

## Planning and Design Services for Inclusive Park and Playground in Abington Township

E&LP Contact: Edward Confair, PE, PLA, CPRP  
Senior Program Manager, Resiliency  
The Creative Arts Building, 219 Cuthbert Street, 5th Floor,  
Philadelphia, PA 19106  
215.330.4113 x311  
econfair@elp-inc.com

**Date: 6-21-2022**

## TECHNICAL PROPOSAL

Township of Abington  
County of Montgomery  
State of Pennsylvania





River Valley Waldorf School - Bridgeton, PA



Bayard Taylor Elementary School - Philadelphia, PA

# TABLE OF CONTENTS

CONTACT INFORMATION & COMPANY INFORMATION ..... 04

COVER LETTER ..... 06

PERSONNEL QUALIFICATIONS ..... 08

SPECIALIZED PLANNING AND  
DESIGN SERVICES COMPETENCE  
PROJECT UNDERSTANDING & APPROACH  
TECHNICAL SCOPE OF WORK ..... 42

CLIENT LIST  
REFERENCES ..... 60

DOCUMENTATION ..... 64





## CONTACT INFORMATION

### Key Contact Person

Edward Confair, PE, PLA, CPRP  
215.330.4113 x311  
econfair@elp-inc.com

### Name of Firm and Corporate Office Contact Information

Engineering & Land Planning Associates, Inc.  
140 West Main Street  
High Bridge, NJ 08829  
Phone: 908.238.0544  
Fax: 908.238.9572  
Email: info@elp-inc.com

### Business Organization

Engineering & Land Planning (E&LP) is a corporation established in New Jersey for the purposes of civil engineering, environmental engineering, and land planning. E&LP is a registered small business enterprise (SBE). E&LP is not a MBE/WBE organization.

The following are the names and business addresses of Principals at E&LP who have operational control, as well as an ownership of 10% or more in the firm:

Eric J. Raes: 140 West Main Street High Bridge, NJ 08829  
eric@elp-inc.com

Wayne J. Ingram: 140 West Main Street High Bridge, NJ 08829  
wingram@elp-inc.com

E&LP is a registered Small Business Enterprise (SBE) with the following additional offices:

Asbury Park: 62 Main Avenue, Ocean Grove, NJ 07756  
P: 609.454.3433

Netcong: 133 Ledgewood Avenue, Netcong, New Jersey 07857  
P: 908.238.0544

Philadelphia: The Creative Arts Building, 219 Cuthbert Street, 5th Floor, Philadelphia, PA 19106 P: 215.330.4113

E&LP was established in 2000 and provides services to public and private clients throughout the State of New Jersey and Pennsylvania. E&LP has been in business for 21 years.





## COMPANY INFORMATION

### **Staffing**

E&LP employs twelve (12) licensed engineers, three (3) LSRPs, two (2) Professional Land Surveyors, two (2) Landscape Architects, one (1) Professional Wetland Scientist, and four (4) Professional Planners in addition to 40 other engineering, surveying, and environmental staff members. E&LP & its subcontractors have appropriate federal & state licenses to perform all services as per the RFP.

### **Affirmative Action Compliance**

E&LP, the Respondent, has complied with all applicable affirmative action (or similar) requirements with respect to its business activities, together with evidence of such compliance. Our current Certificate of Employee Information Report has been attached.

### **COI**

Please see attached COI as proof that E&LP is insured. Should E&LP be awarded a contract, we will furnish a COI in the amounts indicated in the RFP and per written contract.

### **Number of Years Under Current Management**

E&LP's management has been in place since the company's founding in 2000, so the current management has served for 21 years.

### **Judgments, Claims or Suits; Bankruptcy or Reorganization Proceedings**

None.

### **Relatives**

E&LP principals have no known relatives who are employees or elected officials of Township of Abington.

### **E&LP Principals and NJ License Registration Numbers**

Eric J. Raes' Professional Engineer NJ Registration: 24GE03823300

Wayne J. Ingram's Professional Engineer NJ Registration: 24GB04258200

John Hansen's Professional Engineer NJ Registration: 24GE04194500



Proposal Number: 22207

June 21, 2022

**Richard J. Manfredi**  
Township Manager  
Abington Township  
1176 Old York Road  
Abington, PA 19001

RE: REQUEST FOR PROPOSALS  
(RFP): Planning and Design  
Services for Inclusive Park and  
Playground in Abington Township

Dear Mr. Manfredi:

Thank you for the opportunity to plan and design a new inclusive park and playground for Abington Township. It is with great enthusiasm that E&LP is submitting our response to your Request for Proposal. E&LP embraces innovative approaches to all our projects through the lens of leveraging the landscape and natural systems of the site. We apply this brand of design to all our projects where learning and play become integrated layers of the planning, design, and engineering process. To that end, we are delighted to be in consideration in realizing the potential of this playground and park space.

In order to meet the objectives of Abington Township, we have assembled a team of highly qualified consultants in the areas of landscape architecture, playground design and safety, risk management, civil engineering, and stormwater design. Our team has expertise in planning, design, and consultation for playground and recreation projects throughout Pennsylvania, New Jersey, and urban environments like Philadelphia. Our experience has led us to develop a unique complement of analytical, design, and communication skills that are crucial to the design of community-oriented public sites that will be instrumental to the success of this project.

- **E&LP** will be the overall team lead coordinating all subconsultants, serving as the point of contact for Abington and other stakeholders. We will be leading the landscape architectural and civil engineering scope of work including site plans, material plans, grading plans, planting plans, and utility plans. We have been the landscape architect and/or civil engineer of record for a variety of play projects including most recently an all-inclusive playground design for Pennypack Park and a new playground at Norris Square Park, both in Philadelphia.
- **Studio Ludo** is a 501(c)3 nonprofit founded in 2015 whose mission is building better play through research, design, and



## COVER LETTER

advocacy. Their team has more than 20 years of design experience and have developed playgrounds across the US. Additionally, their staff are trained as certified playground safety inspectors through the National Recreation and Park Association, and have assessed and consulted on safety and risk for upwards of 50 playgrounds and museums around the country. Known for innovative and cutting-edge research put into practice, Studio Ludo will be instrumental and foundational to all phases of the project scope.

Studio Ludo and E&LP have been frequent collaborators on playground and school projects throughout Pennsylvania and New Jersey. We have successfully worked together on playgrounds in Lansdowne, Philadelphia, Hoboken, and Manchester Township, Ocean County, as well as eleven (and counting!) projects for the School District of Philadelphia. We have collaborated from public engagement phases through concept design and construction.

Our team knows landscape-focused projects set in the public realm, and we have a proven track record of executing projects at all scales and typologies. As a team, we have a diverse range of expertise in order to creatively integrate playful spaces, existing elements, green and sustainable site design, and public space amenities into cohesive and unique projects that speak to the identity of each neighborhood we work with. The resulting design will be a community resource providing both appropriate and inspiring interventions for play, nature, and learning. Our team approach has at its core a philosophy of sustainable design and collaborative action embraced by learning. This has been especially important in our previous work and partnerships as outlined in this proposal. We look forward to embarking upon a similar collaboration with The Township of Abington.

Sincerely,  
Engineering & Land Planning Associates, Inc.

A handwritten signature in black ink, reading "Edward Confair". The signature is fluid and cursive, with the first name "Edward" being more prominent than the last name "Confair".

Edward Confair, PLA, PE, CPRP  
Senior Program Manager, Resiliency





# PERSONNEL QUALIFICATIONS







Rosedale Lake Playground in Mercer Meadows in Lawrence and Hopewell Townships, New Jersey



# ORGANIZATION CHART/STAFFING PLAN



## Township of Abington



### Project Lead

#### E&LP Associates

Landscape Architecture, Engineering, Project Management

**Edward Confair, PLA, PE, CPRP** - Partner in Charge

**Megan Schmidt** - Landscape Designer & Senior Project Engineer

**Chris Nusser, PE, PP** - QAQC Manager



### Topographic Survey

#### SAS Geospatial

Existing Conditions & Utility Location

**Shaheed Smith, PLS** - Principal

**David Archibald, PLS** - Survey Manager

### Play

#### Studio Ludo

**Meghan Talarowski, PLA, CPSI** - Principal

**Emily Galfond, MCP, CPSI** - Designer



## SELECT PROFESSIONAL EXPERIENCE

### Certifications and Registrations

#### Licensed Landscape Architect

NJ, PA No. 21AS00123600

#### Registered Professional Engineer

NJ No. 24GE05187900, PA No. 92932

#### Certified Park and Recreation Professional (CPRP)

Certification No. 103646681

#### CLARB Certified

Certification No. 40139

### Education

University of Pennsylvania, School of Design  
Masters in Landscape Architecture, 2011

Lehigh University, College of Eng. & Applied  
Science  
B.S. in Civil Engineering, 2006  
B.A. in Architecture, 2006

### Professional Affiliations

NJ Future Task Force

NJBA Green Infrastructure Task Force

Philadelphia Sustainable Business Network  
Partner

Philadelphia Green Stormwater Infrastructure  
Partner

### Employment History

#### **Engineering and Land Planning Associates, Inc.**

High Bridge, New Jersey, 2006-2007 &  
2014-Present  
Senior Program Manager, Resiliency

#### **University of Pennsylvania**

2016-2018, 2021  
Lecturer, Technical Stormwater and Site Design  
Course in the Graduate School of Design

#### **Pennypack Park Playground**

*Philadelphia, Pennsylvania*

E&LP worked with the Lindy Foundation and the School District of Philadelphia on low-impact development site improvements at Pennypacker School. Pennypack Park Playground will be a destination all-inclusive playground for all of Philadelphia. The playground will be thoughtfully designed to provide a safe, barrier-free place where children of all ages and abilities can play together. The design is inspired by the nearby Pennypack Creek with the idea of a sensory-rich play experience in mind.

#### **Norris Square Park**

*Philadelphia, Pennsylvania*

E&LP is working with the City and project team to integrate stormwater management features and green infrastructures into existing conditions with limited existing infrastructure and new programming such as a playground, stage, amphitheater, and a basketball court. E&LP is coordinating the stormwater design and review with the Philadelphia Water Department.

#### **McKinley Tot Lot Park**

*Lansdowne Borough, Delaware County, Pennsylvania*

E&LP is providing civil engineering services for permitting, design development, and construction documentation and administration as well as a lighting plan and a demonstration rain garden. The tot lot, which is a playground intended for children under the age of 5, is funded by grants from the Pennsylvania Department of Conservation and Natural Resources (DCNR) and a Delaware County Community Development Block Grant (CDBG) and will be built on a property that is now an asphalt paved municipal parking lot.

#### **Northwest Resiliency Park**

*Hoboken, New Jersey*

Mr. Confair is the lead engineer for the green stormwater infrastructure design for Hoboken's Northwest Resiliency Park. At 6 acres in size, it is the largest urban installation of green infrastructure in the state. The project will be mitigating difficult existing conditions including on-site contamination, high groundwater, and local flooding conditions. The park will plan for resiliency today as well as in the future due to continued climate change. The goal of the park is to store more than one million gallons of stormwater during rainfall events to relieve the City's taxed CSO system.

#### **Ocean County Park**

*Manchester Township, New Jersey*

Lead engineer for new 215-acre park in the Pinelands that utilizes green infrastructure techniques for habitat restoration and resiliency. The scope of the project includes design, regulatory permitting, bid support & negotiation services as well as construction phase support and services. The park's active and passive recreational amenities include sports fields, playgrounds, pavilions, comfort stations, and walking, exercise, and hiking trails.





## EDWARD D. CONFAIR, PLA, PE, CPRP

### SENIOR PROGRAM MANAGER, RESILIENCY

#### Professional Profile

Mr. Confair has managed urban, civic, residential and commercial projects from the initial research and design through construction. As a Landscape Architect, Mr. Confair has contributed to landscape and urban design processes through master plans, schematic designs, construction documents and administration, hand drawings, rendered plans, perspectives, sections and 3D modeling. Mr. Confair develops comprehensive plans across multiple platforms including AutoCAD, Rhino, Sketch Up and the Adobe Design Suite programs.

Mr. Confair assures that an integrated approach is taken on all of his projects so that seamless designs can be delivered to clients. His dual professional licenses make him uniquely qualified to design multi-layered and faceted solutions to projects.

#### Beagle Club

*Evesham Township, New Jersey*

E&LP was awarded the concept plan for a passive recreation park on the land of the Garden State Beagle Club. At 176 acres (including a small section in Mount Laurel Township), this Evesham Township property is the largest undeveloped area, so its preservation through a municipal bond and the New Jersey Green Acres Local Acquisition Program guarantees that the community will enjoy an expansive new park which will incorporate passive recreation opportunities and green infrastructure while providing access to natural ecosystems.

#### Rosedale Lake Playground

*Pennington, New Jersey*

Mr. Confair was the lead civil engineer for the Rosedale Lake Playground. The playground design augments MCPC's infrastructure at Rosedale Lake, a very popular park with picnic, hiking, kayaking, dog park, and family related attractions. E&LP also did a thorough analysis of existing conditions, soils, and drainage to work with existing park infrastructure and wet conditions adjacent to Rosedale Lake. The design recalls a woodland theme to create a sense of place at home in the natural context of the greater park. Play equipment was chosen for durability & to visually connect with natural elements such as boulders, trees, and native vegetation while still meeting all modern safety standards. E&LP was responsible for site engineering, stormwater management, geotechnical assessment, & construction oversight.

#### Bayard Taylor School

*Philadelphia, Pennsylvania*

E&LP was retained by the School District of Philadelphia to design a playground for the Bayard Taylor Elementary School Annex courtyard. E&LP designers worked directly with the Principal and vice principal to select a combination of play equipment for all ages and ability levels. Selected elements include a spiral slide, hopscotch climber, leg lift, monkey bars, glide slide, and geodesic playcube climber.

#### Finnegan Playground

*Philadelphia, Pennsylvania*

E&LP is the lead landscape architect & civil engineer of on the project coordinating all design submissions to the School District of Philadelphia (SDP), PWD, & permitting for the project.

#### Rose M. Lopez Elementary School

*Perth Amboy, New Jersey*

E&LP was engaged to complete construction documentation, construction administration, permitting, and site survey. By integrating stormwater structures into site elements, stormwater runoff was able to be reduced; detention basins were included under the playground, accepting runoff from roof drains and the site. The synthetic turf field incorporated a large detention basin into its substructure, further increasing storage capacity. Adding to the complexity of the design, the project site is contaminated, requiring a remediation plan. Working closely with the environmental engineers, E&LP developed a strategy to allow for stormwater storage within the constraints of a contaminated site.



## SELECT PROFESSIONAL EXPERIENCE

### Education

Lafayette College  
B.A. in Engineering Studies and Film and Media  
Studies, 2017

### Employment History

**Engineering & Land Planning Associates, Inc.**  
Philadelphia, Pennsylvania, 2017–Present  
Senior Project Engineer

### Norris Square Park *Philadelphia, Pennsylvania*

E&LP is working with the City and project team to integrate stormwater management features and green infrastructures into existing conditions with limited existing infrastructure and new programming such as a playground, stage, amphitheater, and a basketball court. E&LP is coordinating the stormwater design and review with the Philadelphia Water Department.

### McKinley Tot Lot Park *Lansdowne Borough, PA*

The Borough of Lansdowne is redeveloping a corner parking lot as a destination playground to service the local community. Operating within a tight grant funded budget, E&LP is working with the design team and the Borough to provide a fully accessible park with green infrastructure components, shade structures, and utility improvements. E&LP is addressing safety and ADA accessibility for the entire right-of-way surrounding the project site. This is a fast-tracked project that is progressing from design through construction in a short 6-month period. E&LP is coordinating permitting and utilities up front in the design process to limit regulatory review periods during the later phases and meet the Borough's timeline.

### Northwest Resiliency Park *Hoboken, New Jersey*

E&LP is the lead engineer for the green stormwater infrastructure design for Hoboken's Northwest Resiliency Park. At 6 acres in size, it is the largest urban installation of green infrastructure in the state. The project will be mitigating difficult existing conditions including on-site contamination, high groundwater, and local flooding conditions. The park will plan for resiliency today as well as in the future due to continued climate change. The goal of the park is to store more than one million gallons of stormwater during rainfall events to relieve the City's taxed CSO system.

### Ocean County Park *Manchester Township, New Jersey*

E&LP is the lead engineer for new 215-acre park in the Pinelands that utilizes green infrastructure techniques for habitat restoration and resiliency. The scope of the project includes design, regulatory permitting, bid support & negotiation services as well as construction phase support and services. The park's active and passive recreational amenities include sports fields, playgrounds, pavilions, comfort stations, and walking, exercise, and hiking trails.

### Beagle Club *Evesham Township, New Jersey*

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## MEGAN SCHMIDT

### LANDSCAPE DESIGNER & SENIOR PROJECT ENGINEER

#### Professional Profile

Ms. Schmidt is an E&LP Project Engineer with four years of experience working on a variety of private and public projects throughout New Jersey and Pennsylvania. She is a graduate of Lafayette College with a double major in Engineering Studies and Film and Media Studies. She is educated on the most up-to-date regulations with local and state codes, NJDEP and ADA requirements. Ms. Schmidt's responsibilities include drafting in AutoCAD Civil 3D, designing stormwater management systems and filming, designing, and creating marketing videos for E&LP. She brings a vast knowledge of engineering and creative concepts and solutions to E&LP.

and the New Jersey Green Acres Local Acquisition Program guarantees that the community will enjoy an expansive new park which will incorporate passive recreation opportunities and green infrastructure while providing access to natural ecosystems.

#### *Sgt. George Ashby Memorial Park Allentown, New Jersey*

E&LP was selected to lead a public engagement and visioning campaign for Sgt. George Ashby Memorial Park. The three-acre park is nestled in the heart of downtown Allentown Borough which is known for being the crossroads of the American Revolution due to the number of skirmishes fought in the area. The park is planned to play an important role in the Borough by honoring its many veterans and important site history, as well as serve as a central community park. E&LP worked with the Borough to develop two public engagement events to solicit community input and develop the park's program, which is now being constructed.

#### *Bayard Taylor Elementary Philadelphia, Pennsylvania*

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#### *Tanner G. Duckrey School Philadelphia, Pennsylvania*

E&LP is the lead landscape architect and civil engineer of record on the project coordinating all design submissions to the School District of Philadelphia (SDP), PWD, and permitting for the project.

#### *Finnegan Playground Philadelphia, Pennsylvania*

E&LP worked with Love Futbol for the design of a multi-purpose sports surface to be built on top of an existing concrete hockey rink. This design required the demolition of existing skate park equipment as well as repairs on the remaining rink walls and surfaces. A sport court tile was installed along with a fitness area and small seating area.

#### *Henry A. Brown Elementary School Philadelphia, Pennsylvania*

Henry A. Brown is the most recent collaboration between E&LP, the Lindy Foundation, and the School District of Philadelphia. The focus of this schoolyard was on pavement restoration and painted ground games due to the small nature of the outdoor space. E&LP developed pavement specifications and construction details for play features such as a running track, musical instruments, a half court basketball court, maze, and additional painted elements.



## SELECT PROFESSIONAL EXPERIENCE

### Certifications and Registrations

Registered Professional Engineer  
NJ, NY, DC

Registered Professional Planner  
NJ

OSHA 24 Hour Hazardous Waste Site Operations

### Education

Rutgers University, College of Engineering  
B.S. in Engineering, 2006

### Employment History

#### **Engineering & Land Planning Associates, Inc.**

High Bridge, New Jersey, February 2007–Present  
Senior Program Manager, Civil Engineering

#### Northwest Resiliency Park

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#### Mercer Park Northwest

*Lawrence & Hopewell Townships, Mercer County, New Jersey*

Prepared design drawings for the permitting and construction of the rehabilitation of 12 pipe culverts along the trail. DEP permits obtained for culvert crossing, wetlands, and stream buffer disturbance.

#### Musconetcong Watershed Association Mill

*Franklin Township, Hunterdon County, New Jersey*

E&LP was hired to engineer and aid in the preservation of the building and to provide additional space for their organization. The dilapidated structure was in severe disrepair and had a number of environmental and site constraints. Mr. Nusser obtained multiple NJDEP permits to permit the redevelopment and install a new parking lot and other site improvements. The tail race was reconstructed to provide access to the river and an adaptive reuse was found for the building.

#### Raritan Headwaters Association

*Bedminster Township, New Jersey*

Led the redesign efforts associated with the Raritan Headwaters Association's entry drive and site entry. The design included new path networks and circulation for both pedestrians and vehicles. The design incorporated existing specimen trees and new green infrastructure improvements such as a bioretention basin and bioswales. The entire layout integrates with existing site circulation, building usage, and programming to support on-site meadows and trails.



## CHRISTOPHER NUSSER, PE, PP

### SENIOR PROGRAM MANAGER, CIVIL ENGINEERING

#### Professional Profile

Christopher R. Nusser, PE, PP, is the senior program manager of Civil Engineering with Engineering & Land Planning Associates, Inc. (E&LP) with over fifteen (15) years of experience in civil site engineering and site planning. Mr. Nusser has extensive professional engineering experience in site plan engineering, including conceptual site planning, solar energy generation systems, traffic circulation design, sanitary sewer systems, stormwater management facilities, wetlands/flood hazard area delineation and permitting, septic system design, and local and state approvals.

Mr. Nusser has developed, designed, prepared, and provided expert testimony on all aspects of site development plans, including existing facility expansions, site modifications, and the new construction of various commercial, residential, and industrial facilities.

In addition to his site plan engineering experience, Mr. Nusser has specialized experience in assessing and mitigating hazardous soil gases. He has designed passive and active soil vapor extraction systems, vapor barriers and subsurface depressurization systems to eliminate the impact of the soil gasses on indoor air quality. Mr. Nusser has also prepared operations and maintenance manuals for sites to outline the inspection protocols, maintenance requirements and procedures for the repair/replacement of components.

#### Quarry Lawn and River Walk Park *Paterson, New Jersey*

E&LP is the prime design consultant for the Quarry Lawn and River Walk Project (QLRWP) team including Andropogon, Quinn Evans, and Hunter Research. QLRWP will enhance the Paterson Great Falls National Historical Park along the Passaic River. On the grounds of a Quarry and the Allied Textile Printing (ATP) site, this space is adjacent to Overlook Park, which provides scenic views of the Paterson Great Falls. QLRWP will be home to a new visitor center for the National Historical Park and its historically significant industrial buildings. In addition to the ruins that have been overtaken by vegetation, the sixty-foot tall quarry face itself remains as a striking remnant and artifact of the industrial heritage of the site. E&LP is working with the City of Paterson and the National Park Service to develop the Quarry Lawn into a public park that will honor, restore, and preserve aspects of the historic remnants on the property while making the site safe and accessible.

#### Lee's Marina *Mount Arlington, New Jersey*

The Morris County Park Commission (MCPC) has identified Lee's County Park Marina as a key site along Lake Hopatcong for the integration of green infrastructure systems to control Nonpoint Source (NPS) pollution and reduce water quality impairment. The proposed site improvements are an implementation of an approved Watershed Plan addressing impairments and Total Maximum Daily Load (TMDL) allocations. According to the NJDEP, NPS pollution is caused when contaminants deposited on the land surface are washed off and carried into nearby waterways or groundwater. The U.S. Environmental Protection Agency (USEPA) has identified NPS pollution as the nation's largest water quality problem due to its impairment of approximately 40% of surveyed rivers, lakes, and estuaries; stormwater runoff is a major contributing factor. E&LP is developing a full-site strategy for the marina that will control NPS pollution and restore the water quality of Lake Hopatcong by implementing pollution reduction strategies, specifically green stormwater infrastructure best management practices (BMPs). Proposed bioswales, bioretention basins, and pervious pavement will improve existing, localized surface water quality impairments, decrease the volume of runoff discharge from the adjacent roadway, and reduce the associated pollutant loads of phosphorus to the lake. The bioretention basins are strategically placed on-site to capture the most nutrient-rich stormwater runoff from the adjacent Howard Boulevard, reducing the TP load before the water reaches the surface of Lake Hopatcong. With these NPS pollution reduction strategies, it will be possible to restore, maintain, and enhance the water quality at Lake Hopatcong.

#### The Alexander Hamilton Center *Paterson, New Jersey*

The Alexander Hamilton Center will be a three-story 7,500 sf visitor center on the same site as a steam plant within the Paterson Great Falls National Historical Park and the Great Falls National Landmark District. Starting with Mary Ellen Kramer Park on the northeast side of the Passaic River, then to Overlook Park on the south side, then to Alexander Hamilton Visitors on the south side, and then the Quarry Lawn park on the southeastern side, E&LP has provided creative solutions on all of these projects to integrate historic and cultural elements, green and sustainable site design, and public space amenities.





## Meghan Talarowski, PLA, ASLA, CPSI Founder/Executive Director

Meghan is the founder and executive director of Studio Ludo. She has degrees in architecture and landscape architecture, over 20 years of experience in the design field, and is a certified playground safety inspector. Her research focuses on how the design of play environments impacts physical health and social behavior, and has been presented at conferences worldwide.

Her work has been featured by The New York Times, The Atlantic, NPR, Curbed, Next City, Landscape Architecture Magazine, and World Landscape Architecture Magazine.

### Education

2011-2013	Masters in Landscape Architecture University of Pennsylvania, Philadelphia, PA
1998-2003	Bachelors in Architecture Illinois Institute of Technology, Chicago, IL

### Registrations

2019-Present	Registered Landscape Architect PA# LA003356, NJ# AS001363, DC# LAR40000028
2015-Present	Certified Playground Safety Inspector CPSI #32886-1118

### Positions and Employment

2015-Present	Founder/Executive Director Studio Ludo, Philadelphia, PA
2014-2015	Research Development and Knowledge Manager OLIN, Philadelphia, PA
2013-2014	Author, <i>Transects: 100 Years of Landscape Architecture and Regional Planning at the School of Design of the University of Pennsylvania</i>
2008-2011	Project Associate The Trust for Public Land, San Francisco, CA
2006-2008	Landscape Designer GLS Landscape/Architecture, San Francisco, CA
2004-2006	Architectural Designer Gordon-Greineder, San Francisco, CA

### Publications

2020	<i>Play-and-Learn Spaces: Leveraging Library Spaces to Promote Caregiver and Child Interaction</i> Library & Information Science Research
2019	<i>Innovative Playgrounds: Use, Physical Activity and Implications for Health</i> Public Health Journal
2017	<i>Big Data Shows the Way to Healthier Playgrounds for All</i> Next City
2016	<i>Risky Business: The Dangers of Playgrounds That Are Too Safe</i> Context: The Journal of AIA Philadelphia



## Emily Galfond, MCP, CPSI Designer

Emily is motivated by the way the design of public space can affect the physical, social, and emotional well-being of all people. She has had architecture and planning roles in the public, private, and non-profit sectors, in the US and abroad. She also has vast experience in childcare, working or volunteering at schools and daycare centers.

Through her professional and educational experiences, Emily has worked on design projects at a multitude of scales, from district plans to art installations. Her focus on design through a planning lens helps her see site-specific projects in the context of large-scale neighborhoods and systems.

Emily's background in design, research, community engagement, and childcare gives her a unique approach to play space design. Working in the ADA office with the City of Pittsburgh also provided an in depth understanding of how to design spaces for people of all ages and abilities.

### Education

- |           |                                                                                                                    |
|-----------|--------------------------------------------------------------------------------------------------------------------|
| 2017-2019 | Masters in City and Regional Planning, Concentration: Urban Design<br>University of Pennsylvania, Philadelphia, PA |
| 2011-2016 | Bachelors of Art in Architecture, Urban Planning<br>University of Pittsburgh, Pittsburgh, PA                       |

### Registrations

- |              |                                                           |
|--------------|-----------------------------------------------------------|
| 2020-Present | Certified Playground Safety Inspector<br>CPSI# 49768-1123 |
|--------------|-----------------------------------------------------------|

### Positions and Employment

- |              |                                                                                                                  |
|--------------|------------------------------------------------------------------------------------------------------------------|
| 2019-Present | Designer<br>Studio Ludo, Philadelphia, PA                                                                        |
| 2019         | Planning and Urban Design Intern<br>Looney Ricks Kiss, Philadelphia, PA                                          |
| 2018-2019    | Urban Design Intern<br>Philadelphia City Planning Commission, Philadelphia, PA                                   |
| 2015-2017    | Open Space Design and ADA Architectural Intern<br>City of Pittsburgh Department of City Planning, Pittsburgh, PA |
| 2015         | Bike Share Intern<br>Smart City Solutions, Madrid, Spain                                                         |
| 2015         | Architectural Design Intern<br>Bioclimax Gestionando Arquitecturas, Madrid, Spain                                |

### Service and Leadership

- |           |                                                                                           |
|-----------|-------------------------------------------------------------------------------------------|
| 2018-2019 | Vice President of Communications<br>Penn Design Student Council, Philadelphia, PA         |
| 2018-2019 | Co-President, Founding Member<br>Penn Urban Design Student Organization, Philadelphia, PA |



**SHAHEED A. SMITH, PLS | PRINCIPAL**  
SMITH@SASGEOSPATIAL.COM | 215.343.5989

Shaheed brings over 25 years of experience in both field and office, of providing surveying services to private development and governmental clients.

Project experience includes large tract boundary projects, ALTA/ACSM Land Title Surveys, 3D Laser Scanning, commercial projects, bridge projects, route and topographic surveys for road and utility construction, survey control network, hydrographic surveys, acquisition surveys for public agencies, riparian and wetlands surveys and construction surveying services.

**INDUSTRY EXPERIENCE**  
25 YEARS

**EDUCATION**

B.A./Rutgers University/  
Journalism/2001  
NJIT/Surveying Engineering  
Technology

**PROFESSIONAL  
REGISTRATIONS/  
CERTIFICATIONS**

Registered Professional  
Land Surveyor:  
Pennsylvania SU 075289  
Delaware S6-0000780

FAA Remote Pilot Certificate

**PROFESSIONAL  
AFFILIATIONS/  
HONORS/AWARDS**

Pennsylvania Society of Land  
Surveyors Past President  
Pennsylvania Society of Land  
Surveyors/ Bucks Chapter/  
Past President  
PSLS Distinguished Service  
Award  
PSLS Surveyor of the Year  
Nominee  
PLS Foundation Chair  
Goldman Sachs 10,000  
Small Business Alumni

**SELECT PROJECT EXPERIENCE:**

BUCKS COUNTY ON-CALL SERVICES, VARIOUS LOCATIONS, PA

LOCK STREET WALL, MANAYUNK, PA

DELAWARE MEMORIAL BRIDGE, DELAWARE AND NEW JERSEY

PSEG - NEW JERSEY BRIDGES, VARIOUS LOCATIONS NEW JERSEY

PHILADELPHIA WATER DEPARTMENT GSI SURVEYING AND BASE  
MAPPING, VARIOUS LOCATIONS

PHILADELPHIA PARKING AUTHORITY, VARIOUS LOCATIONS,  
PHILADELPHIA, PA

WELLS FARGO CENTER/XFINITY LIVE, PHILADELPHIA, PA

COATESVILLE TRAIN STATION, COATESVILLE, PA

DELDOT ON-CALL SERVICES, MILTON, SUSSEX COUNTY, DE

INDEPENDENCE VISITORS CENTER, PHILADELPHIA, PA

PHILADELPHIA NAVAL SHIPYARD, PHILADELPHIA, PA





## DAVID W. ARCHIBALD, PLS REGIONAL SURVEY MANAGER

DARCHIBALD@SASGEOSPATIAL.COM | 814.933.9862

David brings more than 23 years of field and office experience in boundary, topographic, construction, control, highway, bridge, right-of-way, route and GPS Surveying, GIS and 3-D laser scanning.

He serves as a Regional Survey Manager based near State College, PA. His experience includes project management, survey calculations, field management, safety, crew leadership, CAD drafting, property research and equipment maintenance. He is certified as an Envision Sustainability Professional by the Institute for Sustainable Infrastructure.

Some of his favorite projects include surveying the bottom of the channel of the Allegheny River in its remarkably deep northern reaches for a PennDOT bridge replacement project, scanning and modeling sign frames at Lincoln Financial Field in Philadelphia so custom signs could be created, surveying a stream channel near State College so the channel could be protected from erosion, and teaching a PennDOT Construction Surveying class for PennDOT employees and consultants.

### INDUSTRY EXPERIENCE 23 YEARS

#### EDUCATION

Civil Engineering;  
Bucknell University  
Historic Preservation and  
Planning; University of  
Washington

#### PROFESSIONAL REGISTRATIONS/ CERTIFICATIONS

Registered Professional Land  
Surveyor: Pennsylvania SU  
075211

Envision Sustainability  
Professional, ISI

#### PROFESSIONAL AFFILIATIONS/ HONORS/AWARDS

Pennsylvania Society of Land  
Surveyors, Board of  
Directors

#### SELECT EXPERIENCE

PSEG - New Jersey Bridges, Various Locations New Jersey  
Philadelphia Water Department GSI Surveying and Base Mapping,  
Various Locations  
The Pennsylvania State University - University Park Campus  
Pedestrian Crossing Study, University Park, PA  
Pennsylvania Department of Transportation – Construction  
Surveying Course, Various Locations, PA  
Delaware Memorial Bridge, Delaware and New Jersey  
NiSource Columbia Gas – SR 26 Crossing, State College, PA  
Rittenhouse Real Estate Ventures, LLC – Subdivision Plan, Harris  
Twp., Centre County, PA



## FIRM PROFILE

Engineering & Land Planning Associates, Inc. (E&LP) is a multidisciplinary design firm providing professional consulting services in civil engineering, landscape architecture, surveying, environmental, geotechnical, planning, natural resources, renewable energy, and project/construction management fields. We specialize in park and recreational building and amenity design.

Founded in 2000 by our President, Eric Raes, the company has grown organically attracting cross-disciplinary staff members well-versed in a wide array of disciplines over these two decades. The company's broad range of expertises allows for a flexible and nuanced approach to a variety of site design contexts and constraints. Encompassing all scales of work from master plans over a hundred acres to single parcel developments, E&LP's work reflects its diverse staff and the company's core values and mission to create inspiring places in the built environment. Eric Raes, Wayne Ingram, and John Hansen are the principals at E&LP.

E&LP employs two Landscape Architects, 12 Licensed Engineers, three LSRPs, two Professional Land Surveyors, one Professional Wetland Scientist, and four Professional Planners in addition to 40 other engineering, surveying, environmental staff, and administrative staff.

## GREEN INFRASTRUCTURE

At E&LP, we define Green Infrastructure as sustainable and resilient stormwater Best Management Practices (BMPs) that use or mimic the natural hydrologic cycle. Our integrated team of engineers, landscape architects, and planners deploy these BMPs strategically on the projects we work on to capture, filter, infiltrate, and reuse stormwater. Simultaneously, we look for opportunities to combine these systems with public programs and amenities like sports fields, trail systems, play areas, dog parks, and streetscapes. This multiplicity of use that we weave into our design work allows us to maximize the value that our projects offer to the clients we work with. We are able to deliver infrastructure improvements while simultaneously improving public spaces for the communities they serve.

## MISSION STATEMENT

TO CREATE SOLUTIONS THAT  
INSPIRE THROUGH THE  
INNOVATION OF THE NATURAL  
AND BUILT ENVIRONMENT.

## CORE VALUES

### ● EXCEPTIONAL DESIGN INNOVATION

E&LP collaborates across all of our disciplines to deliver creative and efficient solutions that embrace sustainable design principles.

### ● COMPREHENSIVE CLIENT SERVICES

E&LP, through proactive communication and coordination, understands the full breadth and depth of our Clients' needs so as to deliver comprehensive design solutions that are responsive to their unique projects and goals.

### ● MAINTAIN HIGHEST STANDARDS OF PROFESSIONAL EXPERTISE

E&LP fosters a culture of growth, learning, and pushing boundaries across disciplines. We embrace cross-disciplinary design and professional service integration. E&LP's atmosphere of professional growth is embodied by our leadership, the majority of whom possess dual licensure across Civil Engineering, Environmental, Landscape Architecture, Planning, and Surveying.



ludo, from the latin “ludere”  
translation “I play”



### Firm Summary

Studio Ludo is a 501(c)3 non-profit founded in 2015 whose mission is building better play through research, design, and advocacy. Our team has almost 20 years of design experience and is certified in playground safety and risk benefit assessments.

Our work is focused in three areas:

Our research investigates how the design of play environments impacts physical health and social behavior. To date, we have collected data on over 50,000 people in almost 100 play spaces around the world.

Our advocacy is tied to our belief that everyone deserves a great place to play. We work closely with communities to support their unique play culture, through events, play memory workshops, and lively hands on art projects.

Our design focuses on creating immersive playful experiences unique to the needs of the community. Our play spaces offer opportunities for risk and adventure, full of imagination, movement, discovery, social connection, as well as deep connections to nature. Our designs are a reflection of what we learn from our research and advocacy projects.

We believe that everyone deserves the opportunity to play; that play can happen anywhere; and that behind every good design decision should be even better science.

### Awards

2020 | Groundbreakers, Curbed

2019 | Honor Award, PA Chapter, American Institute of Architects, Playspaces w/ DIGSAU

2016 | Winner, International Play Space design competition, Waterloo Playground w/ Roofmeadow

2016 | Winner, Kaboom Play Everywhere Challenge, Play Parklet w/ Roofmeadow

2015 | Finalist, Knight Cities Challenge, Hygge Project, The Glass Schoolhouse

### Certifications/Licensure

Certified Playground Safety Inspectors:

Meghan Talarowski, CPSI #32886-1118

Emily Galfond, CPSI # 49768-1123

Krithika Mohan, CPSI # 49767-1123

Registered Landscape Architect:

Meghan Talarowski PA# LA003356, NJ# AS001363,  
DC# LAR40000028

### Featured Work

*The Elements That Make A Perfect Playground*  
Popular Science

*The Architect Making Playgrounds Reflect How Children Actually Play*  
Curbed

*Why Safe Playgrounds Aren't Great For Kids*  
Vox

*Never Too Old to Play: Rethinking American Playgrounds*  
TEDx Philadelphia

*State of Play*  
American Way, American Airlines Inflight Magazine

*Bricks, Two by Fours and Sharp Edges: Should Playgrounds Be Riskier for Kids?*  
Here and Now, NPR

*Making Playgrounds a Little More Dangerous*  
*In Britain's Playgrounds, Bringing in Risk to Build Resilience*  
The New York Times

*Waterloo Rebosante*  
World Landscape Architecture Magazine

*Play It Up*  
*Providing Play In A Pandemic*  
Landscape Architecture Magazine

### Clients/Partners

Aegis

Center City District

City of Hoboken

City of Omaha

City of Philadelphia

DIGSAU

E&LP

Fairmount Park Conservancy

Free Library of Philadelphia

Gyroscope

Interface Studio Architects

Metcalfe Architecture

Moorestown Friends School

MTWB Foundation

NYC Parks

OJB Landscape Architecture

OLIN

Roofmeadow

Sidewalk Labs

State College Area School District

Studio Bryan Hanes

The Big Sandbox

TEND

WRT

## FIRM PROFILE



Shaheed A. Smith Geospatial, LLC (SAS) is a full-service Land Surveying and Geospatial firm that provides professional services for private and public sectors throughout the greater Philadelphia, State College and New Jersey regions and beyond.

SAS offers professional services in the fields of Land Surveying, Drone Imagery, 3D Laser Scanning and Subsurface Utility Locating services to our clients with state of the art utility designating services designed to establish as-built site conditions, greatly enhancing project safety and minimizing expensive project delays and change orders.

SAS is committed to the collection and delivery of accurate data. This gives our clients the benefit of a one stop solution for all their comprehensive surveying and mapping needs. In 2021 the firm ranked No. 54 on The Philadelphia100® which is run by The Entrepreneurs' Forum of Greater Philadelphia, and identifies and honors the 100 fastest growing, privately held entrepreneurial companies in the greater Philadelphia Region.

## OUR MISSION STATEMENT

**We are a full-service land surveying and geospatial company focused on providing the highest level of client-driven services to the Greater Philadelphia region and beyond.**





## PENNYPACK PARK PLAYGROUND



Pennypack Park Playground will be a destination all-inclusive playground for all of Philadelphia. The playground will be thoughtfully designed to provide a safe, barrier-free place where children of all ages and abilities can play together. The design is inspired by the nearby Pennypack Creek with the idea of a sensory-rich play experience in mind. Highlights of the design include a welcome plaza, misting station, 2-5 year-old play area, 5-12 year-old play area, picnic groves, music discovery path, a tree house, timber climbing structure and nature paths. All play elements are being orchestrated to achieve the six Cs of playful learning; collaboration, communication, content, critical thinking, creative innovation, and confidence.

DATE  
LOCATION  
CLIENT  
SERVICES

2019  
Philadelphia, PA  
The Lindy Foundation  
Landscape Architecture  
**Surveying by SAS Geospatial**  
Site Design  
Construction Documentation  
Construction Administration

IMAGE  
CREDIT

Marvel





## NORRIS SQUARE PARK



Philadelphia Parks & Recreation are partnering with local community groups around Norris Square to envision and develop improvements across the existing park. E&LP is working with the City and project team to integrate stormwater management features and green infrastructures into existing conditions with limited existing infrastructure and new programming such as a playground, stage, amphitheater, and a basketball court. E&LP is coordinating the stormwater design and review with the Philadelphia Water Department as well as the larger water management strategy for the site as the master vision plan is developed.

### Location

Philadelphia, PA

### Client

Marvel Architects

### Services

Civil Engineering

**Surveying by SAS Geospatial**

Permitting

### Image Credit

Marvel



## PROJECT FOCUS

The Borough of Lansdowne is redeveloping a corner parking lot as a destination playground to service the local community. Operating within a tight grant funded budget, E&LP is working with the design team and the Borough to provide a fully accessible park with green infrastructure components, shade structures, and utility improvements. E&LP is addressing safety and ADA accessibility for the entire right-of-way surrounding the project site. This is a fast-tracked project that is progressing from design through construction in a short sixth-month period. E&LP is coordinating permitting and utilities up front in the design process to limit regulatory review periods during the later phases and meet the Borough's timeline.

STATUS	In Progress
LOCATION	Lansdowne Borough, Delaware County, Pennsylvania
CLIENT	Studio Ludio
SERVICES	Civil Engineering Lighting Construction Administration

### Rendering & Imagery



Bird Houses



Log Scramble



Bird House Structure



Play Mounds



Stepper Path



# MCKINLEY TOT LOT PARK







## URBAN PLAY VALLEY

E&LP is the Prime consultant leading the Northwest Resiliency Park design team to develop the green infrastructure systems and park amenities that will be the signature of Hoboken's largest public park.

At 6 acres in size, the park is positioned to be the centerpiece of the surrounding community as well as provide significant flood relief and infrastructure improvements that will impact the City as a whole.

At the heart of the proposed park design is the "Play Valley." At 1 acre in size, the playground incorporates defined spaces for years 2-5, 5-12, and teenagers. Natural materials are used for all features including surfacing, climbing, sliding, and water play. It is a true all-ages design that is also 100% ADA accessible.

### STATUS LOCATION CLIENT SERVICES

- In Progress  
Hoboken, NJ  
City of Hoboken
- Project Management
  - Civil Engineering
  - Green Infrastructure Design
  - Surveying & Permitting
  - Geotechnical Engineering
  - Environmental Engineering

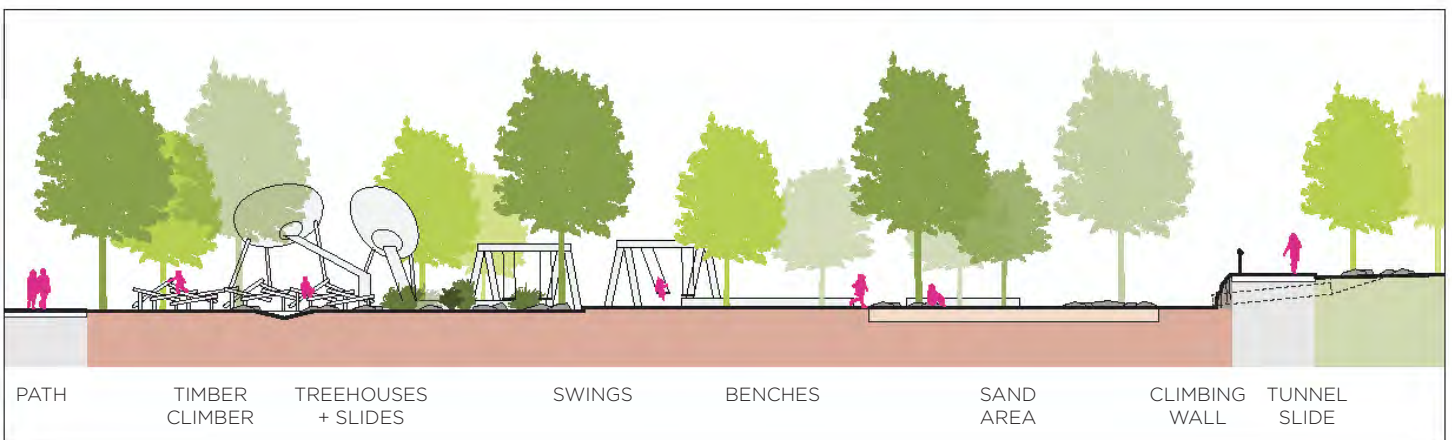


In 2016, the City of Hoboken acquired 6 acres in Northwest Hoboken to transform a former industrial site into the city's largest public park. The Park is a key feature of the City's comprehensive water management strategy for making Hoboken more resilient to flooding, storms, and sea level rise, and will store and manage over 1 million gallons.

The park will play an important role in the mitigation of flooding from frequent storm events and help to relieve the overtaxed combined sewer system. While the park works to manage stormwater, it will also provide a place for neighbors to meet, play, exercise, learn, and relax.

The design team includes E&LP, OLIN, NArchitects, TEND, and Studio Ludo, who helped lead the youth engagement process, supporting kids and their caregivers to imagine their best park. The play area was envisioned as a wild place that echoed the local ecology and character of the site, from the Palisades to the industrial history. It will include a massive stone climbing wall and swathes of plantings, woven through with a stream full of pumps, dams, and wiers, a mist wall, willow dens, large-scale timber climbers, and treehouses with giant slides, all designed for universal accessibility, for people of all ages.

# HOBOKEN RESILIENCY PARK



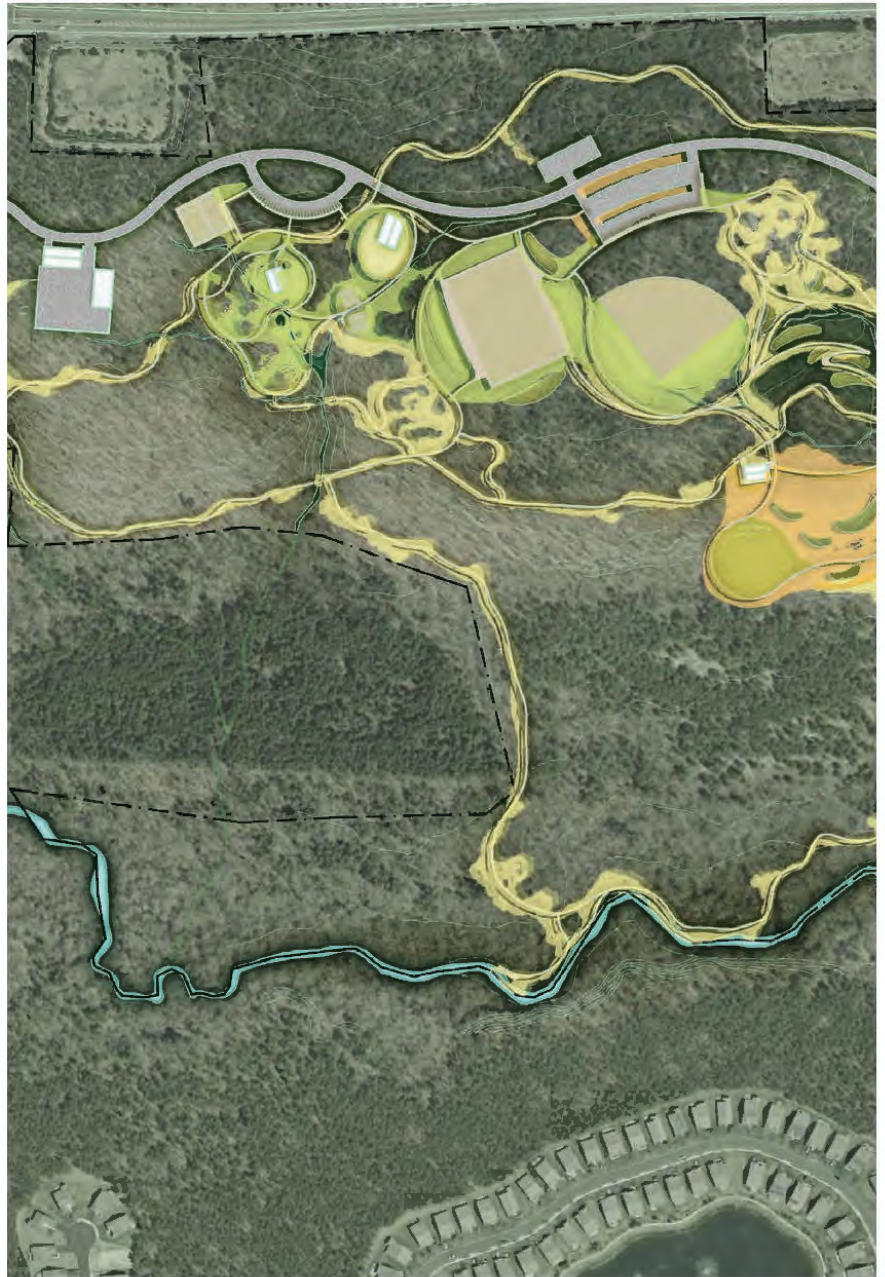




## PROJECT FOCUS

E&LP is the Prime consultant and design lead for a new 215-acre regional County Park in Manchester Township, Ocean County. Situated within the Pinelands National Reserve, our vision for the park is one that builds community hand-in-hand with biodiversity. The park will be a public space dedicated to recreational activities, community amenities, and ecological conservation. More specifically, our design team envisions athletic fields, pavilions, a water reuse system for a splash pad and irrigation, nature play, and miles of new trails and outdoor fitness equipment. E&LP is developing the park design from schematic through construction documentation phases, providing all regulatory permitting, on-site survey and geotechnical investigation, green stormwater infrastructure design, and bid and construction administration services.

LOCATION	Manchester Township, New Jersey
CLIENT	Ocean County Parks & Recreation
SERVICES	Topographic and Boundary Survey, Geotechnical, Civil Engineering, Stormwater Management, Roadway Design, Landscape Architecture, Playground Trail Design, NJDEP Permitting, Pinelands Permitting, Bid Administration, Construction Administration





## OCEAN COUNTY PARK



The client was very interested in a nature-based play space for people of all ages, as well as being fully accessible and supporting those with sensory issues and on the autism spectrum. E&LP worked with Studio Ludo and the rest of the project team to envision a space that had plenty of areas for caregivers to sit and perch and play, with good lines of sight to the variety of play features across the site.

A multi-generational swing is the first major play feature at the entry, with a series of berms that encourage up and over climbing behind it. The play space is split into features for under 5's and over 5's, with a series of ribbon climbers flowing through both spaces, as well as high movement features such as tall slides and spinners. Stormwater meadows are a key element of the site, featuring plenty of plants that support pollinators and local fauna, while also providing places to scramble and climb, with boulders and log elements that invite climbing, leaping, and balancing.



## PROJECT FOCUS

E&LP was awarded the concept plan for a passive recreation park on the land of the Garden State Beagle Club. At 176 acres (including a small section in Mount Laurel Township), this Evesham Township property is the largest undeveloped area, so its preservation through a municipal bond and the New Jersey Green Acres Local Acquisition Program guarantees that the community will enjoy an expansive new park which will incorporate passive recreation opportunities and green infrastructure while providing access to natural ecosystems.

The plan has taken into account a second round of online public survey data and multiple neighborhood focus group meetings to provide a synthesis of community feedback received to date. The plan provides an increase in woodlands and meadows on the site, key amenities such as walking/biking trails, a one-acre nature playground, pavilions, sculpture walk, small amphitheater, flexible lawn, stormwater gardens and pond, and areas for successional growth and interpretive signage.

LOCATION	Marlton, NJ
CLIENT	Evesham Township
SERVICES	Conceptual Design & Master Plan Community Engagement Landscape Architecture Cost Estimating





# BEAGLE CLUB







## PROJECT FOCUS

E&LP has designed, permitted, and overseen construction for trail improvements on behalf of multiple County park commissions including Mercer, Morris, and Ocean counties as well as in the City of Philadelphia. For Mercer County Park Commission we designed the Lawrence Hopewell, Twin Pines, Maidenhead, and Farm History Trails. For the Morris County Park Commission, we designed several miles of new trails at the Frelinghuysen Arboretum. Locally in Philadelphia, we designed an extension to the Schuylkill River Trail connecting the East Park Canoe House. These trails feature historic buildings, native meadows, environmentally sensitive wetlands, green infrastructure, custom boardwalks & footbridges, and trailhead parking, signage, seating, and additional amenities.

**STATUS** Completed

**SERVICES**

- Site/Trail Design
- Nature Trail Design
- Flood Hazard Area Permitting
- Wetland Permitting
- SCD Permitting
- Grading Plans
- Surveying
- Foundation Design
- Geotechnical Investigation
- Composting Restroom Facilities
- Site Furnishings
- Construction Stakeout
- Construction Administration
- Construction Documents
- Technical Specifications



Lawrence Hopewell Trail at Rosedale Lake



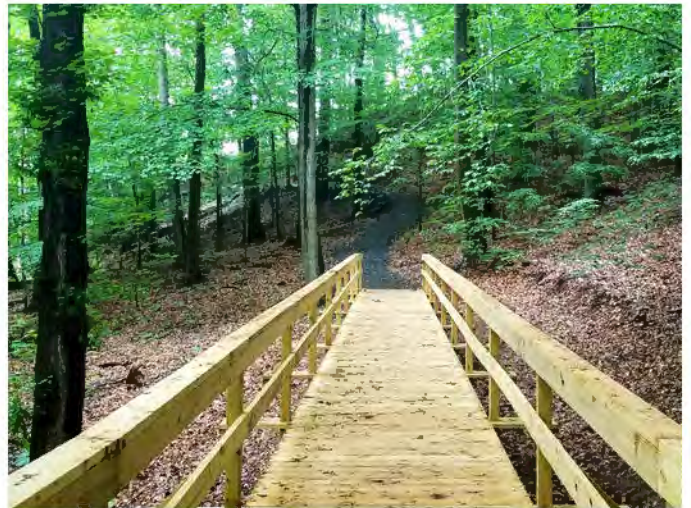
Schuylkill River Connector Trail at East Park Canoe House, Philadelphia, PA



## TRAIL PROJECTS



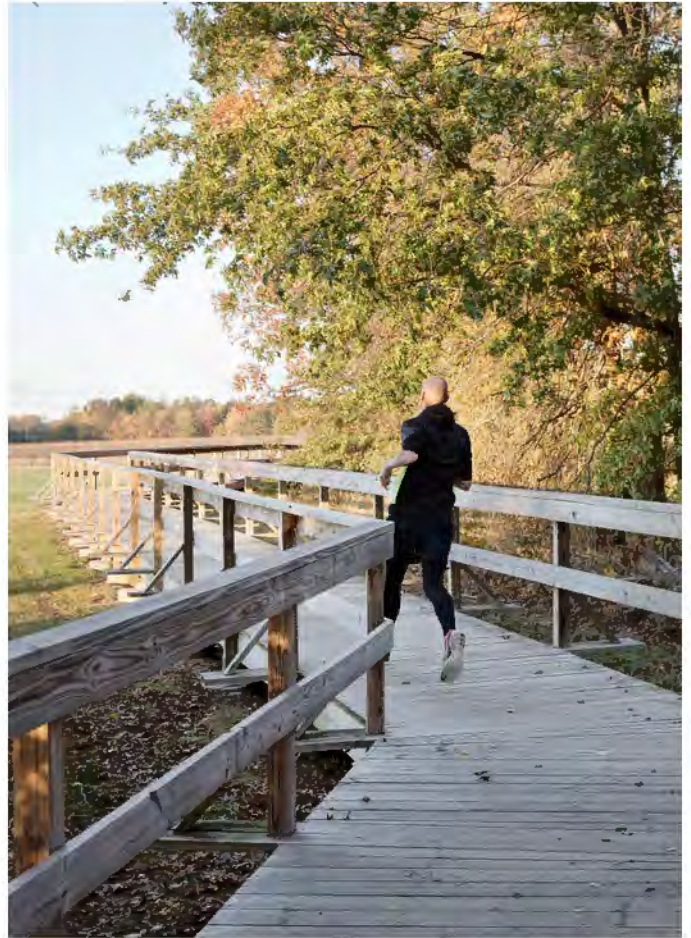
Farm History Trail at Mercer Meadows



Trail at Frelinghuysen Arboretum in Morris Township



Maidenhead Trail in Lawrence Township



Twin Pines Connector Trail in Hopewell Township







# COMMUNITY ENGAGEMENT

## CHARRETTES & MEETINGS

E&LP has run and participated in several public meetings and design charrettes in the early pre-design analysis and planning phases of projects. We have used meetings formats such as breakout groups, rotating stations each focused on a specific site issue, formal presentations with questions and answer periods, and working with scale model materials on site plans and aerial drawings with stakeholders. We have also captured this information through comments cards, dot voting, post-it notes, and transcribing comments received.



Dobson Elementary School Charrette



East Passyunk Community Center dot voting



Hoboken Northwest Resiliency Park public engagement station



Dobson Elementary comment post-its



Hoboken Northwest Resiliency Park breakout station





“Whoever wants to understand much must play much.”  
- Gottfried Benn



## Boedekker Park Playground The Trust for Public Land



Our director was the lead playground designer for this project while on staff at The Trust for Public Land. Boeddeker Park is 1 acre, the largest public open space in the Tenderloin, the densest and poorest neighborhood in San Francisco. The existing site was known as “Prison Park”, for its series of high fences, and gauntlet style entry.

The redesign was developed through an extensive community process. Local residents requested a full basketball court, rain gardens for stormwater management, large lawn, community gardening and adult fitness areas. They wanted the play area to be vibrant and active, but given the constraints of the other site programs, children of all ages needed to be accommodated in the same footprint.

Swings were a priority, as was active play. To allow for as much play as possible in a small space, we used numerous vertical elements, such as playable art elements that looked like grass, as well as large scale chimes. We created a bowl with surface ripples to provide a smaller scale space for children under 5. This proved to be one of the most popular elements in the play space, far more than the large net climber, as kids of all ages curled up in the surface or scrambled across the mounds.

Location:	San Francisco, CA
Client Contact:	Alejandra Chiesa Bay Area Program Director The Trust for Public Land 101 Montgomery St, Ste. 900, San Francisco, CA 94104 P: 415-495-4014 E: Alejandra.Chiesa@ tpl.org
Project Budget:	\$6.5 million
Scheduled Completion:	2013
Project Manager:	Meghan Talarowski
Project Team:	The Trust for Public Land





# SPECIALIZED PLANNING AND DESIGN SERVICES COMPETENCE







## PROJECT UNDERSTANDING

We understand Abington Township is looking to design, permit, and construct an inclusive playground approximately 2/3 acre in size at one of three potential park locations. We have read the RFP in detail and looking at our team's experience and qualifications, we hope it is evident of the level of deep understanding we have working on play-focused project sites. Our team can design, specify, and document everything desired to be incorporated on this project site. We have done it successfully on numerous playground and park sites, and we confidently state that we can do it here.

We understand the many benefits and goals achieved by an inclusive play and park design both physical and cognitive. Our team believes everyone deserves a great place to play. We work closely with communities to discover and support their unique play culture, through engagement events, play workshops, Play Is and Play Is Not exercises, and lively hands-on art projects. Our design approach focuses on creating immersive playful experiences unique to the needs of the community. We design all of our playgrounds to be universally accessible and inviting for all ages and abilities. Our play spaces offer opportunities for risk and adventure, as well as deep connections to nature. We weave natural features that inspire play alongside intrinsic elements that prompt imagination, movement, discovery, and social connection.



# PROJECT UNDERSTANDING & APPROACH

## TECHNICAL SCOPE OF WORK

Design of new public spaces that integrate existing conditions, new amenities, and social goals can be challenging without proper controls, review, and a proactive design process to coordinate design development, regulatory input, and Client review. We have designed and permitted play structures in many park settings and for different age groups such as Pennypack Playground and Norris Square Park in Philadelphia and McKinley Park in Lansdowne. We always aim to incorporate extensive green infrastructure systems in our playground designs as demonstrated by our Hoboken Northwest Resiliency Park and the new Ocean County Park in Manchester Township. These have all been collaborations between E&LP and Studio Ludo (The Design Team) and we know we can bring this synthesis of play, nature, learning, and sustainable site design to Abington.

Given our experience with the scope of work, we have a strong sense of the timing and level of effort necessary to meet the various review gates and permitting requirements. Our approach to the specific scope of work outlined in the RFP is as follows:



Studio Ludo Design Development for Ocean County Park in Manchester Township, New Jersey



## **TASK 1.0 Pre-Design Analysis**

The Design Team will begin the project with a site visit and kickoff meeting with the Township and all project stakeholders. The project schedule and communication protocols shall be reviewed in depth with all parties. Subsequently, the team will conduct pre-design analysis of three (3) project sites. This analysis will help us to better understand the unique character of the Abington community and evaluate operational capacity, existing community resources, environmental conditions, and demographics. The Team will conduct initial listening sessions and key stakeholder interviews with Township representatives to learn more about the project's goals and history. This task will inform our baseline understanding of the neighborhood's Social + Physical resiliency characteristics.

Site-specific research will include at least one site visit to document flora and fauna, surrounding utilities, site accessibility, drainage, natural resources, permitting constraints, connectivity, etc. Opportunities to establish wildlife habitat and enhance the ecological landscape of the Township will be explored at each site. Aboveground utility infrastructure will inform recommendations on how proposed site amenities can connect to existing infrastructure and the extent of improvements necessary to realize the final plan. ADA infrastructure within the surrounding rights-of-way and parking availability will be considered as important to the design of an inclusive and accessible park. Additional site research will be conducted using Geographic Information Systems (GIS) and other online mapping databases to determine site topography and drainage patterns. Additional document review including Township history, regional environmental guidance recommendations, Township ordinances, and applicable County and State regulations will supplement this research and will help to create a design appropriate and desirable for the selected location.

All site analysis will be presented to the Township with a recommendation on site suitability provided by the Design Team. Upon selection of the site to move forward with design studies, a topographic survey shall be prepared to capture existing conditions, grades, surface materials, drainage, lighting, trees, and utilities. The survey shall form the base for all design documentation.



# TECHNICAL SCOPE OF WORK

## Deliverables & Responsible Party

E&LP and Studio Ludo shall be responsible for:

- The development and issuance of a pre-design analysis report
- Topographic Survey of selected site prepared by a Professional Land Surveyor licensed in the State of New Jersey

## TASK 2.0

### Community Engagement

With the pre-design analysis complete, we will begin community engagement for the project. We anticipate up to three (3) rounds of engagement based on answers to questions included with the RFP. The first round of engagement will focus on needs and visioning, and the second on gathering insights on design alternatives for the preferred project site. We envision the third meeting as a share back meeting to present the final design plans and renderings to the public. We assume the Township will handle outreach to all local residents, advertisement of events through social media, and posting of surveys or announcements to the Township website.



Califon Island Park Playground - Califon, New Jersey





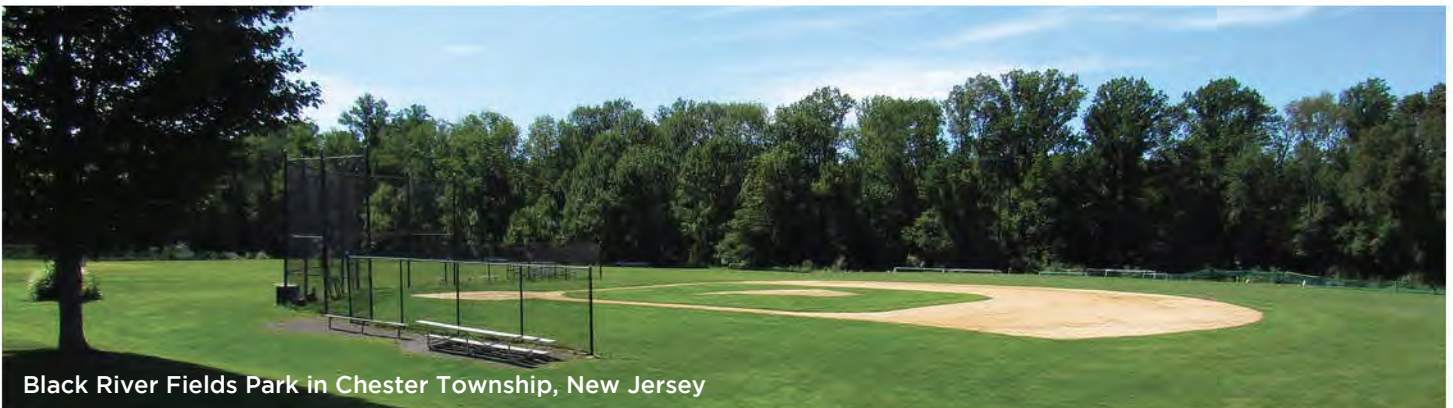
We will select and plan tactics that layer together, accommodate different circumstances, account for different levels of effort people can contribute, and provide value to those involved. For example, we would develop methods that can accommodate those who can access the internet and who cannot, those who have only a few minutes to people who want to spend more time, those who are visual learners vs. those who want to contribute in an auditory or written way, etc. Sample tactics include charrettes, pop-ups, tabling at neighborhood events, hosting community BBQs, attendance at local community meetings, social media, Zoom open houses, use of online surveys, and interactive facilitated discussions more. We develop opportunities within the engagement events for two-way information and insight sharing, presenting information in clear, accessible, interactive & creative ways for all ages and backgrounds.

We would plan for the first information gathering session to be scheduled near the completion of the pre-design analysis phase. The second meeting to present alternatives would occur at the end of the schematic design phase. The final meeting would be near the end of the design development phase before the project moves into final construction documents.

#### **Deliverables & Responsible Party**

E&LP and Studio Ludo shall be responsible for:

- The development of content and promotional material for up to three (3) community engagement meetings
- Agendas and meeting minutes



Black River Fields Park in Chester Township, New Jersey

# TECHNICAL SCOPE OF WORK

## TASK 3.0

### Schematic Design

Once a site is selected and the first community engagement meeting is complete, the Design Team will generate three (3) concepts for the play area with precedent images for pay equipment/features. The concepts will address layout, ADA compliance, connectivity to parking and sidewalks, utility connections, and stormwater management. Ideas for restroom locations, a dining area, and trail connections will be developed and included in the concepts in addition to the main play features. The concepts shall be presented to the Township and a community engagement meeting with one being selected for further development.

The selected design will be refined and reflect all feedback from the town and community input received to date. The final schematic design package will include the selected concept, refined into a measured annotated set of plans which address layout, materials, grading, drainage, equipment, planting, and ADA compliance. A cost estimate shall be prepared for the selected concept only. A 3D axonometric rendering of the design shall be provided as well.

#### Deliverables & Responsible Party

E&LP and Studio Ludo shall be responsible for:

- Three (3) concept design plans
- Schematic Design Drawing Package
- Schematic Design Cost Estimate
- Schedule updates, agendas, meeting minutes



Madison Garden and Learning Walk - Hoboken, New Jersey





## **TASK 4.0**

### **Design Development**

#### **(65% Complete Plans & Specifications)**

The DD package will provide an overview of functional, programmatic, and aesthetic elements of the plan. The submission will feature annotated plans, sections, elevations, and details depicting activity elements, play equipment, planting, and pavement. The proposed stormwater management system will be depicted in the plan with conceptual details and sections as required. The DD plan will provide a holistic description of the design, depicting areas for active and passive recreational uses, physical character, play environments, and relationships to street ROW and utilities.

Architecturally, the design will reflect a restroom facility and dining area. Based on the anticipated project budget (\$1 million), we are proposing that the restroom facility is a prefabricated structure and the dining area is uncovered, relying on placement of canopy trees to provide shade. Please see our cost narrative provided with our fee proposal for more detail on anticipated costs for the desired scope of this project.

At a minimum, the 65% plan set shall include a cover sheet, material plan, grading plan, drainage plan, utility plan, soil erosion and sediment control plan, planting plan, and associated construction details. Outline specifications shall be developed at this stage of design. Building off of the provided conceptual cost estimate, a basis of design landscape architecture and engineering narrative will be provided describing all site elements and systems. Additional layers of specificity beyond the provided concept design, such as materials and quantities, will be developed, and a DD cost estimate will be prepared. The cost estimate will include quantities, systems descriptions, and costs outlined in a categorical format.

Permitting requirements and timelines shall be identified in this stage and reviewed with the Township. All requirements inclusive of projected fees shall be included in a summary memo. The identified permit applications shall be completed and ready for submission. Please note that since the locations of the three (3) alternative project sites are not available at the time of this proposal, the need

## TECHNICAL SCOPE OF WORK

for possible PADEP or PennDOT permits is unknown at this time. As these permits can have substantial lead times and engineering design associated with them, they have been EXCLUDED from this proposal. If they are identified as a requirement of the chosen project site, a separate additional service proposal shall be issued by the Design Team to the Township.

The design team will present the DD plans to Township and all project stakeholders at scheduled bi-weekly meetings. A final community engagement meeting is anticipated as well to show the design before it moves to the construction documentation phase. Agendas will be prepared in advance and meeting minutes shall be kept and issued.

### **Deliverables & Responsible Party**

E&LP and Studio Ludo shall be responsible for:

- The development and issuance of 65% Drawings and Outline specifications.
- 65% Cost Estimate
- Schedule updates, agendas, meeting minutes, permitting requirements



Rose M. Lopez Elementary School Playground - Perth Amboy, New Jersey





## TASK 5.0

### Construction Documents

Building upon the approved design development phase (65%), the design team will prepare final construction documents (95%) including plans, details, schedules, specifications, and refined estimates of costs. Based upon regulatory approvals, the design team will develop comprehensive design details related to finishes, fixtures, furnishings, sourcing materials, etc. and complete civil and landscape drawings of the project. Specifications will be developed by all members of the design team. A final cost estimate will be prepared based on the refined scope of work, material selection, and updated quantities.

The CD drawings will include:

- Landscape Improvements Plans (Planting, Materials/Paving, Furnishings)
- Play Equipment and Surfacing Plans
- Ensure that all play surfaces and components meet requirements of applicable playground safety codes (e.g., ASTM, CPSC, Access Board)
- Surface green infrastructure and Subsurface Infiltration Structure Drawings
- Civil/Site Drawings: Grading, Drainage, Stormwater Management, Utility, SESC
- Associated construction details

Submission will be made to the Township at 50% and 95% CD completion for review and comment before final 100% CDs are issued to the client. Final design documents will be cost reconciled to the adopted project budget. Final design documents will consist of project plans, details and technical specifications, and schedules. The final plans, specifications, and schedule will be used to develop the final cost estimate.

The Design Team will assemble a bid document package consisting of the final 100% CDs and technical specifications (amended with any final comments), cost estimates, and schedules with milestones in digital and print formats. The documentation will assume that a prime contractor will perform the work under one contract in one phase. We will coordinate with Abington on the front end and

## TECHNICAL SCOPE OF WORK

supplemental conditions will be added to the final specification binder. We assume Abington will advertise the bid and that the Design Team will help manage the process.

A final presentation to the Township is planned in this phase. A plan and axonometric rendering shall be prepared by the design team for this meeting.

The design team will present the Final Design plans to Abington and all project stakeholders at scheduled bi-weekly meetings. Agendas will be prepared in advance and meeting minutes shall be kept and issued.

### **Deliverables & Responsible Party**

E&LP and Studio Ludo shall be responsible for:

- 95% Drawings and technical specifications
- 95% Cost Estimate
- 100% Bid Documents
- Montgomery County Conservation District E&S Permit
- Schedule updates, agendas, meeting minutes, permitting requirements, renderings, and electronic copies of all deliverables.



Sgt. George Ashby Memorial Park in Allentown Borough, New Jersey





## **TASK 6.0**

### **Bid Administration**

E&LP will assemble the bid documents and schedule a pre-bid meeting and site walk for contractors. E&LP and Studio Ludo will be present for the pre-bid meeting and site walk as well. The design team will review and respond to all pre-bid RFIs received and issue addenda during the bid period as required.

We will attend the bid opening, prepare a bid tabulation sheet, check references of bidders, and make a recommendation to award to Abington Township. As part of our review, we will identify contractor bids and provide an opinion of bidder qualifications, completeness of bid, and bidding accuracy in the context of the design team's bid drawings and specifications.

#### **Deliverables & Responsible Party**

E&LP and Studio Ludo shall be responsible for:

- Attend pre-bid site walk
- Provide Clarifications and Revisions via Addenda to the Bid
- Bid Tabulation
- Assist Abington in the acceptance or rejection of contractor bids.

## **TASK 7.0**

### **Construction Administration**

The design team will perform construction administration duties throughout the construction phase of the project. Prior to contract award, a conformed set of drawings capturing all addendums, bulletins, and other changes from the bid period shall be prepared and issued. At the start of the construction period, E&LP shall organize and attend a pre-construction meeting with the awarded contractor, Abington representatives, and other stakeholders to review the construction schedule, protocols, and other project requirements.

Throughout the course of construction, the design team shall review RFIs, informational and action submittals, shop drawings, cut sheets, material samples, laboratory testing, and other information submitted by the Contractor for conformance with the contract

## TECHNICAL SCOPE OF WORK

documents. Separate logs shall be maintained for change orders, submittals, and RFIs.

Based on the scope of the project, a construction duration of four (4) months with construction progress meetings held monthly has been assumed for substantial completion. The design team will perform inspections on a weekly basis throughout the assumed construction period. Based on the above, a total of sixteen (16) site visits are proposed. Site observation reports shall be provided for each visit.

As the project nears substantial completion, the design team shall develop a punchlist for the project detailing outstanding items to be completed. Studio Ludo shall perform a final playground safety audit for code compliance.

During the course of construction, E&LP shall also be responsible for reviewing and approving contractor payments, change orders, field changes, and other requests.

### **Deliverables & Responsible Party**

Design Team to review and respond to all change orders, RFIs, and submittals, agendas and minutes for each progress meeting, and site observation reports for each inspection.

### **Conclusion**

In conclusion, we have assembled our schedule, qualifications, precedent work, and references to illustrate the comprehensive nature of our experience and familiarity with inclusive play and park projects. We have successfully worked with a variety of partners including park commissions, municipalities, nonprofits, Friends of groups, and several school districts. We know that we have seen all of the various facets through which this type of project can be viewed and are equipped to be nimble, resourceful, and responsive in our design approach. We want to thank Abington Township again for the opportunity to submit a proposal for this project, and we hope we are able to work together to realize all of the potential of this play space.





“We don’t stop playing because we grow old; we grow old because we stop playing.” - George Bernard Shaw



# CONSTRUCTION BUDGET NARRATIVE


## Approach to Budget Controls


Our team understands, per the answers to questions issued with the RFP, that the total construction budget for the project is \$1,000,000 and the estimated project size is about 2/3 of an acre. E&LP and Studio Ludo have collaborated on over a dozen play-related projects, several of which are comparable to the scope of the Abington Inclusive Park and Playground project. Based on our experience, we wanted to be transparent about making the most of the Township's budget during this project. We have highlighted several precedent projects in this proposal and included the construction budgets for the play equipment and safety surfaces only as compared to the Abington project below. The per acre value of the recent playgrounds of comparable size we have worked on is substantially higher than the budget for this project.

	Size	Budget	Equivalent Cost Per Acre
Abington Playground	0.67 Acres	\$1,000,000	\$1,500,000
McKinley Park	0.17 Acres	\$500,000	\$2,950,000
Northwest Resiliency Park	0.40 Acres	\$1,000,000	\$2,500,000
Ocean County Park	0.37 Acres	\$1,900,000	\$5,135,000
Pennypack Park	0.90 Acres	\$2,500,000	\$2,777,000


The numbers in the table above also do not account for drainage improvements, parking, planting, and other site amenities that were part of each project. Given that there are non-play related pieces of the scope to this project such as a restroom, dining area, and potentially trails, we wanted to highlight for the Township how critical budget management and material selection will be. We intend to propose prefabricated restrooms which are durable and sustainable in terms of either composting toilets or rainwater reuse and use of existing and proposed trees to shade any dining areas as opposed to an overhead structure. We will also work with the Township to identify play equipment, assemblies, and vendors which maximize play value per individual element to keep costs down. We are confident we can work with the Township and community members to conceive of a wonderful park and play environment with the established budget.

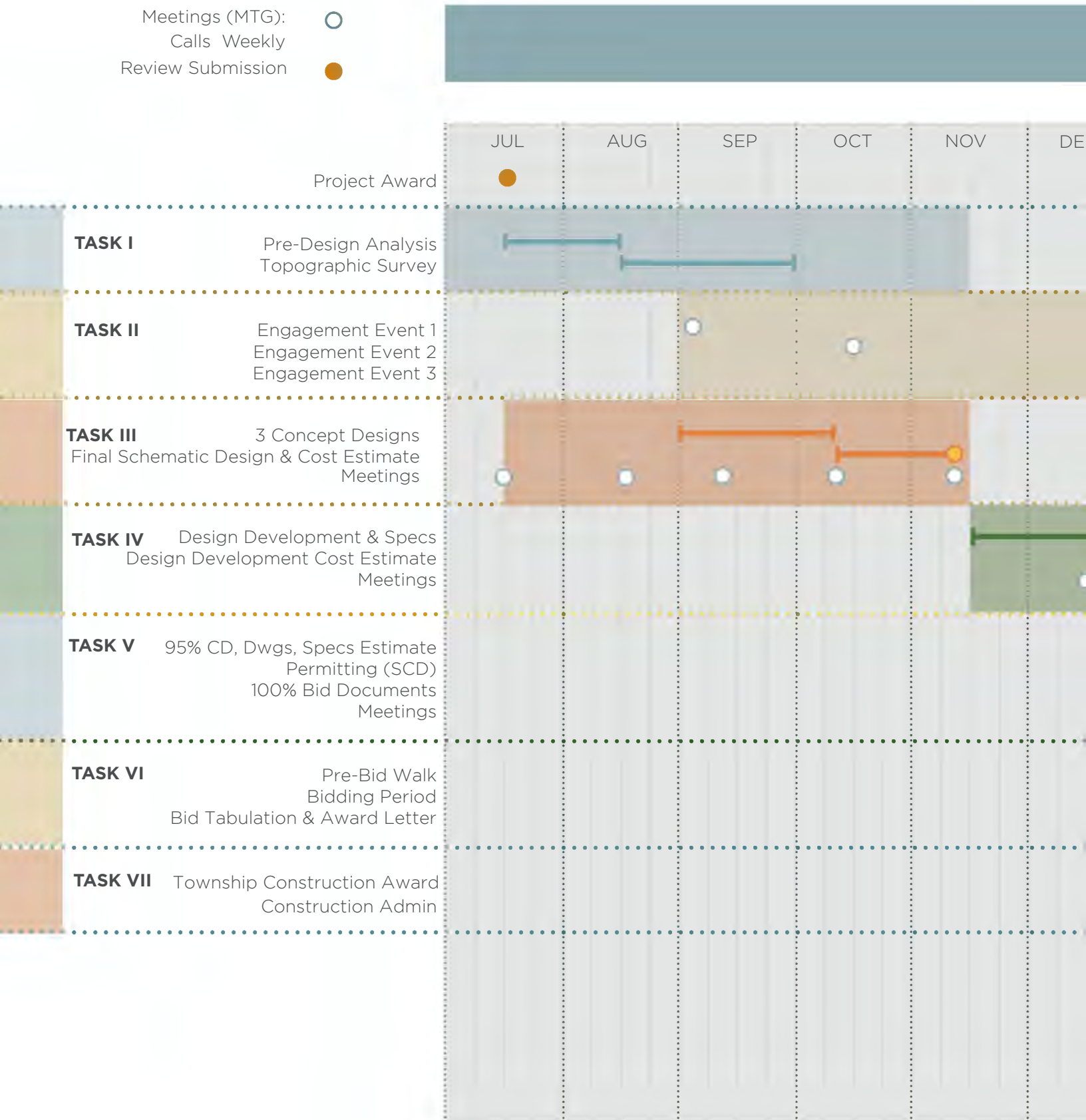


Task 

Meetings (MTG): 

Calls Weekly

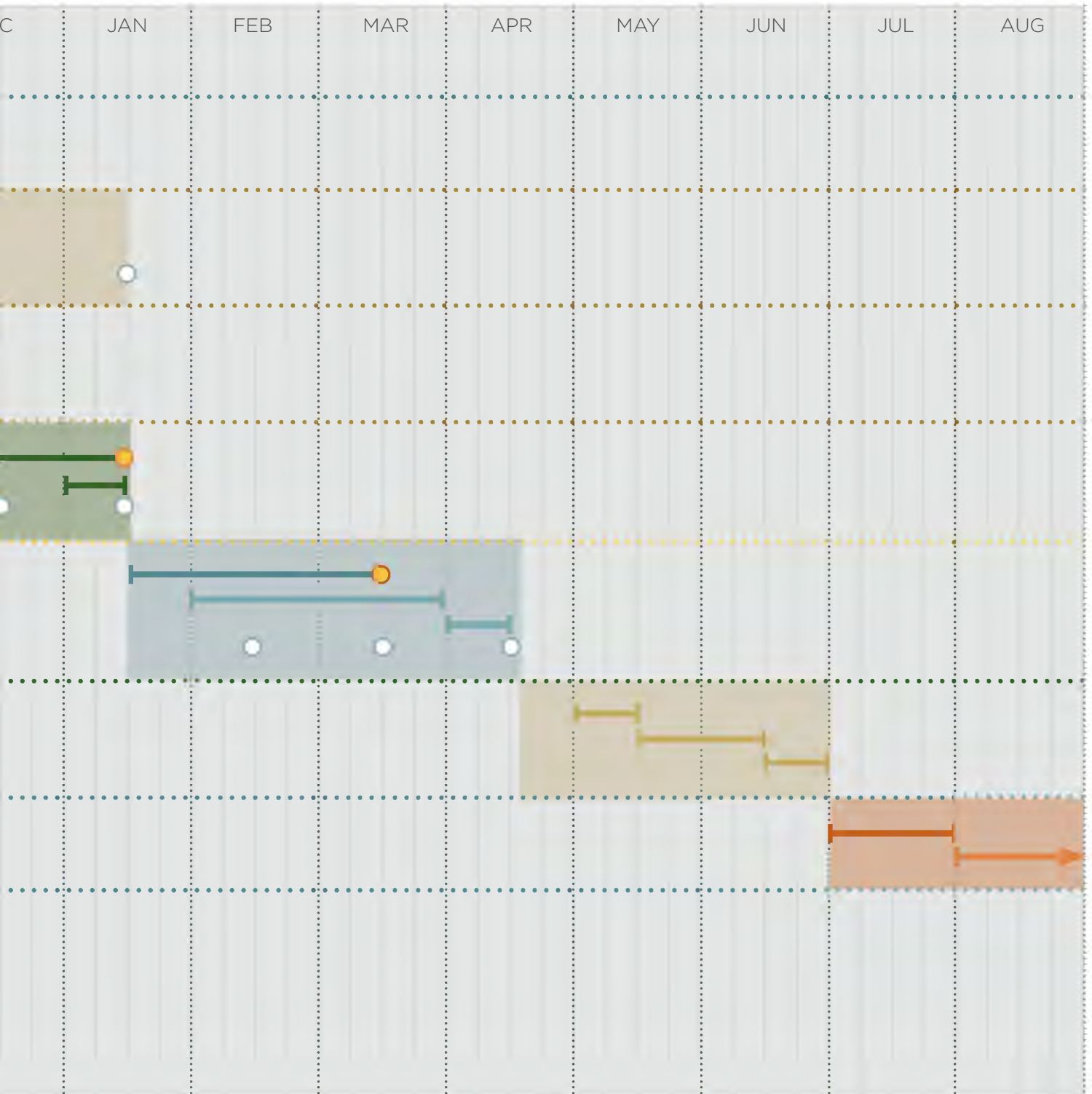
Review Submission 





# SCHEDULE

2023







# CLIENT LIST







## **E&LP & Studio Ludo References**

### **Company Name:**

### **Ocean County Park Commission**

Project Location: New Ocean County Park in Manchester Township, NJ  
Contact Person 1: Joseph A. Pirozek  
Phone Number of Contact: 732-506-9090 x5952  
Position: Chief of Land Acquisition & Design at County of Ocean  
Contact Person 2: Michael Mangum  
Position: Director  
Phone Number of Contact: 732-506-9090

### **Company Name:**

### **City of Hoboken**

Project Location: Northwest Resiliency Park  
Contact Person 1: Jennifer Gonzalez, AICP, PP, CFM  
Position: Director of Environmental Services  
Phone Number of Contact: 201-420-2000 x4000  
Contact Person 2: Caleb Stratton, AICP, PP, CFM  
Position: Assistant Business Administrator & Chief Resiliency Officer  
Phone Number of Contact: 201-420-2000 x8201

## **E&LP References**

### **Company Name:**

### **Evesham Township**

Project Location: Beagle Club  
Contact Person 1: Kevin Rijs, PP, AICP  
Position: Community Development Director  
Phone Number of Contact: 856-983-2900 x4439  
Contact Person 2: Councilwoman Patricia Hansen  
Position: Evesham Township Councilwoman  
Phone Number of Contact: 856-983-2900

### **Company Name:**

### **Marvel Architects**

Project Location: Pennypack Park Playground & Norris Square Park in Philadelphia, PA  
Contact Person 1: Yadiel Rivera-Diaz, ASLA, PLA  
Phone Number of Contact: 212-616-0420  
Position: Partner  
Contact Person 2: Tyler Silvestro, ASLA, PLA  
Position: Partner  
Phone Number of Contact: 212-616-0420

## REFERENCES

### Studio Ludo References

<b>Company Name:</b>	<b>Free Library of Philadelphia</b>
Project Location:	Philadelphia, PA
Contact Person:	Joel Nichols
Position:	Administrative Librarian, Strategic Initiatives
Email of Contact:	nicholsj@freelibrary.org

<b>Company Name:</b>	<b>Moorestown Friends</b>
Project Location:	Moorestown, NJ
Contact Person:	Julia de la Torre
Position:	Head of School
Email of Contact:	jdelatorre@mfriends.org

<b>Company Name:</b>	<b>National Children's Museum</b>
Project Location:	Washington, DC
Contact Person:	Langley Lease
Position:	Exhibits and Experience Manager
Email of Contact:	llease@nationalchildrensmuseum.org

E&LP has no clients that could cause a conflict of interest when performing the scope of work for the Township, if selected.





# DOCUMENTATION







E&LP

## Planning and Design Services for Inclusive Park and Playground in Abington Township

E&LP Contact: Edward Confair, PE, PLA, CPRP  
Senior Program Manager, Resiliency  
The Creative Arts Building, 219 Cuthbert Street, 5th Floor,  
Philadelphia, PA 19106  
215.330.4113 x311  
econfair@elp-inc.com

**Date: 6-21-2022**

## COST PROPOSAL

Township of Abington  
County of Montgomery  
State of Pennsylvania

# SUMMARY FEE PROPOSAL

## Abington Inclusive Park and Playground

	PROPOSED FEE
<b>1.0 PRE-DESIGN ANALYSIS</b>	<b>\$20,075.00</b>
Kickoff	
Three (3) Site Investigations & Assessments	
Topographic Survey	
<b>2.0 COMMUNITY ENGAGEMENT</b>	<b>\$19,765.00</b>
Three (3) Engagement Meetings/Events	
<b>3.0 SCHEMATIC DESIGN</b>	<b>\$22,060.00</b>
Three (3) Concept Designs	
Final Schematic Design dwgs & cost estimate	
Meetings	
<b>4.0 DEESIGN DEVELOPMENT</b>	<b>\$26,695.00</b>
DD Documentation	
Stormwater Management Design	
DD Cost Estimate	
Meetings	
<b>5.0 CONSTRUCTION DOCUMENTATION</b>	<b>\$27,495.00</b>
Construction Documentation	
CD Cost Estimate	
Conservation District Permitting	
Meetings	
<b>6.0 BID ADMINISTRATION</b>	<b>\$6,120.00</b>
Pre-Bid Meeting	
Bid RFIs	
Bid Tabulation and Recommendation of Award	
<b>7.0 CONSTRUCTION ADMINISTRATION</b>	<b>\$32,620.00</b>
RFIs, submittals, shop drawings, punchlist	
Monthly construction progress meetings	
Construction oversight - 16 field visits	
Final safety audit	
<b>ESTIMATED REIMBURSABLE EXPENSES</b>	<b>\$3,500.00</b>
Print Materials for Engagement Meetings/Events	
Travel Related	

**BASE FEE TOTAL      \$158,330.00**



Abington Inclusive Park & Playground					
E&LP ASSOCIATES Fee Proposal					
June 21, 2022					
Amounts below are hours x rate x multiplier + profit					
	Title	Senior Project Manager	Sr. Project Engineer	Staff Engineer	
	RATE	\$ 175.00	\$ 130.00	\$ 105.00	
A-Office Personnel					TOTAL
Task 1 - Pre-Design Analysis					
Kick-off meeting	Hours	4	4		8
	Amount	\$ 700.00	\$ 520.00	\$ -	\$ 1,220.00
Site Inspection for existing conditions assessment	Hours	8	8		16
	Amount	\$ 1,400.00	\$ 1,040.00	\$ -	\$ 2,440.00
Existing conditions assessment report and recommendations	Hours	2	8	8	18
	Amount	\$ 350.00	\$ 1,040.00	\$ 840.00	\$ 2,230.00
Pre-Design analysis research, mapping, narrative	Hours	1	4	8	13
	Amount	\$ 175.00	\$ 520.00	\$ 840.00	\$ 1,535.00
Task 2 - Community Engagement					
Three (3) Community Engagement Meetings	Hours	12	40	24	76
	Amount	\$ 2,100.00	\$ 5,200.00	\$ 2,520.00	\$ 9,820.00
Agendas, minutes, feedback and results tabulation	Hours	3	12	12	27
	Amount	\$ 525.00	\$ 1,560.00	\$ 1,260.00	\$ 3,345.00
Task 3 - Schematic Design					
Three (3) Conceptual Site Designs	Hours	4	24	8	36
	Amount	\$ 700.00	\$ 3,120.00	\$ 840.00	\$ 4,660.00
Schematic Design Package for selected concept	Hours	2	24	8	34
	Amount	\$ 350.00	\$ 3,120.00	\$ 840.00	\$ 4,310.00
Schematic Design Cost Estimate	Hours	2	4	16	22
	Amount	\$ 350.00	\$ 520.00	\$ 1,680.00	\$ 2,550.00
Meetings, agendas, minutes	Hours	4	8		12
	Amount	\$ 700.00	\$ 1,040.00	\$ -	\$ 1,740.00
Task 4 - Design Development					
Design development drawings and outline specifications	Hours	8	40	16	64
	Amount	\$ 1,400.00	\$ 5,200.00	\$ 1,680.00	\$ 8,280.00
Design development cost estimate	Hours	1	2	8	11
	Amount	\$ 175.00	\$ 260.00	\$ 840.00	\$ 1,275.00
Meetings, agendas, minutes	Hours	4	8		12
	Amount	\$ 700.00	\$ 1,040.00	\$ -	\$ 1,740.00
Task 5 - Construction Documents					
CDs - drawings, specifications, submissions at 50% and 95%	Hours	8	32	16	56
	Amount	\$ 1,400.00	\$ 4,160.00	\$ 1,680.00	\$ 7,240.00
CDs - final 100% documents	Hours	2	12		14
	Amount	\$ 350.00	\$ 1,560.00	\$ -	\$ 1,910.00
CD Cost Estimate	Hours	1	2	8	11
	Amount	\$ 175.00	\$ 260.00	\$ 840.00	\$ 1,275.00
Conservation District Permitting	Hours	2	4	12	18
	Amount	\$ 350.00	\$ 520.00	\$ 1,260.00	\$ 2,130.00
Meetings, agendas, minutes	Hours	4	8		12
	Amount	\$ 700.00	\$ 1,040.00	\$ -	\$ 1,740.00
Task 6 - Bid Administration					
Pre-bid meeting and site walk	Hours	4			4
	Amount	\$ 700.00	\$ -	\$ -	\$ 700.00
RFIs and Addendums	Hours	2	8		10
	Amount	\$ 350.00	\$ 1,040.00	\$ -	\$ 1,390.00
Tabulation & Award letter	Hours	2	8		10
	Amount	\$ 350.00	\$ 1,040.00	\$ -	\$ 1,390.00
Task 7 - Construction Administration					
Construction Administration - RFIs, Submittals, Shop Drawings, Punchlist	Hours	8	40	16	64
	Amount	\$ 1,400.00	\$ 5,200.00	\$ 1,680.00	\$ 8,280.00
Monthly construction progress meetings (6 assumed)	Hours	12			12
	Amount	\$ 2,100.00	\$ -	\$ -	\$ 2,100.00
Construction Observation - sixteen (16) field visits over four-month period	Hours	16	48		64
	Amount	\$ 2,800.00	\$ 6,240.00	\$ -	\$ 9,040.00
E&LP Subtotal Office Hours					624
E&LP Total Cost Direct Labor - Office A					\$ 82,340.00

Sub-consultant Fees	Cost
Studio Ludo (Play Consultant)	\$65,340
SAS Geospatial (Survey)	\$7,150

Estimated Reimbursables	
Travel Reimbursement	\$3,500
Printing for Engagement & Meetings	

**GRAND TOTAL \$ 158,330.00**



## Engineering & Land Planning Associates, Inc.

### 2022 Rate Schedule

<u>TITLE</u>	<u>HOURLY RATE</u>
<u>ENGINEERING / ENVIRONMENTAL</u>	
Principal	\$200.00
Division Manager/Associate	\$180.00
Licensed Site Remediation Professional	\$175.00
Senior Project Manager (P.E., P.G., etc.)	\$160.00
Landscape Architect (L.L.A.)	\$135.00
Project Manager	\$140.00
Senior Project Engineer/ Geologist / Scientist	\$125.00
Project Engineer/ Geologist / Scientist	\$115.00
Senior Staff Engineer/Geologist/Scientist	\$105.00
Staff Engineer/ Geologist / Scientist	\$95.00
Drafting / CADD Specialist	\$80.00
Clerical	\$70.00
<u>SURVEY</u>	
Senior Surveyor (P.L.S.)	\$ 160.00
Project Surveyor	\$ 105.00
Survey Crew	\$ 160.00



# CONTRACT PERSONNEL RATE SCHEDULE

## Studio Ludo Rate Schedule

### 2022 Staff Billing Rates

Executive Director	\$193.00/hr.
Senior Designer/Project Manager	\$138.00/hr.
Designer	\$105.00/hr.