wanted the Township to provide day use activities such as open fields, pavilions and court games and access to the water including a boat launch and swimming area. Improvements needed to respect the character of the site bybeing sensitive to the natural features and limit the disturbance of the roadwork, parking, and buildings. Efforts were made to preserve the natural habitats, maintain the rustic appearance and natural theme; repurpose existing facilities and reduce costs.



Protect, preserve, re-use, maintain and enhance



PATRIARCHE PARK PLAYGROUND

EAST LANSING, MI

2014 MRPA AWARD WINNING PLAYGROUND! LAP was chosen to design the site of a new playground to replace an older wooden structure. A tree survey and controlled pruning was done to accommodate the new playground. LAP also produced the construction documents and provided construction administration. This project included benches, information kiosk, pavers and trellis, new walkways connecting the playground to the nearest pavilion, restroom and parking area and a rain garden with interpretive panel.

HAWK ISLAND SNOW PARK
INGHAM COUNTY, MICHIGAN

BRINGING THE MOUNTAIN TO THE CITY
Hawk Mountain will provide anyone access to winter snow sports within the city limits of Lansing, Michigan. This unique, active sports facility – one of a handful in the US. – will be an incredible community asset "serving multi-cultural urban youth," their families, our neighbors and visitors. Anyone can come to Hawk Island to experience snow tubing, feestyle snowboarding or skiing.

Donor Wall for the Snow Park

Snowboard Area

Enjoying the tubing hill.

ACCESS TO RECREATION FACILITIES

MICHIGAN DEPARTMENT OF TRANSPORTATION

"FIRST IN MICHIGAN"

- **First Universally Accessible Playgrounds at Welcome Centers in the United States**
- **Certified by The National Center for Boundless Playgrounds**
- **Playground equipment is over 70% accessible to children of all abilities**
- **Exceeds minimum regulations of the ADA Guidelines**
- **Modular structure and swings covering over 3000 sq. ft.**
- **State of Michigan map detail on safety surfacing**
- **Access by Ramp and Transfer Systems**
- **Volunteer built playground**
- **Decorative concrete donor plaza**
- **Decorative ornamental fence encloses the playgrounds**

View of Welcome Center Entrances

COLLABORATIVE EFFORT BETWEEN

W.K. Kellogg Foundation ~ Access to Recreation ~
Michigan Department of Transportation ~
Michigan Recreation & Parks Association
The National Center for Boundless Playgrounds
Travel Michigan

NEW BUFFALO WELCOME CENTER PLAYGROUND

Modular Play Structure

View of Unitary Rubber Safety Surfacing

MONROE WELCOME CENTER PLAYGROUND

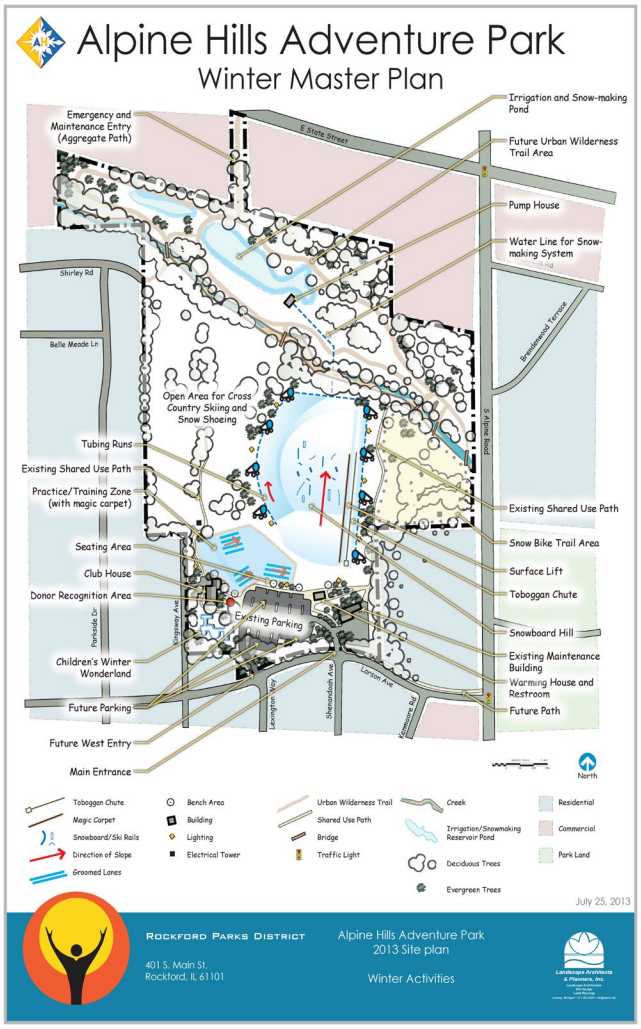
View of Accessible Ramp Leading to the Playground

Modular Play Structure

ALPINE HILLS ADVENTURE PARK
ROCKFORD, ILLINOIS

LAP was contracted by the Rockford Park District to re-purpose the former Alpine Hills golf course to create an Adventure Park. The 51-acre park is located in the southeast part of City of Rockford, IL, with rolling terrain and is traversed by a small creek and related ponds. Other existing site amenities include; a clubhouse, ancillary buildings, a parking lot, golf course driving range, and a few abandoned golf holes.

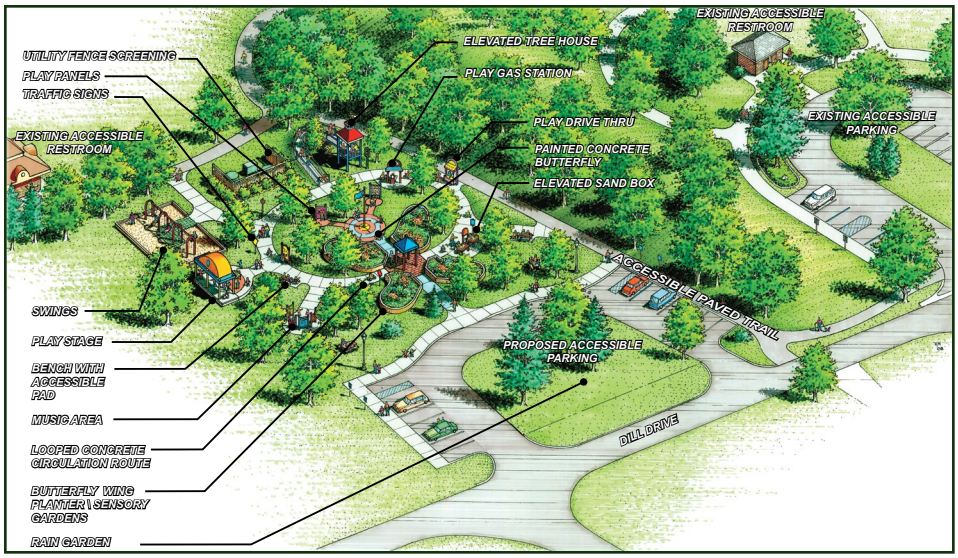
The Park District envisioned a first-class year round urban activity center. Users, of all abilities and ages, will range from families to experienced athletes. Tournaments and programmed events will be encouraged. Activities within the park will include winter activities such as: snow tubing, snow boarding, skiing, snowshoeing, snow biking and tobogganing; and summer activities such as zip lining, rock climbing and off-road biking.



RAIN GARDENS

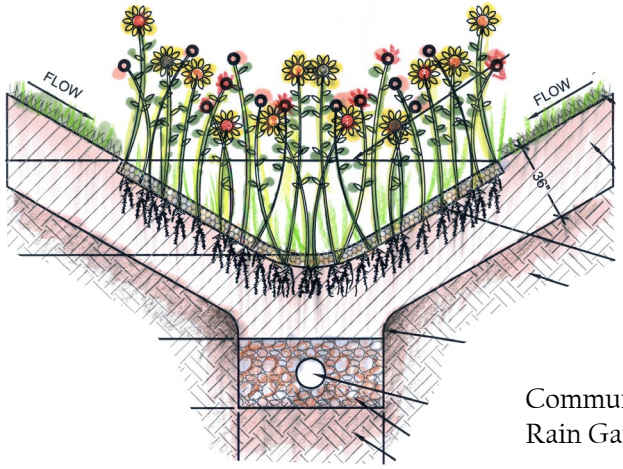
SUSTAINABLE STORM WATER MANAGEMENT

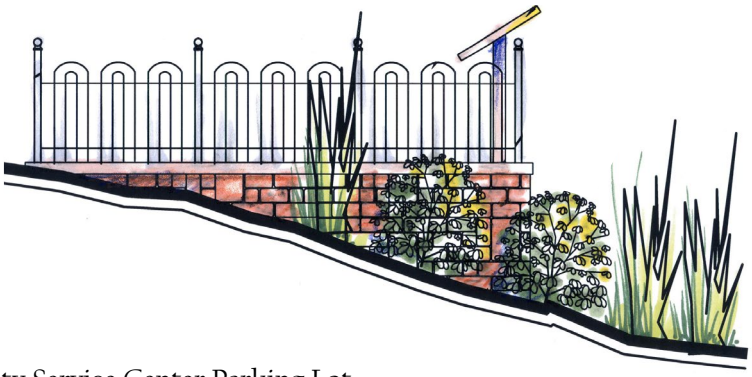
MASTER PLAN - DESIGN - DEVELOPMENT



Master Plan Including Rain Garden, All Kids Playground, DeWitt

Landscape Architects & Planners, Inc. has developed rain gardens to effectively manage storm water while creating an aesthetically pleasing landscape and interpretive design opportunities.





Community Service Center Parking Lot
Rain Garden Details, Delhi Township

Newly Installed Rain Gardens,
New Buffalo Elementary School

SOCCER COMPLEX
EAST LANSING, MICHIGAN

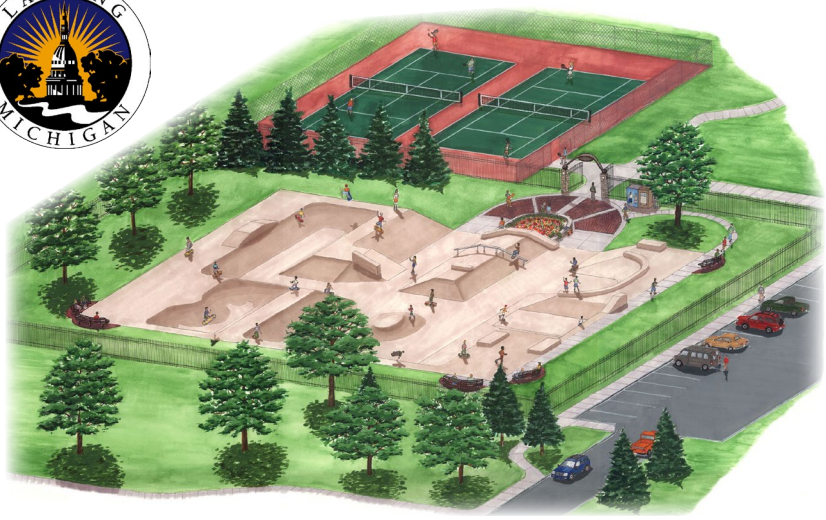
The East Lansing Soccer Complex is a regional soccer complex designed for local soccer needs and statewide tournaments. It is currently the home of the East Lansing High School soccer teams, Lansing United a new expansion team of the National Premier Soccer League and the East Lansing Soccer Club.The amenities include a concession/restroom building, an open air pavilion, bleacher seating, parking area, six soccer fields with two tournment style fields.

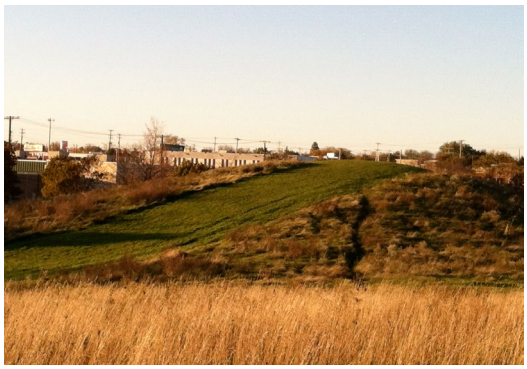
LANDSCAPE ARCHITECTS & PLANNERS, INC.

RANNEY PARK
LANSING, MICHIGAN

This concrete skate park was completed in 2002 for the Lansing Parks & Recreation Department. The skate park has been listed as one of the top ten skateparks in the U.S. by the National Geographic Society. It is located near Michigan State University and several Public Schools which allows it to be enjoyed by many.

The park includes an entry plaza, concession building, tennis courts, handball court, softball field, snow hill and a parking area.





LANDSCAPE ARCHITECTS & PLANNERS, INC.


ROCHESTER

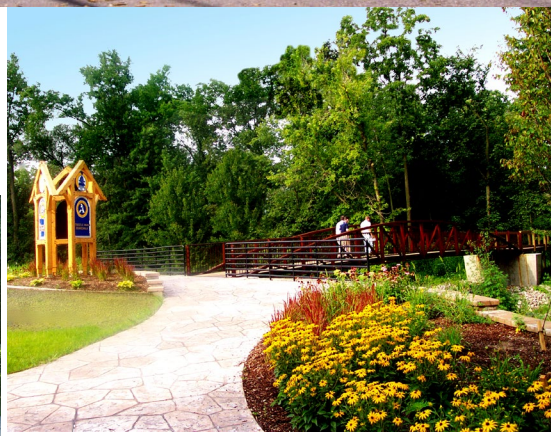

Barryton
Life is Good Where the RIVERS Meet
a MI route 66 community


CLINTON RIVER TRAIL


LEILA ARBORETUM


Clinton
River
Trail


POTTER PARK AND
ZOOLOGICAL GARDENS
INGHAM COUNTY



BUSBY ART MEMORIAL
LANSING, MI

LAP provided the schematic drawings for the installation of a sculpture, flowers, path and benches. The memorial garden is located on Lansing's River Trail in remembrance of Robert Busby, Old Town's "mayor" and creator and to bring a peaceful setting to the Old Town area. The project was a community built endeavor.

The Village of Rochester Hills
Rochester Hills, Michigan

GRISSIM
METZ ASSOCIATES
ANDRIESE

The Village of Rochester Hills
Rochester Hills, Michigan

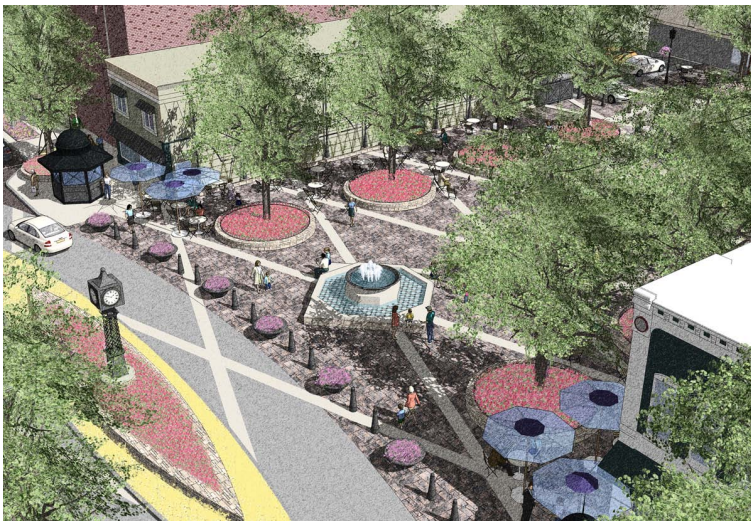
GRISSIM
METZ ASSOCIATES
ANDRIESE

Civic Center Concept
(Berkley Master Plan)
Berkley, Michigan

GRISSIM
METZ ASSOCIATES
ANDRIESE

Town Square
Northville, Michigan

GRISSIM
METZ ASSOCIATES
ANDRIESE



Town Square
Northville, Michigan

GRISSIM
METZ ASSOCIATES
ANDRIESE

Urban Redevelopment
Detroit, Michigan

GRISSIM
METZ ASSOCIATES
ANDRIESE

Urban Redevelopment
Detroit, Michigan

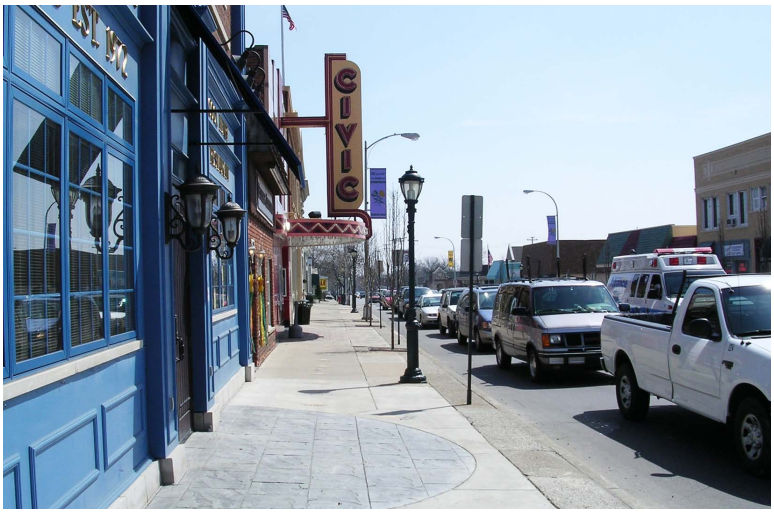
GRISSIM
METZ ASSOCIATES
ANDRIESE

The Village at Michigan State Fairgrounds
Detroit, Michigan

GRISSIM
METZ ASSOCIATES
ANDRIESE

The Village at Michigan State Fairgrounds
Detroit, Michigan

GRISSIM
METZ ASSOCIATES
ANDRIESE



Before

After

City of Farmington
Grand River Avenue Streetscape Project
Farmington, Michigan

GRISSIM
METZ ASSOCIATES
ANDRIESE

City of Farmington
Grand River Avenue Streetscape Project
Farmington, Michigan

GRISSIM
METZ ASSOCIATES
ANDRIESE

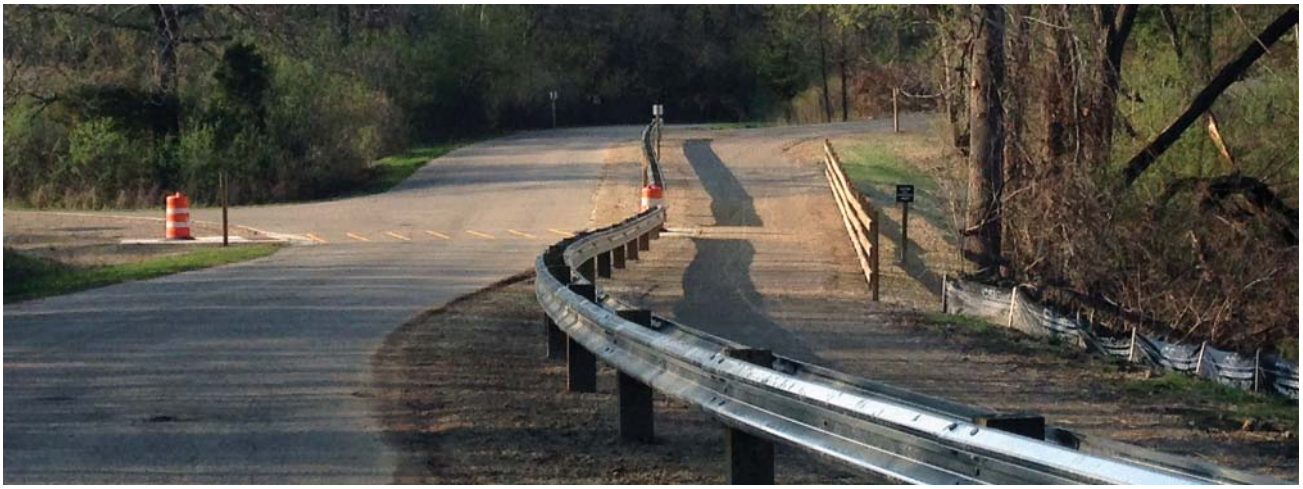
Oakland University - Elliott Carillon Tower Plaza
Rochester, Michigan

GRISSIM
METZ ASSOCIATES
ANDRIESE

HIGHLAND RECREATION AREA REGIONAL TRAIL DEVELOPMENT

CIVIL ENGINEERS · LAND SURVEYORS · LAND PLANNERS

NF ENGINEERS



Project Type
Non-Motorized Trails

Project Location
White Lake, Michigan

Owner
State of Michigan
- Department of Technology Management and Budget
- Department of Natural Resources

Contact
Bruce Watkins, PE
Project Director
517-242-7882

Services Performed
Schematic Design
Surveying
Final Design/Bidding Documents
Construction Administration
Grant Writing Assistance

Estimated Construction Cost
$900,000

Service Budget
$30,000

Year Completed
2014

NFE Project No.
G358

NFE provided the State of Michigan Department of Technology, Management and Budget (DTMB) and Department of Natural Resources (DNR) with design, surveying, construction administration and for this 2.8 mile multi-use trailway from M-59 to Ford Road, through the Highland Recreation Area in White Lake/ Highland Township. This north-south regional trail is a key connection for this segment of northwestern Oakland County and directly correlates to the Oakland County Trail Master Plan. The trail was designed to take full advantage of the natural and historical features found within this State Park.

This fully accessible trail was designed for the use of both hikers and bikers, as well as the equestrian enthusiasts prevalent in the area. The trail was initially scoped using aerial imagery, GIS based information, soil surveys, and eventually a trail alignment was staked and documented using a hand held GPS unit. NFE documented wetland areas, drainage issues, slope conditions and tree locations. The trail drawings were developed to be fully ADA compliant with safety features, including fencing/railing by steep slopes, culverts for existing drainage patterns, and appropriate signage for trail users and vehicles. NFE prepared documents and provided information to assist DTMB and DNR with grant applications to help secure MDNR Trust Fund monies for this project.

Construction on this trail began in Spring 2012 with NFE providing construction observation and quality inspections throughout the construction process until the trail was completed in 2014.

STATE OF MICHIGAN
PINE STREET PARKING LOT IMPROVEMENTS

CIVIL ENGINEERS · LAND SURVEYORS · LAND PLANNERS

NF ENGINEERS

Project Type
Parking Lot

Project Location
Lansing, Michigan

Owner
State of Michigan
- Department of Technology Management and Budget

Contact
Steve Urban
517-284-7920

Services Performed
Design Services
Construction Administration

Year Completed
2013

NFE Project No.
G760

NFE provided surveying, design and construction administration services to the Department of Technology, Management and Budget (DTMB) for this 1,000 vehicle State of Michigan employee parking lot covering seven acres within Lansing's Capitol Complex. All work occurred while existing facilities were in use, requiring careful staging plans and coordination.

NFE completed a Phase 100 investigation followed by proposed modifications to address the premature deterioration of the parking area, and prevent future degradation of materials. NFE addressed ADA accessibility in the design to bring the parking area to current compliance standards. Also during the design phase, it was determined that this parking area would introduce "green" storm water initiatives, consistent with the Department of Environmental Quality's vision for urban parking areas. NFE worked in conjunction with Land Design Studio to design a variety of best management practices, including pervious pavements, rain garden/bio-swales and tree well cisterns to manage a portion of the site's existing runoff. NFE also worked closely with the DTMB's lot security personnel to introduce a security upgrade (pole mounted cameras, emergency phones, wiring, etc.) as a part of the overall design.

WILDERNESS STATE PARK
LAKESHORE CAMPGROUND MASTER PLAN

CIVIL ENGINEERS · LAND SURVEYORS · LAND PLANNERS

NF ENGINEERS

Project Type
Master Plan

Project Location
Carp Lake, Michigan

Owner
State of Michigan
• Department of Technology Management and Budget
• Department of Natural Resources

Contact
Joel Gordon
DTMB Project Director
517-242-0761

Services Performed
Surveying
Schematic and Final Design
Plans and Specifications
Construction Administration

Estimated Construction Cost
$340,000

Service Budget
$150,000

Year Completed
2013

NFE Project No.
H137

NFE, in collaboration with Land Design Studio, was retained by the State of Michigan Department of Technology, Management and Budget (DTMB) and the Michigan Department of Natural Resources (DNR) to conduct a comprehensive study, design and construction administration services for the redevelopment of Wilderness State Park's Lakeshore Campground.

The campground is located in Carp Lake Township on the pristine shoreline of Lake Michigan approximately 20 miles west of Mackinaw City. The existing campground was developed in the early 1950's and serves a very loyal group of repeat visitors who enjoy camping on the shore of Lake Michigan. It is considered one of Michigan's most valuable resources, but needed redevelopment to meet the demands of today's 21st Century campers and recreation enthusiasts.

NFE designed the Master Plan in close collaboration with the DTMB and DNR. Environmental factors were taken into careful consideration on all aspects of the design. On-site and on-line surveys were utilized to gather information from users and were helpful in deciding where to concentrate resources. Upon completion, the entire Lakeshore Campground was fully redeveloped complete with new utility and electrical infrastructure.

CITY OF ROYAL OAK – 15 YEARS

The following is a sampling of projects that NFE has completed or will be completing within the City of Royal Oak in our capacity as Consulting Engineers providing consulting land surveying and consulting engineering services on a contractual basis.

- **City of Royal Oak – Concrete Street Repair Program, 2015-2016, Cost – $2,203,500**
  The City of Royal Oak is predominately a concrete pavement community. All residential and the majority of major streets are aging concrete pavements which were constructed 40 to 50 years ago. Based upon the recent 2014 local election, a 10-year road millage was passed by the residents of the City. NFE was selected by the City of Royal Oak to assist with this program to improve these local streets. This work includes the preparation of contract bid documents, construction plans, specification, and project estimates for the annual program. The first two-year program includes Sections 3, 10, and 14 (year 1) and Sections 15, 22, and 23 (year 2) of the City which includes 76 residential streets. The anticipated construction cost for this work is approximately $2,203,500 based upon City funding.

- **City of Royal Oak – Road Replacement Improvements Program, 2015-2016, Cost – $2,454,000**
  The City of Royal Oak is predominately a concrete pavement community. All residential and the majority of major streets are aging concrete pavements which were constructed 40 to 50 years ago. Based upon the recent 2014 local election, a 10-year road millage was passed by the residents of the City. NFE was selected by the City of Royal Oak to assist with this program to provide land surveying, design, and construction management services required for the removal and replacement of severely deteriorated concrete streets. This work includes the preparation of topographic and right-of-way surveys, construction plans, specification, and project estimates for the annual program. The first two-year program includes 10 streets. The anticipated construction cost for this work is approximately $2,454,000 based upon City funding.

- **City of Royal Oak E. Fourth Street Corridor Upgrade (Main Street to Campbell Road), 2015, Cost – To Be Determined (approximate cost – $1,250,000 +/-)**
  The City of Royal has selected NFE to provide design services for the E. Fourth Street Corridor Upgrade project which was bid in 2015. This work included upgrades to the existing roadway, median and greenbelt areas of E. Fourth Street from Main Street to Campbell Road. This was funded by both the Downtown Development Authority (DDA) and Community Development Block Grant (CDBG) sources for a streetscape expansion project including lighting system replacement and upgrades, road improvements for safety and traffic calming, tree grate installation, ADA ramp improvements, and rain garden/landscape improvements. This work included the preparation of contract bid documents, construction plans, specification, and cost estimates.

- **City of Royal Oak Survey Contract – E. Fourth Street Corridor Upgrade Topographic Survey, 2014, Cost – $35,000**
  NFE provided the City of Royal Oak Engineering Department with right-of-way, boundary, and topographic surveys of the East Fourth Street corridor (Main Street to Campbell Road) for design purposes by the City of Royal Oak. This work included approximately 5,438 linear feet of major street survey and a survey of Whittier Park in accordance with the City of Royal Oak requirements. NFE established horizontal control and alignment, vertical control, topographic data, and provided a finish survey in MicroStation format for use by the City.

- **City of Royal Oak Construction Inspection Services for Royal Oak Water Main W1402/W1403/W1404, 2014, Cost – $ Hourly**
  NFE provided the City of Royal Oak Engineering Department with construction engineering services for the administration of three local water main replacement projects. This work included water main installation, pavement repairs, concrete curb and gutter replacement, concrete sidewalk, and ADA sidewalk ramps on several major and local streets in Royal Oak.

  NFE provided construction engineering services including: contract administration, construction engineering supervision, construction/technical observation (inspection), on-site quality control and material testing, preparation of pay estimates, preparation and evaluation of "punch-list" work, final inspection and review of documentation for final payment, and recommendation for final acceptance of project in accordance with City of Royal Oak requirements.

- **City of Royal Oak S. Troy Street Parking Lot and DDA Streetscape Project, 2014, Cost – $700,000**
  NFE provided the City of Royal Oak Engineering Department with land surveying, design services, and construction engineering services for the administration of the S. Troy Street Parking Lot and DDA Streetscape project. This work included the removal and reconstruction of an existing parking lot servicing the Royal Oak Farmers Market, Courthouse, and City of Royal Oak downtown parking district and City offices. This work included underground storm water detention system, concrete curb installation, HMA pavement installation, concrete sidewalk, ADA sidewalk ramps, and decorate streetscape plans in accordance with City of Royal Oak design standards. This work included new street lights, ornamental street trees, irrigation, and pavers.

  NFE provided preliminary engineering (design) services including: right-of-way and topographic survey, preparation of roadway construction plans, specification, special provisions, and plan details in accordance with City of Royal Oak design requirements.

  NFE will provide construction engineering services including: contract administration, construction engineering supervision, construction/technical

observation (inspection), on-site quality control and material testing, preparation of pay estimates, preparation and evaluation of "punch-list" work, final inspection and review of documentation for final payment, and recommendation for final acceptance of project in accordance with City of Royal Oak construction specification and requirements.

- **City of Royal Oak DDA Streetscape Project – E. Third/S. Williams/E. Fourth/S. Troy, 2014, Cost – $509,000**
  NFE provided the City of Royal Oak Engineering Department with land surveying, design services, and construction engineering services for the administration of the City of Royal Oak DDA Streetscape project. This project was located along E. Third/S. Williams/E. Fourth/S. Troy streets. This work included the removal and reconstruction of an existing composite pavement concrete curb installation, HMA pavement installation, concrete sidewalk, ADA sidewalk ramps, and decorate streetscape plans in accordance with City of Royal Oak design standards. This work included new street lights, ornamental street trees, irrigation, and pavers.

  NFE provided preliminary engineering (design) services including: right-of-way and topographic survey, preparation of roadway construction plans, specification, special provisions, and plan details in accordance with City of Royal Oak design requirements.

  NFE will provide construction engineering services including: contract administration, construction engineering supervision, construction/technical observation (inspection), on-site quality control and material testing, preparation of pay estimates, preparation and evaluation of "punch-list" work, final inspection and review of documentation for final payment, and recommendation for final acceptance of project in accordance with City of Royal Oak construction specification and requirements.

- **City of Royal Oak CDBG Pavement Improvement Project, 2012, Cost – $226,000**
  NFE provided the City of Royal Oak Engineering Department with land surveying and design services for the City of Royal Oak – CDBG Pavement Improvement project. This project included the Knowles Street Pavement Repair project as well as the Cooper Avenue Resurfacing project. This work included the removal and replacement of an existing concrete pavement, as well as the reconstruction of a new roadway including concrete curb, HMA Pavement, concrete sidewalk, drive approaches, and ADA sidewalk ramps.

  NFE provided preliminary engineering (design) services including: right-of-way and topographic survey, preparation of roadway construction plans, specification, special provisions, and plan details in accordance with City of Royal Oak design requirements.

- **City of Royal Oak Normandy Road Resurfacing (RRR) Project (Crooks Road to Main Street), 2011, Cost – $815,000**
  NFE provided the City of Royal Oak Engineering Department with construction engineering services for the administration of 1.01 mile of HMA cold milling and resurfacing, concrete cold milling, pavement repairs, concrete pavement with integral curb concrete sidewalk, and ADA sidewalk ramps on Normandy Road from Crooks Road to Main Street in Royal Oak.

  NFE provided construction engineering services including: contract administration, construction engineering supervision, construction/technical observation (inspection), on-site quality control and material testing, preparation of pay estimates, preparation and evaluation of "punch-list" work, final inspection and review of documentation for final payment, and recommendation for final acceptance of project in accordance with Michigan Department of Transportation and Federal Highway Administration guidelines and requirements using MDOT Field Book and Field Manager software.

- **City of Royal Oak Lincoln Avenue Resurfacing (ARRA) Project (Campbell Road to Stephenson), 2010, Cost – $713,000**
  NFE provided the City of Royal Oak Engineering Department with construction engineering services for the administration of 0.52 mile of HMA and concrete cold milling, HMA resurfacing, pavement repairs, storm sewer, concrete curb and gutter, concrete sidewalk, and ADA sidewalk ramps on Lincoln Avenue from Campbell Road to Stephenson Highway in Royal Oak.

  NFE provided construction engineering services including: contract administration, construction engineering supervision, construction/technical observation (inspection), on-site quality control and material testing, preparation of pay estimates, preparation and evaluation of "punch-list" work, final inspection and review of documentation for final payment, and recommendation for final acceptance of project in accordance with Michigan Department of Transportation and Federal Highway Administration guidelines and requirements using MDOT Field Book and Field Manager software.

- **City of Royal Oak Campbell Road Resurfacing (ARRA) Project (Thirteen Mile to Fourteen Mile), 2009, Cost – $1,155,000**
  NFE provided construction engineering services based on dual jurisdictional limits for the administration of 1.00 mile of HMA cold milling, HMA resurfacing, pavement repairs, storm sewer, concrete curb and gutter, concrete sidewalk, and ADA sidewalk ramps on Campbell Road from Thirteen Mile Road to Fourteen Mile Road in the cities of Royal Oak and Madison Heights.

  NFE provided preliminary engineering services including: right-of-way and topographic survey, preparation of roadway construction plans, specification, special provisions, and plan details in accordance with current Michigan Department of Transportation and Federal Highway Administration and ARRA

requirement. This project was one of two of the first ARRA Stimulus projects designed and constructed in the State of Michigan at the time.

NFE also provided construction engineering services including: contract administration, construction engineering supervision, construction/technical observation (inspection), construction layout and construction staking, on-site quality control and material testing, preparation of pay estimates, preparation and evaluation of "punch-list" work, final inspection and review of documentation for final payment, and recommendation for final acceptance of project in accordance with Michigan Department of Transportation and Federal Highway Administration guidelines and requirements using MDOT Field Book and Field Manager software.

- **City of Royal Oak Campbell Road Reconstruction Project (Twelve Mile to Thirteen Mile Road), 1999, Cost – $2,200,000**
  NFE provided the City of Royal Oak Engineering Department and the City of Madison Heights with construction engineering services based on dual jurisdictional limits for the administration of 1.00 mile of reconstruction of an existing two-lane (each direction) asphalt boulevard into a new five-lane concrete pavement with storm sewer and drainage improvement, concrete sidewalk, and sidewalk ramps on Campbell Road from Twelve Mile to Thirteen Mile Road in the Cities of Royal Oak and Madison Heights.

  NFE provided preliminary engineering services including: right-of-way and topographic survey, preparation of roadway construction plans, specification, special provisions, and plan details in accordance with current Michigan Department of Transportation and Federal Highway Administration requirement.

  NFE provided construction engineering services including: contract administration, construction engineering supervision, construction/technical observation (inspection), construction layout and construction staking, on-site quality control and material testing, preparation of pay estimates, preparation and evaluation of "punch-list" work, final inspection and review of documentation for final payment, and recommendation for final acceptance of project in accordance with Michigan Department of Transportation and Federal Highway Administration guidelines and requirements using MDOT Field Book and Field Manager software.

- **City of Royal Oak Survey Contract SA-0401 Extension – Topographic Surveying to Local and Major Streets, 2010**
  NFE provided the City of Royal Oak Engineering Department with right-of-way, boundary, and topographic surveys of Normandy Road (Crooks Road to Main Street), East 1/2 of Woodward Avenue (Eleven Mile to Oakridge Avenue), West 1/2 of Woodward/Berkshire/Greenfield/Fourteen Mile Road and Lincoln Avenue (Campbell Road to Stephenson Highway) for design purposes by the City of

Royal Oak. This work included approximately 10,174 linear feet of major street and local street surveys. NFE established horizontal control and alignment, vertical control and topographic data, along with providing a finish survey in MicroStation format for use by the City.

- **City of Royal Oak Survey Contract SA-0401 Extension – Topographic Surveying to Local and Major Streets, 2009**
  NFE provided the City of Royal Oak Engineering Department with right-of-way, boundary, and topographic surveys of DPS Facility located at 1600 N. Campbell, Twelve Mile Road (Main Street to Campbell Road), Twelve Mile Road (Crooks to Woodward Avenue), Houstonia (Main Street to Rochester Road), and Main Street (Crooks to Woodlawn Avenue) for design purposes by the City of Royal Oak. This work included approximately 19,925 linear feet of major street and local street surveys. NFE established horizontal control and alignment, vertical control and topographic data, along with providing a finish survey in MicroStation format for use by the City.

- **City of Royal Oak Survey Contract SA-0401 Extension – Topographic Surveying to Local and Major Streets, 2008**
  NFE provided the City of Royal Oak Engineering Department with right-of-way, boundary, and topographic surveys of Lexington Boulevard, Samoset Avenue, Eleven Mile Road, Maple, Louis, Marywood Avenue, Cherry Street, Sixth Avenue, Edison Avenue, and North Wilson for design purposes by the City of Royal Oak. This work included approximately 11,652 linear feet of major street and local street surveys. NFE established horizontal control and alignment, vertical control and topographic data, along with providing a finish survey in MicroStation format for use by the City.

- **City of Royal Oak Survey Contract SA-0401 Extension – Topographic Surveying to Local and Major Streets, 2006**
  NFE provided the City of Royal Oak Engineering Department with right-of-way, boundary, and topographic surveys of Center Street, Second Street, Third Street, and Buckingham Road for design purposes by the City of Royal Oak. This work included approximately 2,081 linear feet of major street and local street surveys. NFE established horizontal control and alignment, vertical control and topographic data, along with providing a finish survey in MicroStation format for use by the City.

- **City of Royal Oak Survey Contract SA-0401 Extension – Topographic Surveying to Local and Major Streets, 2004**
  NFE provided the City of Royal Oak Engineering Department with right-of-way, boundary, and topographic surveys of Farnum Avenue, Woodward Avenue, Harrison and Washington Avenue, and Buckingham Road for design purposes by the City of Royal Oak. This work included approximately 6,230 linear feet of major street and local street surveys. NFE established horizontal control and

alignment, vertical control and topographic data, along with providing a finish survey in MicroStation format for use by the City.

- **City of Royal Oak Survey Contract SA-0401 – Topographic Surveying to Local and Major Streets, 2003**
  NFE provided the City of Royal Oak Engineering Department with right-of-way, boundary, and topographic surveys of Webster Road, Hawthorn Avenue, Alexander Avenue, Connecticut Avenue, and Sedgemoor Avenue for design purposes by the City of Royal Oak. This work included approximately 7,484 linear feet of major and local street surveys. NFE established horizontal control and alignment, vertical control and topographic data, along with providing a finish survey in MicroStation format for use by the City.

Section 6 – Capability and Qualifications

NF ENGINEERS

Section 6 – HIGHLIGHTS

- Highly Experienced and Licensed Professionals: Landscape Architects, Civil Engineers, Geotechnical Engineers, Surveyors, Arborist, Wetland Scientist and a Turf Grass Specialist, and LEED Certified Personnel
- Understanding of Working Relationships for Each Park as Shown by Included Organization Chart
- Extensive Supportive Staff to Meet Work Plan Deadlines
- Separate Landscape Architecture Firm for Each Park to Allow the Parks to Maintain Similar Calendar Schedules

6. CAPABILITY AND QUALIFICATIONS

The NFE Team has been assembled to provide the City of Royal Oak with respected experts within the various fields of discipline required for the design and engineering services of this project. NFE will serve as the lead design consultant with Managing Partner Jeff Huhta acting as project manager, overall QA/QC manager, and main point-of-contact for the Royal Oak staff. The NFE Team will complete all scope items listed in the RFP, including any additional services the city may approve. Below we have identified our commitment to staffing along with the roles each individual will perform with respect to this account.

COMMITMENT TO STAFFING

The NFE Team has assigned highly qualified personnel and experts in their respective fields to perform all design services with respect to this important project. Below, we have identified key individuals, and their area of expertise, who will be assigned to this account.

Team Member:	Jeffrey Huhta, PE, PS **Nowak & Fraus Engineers (NFE)**
Expertise & Account Role	Jeff Huhta, Managing Partner of NFE and licensed civil engineer and surveyor, has extensive experience in designing and administering public and private projects for: regional/state public parks, multi-use trails, local and MDOT transportation improvements, specialized surveying, storm water management, wetland mitigation and municipal improvements. He will serve as the project leader and main contact for this account. Specifically, Jeff will oversee and coordinate the activities on both projects including, but not limited to, preliminary design and final design services. Additionally, Jeff will serve as the lead project manager for NFE overseeing all project surveying, geotechnical investigations, water system designs and SESC design.
Team Member:	Robert Ford, LLA, ASLA National Trustee **Landscape Architects & Planners (LAP)**
Expertise & Account Role	Robert Ford, President of LAP and licensed landscape architect, has over 35 years of public planning and facilitation experience. He has facilitated large groups such as the Oakland County Recreation Plan (OCPRC), “The Grand Vision” for the revitalization of the Lansing Downtown Waterfront and commercial areas for Lansing Economic Area Partnership (LEAP), “MI Grand Charrette” with Dover-Kohl, Miami which was a three-week comprehensive Charrette exploring the alternative designs of urban spaces between Michigan’s Capitol and Meridian Township (Mid-Michigan Governmental/Community Entities), and many other cities, townships and counties. Robert is a well-known leader in park and recreation profession for planning and site design, and specializes in listening and public communications. Robert will lead the facilitation process, concept development and task development for Normandy Oaks, and community collaboration (outreach) for Central Park.

Team Member: Paul Andriese, LLA, ASLA
Grissim Metz Andriese Associates (GMA)

Expertise & Account Role: Paul Andriese, Principal of GMA and licensed landscape architect, will coordinate the production of the planning project, concept development, task management and administration for the Central Park project. He has over 30 years of landscape architecture experience, and his projects have included Berkley Civil Center Design Concept Master Plan, Robina Urban Park Conceptual Design and Oakland University Elliott Tower Plaza, along with dozens of other recreation plans for municipalities.

Team Member: Randall Metz, LLA, FASLA
Grissim Metz Andriese Associates (GMA)

Expertise & Account Role: Randy Metz, President and Design Principal of Grissim Metz Andriese, has many published designed and built projects nationally and internationally. He excels at synthesizing landscape, architecture and engineering into a unified vision of excellence. Randy will lead the design work for Central Park and oversee the development of construction documents.

Team Member: Dr. James Crum, PhD, Turfgrass Management
Michigan State University, College of Agriculture and Science
Department of Plant, Soil and Microbial Science

Dr. Crum is an internationally recognized expert in turfgrass management, specializing in lawns for professional and intramural sports fields. Dr. Crum has been involved in designing turfgrass methods and systems that deliver high quality sports fields for places like Spartan Stadium, Forest Akers golf course and soccer fields for the last two Olympics.

Team Member: Steve Sutton, PE, LSIT
Nowak & Fraus Engineers (NFE)

Expertise & Account Role: Steve Sutton, Senior Associate of NFE and licensed civil engineer, has significant experience in designing and administering public and private projects for: passive and active recreation, large-scale campgrounds, athletic fields, MDOT/transportation improvements, regional multi-use trials, waste water treatment lagoons, storm water management and municipal improvement. He has also served as coordinator for NFE's national railroad account for Amtrak. He will serve as the lead engineering design for both projects. Specifically, Steve will assist in the preparation of preliminary design documents and specifications, final design and specifications, and project estimates.

Team Member	Theresa Pardington, LLA **Nowak & Fraus Engineers (NFE)**
Expertise & Account Role	Theresa Pardington has over 16 years of experience in the areas of environmental design, permitting and landscape architecture. Theresa is a licensed Landscape Architect and a Professional Wetland Scientist. Theresa will serve as the project coordinator for all land planning and environmental related activities associated with both projects, including QA/QC reviews, project meetings/studies, preliminary/final design and site inspections. Theresa will coordinate all activities with LAP, GMA and TEC. Specifically, Theresa will oversee and coordinate all environmental assessments, project evaluation, specifications, cost estimates, preliminary design and administration services.
Team Member	Matthew Hull, ALSA **Landscape Architects & Planners (LAP)**
Expertise & Account Role	Matt Hull is a licensed landscape architect who has designed numerous parks and public spaces. Matt is analytical in his approach with many electronic tools at his disposal, including comprehensive computer graphics which will allow for clear communication with the public and throughout the construction design process. Matt will be involved in the master plan and site design of Normandy Oaks, as well as assist with the public facilitation process.
Team Member	Sandra Bliesener, LLA, LEED AP **Landscape Architects & Planners (LAP)**
Expertise & Account Role	Sandy Bliesener has over 30 years of landscape architecture experience. Her specialty is communication and graphic skills in the early stages of analysis and design, and has led many projects through implementation. She received her LEED accreditation in 2004, and will be overseeing sustainable design for Normandy Oaks.
Team Member	Wesley Landon, ASLA **Landscape Architects & Planners (LAP)**
Expertise & Account Role	Wesley Landon has seven years of landscape architecture experience. He specializes in native design and place-making, creating innovative spaces which inspire and restore the native environmental fabric of the landscape. He will be serving on the Normandy Oaks project.
Team Member	Anthony Dombrowski, RF, PWS **Nowak & Fraus Engineers (NFE)**
Expertise & Account Role	Tony Dombrowski has over 35 years of environmental related experience. He is a Registered Forester and Professional Wetland Scientist in the State of Michigan. Tony will serve as the environmental specialist on both projects responsible for completing tree identifications/condition

assessments and assist with any wetland related issues that may surface as a result of the proposed improvements.

Team Member: Nick Wallace
Landscape Architects & Planners (LAP)

Expertise & Account Role: Nick Wallace has five years of work experience with LAP and will be the primary person in charge of research, plan production/design and graphics for Normandy Oaks.

Team Member: Richard Houdek, LLA, ASLA, LEED AP
Grissim Metz Andriese Associates (GMA)

Expertise & Account Role: Richard Houdek has over 25 years of experience in landscape architecture, covering a varied of projects, including many parks and athletic facilities. He will be the primary person in charge of research, plan production/design and graphics for the Central Park project.

Team Member: Justin Klenk
Nowak & Fraus Engineers (NFE)

Expertise & Account Role: Justin Klenk currently functions as an assistant to the engineering design staff working on a variety of public municipal and private land development projects. A part of that role includes working as a CAD operator with AutoCAD Civil 3D software, and working as a field inspector. He is certified as a concrete field testing technician and as a construction site storm water management inspector.

Team Member: Carey Suhan, PE
Testing Engineers & Consultants (TEC)

Expertise & Account Role: Carey Suhan has over 30 years of experience in the geotechnical and environmental industry. He will be responsible for geotechnical services for both Normandy Oaks and Central Park.

Team Member: Mark Owens, PS
Nowak & Fraus Engineers (NFE)

Expertise & Account Role: Mark Owens has over 25 years of land surveying experience. He will lead the surveying crews for both Normandy Oaks and Central Park.

Team Member: Mark Wilson
Nowak & Fraus Engineers (NFE)

Expertise & Account Role: Mark Wilson has over 30 years of engineering and field experience in the construction industry. He will oversee inspection/density control for both Normandy Oaks and Central Park.

City of Royal Oak
Normandy Oaks Landscape Architectural, Engineering and Construction Services
Team Organizational Chart

NORMANDY OAKS COMMITTEE SELECTED REPRESENTATIVES

STAKEHOLDERS

Royal Oak
Life Now Playing

Greg Rassel
Director of Recreation and Public Services

Nowak & Fraus Engineers

Jeffrey Huhta, PE, PS
Project Manager
Overall Point-of-Contact/Coordination

Landscape Architects & Planners (LAP)

Bob Ford, LLA
Owner

Turf Grass Specialist

Dr. James Grum
Michigan State University
Department of Plant, Soil and Microbial Sciences

Geotechnical

Testing Engineers & Consultants

Carey Suhan, PE
Lead Geotech

Surveying/Basemaps

Nowak & Fraus Engineers

Jeffrey Huhta, PE, PS
Lead Surveyor

Mark Owens, PS
Party Chief

Anthony Dombrowski, RF, PWS
Woodlands/Wetlands

Civil Design/ Parking Analysis

Nowak & Fraus Engineers

Steve Sutton, PE, LSIT
Project Engineer

Theresa Pardington, LLA
Project Coordinator/Designer

Justin Klenk
Engineer Technician

Land Planning/ Landscape Design

Landscape Architects & Planners (LAP)

Bob Ford, LLA
Senior Landscape Architect

Matt Hull
Senior Designer

Sandra Bliesener, LLA, LEED AP
LEED Planner/ Landscape Architect

Wesley Landon, ASLA
Landscape Architect

Nick Wallace
Design Technician

Architecture

TDG Architects

Architect Sub-Consultant
(If needed)

Mechanical/Electrical

TBD

Mechanical/Electrical Sub-Consultant
(If needed)

Construction Administration

Nowak & Fraus Engineers

Steve Sutton, PE, LSIT
Construction Engineer

Theresa Pardington, LLA
Project Coordinator

Mark Wilson
Project Inspector/ Density Control

City of Royal Oak
Central Park Landscape Architectural, Engineering and Construction Services
Team Organizational Chart

CENTRAL PARK COMMITTEE
SELECTED REPRESENTATIVES

STAKEHOLDERS

Royal Oak
Life Now Playing

Greg Rassel
Director of Recreation and Public Services

Nowak & Fraus Engineers

Jeffrey Huhta, PE, PS
Project Manager
Overall Point-of-Contact/Coordination

Grissim Metz Andriese Associates (GMA)

Paul Andriese, ASLA
Vice President/Principal

Geotechnical
Testing Engineers & Consultants

Carey Suhan, PE
Lead Geotech

Surveying/Basemaps
Nowak & Fraus Engineers

Jeffrey Huhta, PE, PS
Lead Surveyor

Mark Owens, PS
Party Chief

Anthony Dombrowski, RF, PWS
Woodlands/Wetlands

Civil Design/ Parking Analysis
Nowak & Fraus Engineers

Steve Sutton, PE, LSIT
Project Engineer

Theresa Pardington, LLA
Project Coordinator/Designer

Justin Klenk
Engineer Technician

Land Planning/ Landscape Design
Grissim Metz Andriese Associates (GMA)

Paul Andriese, ASLA
Senior Landscape Architect

Randy Metz, FASLA
Landscape Architect

Richard Houdek, ASLA, LEED AP
Landscape Architect

Architecture
Saroki Architecture

Architect Sub-Consultant
(If needed)

Community Collaboration (Outreach)
Landscape Architects & Planners (LAP)

Urban Planning
Gibbs Planning Group

Robert Gibbs, AICP, ASLA, CNU-A
President/Urban Planner
(if needed)

Construction Administration
Nowak & Fraus Engineers

Steve Sutton, PE, LSIT
Construction Engineer

Theresa Pardington, LLA
Project Coordinator

Mark Wilson
Project Inspector/
Density Control

Jeffrey J. Huhta, PE, PS

Civil Engineers · Land Surveyors · Land Planners

NF ENGINEERS

TITLE
Managing Partner

PROJECT ROLE
Project Manager, Overall Point-of-Contact/ Coordination, Lead Surveyor

EDUCATION
Bachelor of Science
Michigan Technological University, 1991
Civil Engineering

Extended University Program for Surveying
Michigan Technological University

LICENSES
Professional Engineer, State of Michigan, 1995

Professional Surveyor, State of Michigan, 2005

Mr. Jeffrey Huhta is a Managing Partner at NFE with over 25 years of civil engineering and land surveying experience. Jeff joined NFE in 1989 while earning his Bachelor of Science degree in civil engineering from Michigan Technological University, and has held the positions of project engineer, project manager, vice president and principal. In 2015, Jeff was promoted to Managing Partner and Executive Committee member, overseeing the firm's practice, management and daily operations with two other managing partners.

With both civil engineering and land surveying expertise, Jeff oversees the full project delivery process from conception through completion on behalf of clients, and has also been influential in seeing that the firm's project delivery system operates as efficiently as possible. He has extensive knowledge of all FHWA/MDOT requirements for administering federal/state funded projects, and has served as the MDOT project engineer on a variety of 3R and enhancement projects.

In designing and managing a wide range of projects, Jeff has included sound value engineering principles that were in the best interest of clients. Together with his team, he has worked on public works projects exceeding $50 million in value, as well as a private land development projects exceeding $200 million in value.

PROJECT EXPERIENCE

Lead Consultant/Project Manager – Municipal
- DTMB, Capitol Complex Master Plan and Implementation, Lansing, Michigan
- DTMB, Pine Street Parking Area Design, Replacement and Construction, Lansing, Michigan
- DTMB, Wilderness State Park Master Plan and Implementation, Carp Lake Township, Michigan

Project Manager – Municipal
- DTMB/DNR, Highland Recreation Area Regional Trail Design, Highland, Michigan
- DTMB/DNR, Water System Upgrades and Improvements for Highland Recreation Area (White Lake, Michigan), Proud Lake Recreation Area (Commerce Township, Michigan) and Pontiac Lake Recreation Area (White Lake Township, Michigan)
- DTMB, Pointe Mouillee State Game Area Dike Improvements, Berlin Township, Michigan
- City of Pontiac, Saginaw Street Lighting Enhancement, Pontiac, Michigan
- City of Pontiac, Saginaw Streetscape Enhancement (MDOT), Pontiac, Michigan
- City of Pontiac, Saginaw Street Resurfacing, Restoration and Rehabilitation (MDOT), Pontiac, Michigan

Project Manager – Private Land Development
- Ford Motor Company, Pavement Evaluation for 25 Manufacturing Facilities in Michigan, Ohio, Kentucky, Missouri, Illinois, New York, and Ontario
- General Motors, PEP Car Facility Parking Reconstruction, Warren, Michigan
- Community Living Services, Parking Reconstruction, Wayne, Michigan

Project Manager – University
- Central Michigan University, Housing Facility (Certified LEED Platinum), Mt. Pleasant, Michigan

Robert E. Ford
Principal, Landscape Architect

Education
Bachelor of Landscape Architecture
Michigan State University, 1975
Post Graduate Work: MSU Planning

Registration
Licensed Professional Landscape Architect
State of MI #3901000909
Certified Playground Safety Inspector
#21545-0316, Expires 3/1/2016
Certified Storm Water Management-
Construction Site #C-08418

Specialty Areas
Administration & Project Management
Master Planning
Site Design
Construction Management
Landscape Design
Waterfront and Trail Development
Grant Applications
Park Design
Streetscapes
Parking Areas
Environmental Issues

Professional Participation
American Society of Landscape Architects
ASLA National Trustee 2016-2019
Michigan Chapter, American Society of Landscape Architects
Active Member
President
Legislative Committee Chair
Award – Distinguished Service as President
Michigan Recreation and Parks Association
Lansing Community College, faculty Advisory Board
Michigan State University, Instructor and Guest Lecturer - Landscape Architectural Program
1992 Faculty of the Year Award
Michigan School Business Officials Member
Michigan Society of Planning
Michigan Trails & Greenways Alliance
Global Relief of Michigan, Inc., Advisory Board Member
American Planning Association, Member
Friends of Turner-Dodge House
Governor's Council on Physical Fitness, Safe Routes to School Trainer
Grand River Environmental Action Team Member
Michigan Nursery and Landscape Association Member
US Green Building Council (Firm)
Michigan Downtown Association
National Association for Interpretation
Michigan State University – Landscape Architecture Alumni Board – President & Founder 2011-2015 – 1,700 Members
Advisor – Michigan State University Geography Department – Establish Alumni Board 2015-2016
Webinar Series 1-9 – A program promoting healthy functioning landscapes sponsored by the Lady Bird Johnson Foundation & ASLA.

Mr. Ford has over 40 years of experience in site design, land use planning, project management, park design, streetscapes and urban design. Mr. Ford began his career as park designer prior to his graduation from Michigan State University, when he worked for Lansing Parks & Recreation Department, (1976-1980). He had the opportunity to design many downtown / city parks. From 1980 – 1988, Robert was employed by Midland County, the MDNR, City of Lansing, Snell Engineering, and OBCA, a Landscape Architectural firm giving him an extensive background in urban planning, park design, engineering, project management and administration.

In 1989 Robert started Ford & Associates and in 1994 formed his current company Landscape Architects and Planners, Inc., L.A.P. provides master planning, site design, construction management, administration and quality control. As Principal of this Lansing based firm for the past 24 years, he and his staff have consulted for a large number of schools, communities, and parks throughout the state. Mr. Ford has extensive experience with master plans, reports, site plans, comprehensive plans, park development, greenways, non-motorized transportation plans, streetscapes and implementation of these projects.

While Robert's career as a Landscape Architect requires significant time, he has remained active in the community by teaching and motivating students interested in a career in Landscape Architecture. He taught courses at Michigan State University for three years where he was awarded the 1992 Faculty of the Year Award, and was an instructor for 20 years at Lansing Community College where he also served on the Faculty Advisory Board. He has been a member of the Michigan Recreation and Parks Association for 20 years. He also served as president and remains an active member of the Michigan Chapter of the American Society of Landscape Architects and other local and professional organizations. He served as the president of the MSU Alumni Advisory Board for Landscape Architecture through 2014 and many other local organizations including the Saginaw-Oakland Corridor Improvement Authority appointed by Mayor Bernero.

Project Experience

East Lansing Soccer Complex - East Lansing, MI
Provided master plan design for soccer complex, probable costs, phasing plan, construction documents and conducted site observation for two tournament soccer fields with wind screens, moveable bleachers, field and parking lot lighting, press boxes, ticket booth, locker room building, concession/restroom building and sound system.

Patriarche Park Community Dream Playground - East Lansing, MI
2014 MRPA Award Winner! LAP was retained by the City of East Lansing to organize a community build playground involving multiple community organizations, volunteer groups, individual benefactors and various businesses throughout the local vicinity to come together and focus on a community build project. LAP organized and presented materials to various organizations with the idea of soliciting funds and labor from the community. Over $450,000 dollars has been either raised or pledged along with the award of a MDNR grant of $300,000. The plans were developed by LAP as well as the construction oversight.

New Buffalo Memorial Park - New Buffalo, MI
Prepared a master plan and phasing plan for the 22-acre park. LAP prepared a MDNR grant, held community workshops, provided construction documents and observation for a shelter, playground with splash pad, nature trails, ballfield and river trail.

Hartrick Park - Meridian Township, MI
Prepared and implemented a DEQ permit, and implementation of a MDNR grant, design drawings, bid documents for 2 ballfields, soccer field, parking lot, service road, restrooms, pavilion, trail system with accessible overlook and wetland restoration.

Robert E. Ford
Principal, Landscape Architect

Workshops

Land Conservancy of West Michigan Green Infrastructure Design Charrette
MI Council for Arts & Cultural Affairs, Cool Cities conference "Tipping to Cool: Linking Culture, Community and the Economy "
Rails to Trails Conservancy, Trail Summit
"Able to Play" Boundless Playground Seminar
Heart of Michigan Trails & Greenways Partnership- Goals Charrette Facilitator
Risk Management and Skateboard Parks Workshop
MASLA Conference: Creating a Sustainable Michigan
ASLA Annual Conference – Designing with Nature: The Art of Balance
MRPA Conference: Developing a Universally Accessible Playground: Workshop Facilitator
MRPA Conference: Reviving Athletic Fields educational session facilitator
Green Infrastructure: What does it mean for the Tri-County Region?
Low Impact Development for Storm Water Management
MSBO Conference: Revitalizing Athletic Fields Workshop Facilitator
MSBO Conference: Developing a Universally Accessible Playground – Workshop Facilitator
Low Impact Development (LID) for Storm Water Management
ASLA Annual Conference – Beyond Sustainability: Regenerating Places and People
Mid-America Trails & Greenways: Presentation – Pre-Trail Planning

Awards

Michigan State University – Alumni Service Award

President's Award 2010, Michigan Chapter, American Society of Landscape Architects
Master Plan Award for Outstanding Master Planning presented by the Michigan Recreation and Parks Association

Michigan Medallion Award presented by the ASLA, Michigan Chapter for contributing 13.35 miles of design and construction management to the Lansing River Trail.

Merit Award presented by the ASLA, Michigan Chapter in recognition of outstanding professional achievement for Park Design in collaboration with Bauer-Ford Reclamation Design.

Heart of Michigan Trails and Greenways Partnership: Recognition for the contribution of time and expertise in starting the new organization and for leadership provided to produce the "Connecting Michigan" booklet

Merit Award, Michigan Nursery and Landscape Association presented to HTA Companies, who recognized Mr. Ford as the Landscape Architect responsible for the design of the Shigematsu Memorial Japanese Garden.

Hawk Nest Park
East Lansing, MI
Provide planning, design, construction documents and observation for the implementation of a MDNRE grant including dredging, contouring, native ecological habitats, interpretive stations, viewing platforms, small picnic/shelter area and a playground.

Williamston Red Cedar Greenway
Williamston, MI
Provide a conceptual study to determine a feasible route for the Red Cedar Greenway through Williamston from Putnam Street east to the Grand River Bridge. LAP was also responsible for contacting property owners and initiating easement acquisitions.

Shigematsu Memorial Japanese Garden
Lansing Community College, Lansing MI
Prepared construction drawings, written specifications, coordination of the bid and award process as well as construction observation at the award winning project that included fish stocking, pathways, entry areas, overlooks, accessible walkways, waterfalls, pumps, skimmers, ultra-violet light, water plants and bridge.

City of Jackson Trail System
Jackson, MI
Design and construction documents for a non-motorized transportation trail along the Grand River. Including retaining walls, landscape design, lights, walks, benches, trash receptacles, street signs, entry sign, decorative paving, fencing, raised planters, pedestrian art plazas and shoreline protection.

Veteran's Memorial Gardens Park
Holt, MI
Provided grant application and implementation, community meetings, master plan, site details, construction documents and observation for the wildflower gardens, fountain, gazebo, garden amphitheater, restroom facility, walks and other amenities.

McClintock Park Improvements
Laingsburg, MI
Provide design plan, construction documents, observation, MDNR grant application and implementation, Cool Cities grant application for a park including a loop path, trail connections to two schools, shelters, restrooms, tennis courts, volleyball courts, tot lot, playground, parking lots, sledding hill and skate park.

Valhalla Park
Holt, MI
Prepared a Land and Water Conservation Fund Grant application and received the grant, construction documents and observation for a "universally accessible" park playground for 5-12 and a 2-5 year olds. Grant application included a trail around the existing lake, restroom building and landscape plan.

Monroe and New Buffalo Welcome Center Playgrounds
Monroe and New Buffalo, MI
Assisted in the creation of the First Universally Accessible Playground at a Welcome Center in the United States with over 70% of the playground equipment accessible to children of all abilities. Prepared design plans including, bidding process, construction documents and observation with a final safety inspection. This "Able to Play" project included modular structures and swings covering over 3,000 sq. ft. with access by ramp and transfer systems, a donor plaza, and an ornamental fence enclosure. Completed concurrently

PAUL R. ANDRIESE, ASLA

Vice President | Principal



EDUCATION
Bachelor of Landscape Architecture
Michigan State University, 1983

Calvin College, 1977-1980

PROFESSIONAL REGISTRATION
Michigan

PROFESSIONAL AFFILIATIONS
American Society of Landscape Architects

International Interior Design Association

Woodward Avenue Action Association

INVOLVEMENTS
Public Library Association
National Conference Guest Lecturer, 1998-1999

Federated Garden Clubs of Michigan
Scholarship Recipient

Federated Garden Clubs of Michigan
Landscape Design Study Courses Guest Lecturer

RELEVANT PROJECT EXPERIENCE
Berkley Civic Center Design Concept
Master Plan Team
Berkley, Michigan

Robina Urban Park Conceptual Design
Berkley, Michigan

Elliott Tower Plaza, Oakland University
Rochester, Michigan

ROLE on Civic Center Project
Principal-In-Charge, Project Manager/Designer

As principal of the firm, Paul has leveraged over thirty years of experience with forward-thinking vision and creative talent. Adhering to the philosophy that the practice of landscape architecture is an art, he has established himself as a credible practitioner.

Paul began his career as a draftsman and staff landscape architect. During his tenure at GMA, the firm has grown by over four hundred percent and maintains a solid client base with eighty percent of the work generated from repeat clients. Paul contributes his leadership abilities as a hands-on principal, actively involved in projects, as well as through his role in business development and promotion of the firm's work.

He is involved in a wide range of projects from campus master planning to intimate courtyard design. Paul has provided site design and landscape design services for hospitals, automotive plants, schools, colleges, municipal facilities, churches, parks, residential communities, libraries, office buildings and retail projects.

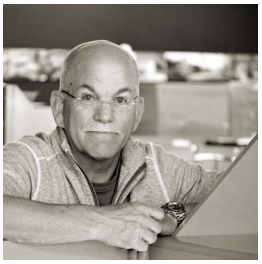
Recognized for his public library work, Paul has been a guest lecturer at the Public Library Association's National Convention, speaking on library site design. He is frequently called on by communities for his expertise in planning/design issues.

"When the expression of an idea is realized on a site with imagination and responsibility, landscape design is elevated to an art form."

GRISSIM
METZ ASSOCIATES
ANDRIESE

RANDALL K. METZ, FASLA

President | Design Principal



EDUCATION
Bachelor of Landscape Architecture
Michigan State University, 1976

PROFESSIONAL REGISTRATION
Michigan, Illinois, Kansas, Indiana

CLARB Certified (Council of Landscape Architectural Registration Boards)

PROFESSIONAL AFFILIATIONS
Fellow, American Society of Landscape Architects

American Institute of Architects Michigan Chapter Honorary Affiliate Member

U.S. Green Building Council

INVOLVEMENTS
University of Michigan School of Architecture Design Juror

University of Michigan School of Architecture Guest Lecturer

RELEVANT PROJECT EXPERIENCE
Downtown Parking and Urban Redevelopment
Howell, Michigan

Riverfront Plaza
Lansing, Michigan

Downtown Conceptual Design Plan
Northville, Michigan
Town Square
Northville, Michigan

Gateway Park at Rochester Road
Troy, Michigan

DDA Development Guidelines
Troy, Michigan

ROLE on Civic Center Project
Project Designer

"Pushing the design envelope, but within the boundaries of environmental responsibility, creates the unique, the engaging, the memorable."

Randy Metz synthesizes landscape, architecture, and engineering into a unified vision of excellence. Drawing upon an architectural background, he has the singular ability to align design elements and disciplines into an uncompromised whole.

Randy's design leadership and day-to-day management have directed the success of the firm's international and national award-winning practice.

Cofounder of Grissim | Metz Associates, Inc., in 1993, Randy has been responsible for attracting significant clients, including nationally renowned architects and developers.

His work has received national and international recognition for enduring design, including the prestigious National Landscape Architecture Award received from Barbara Bush during her tenure as First Lady at the White House. He has been cited in numerous national design awards from the American Society of Landscape Architects and the National Arborist Association, as well as awards from the Michigan Chapter ASLA, Associated Landscape Contractors of America, Environmental Improvement Awards, International Association of Lighting Designers, Michigan Recreation and Park Association, and Michigan Society of Professional Engineers.

Randy's work has been published internationally and nationally in such books as *Landscape Architecture, The New American Garden,* and *Paradise Transformed;* in magazines, including *Landscape Architecture* and *Inland Architect;* and in the press, including the *New York Times, Wall Street Journal,* and *Detroit Free Press*.

GRISSIM
METZ ASSOCIATES
ANDRIESE

James R. Crum

Appointment Date: 1984 **Rank:** Professor

Specialty Area: Turfgrass Soil Management **Current Appointment:** 85%T, 15%R

Education:

B.S.	Purdue University, 1976
M.S.	Purdue University, 1979
Ph.D.	University of Minnesota, 1984

Positions held (since terminal degree):

7/84-7/89	Assistant Professor, Michigan State University
7/89-7/97	Associate Professor, Michigan State University
7/97-present	Professor, Michigan State University

Research Responsibilities (FY 95 – Present):

High sand content rootzones for golf putting greens and athletic fields, evaluations of sports turf systems and management, putting green management.

Selected Awards, Grant Support, and Professional Services:

1985-1988	North Central Regional Research (NCR): Soil erosion and productivity.
1986-1989	NSF (Biotic Systems and Resources): Process-level Interactions in Terrestrial Ecosystems: An Experimental Approach.
1989-1990	NSF (Biotic Systems and Resources): Process-level Interactions in Agricultural Ecosystems.
1988-1993	NSF (LTER Program): Organisms in the Agricultural Landscape: Long Term Ecological Research.
1988-1991	USGS: Attenuating Organic Contaminant Mobility Using Organo-Clays.
1987	Travel Award, Michigan State University.
1989	Institute of Water Research. Potential Nitrogen Contamination of Groundwater as affected by Soil, Water, and Land Use Relationships.
1989-1992	UpJohn Corporation. Reduction of the Environmental Impact of Animal Waste and Mycelia Filter Cake Bi-product Application to Agricultural Land.
1993.	Michigan Turfgrass Foundation. Soil Variability on Selected Golf Courses.
1994.	Michigan Turfgrass Foundation. Soil Nutrient Levels on Selected Golf Courses.

1995 - 2000. United States Golf Association. Engineering Properties of High Sand Content Golf Putting Greens.
2000 – 2005 Michigan Turfgrass Foundation. Properties of High Sand Content Materials.

Selected Publications:

Franzmeier, D.P., G.C. Steinhardt, J.R. Crum, and L.D. Norton. 1977. Soil characterization in Indiana: I. Field and laboratory procedures. Purdue University Agric. Exp. Stn. Res. Bulletin. 943.

Crum,J.R. and D.P. Franzmeier. 1980. Soil properties and chemical composition of tree leaves in Southern Indiana. Soil Sci. Soc. Amer. Jour. 44: 1063-1069.

Giencke, A.G., R.O. Paulson, and J.R. Crum. 1983. Identification and characterization of three glacial tills in Kandiyohi County, Minnesota. Minn. Acad. Sci. 49:7-9.

Bloom, P.R., K. Meter, and J.R. Crum. 1983. Titration method for determination of clay-sized carbonates. Soil Sci. Soc. Amer. Jour. 49:1070-1073.

Dunning, X., R.H. Rust, and J.R. Crum. 1986. Numerical classification of forested soils in the High-Mountain region of Southwestern China. Soil Sci. 141:127-137.

Crum,J.R. and R.H. Rust. 1986. Characterization and stratigraphy of soil parent materials in West-Central Minnesota. Soil Sci. Soc. Amer. Jour. 50:1509-1515.

Ritchie, J.T. and J.R. Crum. 1989. Conterting Soil Survey characterization data into IBSNAT Crop model input. In (Bowma ed.) Land Qualities in Space and Time. Wageningen. The Netherlands.

Bloom, P.R.,J.R. Crum, and M.E. Pohl. 1989. Characterization and classification of some soils in the lowlands of Northern Belize. Geoderma

Lee, J.F., J.R. Crum, and S.A. Boyd. 1989. Enhanced retention of organic contaminants by soils exchanged with organic cations. Environmental Science and Technology, 23:1365-1372.

Crum, James R., G. Philip Robertson, and Fred Nurnberger. 1989. Long-term climate trends and agricultural productivity in Southwest Michigan. U.S. Forest Service Special Publication

Ellis, B.G., J.R. Crum, and J.A. Melin. 1990. Relationship between soil test parameters and Algal available P. J. Environ. Qual.

Stier, J.C., J.N. Rogers, III, J.R. Crum, and P.E. Rieke. 1999. Flurprimidol Effects on Kentucky bluegrass in reduced light conditions. Crop Sci. 39:1423-1430.

Rogers, J.N., III and J.T. Vanini, and J.R. Crum. 1998. Simulated traffic on turfgrass topdressed with crumb rubber. Agron. J. 90:215-221.

Rogers, J.N., III, J.C. Stier, J.R. Crum, T.M. Krick, and J.T. Vanini. Sports Turf Management

Program at Michigan State University. Safety in American Football, ASTM STP No. 1305, Earl F. Hoerner, Ed. American Society for Testing and Materials, 1996, pp. 132 - 144.

Frank, Kevin W.; O'Reilly, Kevin; Crum, Jim; Calhoun, Ron. 2006. Nitrogen fate in a mature Kentucky bluegrass turf. *USGA Turfgrass and Environmental Research Online*. January 15. 5(2): p. [1-6].

Frank, Kevin W.; O'Reilly, Kevin M.; Crum, James R.; Calhoun, Ronald N. 2006. The fate of nitrogen applied to a mature Kentucky bluegrass turf. *Crop Science*. January/February. 46(1): p. 209-215.

Henderson, J. J.; Crum, J. R.; Wolff, T. F.; Rogers, J. N. III. 2005. Effects of particle size distribution and water content at compaction on saturated hydraulic conductivity and strength of high sand content root zone materials. *Soil Science*. May. 170(5): p. 315-324.

Frank, K.W., B.E. Leach, J.R. Crum, P.E. Rieke, B.R. Leinauer, T.A. Nikolai, and R.N. Calhoun. 2005. The effects of a variable depth root zone on soil moisture in a sloped USGA putting green. Int. Turfgrass Res. J. 10(2):1060-1066.

Paul R. Bloom*, James R. Crum and Mary E. Pohl 2004.Characterization and classification of some soils in the Lowlands of Northern Belize. *Soil Crop Sci. Soc. Florida Proc.* 63:12-19(2004)

Frank, Kevin W.; Crum, James R.; Bryan, Jeff M.; Hathaway, Aaron D. 2016. Crop Science. November/December. 56(6): p. 3338-3344.

Lee, Sang-Kook; Frank, Kevin W.; Crum, James; Warncke, Darryl. 2013. International Turfgrass Society Research Journal. 12: p. 207-215.

Kowalewski, Alexander R.; Dunne, Jeff C.; Rogers, John N. III; Crum, James R. 2011. Applied Turfgrass Science. December 23. p. 1-9.

Kowalewski, Alexander Robert; Crum, James R.; Rogers, John N. III; Dunne, Jeffery C. 2011. Soil Science. March. 176(3): p. 143-149.

Lee, Sang-Kook; Frank, Kevin W.; Crum, James R. 2010. Korean Journal of Turfgrass Science. 24(1): p. 45-49.

Kowalewski, Alexander R.; Rogers, John N. III; Crum, James R.; Dunne, Jeffrey C. 2010. HortTechnology. October. 20(5): p. 867-872.

Other Publications:

Frank, Kevin W.; O'Reilly, Kevin; Crum, Jim; Calhoun, Ron. 2006. Nitrogen fate in mature turf: Michigan State University research demonstrates how high rates of nitrogen fertilization to

mature turf can result in unacceptable levels of nitrate leaching. *USGA Green Section Record*. March/April. 44(2): p. 26-28.

Lee, Sang-Kook; Frank, Kevin W.; Bryan, Jeff M.; Crum, James R. 2006. Determining nitrogen and phosphorus recommendations for turfgrass grown on a phosphorus deficient soil. *2005 MSU Turfgrass Research Reports*. 1: p. [1-3].

Lee, Sang-Kook; Frank, Kevin; Bryan, Jeffrey M.; Crum, James R. 2006. Phosphorus and nitrogen recommendations for turf grown on a phosphorus deficient soil. *Abstracts: 2006 International Annual Meetings* [ASA/CSSA/SSSA]. p. [1].

Lee, Sang-Kook; Frank, Kevin; Crum, James R. 2006. *Abstracts: 2006.* The effect of rootzone mix and compaction on nitrogen leaching in turfgrass. *International Annual Meetings* [ASA/CSSA/SSSA]. p. [7].

Vanloo, Tim; Rogers, John N. III; Crum, James R. 2006. *Abstracts: 2006.* Organic matter accumulation in high sand content root zone. *International Annual Meetings* [ASA/CSSA/SSSA]. p. [10].

Lee, S.K., K.W. Frank, and J.R. Crum. 2005. Compaction and root zone mix effects on nitrogen leaching in turfgrass. *In* Annual Meetings Abstracts [CD- ROM]. ASA, CSSA, SSSA, Madison, WI.

Lee, S.K., K.W. Frank, J.Bryan, and J.R. Crum. 2005. Determining nitrogen and phosphorus recommendations for turfgrass grown on a phosphorus deficient soil. *In* Annual Meetings Abstracts [CD-ROM]. ASA, CSSA, SSSA, Madison, WI. Publications.

Frank, K.W., J.M. Bryan, J.R. Crum, and S.K. Lee. 2005. Turfgrassnutrition research report 2004. *In* Mich. Turfgrass Conf. Proc. Vol. 34. [CD-ROM].

Lee, S.K., K.W. Frank, J. Bryan, and J. Crum. 2005. Nitrogen and phosphorus effects on turfgrass grown on a phosphorus deficient soil. *In* 2005 Michigan Turfgrass Field Day Report. p. 5.

Frank, K. W., B. E. Leach, J. R. Crum, P. E. Rieke, B. R. Leinauer, T. A. Nikolai. 2005. Effect of rootzone material and depth on moisture retention in undulating USGA putting greens. [Online]*USGA Turfgrass Environ. Res. Online.* 4(11):pp. 1-9.

Anderson, M. N.; Crum, J. R.; Rogers, J. N. III. 2004. Temperature modification of the athletic field rootzone. *2004 Michigan Turfgrass Field Day*. 2004, p. 15.

Frank, K. W.; Bryan, J. M.; Crum, J. R.; Lee, S. K. 2004. Turfgrass nutrition research report 2004: I. Nitrogen and phosphorous fate in a 10 year old kentucky bluegrass turf. *75th Annual Michigan Turfgrass Conference Proceedings*. Vol. 75, 2005, p. 1-12.

Henderson, J. J.; Rogers, J. N. III; Crum, J. R. 2004. *Athletic Field Systems Study 2000-2003: An Evaluation and Comparison of Naturally and Artificially Enhanced Athletic Field Sand Textured Root Zones*. Monograph. East Lansing, MI: Michigan State University

Lee, S. K.; Frank, K. W.; Bryan, J. M.; Crum, J. R. 2004. Turfgrass nutrition research report 2004: II. Determining nitrogen and phosphorous recommendations for turfgrass grown on a phosphorous deficient soil. *75th Annual Michigan Turfgrass Conference Proceedings*. Vol. 75, 2005, p. 13-15.

Lee, S. K.; Frank, K. W.; Bryan, J. M.; Crum, J. R. 2004. Nitrogen and phosphorus recommendations for turf grown on a phosphorus deficient soil. *Michigan Turfgrass Field Day*. 2004, p. 7.

Lee, Sang Kook; Frank, K. W.; Bryan, J. M.; Crum, J. R. 2004. Determining nitrogen and phosphorus recommendations for turfgrass grown on a phosphorus deficient soil. *2004 Annual Meeting Abstracts* [ASA/CSSA/SSSA/CSSS]. 2004.

Vanini, J. T., J.R. Crum, and J.N. Rogers, III. 2003. Core cultivation vs. Graden cultivation. 73rd Annual Michigan Turfgrass Conference Proceedings. 32:141-143.

Crum, J.R., T.F. Wolff, and J.N. Rogers, III. 2003. Agronomic and engineering properties of USGA putting greens. USGA Turfgrass and Environmental Research Online. 2(15):1-9.

Henderson, J.J, J.N. Rogers, III, and J. R. Crum. 2003. The Effects of Natural and Artificial Root Zone Inclusions on the Playing Surface Characteristics of Kentucky Bluegrass. American Society of Agronomy Abstracts. Madison, WI.

Rogers, J. N., III and J.R. Crum, J.J. Henderson, J.T. Vanini, and M.N. Anderson. 2003. The Sports Turf Research Program and at Michigan State University. American Society of Agronomy Abstracts. Madison, WI.

VanLoo, Tim; Rogers, John N. III; Crum, James. 2010. SportsTurf. August. 26(8): p. 8, 10.

Green, Thomas O.; Crum, James R.; Rogers, John N. 2016. Course Conditions. Spring. p. 22-23

Kowalewski, Alexander R.; Crum, James R.; Flore, James A.; Rogers, John N. III.; Vargas, Joseph M. 2009. 2009 International Annual Meetings: [Abstracts][ASA-CSSA-SSSA]. p. 52473.

Kowalewski, Alexander; Crum, James R.; Rogers, John N. III. 2009. Sports Turf Manager [STA]. Summer. 22(2): p. 13-15, 17.

Kowalewski, Alexander R.; Crum, James R.; Rogers, John N. III. 2009. The Landsculptor. July. p. 37-40.

Kowalewski, Alexander R.; Crum, James R.; Rogers, John N. III. 2009. SportsTurf. July. 25(7): p. 42-45.

Kowalewski, Alexander R.; Crum, James R.; Flore, James A.; Rogers, John N.; Vargas, Joseph M. 2008. *2008 Joint Annual Meeting: [Abstracts][GSA/SSSA/ASA/CSSA/GCAGS/HGS*]. p. 43846.

Kowalewski, Alexander; Rogers, John N. III; Crum, James R. 2008. MSU Turfgrass Science Program. November. p. [1-9].

Steve W. Sutton, PE, LSIT

Civil Engineers · Land Surveyors · Land Planners

NF ENGINEERS

TITLE
Senior Associate

PROJECT ROLE
Project Engineer,
Construction Engineer

EDUCATION
Bachelor of Science
Michigan Technological University, 1999
Civil Engineering

Extended University Program for Surveying
Michigan Technological University

LICENSES
Professional Engineer, State of Michigan, 2003

Passed Professional Surveyor Exam – Part 1

CERTIFICATIONS
Field Manager Software Certified

U.S. NRC Nuclear Gauge Technician

Mr. Steve Sutton began his career at NFE in 1998, and after several promotions, currently serves as Senior Associate for the firm with over 15 years of civil engineering experience. His main role is Project Manager for the design and construction administration of numerous municipal engineering and private land development projects. His municipal engineering experience includes roadway and utility system projects, and his private land development experience includes retail, industrial and residential projects.

Steve also oversees and conducts the plan review process for several municipalities, and most notably for the City of Pontiac. He reviews site, subdivision, condominium and roadway plans submitted to the city for approval. This experience has put him at the forefront in developing Pontiac's plan review database which has been critical in tracking hundreds of projects through the approval process.

PROJECT EXPERIENCE

Project Manager – Municipal

- DTMB, Capitol Complex Master Plan and Implementation, Lansing, Michigan
- DTMB, Pine Street Parking Area Design, Replacement and Construction, Lansing, Michigan
- DTMB, Wilderness State Park Master Plan and Implementation, Carp Lake Township, Michigan
- DTMB/DNR, Highland Recreation Area Regional Trail Design, Highland, Michigan
- DTMB/DNR, Water System Upgrades and Improvements for Highland Recreation Area (White Lake, Michigan), Proud Lake Recreation Area (Commerce Township, Michigan) and Pontiac Lake Recreation Area (White Lake Township, Michigan)
- DTMB, Pointe Mouillee State Game Area Dike Improvements, Berlin Township, Michigan

Project Manager – University

- Central Michigan University, Housing Facility (Certified LEED Platinum), Mt. Pleasant, Michigan

Project Manager – Private Land Development

- Ford Motor Company, Pavement Evaluation for 25 Manufacturing Facilities in Michigan, Ohio, Kentucky, Missouri, Illinois, New York, and Ontario
- General Motors, PEP Car Facility Parking Reconstruction, Warren, Michigan
- Community Living Services, Parking Reconstruction, Wayne, Michigan

Theresa Pardington, LLA

Civil Engineers · Land Surveyors · Land Planners

NF ENGINEERS

TITLE
Landscape Architect

PROJECT ROLE
Project Coordinator/ Designer

EDUCATION
Bachelor of Landscape Architecture
Michigan State University, 1999

LICENSES
Licensed Landscape Architect, State of Michigan, 2003

Ms. Theresa Pardington started her career at NFE in 2014, and currently serves as a Landscape Architect for the firm with over 15 years of experience. Her responsibility is preparing site and landscape plans from concept through final construction documents for municipal improvements and private land development projects. Theresa is also responsible for presentation materials, construction administration and inspection, and environmental planning, and has over 10 years of experience in obtaining site planning, zoning variances, wetland, woodland and environmental approvals/permits with many local municipalities, as well as with the State of Michigan Department of Environmental Quality.

PROJECT EXPERIENCE

Landscape Architect – Municipal

- Lillie Park North, South and Southeast, Pittsfield Township, Michigan – Responsible for the design, grant writing and implementation of active and passive land and water-based recreation for this 126-acre park. Included natural short stabilization, constructed wetlands, re-creation of Michigan native landscape, miles of multi-use trails, soccer fields with irrigation systems, parking, picnic pavilions, self-composting restroom facility, accessible play structures and custom designed signage.
- Independence Lake County Park, Washtenaw County, Michigan – Responsible for the design and implementation of a water spray park facility, multi-use trail and parking to accommodate year-round use of this family oriented park.
- State Street Area Improvements, Ann Arbor, Michigan – Responsible for the plan, design and implementation for this project in the Downtown District Area (DDA) adjacent to the University of Michigan. Included streetscape from building face to building face, switching one-way traffic to two-way system, rearrangement of sidewalk amenities and development of outdoor dining areas.

Landscape Architect – Private

- Henry Ford Health System, West Bloomfield, Michigan – Responsible for the design and permit assistance (local and state) for the expansion of Henry Ford's campus. Included environmental site improvements with the relocation of 290 lineal feet of stream, 95 lineal feet of new stream, creation of three acres of wetland and six acres of native upland area. Also created areas of drainage, grading and planting Michigan native trees, shrubs, plugs, grasses and forbs.
- Madonna University, Livonia, Michigan – Responsible for the design and construction of Madonna's varsity synthetic softball field, fieldhouse/concessions, men's varsity synthetic batting cages and common plaza area between sports fields.

Matthew J. Hull, ASLA
Landscape Architect

Education
B.L.A, Michigan State University
with High Honors, 2010

Registration
Licensed Professional Landscape Architect
State of MI #3901001626

Specialty Areas
Site Design
Urban Design
Master Planning
Graphic Design
Hand Drawings
Sketchup
Adobe Creative Suite applications
Microsoft Office applications

Workshops
Big Ten Design Charette and Graphic Workshop 2008, 2010

Professional Participation
Michigan State University Landscape Architecture Club
US Green Building Council (Firm)
American Society of Landscape Architecture (ASLA) Member
Michigan Chapter - American Society of Landscape Architecture (ASLA) Member
SITES Fundamentals Webinar Series 1-9

Mr. Hull has 5 years of experience in the field of Landscape Architecture. He has been involved in the design process from conceptualization to implementation and has a strong and well grounded ability to bring together the client's needs into a creative and thoughtful design.

Prior to graduation, Mr. Hull worked for nearly two years at Landscape Architects and Planners, preparing site designs and planting plans, surveying playground equipment, and developing construction documents. He also spent time with JJR preparing site designs and analysis drawings for a riverfront park and trail, a methane to energy plant, and a large automotive facility in China.

Mr. Hull is currently employed by Landscape Architects & Planners where his responsibilities include site design, master planning, preparation of construction documents and specifications, cost estimates, permit and grant writing, construction observation and contract administration for Landscape Architects and Planners, Inc.

PROJECT EXPERIENCE

Sea Gull Lake Park Master Plan
Hayes Township, MI
Provide consulting and design services to produce a park master plan consisting of the following: providing adequate facilities to support the demand for land based recreational uses while providing the public with a quality recreational experience and providing adequate shoreline facilities to support water-based uses all consistent with preserving the natural character of the site; providing appropriate vehicular and non-motorized access to recreation areas (on or near the site); Mitigate the impact to adjacent properties; ensured it was universally accessible and recommended facilities and programs allowing the park to become operationally self-sustaining.

Fillmore Park Master Plan
Livingston County, MI
LAP developed a master plan for a 198 acre parcel bequeathed to Livingston County by Raymond Fillmore for active recreation and assisted them with developing a recreation needs assessment, design alternatives relative to programming with adjacent partners, developed a budget and phasing plan.

Dimondale Island Park
Dimondale, MI
Provide a master plan, construction documents, bid assistance and construction observation for the park development. Amenities include storm water treatment, pathways, an overlook, pedestrian bridge, stone steps, kayak launch, landscaping and signage.

Riverbend Park
Rochester Hills, MI
LAP was contracted to enhance the site aesthetics, provide passive recreation, and create an ecological self-sustaining public park with reduced long-term maintenance. Amenities potentially include: parking lot at Hamlin Road entrance, wayfinding/interpretive signage, boardwalks and overlooks, pond, outdoor classrooms, educational exhibits/stations, exercise stations, canoe/kayak launch, asphalt trail, lighting, fountain(s) and ecosystem restoration and management.

Alpine Hills Adventure Park
Rockford, IL
Provided concept design, construction documents and bid assistance to the Rockford Park District for an Adventure Park. The park includes winter and summer activities including: snow tubing and boarding, skiing, snowshoeing, snow biking, tobogganing, zip lining, rock climbing, off road biking and a five-hole golf course and driving range (designed by others).

Matthew J. Hull, ASLA
Landscape Architect

Patriarche Park Community Dream Playground
East Lansing, MI
2014 MRPA Award Winner! LAP was retained by the City of East Lansing to organize a community build playground involving multiple community organizations, volunteer groups, individual benefactors and various businesses throughout the local vicinity to come together and focus on a community build project. LAP organized and presented materials to various organizations with the idea of soliciting funds and labor from the community. Over $450,000 dollars has been either raised or pledged along with the award of a MDNR grant of $300,000. The plans were developed by LAP as well as the construction oversight.

UAW Marcus Garvey Academy Playground
Detroit, MI
LAP, in cooperation with Rolar Property Services, was responsible for refining the master plan developed for Marcus Garvey Academy and designing the playground environment which included the playground locations for a 2-5 year old and 5-12 year old play area; and other elements such as structures, play equipment, walks, landscape and drainage.

Williamston Red Cedar Greenway
Williamston, MI
Provide a conceptual study to determine a feasible route for the Red Cedar Greenway through Williamston from Putnam Street east to the Grand River Bridge. LAP was also responsible for contacting property owners and initiating easement acquisitions.

Delhi Non-Motorized Trail Plan
Holt, MI
Comprehensive Master Plan of this non-motorized transportation plan for the Township that included a network that connects trails, sidewalks and bike lanes to neighborhoods, parks, schools, libraries and the central business district.

Charlotte Area Ballfield Design
LAP provided consulting services and grant application assistance for the development of the recreation complex at the Parkland Drive property including: three ball diamonds (one small, two large), a 15 car parking lot, an entry drive, an entry sign, and a variety of alternative walkways.

Sandra J. Bliesener, LLA, LEED AP

Professional Registrations
Licensed Landscape Architect: Kansas

Education
B.L.A., Kansas State University, 1986

Accreditations
LEED Accredited Professional

Previous Professional Experience
Landscape Architect, The Dike Partnership Irvine, California
Designer, Brent Bowman & Associates, Architects Manhattan, Kansas
Landscape Architect Intern, Kansas State
University Facilities Planning

Community Activities
City of Parchment, Michigan
Planning Commission Member since 2008
Zoning Board Member since 2003
Kalamazoo Metropolitan County
Planning Commissioner since 2010
Kalamazoo County Parks Board Member
Rotary Club of Kalamazoo
Career Connections Chair since 2015
President 2013-14
Board of Directors, 2012-2015, 2006-2008
Website Committee Chair, 2005-2006
Editarian Committee Chair, 2004-2005
Kalamazoo Institute of Arts Building & Grounds Committee Member since 2008

Professional Papers/Lectures
The Fountain Plaza Renovation, SITES Magazine, Summer 2015 Edition
Speaker, Mid-American Camping Conference, Battle Creek, MI 2014
Master Planning with Your Major Donors,
Camp Business Magazine, Sept. 2013
Speaker, ACA Mid-States Camp Conference, Chicago, IL 2012
Speaker, NE YMCA Camping Conference
Huguenot, NY 2011
Panel Speaker "Green Building Initiatives"
Southwest Michigan Sustainable Design
Forum 2007
Guest Lecturer Federated Garden Clubs
of America 2004 - Present
Speaker, YMCA Camp Financial Development Symposium, Brookston, Indiana, 2004
Speaker, Mid-American Camping Conference Battle Creek, MI 2003
Speaker, Michigan Chapter of the American Institute of Architects Design
Retreat Torch Lake, Michigan 2000

Sandy is a LEED Accredited Professional. Her specialty is communication and graphic skills in the early stages of analysis and design, and she has lead many projects through implementation. She received her LEED accreditation in 2004 and continues her education in the field of sustainable design. She has served as a designer and project manager since 1993. Recent park projects with which Sandy has been involved include the following:

- City of Grand Rapids Parks Department, Grand Rapids, Michigan
  - Monument Park Master Plan
  - Veteran's Memorial Park Master Plan
  - Madison Square Park Master Plan
  - Riverside Park Master Plan
- City of Kalamazoo Parks & Recreation, Kalamazoo, Michigan
  - Hays Park Master Plan
  - Bronson Park Master Plan
  - Dutton Street Park
- Cass County Parks, Cass County, Michigan
  - Arthur Dodd Memorial Park Master Plan
  - Dr. T.K. Lawless Park Master Plan Update
- Kalamazoo County Parks Department, Kalamazoo, Michigan
  - Markin Glen County Park Master Plan
  - River Oaks County Park Master Plan
- Christmas Cove Beach Master Plan, Leelanau Township, Michigan
- Central Park Master Plan, Meridian Township, Michigan
- Drake Farmstead Master Plan, Oshtemo Township, Michigan
- Roselle Park Master Plan Update, Ada Township, Michigan
- Southwest Michigan Land Conservancy, Kalamazoo, Michigan
  - Bow in the Clouds Nature Preserve Access Plan, Kalamazoo
  - Pilgrim Haven Property Land Use Master Plan, South Haven
  - The Wau-Ke-Na Preserve Land Use Master Plan, Glenn
- Hobart Marsh Land Use Master Plan, Hobart, Indiana
- Parks & Recreation Master Plan, Prairieville Township, Michigan
- The Stage at Kindleberger, Parchment, Michigan
- Richland Area Community Center Master Plan, Richland, Michigan
- Peregrine Plaza Roof Gardens, Kalamazoo, Michigan
- Whirlpool Corporation Campus Master Plan, Benton Harbor, Michigan
- Western Michigan University, Kalamazoo, Michigan
  - Goldsworth Valley Enhancement Project
  - Fountain Plaza Master Plan
  - Western Heights Residence Halls
- Grand Valley State University, Grand Rapids, Michigan
  - Health Professions North
  - Allendale Lab Building
  - Seidman Riverwalk Sketches
- Adrian Dominican Sisters Landscape Master Plan, Adrian, Michigan
- Genesys Health Park Landscape Master Plan, Grand Blanc, Michigan

Wesley K. Landon, ASLA
Landscape Architect

PROFESSIONAL REGISTRATIONS

Landscape Architect
Michigan No. 3901001603

EDUCATION

B.L.A. Michigan State University
2010

PROFESSIONAL ASSOCIATIONS

American Society of Landscape Architects (ASLA), Member

Michigan Chapter of the American Society of Landscape Architects (MiASLA), Member & Editor of chapter's quarterly publication - MiSITES

CERTIFICATIONS

CLARB Certified Professional

Project Experience

Wesley Landon is a licensed landscape architect specializing in native design and placemaking, his passion is creating resilient, innovative places which inspire, and restore the native environmental fabric of the landscape. He has diverse professional experience – spanning park and open space design, to community visioning and downtown planning – and is adept at all phases of project development, from initial concept generation to construction documentation and administration.

Mr. Landon utilizes a collaborative, inclusive design philosophy, centered on effective communication and client engagement. This process produces unique, personal designs which meet the client's goals and uncover subtle site opportunities. He has a sharp graphic skillset which he uses to quickly and efficiently communicate design ideas and intent to clients and project stakeholders. He produces exceptional presentation graphics through artistic drawings and renderings, and precise technical drawings for permitting and construction documentation purposes.

- Native Design & Restoration
- Green Infrastructure
- Park & Open Space
- Trails & Greenways
- Master Planning
- Site Design
- Community Visioning
- Downtown Planning

Anthony Dombrowski, RF, PWS

Civil Engineers · Land Surveyors · Land Planners

NF ENGINEERS

TITLE
Woodlands/Wetlands Manager

PROJECT ROLE
Woodlands/Wetlands

EDUCATION
Bachelor of Science
Michigan Technological University, 1973
Forestry Management

LICENSES
Registered Forester, State of Michigan, 2000

Professional Wetland Scientist, 2010

CONTINUING EDUCATION
U.S. Army Corps of Engineers, Wetland Delineation and Management Training

Richard Chinn Environmental Training

Wetland Training Institute
- Wetland Construction and Restoration
- Grasses, Sedges and Rushes
- Wetland Delineation
- Plant Identification
- Wetland Soils and Hydrology
- Planning Hydrology for Constructed Wetlands
- Vegetation Establishment for Constructed Wetlands
- Assessing Wetland Function and Health

Mr. Anthony Dombrowski has over 40 years of forestry and wetland experience serving both municipal agencies and private land developers, and during that time, has successfully completed hundreds of wetland delineations and tree surveys. Tony joined NFE in 2001 after 28 years of serving as Forester/Ground Superintendent for the City of Pontiac. As Woodlands/Wetlands Manager at NFE, he is responsible for all environmental related issues on NFE projects, including tree and woodland surveys, forest management plans, wetland delineations, wetland mitigation plans, wetland monitoring reports and MDEQ permit applications. Additionally, Tony assists in the administration of the City of Pontiac's NPDES storm water permit program.

Expertise
- Woodlands and Wetlands Assessment, Monitoring and Planning
- Woodlands and Wetlands Mitigation Design
- Wetland Construction and Restoration
- Wetland Delineation
- Tree Surveys
- Storm Water Permitting
- Plant Identification
- Wetland Soils and Hydrology

PROJECT EXPERIENCE

Woodlands/Wetlands Manager – Municipal
- Michigan Department of Natural Resources, Wilderness State Park Tree/Woodland Survey and Wetland Delineation, Carp Lake, Michigan
- City of Pontiac, NPDES Storm Water Oversight/IDEP Inspection and Testing, Pontiac, Michigan

Woodlands/Wetlands Manager – Private Land Development
- North Star Reach, Forest Management Plan/Timber Sale, Pinckney, Michigan
- Greenstone Farm Services Credit Union, Wetland Delineation, Wetland Mitigation Plan and Monitoring, East Lansing, Michigan

Nicholas R. Wallace
Technical Designer

Education
Associate's Degree – Landscape Architecture
Lansing Community College
With High Honors, 2012

Specialty Areas
Site Design
Construction Drawings
Construction Details
Graphic Design
Hand Drawings
AutoCad 2006-2014
Sketchup
Adobe Creative Suite applications
Microsoft Office applications

Workshops
Training Wheels 2014
(Bicycle Facility Design Training)
Sustainable SITES Initiative Fundamentals
Webinar Series 1-9 – A program promoting healthy functioning landscapes sponsored by the Lady Bird Johnson Foundation & ASLA.

Mr. Wallace has been employed by Landscape Architects & Planners for 3 years. He holds an Associate's Degree in Landscape Architecture, graduating with honors from Lansing Community College.

His professional experience includes several years of residential landscape and hardscape design and construction. This experience has provided Nick with a broad and practical knowledge of all aspects of a project from concept, cost estimating and construction drawings, through final construction.

Since joining LAP, Nick has applied his diverse range of skills to help bring projects from concept to completion-from preliminary sketching and design development to construction drawings, digital rendering techniques and presentation graphics.

PROJECT EXPERIENCE

Patriarche Park Community Dream Playground - East Lansing, MI
2014 MRPA Award Winner! LAP was retained by the City of East Lansing to organize a community build playground involving multiple organizations, volunteer groups, individual benefactors and various businesses throughout the local vicinity to come together and focus on the project. LAP organized and presented materials to various organizations with the idea of soliciting funds and labor from the community. Over $450,000 dollars was raised or pledged along with the award of a $300,000 MDNR grant. LAP developed the plans and oversaw construction.

Charlotte Area Ballfield Design - Charlotte, MI
LAP provided consulting services and grant application assistance for the development of the recreation complex at the Parkland Drive property including: three ball diamonds (one small, two large), a 15 car parking lot, an entry drive, an entry sign, and a variety of alternative walkways.

Arenac County Bluewater Trail / Wayfinding System - Arenac County, MI
LAP worked with Arenac County and other stakeholders to plan, map and promote a water trail along the county's Saginaw Bay coastline. LAP evaluated potential sites and determined which sites make the best candidates for the development plan. The types of improvements anticipated include: property upgrades, possibly property acquisitions, water access, road access, parking, restrooms, potable water, waterfront character development, and integration with adjacent uses. A preliminary and final report will be generated illustrating the overall development plan and specific improvements needed for each site.

Fenner Pavilion Design - Lansing, MI
LAP provided a vision for a new pavilion at Fenner Nature Center that would become a destination for weddings, graduations and other events. Computer modeling and graphic presentation were used to create a pavilion concept that is functional, all-inclusive and aesthetically pleasing, while not taking away from the natural surroundings.

UAW Marcus Garvey Academy Playground - Detroit, MI
LAP, in cooperation with Rolar Property Services, was responsible for refining the master plan developed for Marcus Garvey Academy and designing the playground environment which included the playground locations for a 2-5 year old and 5-12 year old play area; and other elements such as structures, play equipment, walks, landscape and drainage.

Sea Gull Lake Park Master Plan - Hayes Township, MI
Provide consulting and design services to produce a park master plan consisting of the following: providing adequate facilities to support the demand for land based recreational uses while providing the public with a quality recreational experience and providing adequate shoreline facilities to support water-based uses all consistent with preserving the natural character of the site; providing appropriate vehicular and non-motorized access to recreation areas (on or near the site); Mitigate the impact to adjacent properties; ensured it was universally accessible and recommended facilities and programs allowing the park to become operationally self-sustaining.

RICHARD G. HOUDEK, ASLA, LEED AP

Partner



EDUCATION
Bachelor of Landscape Architecture
Michigan State University, 1988

Dale Carnegie Course Graduate, 1992

PROFESSIONAL REGISTRATION
Michigan, Colorado, Tennessee

CLARB Certified Landscape Architect
(Council of Landscape Architectural Registration Boards), 2009

LEED Accredited Professional (speciality AC & B), 2009

INVOLVEMENTS
American Society of Landscape Architects

American Sports Builder Association

Steppingstone School for Gifted Education
Board of Trustees, Current President

Adjunct Professor, Integrated Design Studio
Lawrence Technological University, Fall 1999

Wetlands Restoration Enhancement and Construction, Community Education Outreach Program, 1993

Teaching Assistant, Landscape Architecture
Michigan State University, 1987 – 1988

RELEVANT PROJECT EXPERIENCE
Downtown Parking and Urban Redevelopment
Howell, Michigan

Riverfront Plaza
Lansing, Michigan

Town Square
Northville, Michigan

Big Beaver / 1-75 Gateway Project
Troy, Michigan

ROLE on Civic Center Project
Project Landscape Architect

"Dedication and persistence are rewarded when we give something of value to our communities, on projects large or small."

Richard Houdek plays a key role in the firm as his twenty-five years of experience covers a vast array of projects and project types.

Richard's involvement has led to national and local award winning projects, such as the Michigan ASLA Merit Award for the AAA Michigan Headquarters project, the National ASLA Merit Award for a contemplative garden for a private school, the 2010 American Sports Builders Association Distinguished Tennis Facility Award for Catholic Central High School, Novi, Michigan and most recently, the 2010 Michigan ASLA Honor Award for the DTE Energy Company Corporate Headquarters improvement project. This range of work is reflected in the variety of projects he manages, from commercial developments to multi-family housing, schools, parks and athletic facility projects.

Well-versed in different project types, his day-to-day schedule involves overseeing the coordination of construction documents for bid, as well as his hands on involvement in construction administration and follow-up. He also brings in-depth knowledge and experience in athletic field construction, where he has been involved in various athletic field projects ranging from a singular athletic field to entire athletic campuses, from high schools to college campuses and a minor league baseball field.

Richard has also volunteered his time and talent to the community, such as Habitat for Humanity in Detroit and he is an active member of the Board of Trustees for Steppingstone School for Gifted Education.

GRISSIM
METZ ASSOCIATES
ANDRIESE

Justin Klenk

Civil Engineers · Land Surveyors · Land Planners

NF ENGINEERS

TITLE
Engineer II

PROJECT ROLE
Engineer Technician

EDUCATION
Bachelor of Science
Michigan Technological University, 2012
Civil Engineering

LICENSES
MDOT Office Technician

MDEQ Storm Water Operator

ACI/MCA Concrete Field Testing Technician – Level 1

PASER Pavement Rating Training

Mr. Justin Klenk began his career at NFE in 2012, and currently serves as an Engineer II, assisting the engineering design staff on a variety of public improvement and private land development projects. His role includes mapping projects with AutoCAD Civil 3D software and working as a field inspector on construction sites when needed.

PROJECT EXPERIENCE

AutoCAD Operator/Engineer – Municipal

- DTMB, Capitol Complex Master Plan and Implementation, Lansing, Michigan
- DTMB, Pine Street Parking Area Design, Replacement and Construction, Lansing, Michigan
- DTMB, Wilderness State Park Master Plan and Implementation, Carp Lake Township, Michigan
- DTMB/DNR, Highland Recreation Area Regional Trail Design, Highland, Michigan
- DTMB/DNR, Water System Upgrades and Improvements for Highland Recreation Area (White Lake, Michigan), Proud Lake Recreation Area (Commerce Township, Michigan) and Pontiac Lake Recreation Area (White Lake Township, Michigan)

AutoCAD Operator/Engineer – Private Land Development

- Ford Motor Company, Pavement Evaluation for 25 Manufacturing Facilities in Michigan, Ohio, Kentucky, Missouri, Illinois, New York, and Ontario
- General Motors, PEP Car Facility Parking Reconstruction, Warren, Michigan
- Community Living Services, Parking Reconstruction, Wayne, Michigan

AutoCAD Operator/Engineer – University

- Central Michigan University, Housing Facility (Certified LEED Platinum), Mt. Pleasant, Michigan

CAREY J. SUHAN, PE

TITLE: Vice President, Geotechnical and Environmental Services

EDUCATION:

BS, Civil Engineering
University of Michigan, 1985

MS, Civil Engineering (Geotechnical/Environmental Concentration) Wayne State University, 1995

PROFESSIONAL DEVELOPMENT:

FRA Contractors On Track Safety Training, 2009
MDEQ RBCA Training Course, 1995

Hazardous Waste Supervisors OSHA Course, 1987
Environmental Site Assessment Seminar, PSI, 1987
8-Hour Hazardous Waste Supervisor Certification Training (OSHA) 1987

Deep Foundations Institute Annual Conference, 1991
40-Hour Hazardous Waste Training Certification (OSHA)
8-Hour Hazardous Waste Training Refresher, Annually
Fundamentals of Deep Foundation Design, University of Missouri Rolla, 1989

LICENSES/REGISTRATION: Licensed Professional Engineer, State of Michigan, 1990

EXPERIENCE:

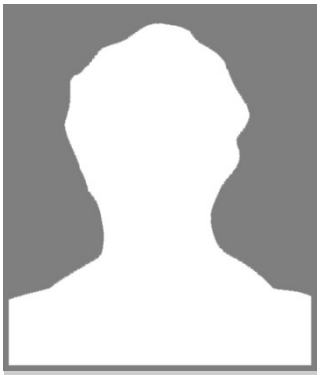
Twenty-six (26) years experience in geotechnical engineering, pavement evaluation, construction materials testing and environmental site assessment investigations and supervision of engineering and technical staff. Responsibilities include development of geotechnical exploration programs; field and advanced laboratory testing of soils and construction materials, preparation of pavement, foundation and construction recommendations. Supervises drilling crews performing geotechnical and environmental sampling, piezometer, and ground water monitoring well installation. Extensive experience with Michigan municipalities and civil design firms on pavement reconstruction, resurfacing, widening and re-routing of roads, parking lots, pedestrian paths and boardwalks. *Mr. Suhan was Project Principal on the following projects:*

- Performed soil borings and provided geotechnical engineering for pedestrian path at Highland State Park. Additional borings were performed to relocate path and construct a boardwalk over the wetlands.
- TEC provided geotechnical engineering services for the Clinton River Pedestrian Bridge. Included in the scope was a geotechnical investigation and foundation recommendations for a 650-foot long, eight-span pedestrian bridge over US-24. TEC provided foundations recommendations for four options to remedy the situation of a large are of peat soil that was identified beneath one of the highest portions of the proposed embankment.
- TEC provided geotechnical engineering and foundation design for a new pedestrian and bike path along the south shore of the Clinton River. This project consisted of constructing a 10-foot wide asphalt pathway, boardwalk and a cantilevered wood overlook platform. Recommendations were provided to accommodate the challenges of the significant grade change, existing fill and underground obstructions (due to former demolished buildings on that site).
- TEC was retained to provide a geotechnical investigation for a pedestrian path along the steeply sloped Clinton River from Van Dyke Avenue to Riverland Drive. The pedestrian path consists a boardwalks constructed of wood and asphalt and concrete pavement pathways. A geotechnical investigation was performed and TEC provided engineering recommendations for deep foundations due to the unsuitable soil conditions near the surface including H-piles, Timber Piles and Helical Piers.
- TEC has provided services to MDOT under an as needed services geotechnical services contract for Metro Region. Projects have included pedestrian paths; interchange improvements, detention ponds, and culvert replacements.

Mark A. Owens, PS

Civil Engineers · Land Surveyors · Land Planners

NF ENGINEERS



TITLE
Survey Crew Chief

PROJECT ROLE
Party Chief

EDUCATION
Bachelor of Science
Michigan Technological University, 2009
Land Surveying

Associates Degree
Macomb Community College, 2002
Land Surveying

Associates Degree
Lake Superior State University, 1987
Building Construction Management

LICENSES
Professional Surveyor, State of Michigan, 2009

Residential Builders & Alternation Contractor License, State of Michigan, 1990

Mr. Mark Owens began his career in 1989 at NFE, and has over 25 years of land surveying experience with most of those years serving as Survey Crew Chief. Over the course of his career, Mark has completed hundreds of public improvement and private land development projects, involving surveys for boundary/easement, topographic, road design, right-of-way, feature identification, drainage, public and private utilities, and floodplain. He has experience in performing surveys involving the U.S. Rectangular Survey System, private (French) claims, subdivision of standard sections, subdivision of fractional sections, and restoration of lost or obliterated corners.

Mark is knowledgeable in global positioning system (GPS), geodetic coordinate system, local space rectangular coordinate system, and Michigan State Plane Coordinate System. He understands all aspects of surveying, including angular, linear, area and volume measurement; bearings and azimuths; horizontal and vertical control and measurement; horizontal and vertical angles by repetition; specifications for vertical and horizontal accuracy; brenchmark loops; coordinates and map projections; least squares adjustments and analysis of networks; reconnaissance and monumentation; and witnessing control points.

PROJECT EXPERIENCE

Survey Crew Chief – Municipal Consulting Services
- City of Madison Heights, Client since 1977, Ongoing
- City of Huntington Woods, Client since 1980, Ongoing
- City of Royal Oak, Client since 2002, Ongoing
- City of Birmingham, Client since 1999, Ongoing

Survey Crew Chief – Municipal
- DTMB/DNR, Multiple Projects for Park Improvements, including trails, parking lots, water systems and master plans, Various locations in Michigan

Mark Wilson

Civil Engineers · Land Surveyors · Land Planners

NF ENGINEERS

TITLE
Engineer III

PROJECT ROLE
Project Inspector/
Density Control

EDUCATION
Master of Science
Lawrence Technological University, 1987
Construction/Civil Engineering

Associates Degree
Macomb Community College, 1983
Construction Management

CERTIFICATIONS
ACI/MCA Concrete Field Testing Technician – Level I

MDOT Certified Bituminous Technician

MDOT Certified Aggregate Technician

MDOT Certified Density Technician

MDEQ Storm Water Operator

Certified Nuclear Density

CONTINUING EDUCATION
Hydrology/Storm Design, University of Wisconsin

Detention Basin Design, ASCE/Michigan Chapter

Concrete Pipe Design, ASCE/Michigan Chapter

Pavement Design, APAM

Mr. Mark Wilson began his career at NFE in 2012, and currently serves as Senior Construction Observation Technician for both municipal improvement and private land development projects, along with providing civil engineering and AutoCAD assistance when needed. Mark has over 30 years of engineering and field experience in the construction industry. His experience includes preliminary design, construction plans, engineering estimates, specifications, contract and construction administration for water main, sanitary sewer and storm water design projects. Mark's experience also includes plan reviews for numerous communities, working directly with local, county and state agencies, including MDOT, during acquisition of permits, community block grants, tri-party funding and MDOT/federal funding.

Mark has a thorough knowledge and understanding of engineering standards, field operations, and project specifications and guidelines, such as Michigan Department of Transportation (MDOT) Construction manual, Standard Specifications for Construction, Standard Plans, Material Sampling Guide and other ASSHTO, MDOT and MMUTCD publications necessary for overseeing roadway and site construction engineering projects. Likewise, he is proficient in the use of Field Manager software, including processing electronic IDR's, pay estimates, material certification approvals, computations and other support functions necessary to meet project requirements.

PROJECT EXPERIENCE

Senior Construction Observation Technician – Municipal

- DTMB/DNR, Orchard Beach State Park Site Improvements, Manistee, Michigan, 2014
- Highland DDA, Milford Road/Livingston Road Streetscape Improvement, Highland Township, Michigan, 2014
- DTMB, Wilderness State Park Site Improvements, Carp Lake Township, Michigan, 2014
- DTMB/DNR, Holly State Recreation Area Site Paving/Parking Lot Improvements, Berlin Township, Michigan, 2013
- Charter Township of West Bloomfield, Civic Center Improvements, West Bloomfield Township, Michigan, 2013
- DTMB/DNR, Proud Lake Recreation Area Site Improvements, Commerce Township, Michigan, 2013

Section 7 – References

NF ENGINEERS

7. REFERENCES

The following list contains contact information of municipalities NFE has provide consulting services for. Any of our references would be happy to discuss NFE's qualifications, experience and ability to serve the City of Royal Oak with landscape architectural, engineering and construction services.

CITY OF ROYAL OAK

Matthew J. Callahan, PE,
City Engineer
211 Williams Street (P.O. Box 64)
Royal Oak, Michigan 48068
Phone: 248.246.3260
Email: mattc@ci-royal-oak.mi.us

CITY OF MADISON HEIGHTS

James T. Schafer, AICP – CDD,
Director
Ben Myers, *City Manager*
300 West Thirteen Mile Road
Madison Heights, Michigan 48071
Phone: 248.583.0831
Email: jimschafer@madison-heights.org
Email: benmyers@madison-heights.org

CITY OF BIRMINGHAM

Paul T. O'Meara, PE, *City Engineer*
151 Martin Street (P.O. Box 3001)
Birmingham, Michigan 48012
Phone: 248.530.1836
Email: pomeara@bhamgov.org

CITY OF PONTIAC

John Balint, *City Engineer*
47450 Woodward Avenue
Pontiac, Michigan 48342
Phone: 248.758.3030
Email: jbalint@pontiac.mi.us

CITY OF HUNTINGTON WOODS

Amy Sullivan, *City Manager*
26815 Scotia Road
Huntington Woods, Michigan 48070
Phone: 248.541.2632
Email: asullivan@hwmi.org

WEST BLOOMFIELD TOWNSHIP

Marshall Labadie, PE,
Development Services Director
4550 Walnut Lake Road
West Bloomfield, Michigan 48325
Phone: 248.451.4852
Email: mlabadie@wbtwp.com

Landscape Architects & Planners, Inc.
References

Mr. Mark Jenks
Director – Parks & Recreation
Delhi Charter Township
2074 Aurelius Road
Holt, MI 48842-6320
(517) 694-1549
Fax: (517) 694-1289
mark.jenks@delhitownship.com

Mr. Timothy M. McCaffrey
Director – Parks & Recreation
City of East Lansing
410 Abbot Road
East Lansing, MI 48823
(517) 337-1731
tmccaff@ci.east-lansing.mi.us

Mr. Greg Orner
Director
Dearborn Recreation and Parks Department
15801 Michigan Avenue
Dearborn, MI 48126
(313) 943-2350
gorner@ci.dearborn.mi.us

Mr. Mark Gasche
Director – Pittsfield Charter Township Parks and Recreation
(Former Director – City of Adrian's Parks and Recreation Department)
701 W. Ellsworth,
Ann Arbor, MI 48108
(734) 822-2120
gaschem@pittsfield-mi.gov

Mr. Murdock Jemerson
Former Director, Lansing Parks and Recreation
Rose Lake Field Office
8562 Stoll Road
East Lansing, MI 48823
(517) 641-4903
jemersonm1@michigan.gov

Mr. Richard Schaefer
Parks & Recreation
City of Lansing
200 North Foster Street, 2nd Floor
Lansing, MI 48912
(517) 483-4283
dschaefe@lansingmi.gov

MUNICIPAL REFERENCES

CITY OF BERKLEY DDA
3338 Coolidge Road
Berkley, Michigan 48072
Mr. Keith Logsdon, DDA Member
(248) 540-7603

CANTON TOWNSHIP
1150 Canton Center Road
Canton, Michigan 48188
Mr. Jeff Goulet, Township Planner
(734) 397-1000

CITY OF FARMINGTON
23600 Liberty Street
Farmington, Michigan 48335
Ms. Annette Knowles DDA Executive Director
(248) 473-7276

CITY OF GROSSE POINTE FARMS
90 Kerby Road
Grosse Pointe Farms, Michigan 48236
Mr. Shane Reeside, City Manager
(313) 885-6600

VILLAGE OF MILFORD
1100 Atlantic Street
Milford, Michigan 48381
Ms. Ann Barnette, DDA Executive Director
(248) 684-1515

CITY OF NORTHVILLE
215 West Main Street
Northville, Michigan 48167
Ms. Lori Ward, DDA Executive Director
(248) 349-0345

Section 8 – Fee Structure

NF ENGINEERS

8. FEE STRUCTURE

The NFE work plan provides for a comprehensive approach to effectively designing and administering this project. The attached fee structure is submitted for your consideration. If there are any questions or comments associated with this proposal, please do not hesitate to contact us at any time.

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

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 $ 239,138.20*

CENTRAL PARK $ 28,111.20*

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:

*See attached fee breakdown sheets.

City of Royal Oak - Normandy Oaks Fee Summary

Normandy Oaks - Base Contract

Task 01: Project Kick Off Meeting	$2,240.00
Task 02: Inventory of Existing Conditions	$7,280.00
Task 03: Preliminary Design	$12,106.00
Task 04: Public Consensus	$12,302.00
Task 05: Final Design - Master Plan	$9,304.00
Task 06: Construction Documents	$67,192.00
Task 07: Bidding Services	$9,244.00
Task 08: Construction Administration Services	$67,680.00
Task 09: Base Public Engagement	$6,294.00
Task 10: Reimbursable Expenses	$45,496.20

Total Fee - Base Scope $239,138.20

Normandy Oaks - Add Alternates

Additional Input Meeting	$3,954.00
User Opinion Survey	$3,762.00
Picture This	$4,504.00
On-Site Exhibit/Engagement	$4,560.00
Stakeholder Interviews	$3,280.00
Reimbursable Expense	$1,092.00

Total Fee - Alternate Scope $21,152.00

Landscape Architecture and Engineering Professional Services - Normandy Oaks Master Plan

City of Royal Oak

Estimated Hours for Services

Team Members	Huhta	Pardington	Sutton	Klenk	Ford	Hull	Wallace	Suhan	Task
Consultant Firm	NFE	NFE	NFE	NFE	LAP	LAP	LAP	TEC	Hours per
Titles	Project Mgr.	LA-Design	Project Engineer	Engineer II	Principal	Design	Tech	Principal	Cost per
Task 01: Project Kick Off Meeting									
Meeting #1: Conduct Kick Off Meeting	4	4	0	0	6	6	0	4	24
	$440.00	$320.00	$0.00	$0.00	$660.00	$480.00	$0.00	$340.00	$2,240.00
Task 02: Inventory of Existing Conditions									
Perform Site Visit/ Photograph & Map Existing Conditions	4	4	0	0	6	6	6	0	26
Topographic Survey / Field Verify & Develop Findings Report (topographic survey is reimbursable expense)	0	0	6	0	0	0	0	0	6
Meeting #2: Present Findings to Normandy Oaks Committee (NOC) and Interested Stakeholders	4	8	0	0	8	12	24	0	56
	$880.00	$960.00	$600.00	$0.00	$1,540.00	$1,440.00	$1,860.00	$0.00	$7,280.00
Task 03: Preliminary Design									
Prepare 2-3 Concept Plans (50% Schematic Design Level)	4	24	8	0	4	16	40	0	96
Prepare Preliminary Cost Opinions	2	4	4	0	1	12	4	0	27
Meeting #3: Present Concept Plans to NOC and revise plan for Meeting #4	4	4	0	0	6	6	4	4	28
	$1,100.00	$2,560.00	$1,200.00	$0.00	$1,210.00	$2,720.00	$2,976.00	$340.00	$12,106.00
Task 04: Public Consensus									
Refine Concept Plans into one (1) Preliminary Plan	4	16	12	0	8	28	40	0	108
Refine Preliminary Cost Opinions	0	2	6	0	1	8	2	0	19
Meeting #4: Present Preliminary Plan to NOC and revise plan if necessary for presentation Meeting #5	4	4	0	0	6	6	4	0	24
Conduct Geotechnical Investigation Work (Reimbursable Expense)	0	0	0	0	0	0	0	0	0
	$880.00	$1,760.00	$1,800.00	$0.00	$1,650.00	$3,360.00	$2,852.00	$0.00	$12,302.00
Task 05: Final Design - Master Plan									
Develop Final Master Plan	4	16	4	0	4	12	32	0	72
Prepare Construction Costs/ Project Budget	0	8	4	0	2	8	0	0	22
Meeting #5: Present Master Plan to City Council for Plan Approval	4	4	0	0	6	6	0	0	20
	$880.00	$2,240.00	$800.00	$0.00	$1,320.00	$2,080.00	$1,984.00	$0.00	$9,304.00
Task 06: Construction Documents									
Preparation of Construction Drawings (All Disciplines)	20	120	48	160	20	180	240	8	796
Preparation of Specifications and Final Cost Estimate	0	16	40	0	0	8	16	0	80
	$2,200.00	$10,880.00	$8,800.00	$11,520.00	$2,200.00	$15,040.00	$15,872.00	$680.00	$67,192.00
Task 07: Bidding Services									
Preparation of Bidding Documents (drawings, specifications and proposal documents)	0	8	48	0	0	6	2	0	64
Assistance/ Project Management with Bid Letting, Pre-Bid Meeting, Reference Checking and Award Recommendation	0	0	24	0	0	10	0	0	34
	$0.00	$640.00	$7,200.00	$0.00	$0.00	$1,280.00	$124.00	$0.00	$9,244.00
Task 08: Construction Administration Services									
Provide Construction/ Project Management (provide daily inspections; attend weekly construction meetings & attend as needed)	40	360	120	0	24	90	0	0	634
Reivew and approve payment requests to the City of Royal Oak and provide assistance with close out documents	8	24	60	40	0	12	0	0	144
	$5,280.00	$30,720.00	$18,000.00	$2,880.00	$2,640.00	$8,160.00	$0.00	$0.00	$67,680.00
Estimated Hours	106	626	384	200	102	432	414	16	
Hourly Rates	$110.00	$80.00	$100.00	$72.00	$110.00	$80.00	$62.00	$85.00	$187,348.00
Sub Total	$11,660.00	$50,080.00	$38,400.00	$14,400.00	$11,220.00	$34,560.00	$25,668.00	$1,360.00	*$187,348.00*

REIMBURSABLES - NFE		***REIMBURSABLES - LAP***		**TOTAL PROF. FEE**	**$187,348.00**
Printing/Copying/Delivery Charges	$ 1,250.00	Dr. Crum, Sports Field	$ 3,000.00		
Boundary & Topographic Survey	$ 7,500.00	Splash Pad Design	$ 12,500.00		
Geotechnical Investigation (TEC)	$ 5,800.00	Printing/Copying	$ 1,250.00		
Architectural Allowance (TDG)	$ 6,500.00	Travel/Parking	$ 677.00		
Mechanical/Electrical Allowance (BA)	$ 5,500.00				
Total	$ 26,550.00	Total	$ 17,427.00	**TOTAL REIMB. FEE**	**$43,977.00**

FEE BREAKDOWN BY CONSULTANT:	**Professional Fee**	**Reimbursable Expenses**	**Total Fee**
Nowak & Fraus Engineers (NFE)	$114,540.00	$26,550.00	$141,090.00
Landscape Architects & Planners (LAP)	$71,448.00	$17,427.00	$88,875.00
Testing Engineers & Consultatnts (TEC)	$1,360.00	$0.00	$1,360.00
Totals	$187,348.00	$43,977.00	$231,325.00

Landscape Architecture and Engineering Professional Services - Public Engagement Process

City of Royal Oak - Normandy Oaks

Estimated Hours for Services

Team Members	Huhta	Pardington	Sutton	Klenk	Ford	Hull	Wallace	Paul	Task
Consultant Firm	NFE	NFE	NFE	NFE	LAP	LAP	LAP	GMA	Hours per
Titles	Project Mgr.	LA-Design	Project Engineer	Engineer II	Principal	Design	Tech	Principal	Cost per
Project Kick Off Meeting									
Meeting #1: Conduct Kick Off Meeting	4	4	0	0	6	6	0	4	24
	$440.00	$320.00	$0.00	$0.00	$660.00	$480.00	$0.00	$440.00	$2,340.00
Public Concept Input Meeting									
Meeting Prep and Setup	0	0	0	0	2	4	8	0	14
Meeting	4	0	0	0	6	6	0	4	20
Meeting Recap	1	2	0	0	1	2	4	1	11
	$550.00	$160.00	$0.00	$0.00	$990.00	$960.00	$744.00	$550.00	$3,954.00
Estimated Hours	9	6	0	0	15	18	12	9	
Hourly Rates	$110.00	$80.00	$100.00	$72.00	$110.00	$80.00	$62.00	$110.00	$6,294.00
Sub Total	$990.00	$480.00	$0.00	$0.00	$1,650.00	$1,440.00	$744.00	$990.00	*$6,294.00*

REIMBURSABLES - NFE		***REIMBURSABLES - LAP***		**TOTAL PROF. FEE**	**$0.00**
Printing/Copying/Delivery Charges	$ 200.00	Printing/Copying	$ 1,000.00		
		Travel/Parking	$ 319.20		
Total	$ 200.00	Total	$ 1,319.20	**TOTAL REIMB. FEE**	**$1,519.20**

FEE BREAKDOWN BY CONSULTANT:	**Professional Fee**	**Reimbursable Expenses**	**Professional Fee**
Nowak & Fraus Engineers (NFE)	$1,470.00	$200.00	$1,670.00
Landscape Architects & Planners (LAP)	$3,834.00	$1,319.20	$5,153.20
Grissim Metz & Associates	$990.00	$0.00	$990.00
Totals	$6,294.00	$1,519.20	$7,813.20

Team Members	Huhta	Pardington	Sutton	Klenk	Ford	Hull	Wallace	Paul	Task
Consultant Firm	NFE	NFE	NFE	NFE	LAP	LAP	LAP	GMA	Hours per
Titles	Project Mgr.	LA-Design	Project Engineer	Engineer II	Principal	Design	Tech	Principal	Cost per
ADDITIONAL SERVICES									
Additional Input Meeting									
Meeting Prep and Setup	0	0	0	0	2	4	8	0	14
Meeting	4	0	0	0	6	6	0	4	20
Meeting Recap	1	2	0	0	1	2	4	1	11
	$550.00	$160.00	$0.00	$0.00	$990.00	$960.00	$744.00	$550.00	$3,954.00
User Opinion Survey									
Survey Design	2	0	0	0	8	8	8	0	26
Survey Administration	0	0	0	0	1	2	0	0	3
Survey Analysis	2	0	0	0	2	4	8	0	16
	$440.00	$0.00	$0.00	$0.00	$1,210.00	$1,120.00	$992.00	$0.00	$3,762.00
Picture This									
Setup	2	0	0	0	2	2	8	12	26
Collection	0	0	0	0	0	4	0	0	4
Review	1	0	0	0	1	4	0	0	6
Synthesis	4	0	0	0	2	4	4	0	14
	$770.00	$0.00	$0.00	$0.00	$550.00	$1,120.00	$744.00	$1,320.00	$4,504.00
On-Site Exhibit/Engagement (1)									
Prep and Setup	2	0	0	0	0	0	0	0	2
Field Day	4	8	0	0	8	8	0	4	32
Synthesis	2	4	0	0	2	4	0	2	14
	$880.00	$960.00	$0.00	$0.00	$1,100.00	$960.00	$0.00	$660.00	$4,560.00
Stakeholder Interviews (6)									
In-Person Interviews	0	0	0	0	24	8	0	0	32
	$0.00	$0.00	$0.00	$0.00	$2,640.00	$640.00	$0.00	$0.00	$3,280.00
Estimated Hours	24	14	0	0	59	60	40	23	
Hourly Rates	$110.00	$80.00	$100.00	$72.00	$110.00	$80.00	$62.00	$110.00	$20,060.00
Sub Total	$2,640.00	$1,120.00	$0.00	$0.00	$6,490.00	$4,800.00	$2,480.00	$2,530.00	*$20,060.00*

REIMBURSABLES - NFE		***REIMBURSABLES - LAP***		**TOTAL PROF. FEE**	**$0.00**
Printing/Copying/Delivery Charges	$ 200.00	Printing/Copying	$ 400.00		
		Travel/Parking	$ 492.00		
Total	$ 200.00	Total	$ 892.00	**TOTAL REIMB. FEE**	**$1,092.00**

FEE BREAKDOWN BY CONSULTANT:	**Professional Fee**	**Reimbursable Expenses**	**Professional Fee**
Nowak & Fraus Engineers (NFE)	$3,760.00	$200.00	$3,960.00
Landscape Architects & Planners (LAP)	$13,770.00	$892.00	$14,662.00
Grissim Metz & Associates	$2,530.00	$0.00	$2,530.00
Totals	$20,060.00	$1,092.00	$21,152.00

City of Royal Oak - Central Park Fee Summary

Central Park - Base Contract

Task 01: Project Kick Off Meeting	$2,340.00
Task 02: Inventory/Analysis	$4,536.00
Task 03: Modified Charrette (First Public Meeting)	$7,018.00
Task 04: Input Synthesis/Response	$4,010.00
Task 05: Charrette Report-Out 92nd Public Meeting)	$5,168.00
Task 06: Public Input Report	$3,520.00
Task 07: Reimbursable Expenses	$1,519.20

Total Fee - Base Scope $28,111.20

Central Park - Add Alternates

User Opinion Survey	$3,762.00
Picture This	$4,614.00
On-Site Exhibit/Engagement	$4,560.00
Stakeholder Interviews	$3,280.00
Reimbursable Expense	$1,092.00

Total Fee - Alternate Scope $17,308.00

Landscape Architecture and Engineering Professional Services - Public Engagement Process

City of Royal Oak - Central Park

Estimated Hours for Services

Team Members	Huhta	Pardington	Sutton	Klenk	Ford	Hull	Wallace	Paul	Task
Consultant Firm	NFE	NFE	NFE	NFE	LAP	LAP	LAP	GMA	Hours per
Titles	Project Mgr.	LA-Design	Project Engineer	Engineer II	Principal	Design	Tech	Principal	Cost per
Project Kick Off Meeting									
Meeting #1: Conduct Kick Off Meeting	4	4	0	0	6	6	0	4	24
	$440.00	$320.00	$0.00	$0.00	$660.00	$480.00	$0.00	$440.00	$2,340.00
Inventory/Analysis									
Field Investigations	0	0	8	6	6	6	0	4	30
Site Analysis Drawings	2	0	0	0	2	4	12	2	22
	$220.00	$0.00	$800.00	$432.00	$880.00	$800.00	$744.00	$660.00	$4,536.00
Modified Charrette (First Public Meeting)									
Precedent Imagery Development	2	4	0	0	2	4	12	4	28
Meeting Prep and Setup	0	4	0	0	2	4	8	0	18
Meeting	4	6	0	0	6	6	0	4	26
Meeting Recap	1	2	0	0	1	2	4	1	11
	$770.00	$1,280.00	$0.00	$0.00	$1,210.00	$1,280.00	$1,488.00	$990.00	$7,018.00
Input Synthesis/Response									
Program Outline	2	0	0	0	2	4	0	2	10
Schematic Diagrams	1	0	0	0	2	8	16	1	28
Precedent Imagery	0	0	0	0	1	2	4	4	11
	$330.00	$0.00	$0.00	$0.00	$550.00	$1,120.00	$1,240.00	$770.00	$4,010.00
Charrette Report-Out (2nd Public Meeting)									
Meeting Prep and Setup	2	0	0	0	4	8	12	2	28
Meeting	4	0	0	0	6	6	0	4	20
Meeting Synthesis	2	0	0	0	2	4	2	0	10
	$880.00	$0.00	$0.00	$0.00	$1,320.00	$1,440.00	$868.00	$660.00	$5,168.00
Public Input Report									
Report Development	2	0	0	0	8	12	20	2	44
	0	0	0	0	0	0	0	0	0
	$220.00	$0.00	$0.00	$0.00	$880.00	$960.00	$1,240.00	$220.00	$3,520.00
Estimated Hours	26	20	8	6	50	76	90	34	
Hourly Rates	$110.00	$80.00	$100.00	$72.00	$110.00	$80.00	$62.00	$110.00	$26,592.00
Sub Total	$2,860.00	$1,600.00	$800.00	$432.00	$5,500.00	$6,080.00	$5,580.00	$3,740.00	*$26,592.00*

REIMBURSABLES - NFE		***REIMBURSABLES - LAP***		**TOTAL PROF. FEE**	**$0.00**
Printing/Copying/Delivery Charges	$ 200.00	Printing/Copying	$ 1,000.00		
		Travel/Parking	$ 319.20		
Total	$ 200.00	Total	$ 1,319.20	**TOTAL REIMB. FEE**	**$1,519.20**

FEE BREAKDOWN BY CONSULTANT:	**Professional Fee**	**Reimbursable Expenses**	**Professional Fee**
Nowak & Fraus Engineers (NFE)	$5,692.00	$200.00	$5,892.00
Landscape Architects & Planners (LAP)	$17,160.00	$1,319.20	$18,479.20
Grissim Metz & Associates	$3,740.00	$0.00	$3,740.00
Totals	$26,592.00	$1,519.20	$28,111.20

Team Members	Huhta	Pardington	Sutton	Klenk	Ford	Hull	Wallace	Paul	Task
Consultant Firm	NFE	NFE	NFE	NFE	LAP	LAP	LAP	GMA	Hours per
Titles	Project Mgr.	LA-Design	Project Engineer	Engineer II	Principal	Design	Tech	Principal	Cost per
ADDITIONAL SERVICES									
User Opinion Survey									
Survey Design	2	0	0	0	8	8	8	0	26
Survey Administration	0	0	0	0	1	2	0	0	3
Survey Analysis	2	0	0	0	2	4	8	0	16
	$440.00	$0.00	$0.00	$0.00	$1,210.00	$1,120.00	$992.00	$0.00	$3,762.00
Picture This									
Setup	2	0	0	0	2	2	8	12	26
Collection	0	0	0	0	0	4	0	0	4
Review	2	0	0	0	1	4	0	0	7
Synthesis	4	0	0	0	2	4	4	0	14
	$880.00	$0.00	$0.00	$0.00	$550.00	$1,120.00	$744.00	$1,320.00	$4,614.00
On-Site Exhibit/Engagement (1)									
Prep and Setup	2	0	0	0	0	0	0	0	2
Field Day	4	8	0	0	8	8	0	4	32
Synthesis	2	4	0	0	2	4	0	2	14
	$880.00	$960.00	$0.00	$0.00	$1,100.00	$960.00	$0.00	$660.00	$4,560.00
Stakeholder Interviews (6)									
In-Person Interviews	0	0	0	0	24	8	0	0	32
	$0.00	$0.00	$0.00	$0.00	$2,640.00	$640.00	$0.00	$0.00	$3,280.00
Estimated Hours	20	12	0	0	50	48	28	18	
Hourly Rates	$110.00	$80.00	$100.00	$72.00	$110.00	$80.00	$62.00	$110.00	$16,216.00
Sub Total	$2,200.00	$960.00	$0.00	$0.00	$5,500.00	$3,840.00	$1,736.00	$1,980.00	*$16,216.00*

REIMBURSABLES - NFE		***REIMBURSABLES - LAP***		**TOTAL PROF. FEE**	**$0.00**
Printing/Copying/Delivery Charges	$ 200.00	Printing/Copying	$ 400.00		
		Travel/Parking	$ 492.00		
Total	$ 200.00	Total	$ 892.00	**TOTAL REIMB. FEE**	**$1,092.00**

FEE BREAKDOWN BY CONSULTANT:	**Professional Fee**	**Reimbursable Expenses**	**Professional Fee**
Nowak & Fraus Engineers (NFE)	$3,160.00	$200.00	$3,360.00
Landscape Architects & Planners (LAP)	$11,076.00	$892.00	$11,968.00
Grissim Metz & Associates	$1,980.00	$0.00	$1,980.00
Totals	$16,216.00	$1,092.00	$17,308.00

NOWAK & FRAUS ENGINEERS
46777 WOODWARD AVE.
PONTIAC, MI 48342-5032
TEL. (248) 332-7931
www.nowakfraus.com

CIVIL ENGINEERS - LAND SURVEYORS - LAND PLANNERS