



TOWNSHIP OF WEST ORANGE

25 LAKESIDE AVENUE, WEST ORANGE, N.J. 07052

DEPARTMENT OF ENGINEERING

SUSAN McCARTNEY

Mayor

Tel./Fax: (973) 325-4160

Email: Engineering@westorange.org

ZAYIBETH CARBALLO

Director/Municipal Engineer

October 29, 2024

Mayor and Township Council
Municipal Building
66 Main Street
West Orange, New Jersey 07052

RE: **AWARD OF PROFESSIONAL SERVICES CONTRACT,
PROFESSIONAL CIVIL ENGINEERING AND LAND
SURVEYING SERVICES FOR:
OSKAR SCHINDLER PERFORMING ARTS CENTER
(OSPAC) AND CRYSTAL LAKE IMPROVEMENTS**

Mayor McCartney, Council President Rutherford, and Council Members,

On Friday, October 25, 2024 the Township received three responses to the Request for Proposal issued October 11, 2024 for Professional Civil Engineering and Land Surveying Services for Oskar Schindler Performing Arts Center (OSPAC) and Crystal Lake Improvements. An additional line item, separate from the base proposal was requested for Construction Inspection Services, if needed. This addition is shown in the table attached below.

A summary of the responses for the project is as follows:

- | | |
|--|---------------------|
| 1. Matrix New World Engineering
26 Columbia Turnpike, 2 nd Floor
Florham Park, NJ 07932 | \$134,500.00 Base** |
| 2. Consulting & Municipal Engineers
1460 Route 9 South
Howell, NJ 07731 | \$160,000.00 Base |
| 3. Greenman-Pedersen, Inc.
301 Gibraltar Drive, Suite 2A
Morris Plains, NJ 07950 | \$161,600.00 Base |

AN EQUAL OPPORTUNITY EMPLOYER

www.westorange.org

- | | |
|--|-------------|
| 4. T&M Associates
400 Broadacres Drive, Suite 250
Bloomfield, NJ 07003 | Declined |
| 5. Suburban Consulting
3 Mountainview Road
Warren NJ 07059 | No Response |
| 6. H2M Architects + Engineers
119 Cherry Hill Road, Suite 110
Parsippany, NJ 07054 | No Response |

******Matrix New World Engineering, although the least expensive, is missing Land Surveying Services in their proposal that were outlined in the request for proposal.

<u>Vendor</u>	<u>Experience</u>	<u>Base Services</u>	<u>Const. Adm. Services</u>	<u>Added Amenities</u>	<u>Total Services</u>
Matrix New World Engineering **	Yes	\$134,500.00	\$29,050.00	\$0.00	\$163,550.00
Consulting and Municipal Engineers	Yes	\$160,000.00	\$60,000.00	\$0.00	\$220,000.00
Greenman-Pedersen, Inc.	Yes	\$161,600.00	\$114,000.00	Up to \$67,000.00	\$275,600.00

Based on my review of the proposals received, I recommend you award a Professional Services Contract to Consulting and Municipal Engineers, 1460 Routh 9 South, Howell, NJ 07731, in the amount of \$160,000.00 as the lowest responsive proposal. Attached, is a Resolution awarding Professional Services Contracts to Consulting and Municipal Engineers.

Please contact me if you have any questions. A copy of the RFP and a copy of the responses are enclosed.

Very truly yours,
Zayibeth Carballo
 Zayibeth Carballo
 Director/Municipal Engineer

ZYC/bs

cc: John Ditinyak, CFO
 James Abbott, Interim BA/Chief of Police
 Richard Trenk, ESQ
 Peter Smeraldo, Assistant BA
 Bill Kehoe, Director of Recreation
 Edwin Johnson, Assist. Director of Recreation



TOWNSHIP OF WEST ORANGE

DEPARTMENT OF ENGINEERING

25 Lakeside Avenue, West Orange, New Jersey 07052

SUSAN McCartney
MAYOR

ZAYIBETH CARBALLO
Director/Municipal Engineer

Tel: (973) 325-4160

Email: zcarballo@westorange.org

October 11, 2024

Trevor Taylor
CME
379 US Route 1 South, Suite 100
Monmouth Junction, NJ, 08852

RE: **REQUEST FOR PROPOSALS**
OSKAR SCHINDLER PERFORMING ARTS CENTER (OSPAC)
AND CRYSTAL LAKE IMPROVEMENTS

Dear Mr. Taylor,

The Department of Engineering for the Township of West Orange requests proposals from firms providing both Civil Engineering and Land Surveying Services, which are capable of preparing the necessary permitting applications, concept plan, preliminary and construction plans, specifications and bid documents for improvements at OSPAC and Crystal Lake. Township intends to improve OSPAC and Crystal Lake by creating additional amenities to better utilize the area around it. The project construction cost will be partially funded by the American Rescue Plan (ARPA) for which the funds will need to be expended by December 2025. As a result, the project schedule must be on an expediated process to meet the anticipated date.

The Township envisions the improvements to OSPAC consisting of furnishing and installing a sound system for the amphitheater including the installation of ADA accessible bleachers on concrete pads. Crystal Lake improvements will consist of the reconstruction of approximately 0.5 miles of stone dust and/or HMA pathway around the lake between 6 ft. to 8 ft. wide including the installation of decorative pathway LED lighting, electronic entrance LED sign, benches, and trash receptacles. Other possible amenities might include the construction of a fishing pier and floating dock, paddle boats and canoes launch area, prefab pedestrian bridge, the construction of a small shoreline with outdoor showers, seating area pavilion, a playground, and a concession stand.

The project might also include retrofitting certain storm drain inlets along drains in the vicinity of the lake to meet standards outlined in the Stormwater Management rules. The retrofitting focuses on solids and floatable control to help reduce the amounts of pollutants that may enter the stormwater system that impact receiving waters.

Crystal Lake is a spring-fed lake and the headwater to the Rahway River and a passive park facility that is underutilized by West Orange residents. According to FEMA's Flood Insurance Rate Map (FIRM) Map # 34013C0111F with an effective date of June 4, 2007, Crystal Lake is within Zone A flood hazard area. Please see attached FIRM map and Stream Stat for drainage area to the Crystal Lake.

ANTICIPATED EXPEDIATED PROJECT SCHEDULE

Project Tasks	Anticipated Start/Completion Dates
Funding Recommendations	October 2024
Develop and Issue RFP	Mid-October 2024
Award Concept Phase/Design & Permitting Engineering Services	November 2024
NJDEP Pre-Application Meeting	December 2024-January 2025
NJDEP Permitting Submission Package	February 2025 to July 2025
Hudson-Essex-Passaic SCD Permit	
Execute Grant Agreement	January 2025 to June 2025
Finalize Project Design & Specifications	July 2025
Award Construction Contract	August 2025
Construction Phase	September 2025 to November 2025
Grant Closeout	December 2025

*The timetable above is tentative and based upon the anticipated date for execution of grant agreement and obtaining NJDEP permitting within 6 months of submitting permit application.

The following professional services are required for the proposed recreational improvements:

LAND SURVEYING SERVICES:

- A. Preparation of a Base Map utilizing aerial orthographic photographs with field data to supplement planimetric features such as tax map data to be provided by the Township in CAD for the preparation of Concept Plans;
- B. Boundary and Topographic Survey for OSPAC and Crystal Lake for the preparation

- of permitting and construction plans;
- C. Map the location of wetlands, buffers, riparian zones, limits of the 100-Year Flood Hazard Area (FHA) and top of bank location as per Professional Wetlands Scientist and Engineer;
- D. Location of tree canopy around the lake needs to be established;
- E. Sufficient topographic information is to be provided for the design of proposed curb ramps and ADA accessible areas;
- F. Establish horizontal control based on North American Datum 1983 (New Jersey State Plane Coordinate System-NAD 83) and North American Vertical Datum 1988 (NAVD 88);
- G. Establish water surface elevation of Crystal Lake;
- H. Benchmark(s) to be set on site for future use;
- I. Existing conditions/Survey Control plan;
- J. Coordinate utility mark-outs;

As part of the deliverables, an electronic AutoCAD file of the Boundary and Topographic Survey is to be provided to the Department of Engineering.

CIVIL ENGINEERING SERVICES:

I. CONCEPT PHASE & NJDEP PRE-APPLICATION MEETING

- A. Concept Plans for the overall proposed improvements
- A. Develop two (2) color renderings;
- B. Preparation of NJDEP Pre-Application Package for application meeting request; (See attached checklist)
- C. Confirm and establish Drainage Area for this project as to whether or not is greater than 50 acres to establish whether or not it has a regulated floodplain;
- D. Establish the still water surface elevation for Crystal Lake to determine;
- E. Wetlands delineation, buffers and riparian zones;
- F. Attend Pre-Application meeting and draft meeting notes;
- G. Provide design recommendations to the Township based on NJDEP's feedback, regulatory challenges, design conflicts and project feasibility;
- H. Determine/discuss the appropriate improvements in conjunction with Township and its representatives for the best course of action to facilitate the project goals.

II. NJDEP PERMITTING SUBMISSION PACKAGE

Preparation of NJDEP Permitting Package following the feedback obtained from Civil Engineering Services Task I. It is anticipated that the following permits will be required:

- Prepare and submit a complete NJDEP application requirement under the Freshwater Wetlands Protection Act Rules N.J.A.C. 7:7A since it is probable that FWW exist within the vicinity of the project. Some general permits include but not limited to are as needed, minor outfalls and intake structures (GP 11), Trails and Boardwalks (GP 17) Docks and piers (GP 19), bank stabilization (GP 20), above ground utility lines (GP 21), and minor

channel or stream cleaning for government agencies (GP 25) will probably be needed for the construction of proposed improvements;

- The desired improvements are anticipated to be proposed within Crystal Lake a tributary to the Rahway River (classified as Category One water) and Flood Hazard Area and the 300 foot wide Riparian Zone extending from the top of bank of the stream. Prepare and submit NJDEP Flood Hazard Area (FHA) in accordance with the FHA Control Act Rules N.J.A.C. 7:13;
- Permit by Rules to facilitate the construction of the proposed improvements;
- Stormwater Management design and site drainage improvements to address major development requirements in accordance with N.J.A.C. 7:8.

NJDEP Regulatory permit fees are to be provided by the Township at the time of the application.

III. HUDSON-ESSEX-PASSAIC SOIL CONSERVATION DISTRICT (SCD)

It is anticipated that Certification by the Hudson-Essex-Passaic SCD will be required due to the limits of disturbance. Consultant will prepare and submit the following items in support of the SCD application:

- SCD application form;
- Soil Erosion and Sediment Control Plans in accordance with “Standards” pursuant to N.J.S.A. 4:24-39 and N.J.A.C. 2:90-1.1;
- Engineering Drainage Report;
- Complete set of Constructions Plan;
- Revisions as requested from the SCD within the 60-day review & approval period; and
- Request for NJDEP Stormwater General Permit Authorization (RFA) to discharge stormwater from a construction site.

The SCD certification, inspection, and administrative fee and RFA is to be provided by the Township at the time of the applications.

IV. FINAL DESIGN OF CONSTRUCTION PLANS

- A. Final Design to incorporate permits and contract items;
- B. Preliminary Plans and Cost Estimate are to be submitted for final review and approval;
- C. Plan Set to include but not limited to Cover Sheet with location map, General and Construction Notes with legends, Existing Conditions/Survey Plan, Control Plan, Demolition Plan, Construction Plan, Grading Plan and Earthwork Summary, Utility Plan including profiles, Landscaping Plan, Soil Erosion and Sediment Control Plan and Details, Traffic Control and Detour Plans and Construction Details;
- D. Include four (4) meetings with the Township Officials for Kickoff, Preliminary Design, Public Presentation and Final Design;

V. BID PHASE

- A. Bid Package that includes bid set of plans and construction specifications in accordance with public bidding laws;
- B. Provide 20 sets of plans and specifications;
- C. Respond to Request for Information (RFI) during the bid period;
- D. Issuance of Addenda(s) to the Qualified Purchasing Agent;
- E. Bidding documents (plans and specifications) deliverables to the Township via AutoCAD, hard copy and PDF files.

VI. CONSTRUCTION ADMINISTRATION SERVICES

Provide separate lump sum cost for construction administration services based on full-time inspection.

Tax map with OSPAC and Crystal Lake site delineated, FIRM map, StreamStats Report, NDJEP Pre-Application Checklist, and photos showing project area are enclosed.

The cost of services shall be for a complete permitting process, design and bid package including cost estimates, plans, specifications and bid documents (twenty copies) for bidding purposes including detour plans. All plan specifications and bid documents shall be in conformance with the latest New Jersey Department of Transportation specifications. Proposals shall be on a lump sum basis. Hourly rates shall be submitted with all proposals for any additional work.

It is the intent of this office is to award a construction contract in August 2025 and to construct improvements in the Fall 2025. Proposals shall be submitted in writing via email and/or hard copy on or before **10:00 A.M. Friday, October 25, 2024** to the Department Engineering, 25 Lakeside Avenue, West Orange, NJ 07052 and shall include a specified completion date or number of days required for completion of the work after approval is granted to proceed. Also, evidence of proper insurance shall be submitted for approval by the Township Attorney.

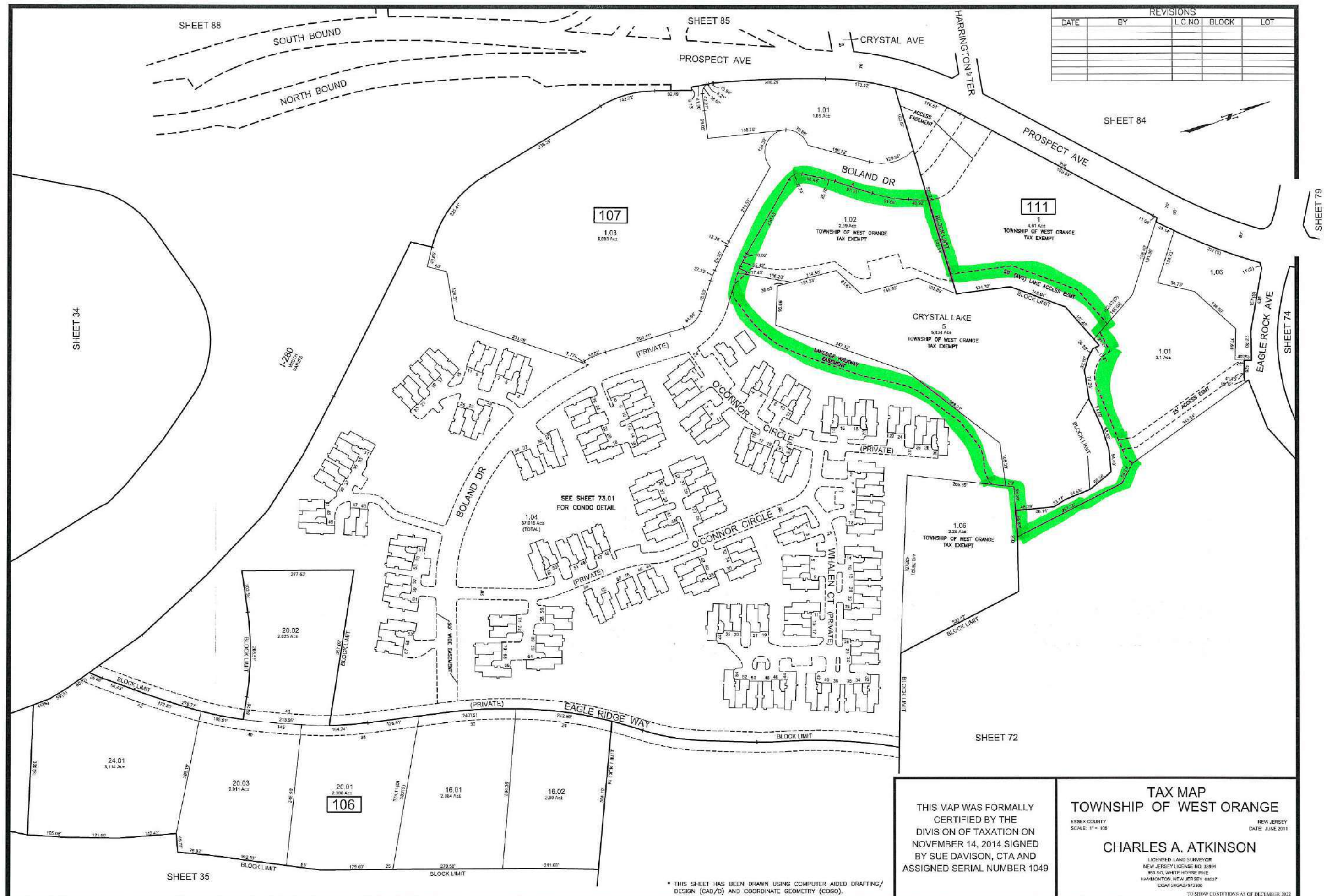
A separate proposal for construction inspection and certificates of completion should also be included if available from your firm.

Very Truly yours,

Zayibeth Carballo

Zayibeth Carballo, Municipal Engineer
Director of Engineering

ZYC



NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevation (BFE)** and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevation (CBFE) shown on this map apply only landward of 0.0' North American Vertical Datum (NAVD). Users of this FIRM should be aware that coastal flood elevations may also be provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for this community. Elevations shown in the Summary of Stillwater Elevations table should be used for construction, and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures in this jurisdiction.

The **projection** used in the preparation of this map is Universal Transverse Mercator (UTM) zone 18. The **horizontal datum** is NAD83, GRS1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of the FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

Spatial Reference System Division
National Geodetic Survey, NOAA
Silver Spring Metro Center
1315 East-West Highway
Silver Spring, Maryland 20910
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit their website at www.ngs.noaa.gov.

Base map information shown on this FIRM was provided in digital format by the New Jersey Office of Information Technology produced in State Plane NAD83 Coordinates (US Survey) with 1 foot pixel resolution and a scale of 1:2400 from photography captured during February-April 2002.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

An accompanying Flood Insurance Study report, Letters of Map Revision or Letters of Map Amendment revising portions of this panel, and digital versions of this PANEL may be available. Contact the FEMA Map Service Center at the following phone numbers and Internet address for information on all related products available from FEMA;

Phone: 800-358-9616
FAX: 800-358-9620
www.fema.gov/msc

If you have **questions about this map** or **questions concerning the National Flood Insurance Program** in general, please call 1-877-FEMA-MAP (1-877-338-2627) or visit the FEMA website at www.fema.gov.

This map reflects more detailed and up-to-date stream channel configurations than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study report may reflect stream channel distances that differ from what is shown on this map.



LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD EVENT

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equalled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water surface elevation of the 1% annual chance flood.

- ZONE A** No base flood elevations determined.
- ZONE AE** Base flood elevations determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
- ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE AR** Area of special flood hazard formerly protected from the 1% annual chance flood event by a flood control system that was subsequently deteriorated. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood event.
- ZONE A99** Area to be protected from 1% annual chance flood event by a Federal flood protection system under construction; no base flood elevations determined.
- ZONE V** Coastal flood zone with velocity hazard (wave action); no base flood elevations determined.
- ZONE VE** Coastal flood zone with velocity hazard (wave action); base flood elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X Areas determined to be outside the 0.2% annual chance floodplains.

ZONE D Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- 1% annual chance floodplain boundary
- 0.2% annual chance floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or velocities.
- Base Flood Elevation line and value; elevation in feet*
- Base Flood Elevation value where uniform within zone; elevation in feet*

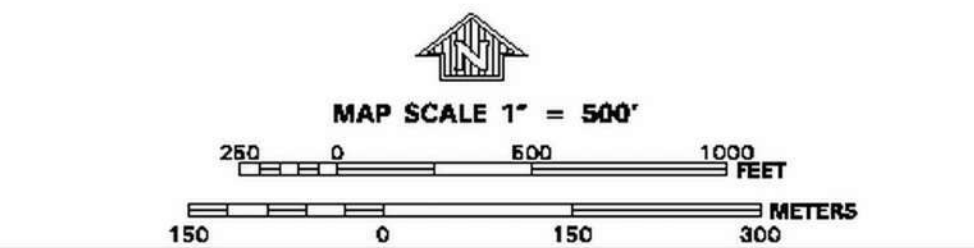
*Referenced to the North American Vertical Datum of 1988

- (A) --- (A)** Cross Section Line
- (23) --- (23)** Transect Line
- Geographic coordinate referenced to the North American Datum of 1983 (NAD 83)
- 1000-meter Universal Transverse Mercator grid values, zone 18
- 6000-foot grid ticks
- DX5510** Bench mark (see explanation in Notes to Users section of this FIRM panel).
- M1.5** River Mile

MAP REPOSITORY
Refer to Repository Listing on Index Map
EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
JUNE 4, 2007
EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at (800) 638-6622.



PANEL 0111F

FIRM
FLOOD INSURANCE RATE MAP
ESSEX COUNTY,
NEW JERSEY
(ALL JURISDICTIONS)

PANEL 111 OF 200
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
MONTCLAIR, TOWNSHIP OF	340138	0111	F
WEST ORANGE, TOWNSHIP OF	340197	0111	F
ORANGE, CITY OF	340192	0111	F
EAST ORANGE, CITY OF	340111	0111	F

Notice to User: The Map Number shown below should be used when ordering map prints. The Community Name shown above should be used on insurance applications for the subject community.

MAP NUMBER
34013CD111F

EFFECTIVE DATE:
JUNE 4, 2007

Federal Emergency Management Agency

PRE-APPLICATION REQUEST SUBMITTALS

It is recommended that every request for a pre-application meeting include the items listed below. Please note that each Rule implemented by the Division of Land Use Regulation has specific requirements for pre-application meetings. Therefore, any pre-application meeting request that includes items as noted in the applicable rule will also be accepted.

- 1) A complete written description of the project and all proposed activities (the State Plane coordinates for the site should be included in this document).
- 2) A written meeting agenda with goals and objectives.
- 3) One copy of a USGS quad map with the site clearly outlined to scale.
- 4) One copy of the municipal tax map with the site clearly outlined to scale.
- 5) One color copy of an aerial photograph of the site.
- 6) One copy of the appropriate United States Soil Conservation Service map(s) with the site clearly outlined to scale.
- 7) One copy of each previous approval received from the Department concerning the site, if such approvals exist.
- 8) One set of color photographs depicting the entire project area, mounted on 8.5" x 11" paper and accompanied by a map showing the location and direction from which each photograph was taken.
- 9) One set of drawings depicting the proposed project.

Special Notes

- 1) If applicable, the potential applicant shall also include a copy of any floodplain mapping such as a Department flood hazard area map or FEMA flood insurance map with the site clearly outlined to scale.

This package should be directly mailed to:

Regular Mail

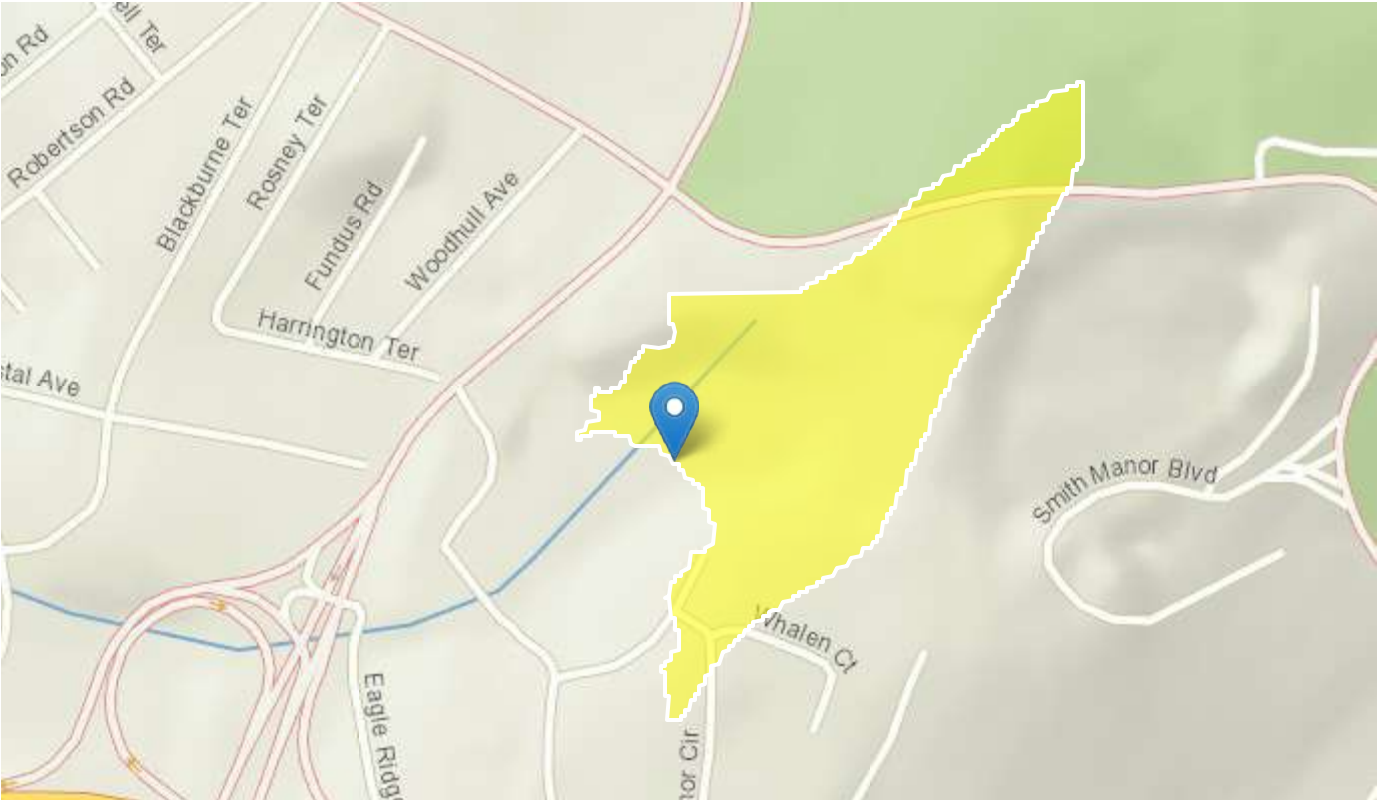
NJ Department of Environmental Protection
Division of Land Use Regulation
Mail Code 501-02A; PO Box 420
Trenton, NJ 08625-0420

UPS or FedEx

NJDEP-Division of Land Use Regulation
5 Station Plaza
501 East State Street, Second Floor
Trenton, NJ 08609

StreamStats Report

Region ID: NJ
Workspace ID: NJ20241011192707378000
Clicked Point (Latitude, Longitude): 40.80073, -74.24771
Time: 2024-10-11 15:27:43 -0400



 Collapse All

➤ Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
CSL10_85	Change in elevation divided by length between points 10 and 85 percent of distance along main channel to basin divide - main channel method not known	89.8	feet per mi
DRNAREA	Area that drains to a point on a stream	0.035	square miles
POPDENS	Basin Population Density	2840	persons per square mile

Parameter**Code****Parameter Description****Value****Unit**

STORAGE

Percentage of area of storage (lakes ponds reservoirs wetlands)

13.9

percent

> Peak-Flow Statistics**Peak-Flow Statistics Parameters [Peak Glaciated Piedmont Region 2009 5167]****Parameter****Code****Parameter Name****Value****Units****Min****Limit****Max****Limit**

DRNAREA

Drainage Area

0.035

square miles

1.27

56.4

STORAGE

Percent Storage

13.9

percent

0.62

11.6

CSL10_85

Stream Slope 10 and 85 Method

89.8

feet per mi

9.37

176

POPDENS

Basin Population Density

2840

persons per square mile

645

13492

Peak-Flow Statistics Disclaimers [Peak Glaciated Piedmont Region 2009 5167]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Peak-Flow Statistics Flow Report [Peak Glaciated Piedmont Region 2009 5167]**Statistic****Value****Unit**

50-percent AEP flood

12.1

ft³/s

20-percent AEP flood

19.1

ft³/s

10-percent AEP flood

24.1

ft³/s

4-percent AEP flood

30.7

ft³/s

2-percent AEP flood

35.8

ft³/s

1-percent AEP flood

40.9

ft³/s

0.2-percent AEP flood

53.2

ft³/s*Peak-Flow Statistics Citations*

Watson, K.M.,and Schopp, R.D.,2009, Methodology for estimation of flood magnitude and frequency for New Jersey streams, U.S. Geological Survey Scientific Investigations Report 2009-5167, 51 p. (<http://pubs.usgs.gov/sir/2009/5167/>)

USGS Data Disclaimer: Unless otherwise stated, all data, metadata and related materials are considered to satisfy the quality standards relative to the purpose for which the data were collected. Although these data and associated metadata have been reviewed for accuracy and completeness and approved for release by the U.S. Geological Survey (USGS), no warranty expressed or implied is made regarding the display or utility of the data for other purposes, nor on all computer systems, nor shall the act of distribution constitute any such warranty.

USGS Software Disclaimer: This software has been approved for release by the U.S. Geological Survey (USGS). Although the software has been subjected to rigorous review, the USGS reserves the right to update the software as needed pursuant to further analysis and review. No warranty, expressed or implied, is made by the USGS or the U.S. Government as to the functionality of the software and related material nor shall the fact of release constitute any such warranty. Furthermore, the software is released on condition that neither the USGS nor the U.S. Government shall be held liable for any damages resulting from its authorized or unauthorized use.

USGS Product Names Disclaimer: Any use of trade, firm, or product names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

Application Version: 4.24.0

StreamStats Services Version: 1.2.22

NSS Services Version: 2.2.1

CRYSTAL LAKE



CRYSTAL LAKE



OUTFALL FLARE END SECTION FOR LAKE BY PEDESTRIAN BRIDGE

CRYSTAL LAKE



OUTFALL FLARE END SECTION FOR LAKE BY PEDESTRIAN BRIDGE

CRYSTAL LAKE



WOODEN PEDESTRIAN BRIDGE

CRYSTAL LAKE



CRYSTAL LAKE



STONE DUST PATH

CRYSTAL LAKE



CRYSTAL LAKE



CRYSTAL LAKE



CRYSTAL LAKE



CRYSTAL LAKE



STONE DUST PATH & LAKE

CRYSTAL LAKE



STONE DUST PATH AND PAVERS AREA BY LAKE

Brandon Santos

From: Zayibeth Carballo
Sent: Tuesday, October 22, 2024 9:22 AM
To: Taylor, Trevor
Cc: gvalesi@cmeusa1.com; Hess, John; Brandon Santos; Glenn McCarthy
Subject: RE: RFP-WEST ORANGE OSPAC & CRYSTAL LAKE IMPROVEMENTS
Importance: High

Below please find questions and answer to the RFP:

A. Regarding the OSPAC work

1. I can't make out the amphitheater from Google Earth. Do you have a sound system picked out so we can understand the extent/intent? Is it an amplifier and a pair of speakers that sit on the stage or is it an amplifier, multiple speaker banks and a sound board to control sound quality? Hard wired or wireless? Is there power already at the amphitheater? **OSPAC already has the sound system and for what I had gather from the Recreation Director all they need is a pair of speaker up on the stage.**
2. How many bleachers and where? Is there an accessible route to the bleacher locations or will that need to be created as part of the scope? **According to the Recreation Director, they are actually looking for stadium seats and approximately 3 rows for people to seat in front of the stage. An accessible route will need to be created.**
3. Are the pathway lights for the full 0.5 mile pathway? Yes. Have they been picked out yet? **No. Where will power for the path lights be coming from. I will assume a power source will be needed or from a utility pole nearby.**
4. Is the entrance sign is something like the one I did at Little Falls (See attached)? If not, please clarify. Where will power come from? **Maybe. I'm not sure.**

B. Regarding "Other Possible Amenities"

1. How is the fee to be presented for this work? Show it be as an alternate so is can be easily added to or removed from the scope? **I would recommend presenting the fee for each section and breaking it down so that It can easily be removed or added in the future.**
2. Not sure what you mean by "...the construction of a small shoreline with outdoor showers"? **Beach sand and outdoor shower area.**
3. Regarding the outdoor showers, where will they go and how will water/sanitary services be provided? **Utilities will need to be provided from NJAW and PSE&G for electric and gas.**
4. What is the scope of the seating pavilion area? Basically, what kind of seating capacity are you looking for? Is the area already graded flat? **The pavilion area will have to be picked but according to Recreation Director; he was thinking of picnic tables.**
5. Regarding the playground, do you have an equipment list? **We do not have an equipment list yet.** Have you checked equipment lead time on the equipment? **No.** I was looking into playground equipment a couple years

ago and I seem to remember the lead time being 10-12 weeks. That was closer to the end of Covid so things may have improved. **Not sure.**

6. Regarding the concession stand, they can range from a pre-fab wooden shed with coolers for drinks and pre-packaged snacks to a masonry building with a commercial kitchen. Can you provide a little more of a description? **Recreation Director not sure of permanent concession stand. We're more incline for a food truck area.**

C. Regarding "Retrofitting Storm Drains"

1. This sounds like swapping out inlet frames and grates. Is there something else that you have in mind? Things like Manufactured Treatment Devices for water quality come to mind. **I was thinking of changing grates, cleaning swales and maybe MTD's if need it by NJDEP.**



Zayibeth Carballo, PE,PLS,PP,CME,CFM,CFS

Director, Municipal Engineer
Department of Engineering
Township of West Orange
25 Lakeside Avenue
West Orange, NJ 07052
Phone/Fax: (973) 325-4165
zcarballo@westorange.org
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From: Zayibeth Carballo

Sent: Friday, October 11, 2024 6:40 PM

To: Taylor, Trevor <trevort@cmeusa1.com>

Cc: gvalesi@cmeusa1.com; Hess, John <jhess@cmeusa1.com>; Brandon Santos <bsantos@westorange.org>; Glenn McCarthy <GMcCarthy@westorange.org>

Subject: RFP-WEST ORANGE OSPAC & CRYSTAL LAKE IMPROVEMENTS

Good evening Trevor,

Attached please find RFP for Professional Services.

Please response that you have receive request and don't hesitate to contact us if you have any questions



Zayibeth Carballo, PE,PLS,PP,CME,CFM,CFS

Director, Municipal Engineer

Department of Engineering

Township of West Orange

25 Lakeside Avenue

West Orange, NJ 07052

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MATRIX**NEW**WORLD

Engineering Progress



OSKAR SCHINDLER PERFORMING ARTS CENTER AND CRYSTAL LAKE IMPROVEMENTS

SUBMITTED TO

**Township of West Orange
Department of Engineering**
66 Main Street
West Orange, NJ 07052
Attention: Zayibeth Carballo

SUBMITTED BY

**Matrix New World Engineering, Land Surveying
and Landscape Architecture, PC**
26 Columbia Turnpike, 2nd Floor
Florham Park, NJ 07932
P: 973.240.1800 F: 973.240.1818

SUBMITTED DATE

October 25, 2024



October 25, 2024

Zayibeth Carballo, Municipal Engineer
Director of Engineering
Township of West Orange
66 Main Street
West Orange, NJ 07052

**Re: REQUEST FOR PROPOSAL FOR OSKAR SCHINDLER PERFORMING ARTS CENTER (OSPAC)
AND CRYSTAL LAKE IMPROVEMENTS**

Dear members of the selection committee:

The OSPAC and Crystal Lake Improvements contract demands a collaborative team with diverse expertise. We have assembled local experts with extensive engineering and consulting experience tailored for public clients. To succeed, the consultant team must be agile in addressing unforeseen conditions and work closely with the Township to deliver safe, detailed, and compliant solutions.

Matrix New World Engineering, Land Surveying and Landscape Architecture, PC (Matrix) is a 30-year-old full-service firm providing civil, environmental, environmental, geotechnical, marine, and structural engineering services; hazardous materials services; survey consulting; and landscape architecture expertise. As one of the largest engineering firms in the state, Matrix has long been recognized as a *leader in civil engineering and surveying services*. The firm brings extensive experience, capability, and knowledge to West Orange's ever-evolving engineering challenges. Matrix takes a proactive approach in partnering with clients to ensure compliance, mitigate liability, overcome engineering obstacles, enhance infrastructure, and foster a collaborative environment that leads to the most effective solutions for the end user. This proposal presents our team, our deep history of experience delivering civil engineering and surveying services, and our approach to working collaboratively with the Township to deliver the support required. The Matrix team is the right team because of the following key factors:

- **Experience:** With over **25 years of experience with New Jersey public entities**, Matrix is extremely knowledgeable in providing professional services to and advising these types of clients. Our firm and staff are well versed in waterfront projects as well as various improvement developments.
- **Management:** Our management approach allows us to **provide our services in very economical fashion** and the team we have assembled will be able to accelerate project delivery while lowering costs.
- **Location:** We are conveniently **located in Florham Park, only 10 minutes** from the Township, making us capable of responding to any emergent matters in a quick and efficient manner.

Thank you for the opportunity to submit this proposal. Since we have already been prequalified, we have opted to withhold general marketing materials. If you require any additional information or have questions about our experience, please don't hesitate to reach out to me directly at (973) 585-5266 or via email at pscott@mnwe.com.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Phill Scott".

Phill Scott, PE
Project Manager

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SECTION 1 – TECHNICAL PROPOSAL

PROJECT UNDERSTANDING & APPROACH, SCOPE OF SERVICES, AND FEES

PROJECT UNDERSTANDING & APPROACH

Matrix New World Engineering, Land Surveying and Landscape Architecture, PC (Matrix) has successfully executed and delivered on multiple concurrent large-scale and complex contracts for public agencies (Federal, State, and County), private corporations, architects, engineering firms, and commercial and residential developers.

By providing full-service engineering and landscape architectural services that range from preliminary site assessment and investigation to conceptual layout and design to development of detailed site drawings and construction specifications, Matrix combines architectural design skills with the scientific principles of engineering and the broad development knowledge of urban planning to develop aesthetic and practical relationships with the land.

Client satisfaction is always our main goal and thus we ensure that staff availability and qualifications are never a compromise. A primary contact and project manager will provide a direct link between Matrix personnel and the Township of West Orange (Township) for consistent direction and collaboration, but the entirety of Matrix's staff and management are available when needed or warranted.

Our current workload is steady yet flexible. We prefer to maintain control over our growth and make sure we are never over- or under-staffed. We presently have sufficient capacity to give the Township our undivided attention to meet project goals and deadlines, and we do not anticipate any change to this for the duration of the project. We also plan to utilize the same managers and staff throughout the project to ensure consistency. Matrix acknowledges the schedule that was outlined in the RFP. We will make every effort to meet the schedule and notify the Township if we anticipate any deviations from the schedule.

It is our understanding that the Township wishes to improve the area around Crystal Lake and provide some upgrades to the Oskar Schindler Performing Arts Center (OSPAC) space.

The elements that may be incorporated into the design are as follows:

Crystal Lake

- Reconstruct/repair the approximately half mile walking path around the perimeter of the lake
- Provide lighting for the walking path. Due to the shallow bedrock visible at the site, we recommend providing low voltage lighting (bollard type) for the walkway to limit the amount of excavation that would be required.
- Provide additional site benches and trash receptacle along the walking path.
- Locate a small, prefabricated shade structure with seating. We recommend this is located at the paver plaza area to take advantage of the views across the lake.
- Locate and design a floating dock that could be used for fishing and boating on the lake. The dock should be located at the paver plaza area. A small concrete wall already exists at the edge of the lake in this area.
- Replacement of the small pedestrian bridge. This could be potentially eliminated by routing pedestrians to the sidewalk along Boland Drive.

Oskar Schindler Performing Arts Center

- Design and placement of speakers for the existing sound system.
- Provide an LED type entrance sign. It is our understanding that the Township will select a sign that our team will locate and provide power to.
- Provide for barrier free seating areas for the outdoor amphitheater space.
- Recommend an area for the location of a food truck.
- Design a small playground area if possible.

SCOPE OF SERVICES

The scope of services is described in detail below:

PHASE 1 - FIELD INVESTIGATION/RECONNAISSANCE**ITEM 1: KICK OFF MEETING AND EXISTING CONDITIONS**

Matrix will attend a kick-off meeting with the Township to discuss the goals for the park and gather readily available information about the park from the Township. This will include an initial discussion on the type and number of facilities and the construction budget for potential park improvements. This will also be the time to discuss potential areas of concern and specific areas in need of review prior to visiting the site.

As part of this item, Matrix will review the available information to fully understand the conditions as they are today, which will set the foundation for the creation of the concept plan for the park. In addition, Matrix staff will visit the site to evaluate any areas of concern brought to our attention by the Township and to assess the overall condition of the park space.

Matrix will attend up to two (2) meetings as part of this task.

FIXED FEE: \$2,500.00

ITEM 2: WETLANDS DELINEATION

Matrix will perform a field delineation to establish the jurisdictional limits of existing wetlands and open waters on the project site. The delineation will be conducted consistent with the *1989 Federal Manual for Identifying and Delineating Jurisdictional Wetlands* which is the methodology required pursuant to the Freshwater Wetlands Protection Act Rules (NJAC 7:7A). The wetland boundary will be marked with numbered flagging placed at 50- to 75-foot intervals. We will also record soil, hydrologic, and vegetation data at intervals along the wetland boundary and take photographs at representative locations.

FIXED FEE: \$7,000.00

ITEM 3: SURVEYING SERVICES

Matrix understands the area required to provide land surveying services in support of the above referenced project and as shown in Fig.1 below to be as described as follows.



Fig.1 Approximate Survey Area

Topographic Survey

Matrix will schedule on-site work with the project manager from your office who will work directly with facility management. Matrix will need full access to the property with parking available for their vehicles if convenient public parking is unavailable.

- Matrix will prepare a Base Map utilizing aerial orthographic photographs downloaded from an on-line source with field data to supplement planimetric features plus tax map parcel data to be provided by the Township in CAD for the preparation of Concept Plans;
- Matrix will provide a Boundary and Topographic for OSPAC and Crystal Lake for the preparation of permitting and construction plans;
- Matrix will at a minimum map the location of wetlands, buffers, riparian zones, limits of the 100-Year Flood Hazard Area (FHA) and top of bank location as per Professional Wetlands Scientist and Engineer;
- Location of tree canopy around the lake will be established during survey field operations;

- Sufficient topographic information will be provided for the design of proposed curb ramps and ADA accessible areas;
- Matrix will establish horizontal control based on North American Datum 1983 (New Jersey State Plane Coordinate System-NAD 83) and North American Vertical Datum 1988 (NAVD 88), utilizing GNSS static methods and closed loop traverses;
- Benchmark(s) to be set on site for future use;
- Matrix will establish the water surface elevation of Crystal Lake.
- Matrix will provide an Existing Conditions/Survey Control plan;
- As determined in consultation with the Project Engineer and the Township of West Orange as needed, Matrix will coordinate utility mark-outs

Matrix will map all surface features including all existing elevations, high and low points, contour lines at 1-ft-intervals, elevations and street grades, utility casting, manholes, fire hydrants, catch basins and invert elevations of catch basins, pipes and drainage structures (e.g., size, material, type, rim/grate elevation, and invert elevations at the inlet and outlet), existing site furniture (including but not limited to fences, sign poles, benches, tables, light and utility poles, etc.), tree centerline, diameter and breast height (DBH) and drip line locations of trees 6" DBH and above, tree stump centerlines and diameters, tree pit extents, driveways, curb cuts, crosswalks, ramps, stairwells, existing buildings and structures.

Matrix will utilize conventional land survey, plus possible combinations of 3D laser scanning and SLAM LiDAR technologies to perform this survey. Conventional survey equipment will also be used for establishing survey control and collecting topography in shadow areas not included in the 3D laser scan. Matrix will use Leica GNSS equipment to establish benchmarks and horizontal survey control on site.

Matrix will map underground utilities, engaging the services of a subsurface utility provider (GPR) is excluded, to obtain Level B SUE survey per ASCE Standard Guideline for the Collection and Depiction of Existing Subsurface Utility data in areas designated by the Project Engineer. Matrix will also depict Water and Sewer mapping on the survey.

Exclusions and assumptions made for this proposal:

- The Client will provide Matrix with the existing topographic, property boundary, and utility mapping or information if pertinent to the project.
- It will be the responsibility of the Client to provide and coordinate the scheduled access to the site for Matrix staff as needed.
- Matrix will provide deliverables as specified in the RFP. Matrix will provide all electronic copies in Civil3D AutoCAD 2024 format (or other AutoCAD version if required).
- Soft-Dig is not included in this proposal.
- Construction stakeout/layout is not included in this proposal.
- The proposal does not include TV scanning of the storm and sanitary lines.
- The proposal does not include cleaning of the storm/sanitary lines.
- The proposal does not include a designated tree survey.
- The proposal does not include wetland delineation services under the survey task.
- Matrix will locate wetland delineation markers set by others.

“Service delays associated with any acts of war, acts of God, acts of a legislative, administrative, or judicial entity, or other forms of Force Majeure, including but not limited to fires, floods, hurricanes, unusually severe weather, disease, and pandemic, will not constitute grounds for default. It is expressly recognized that any of these events may result in disruptions of work due to restrictions on access to legal documents, record plans, and work sites. Based upon the effect of the Force Majeure on the performance of the Work, Matrix will be granted a time extension and compensated for time expended pursuant to its good faith attempts to achieve the Work. (Client's) remedy for any delay caused by Force Majeure will be the negotiation of an equitable adjustment of the project schedule.” It will be the responsibility and expense of the client to supply Matrix with access to the subject and adjoining properties and/or permits along with traffic safety control if required by any State, County, local authority, or the Township. This will also include the additional cost for safety personnel and/or police presence. No work will be performed outside the limits of the subject property boundary if the above-mentioned property access, highway access, and/or traffic safety is required and not provided to Matrix. A separate authorization from the client will be requested prior to beginning any field work if traffic safety is required. Any delays to the field or office work, caused by not having proper access to the site or adjoining properties, and/or for traffic safety, the client will then be invoiced in accordance with the current Matrix fee schedule.

FIXED FEE: \$18,000.00

PHASE 2 - DESIGN

ITEM 1: CONCEPT PLAN

Upon completion of Phase 1 Items 1, 2 and 3, Matrix will review the data found in our field investigation and create one concept plan for the project that will incorporate as many of the requested program elements as possible. Due to the nature of the site, not all the desired improvements may be possible to construct in this location. Matrix will analyze the best locations for the improvements based on the results of the tasks above. A color rendered concept plan will be presented to the Township for review and comment. This will be the basis for the discussion with the New Jersey Department of Environmental Protection (NJDEP) at the preapplication meeting (see item 2 below).

An initial probable cost of construction will also be provided to the Township at this stage to verify adequate funding is available for the improvement shown.

As part of this item Matrix will attend up to one (1) meeting with the Township's staff.

FIXED FEE: \$6,500.00

ITEM 2: NJDEP PREAPPLICATION MEETING AND PREPARATION

In order to establish regulatory framework required to obtain state environmental permits for regulated activities presented within the developed concept plan. Matrix will schedule and participate in one on-line pre-application meeting with NJDEP to present the project, obtain initial agency feedback and discuss permitting requirements. This includes submission of a written request for a meeting to NJDEP including available aerial photography of the site and a plan showing the approximate location of regulated areas as well as proposed activities. Comments from The NJDEP will be discussed with the Township and if any changes are required to the concept plan, they will be addressed in the construction document item of this proposal.

FIXED FEE: \$4,200.00

ITEM 3: CONSTRUCTION DOCUMENTS/FINAL DESIGN

Based on the information gathered above, Matrix will generate construction documents for the improvements mentioned in this proposal. This proposal also includes time for one (1) site visit by a project engineer for with review and confirmation of the existing utility locations. Our fee includes normal coordination with the Township Department of Engineering during development of the plans.

Any application or permit fees required for this project are expected to be paid directly by the Township and have not been included herein. This proposal does not include design or permitting associated with off-site utility services or with building construction. Based on the nature of the project and potential constraints, this proposal assumes that the project will disturb less than one acre and not increase existing impervious surfaces on site by more than one quarter acre so this project would be considered a minor development project.

Matrix shall review the existing site utilities and drainage patterns to obtain sufficient information to prepare the Grading and Utility Plan(s) for the project. The location of the utility connections will be in accordance with all local ordinances.

It is anticipated that the following plans will be prepared and submitted as part of the project package:

- Cover Sheet
- Existing Conditions and Removals Plan(s)
- Site Layout Plan(s)
- Grading and Utility Plans(s)
- Soil Erosion and Sediment Control Plan(s)
- Electrical Plan(s)
- Landscape Plan(s)
- Construction Details
- Technical Specification sections will be provided for the engineering work we are providing for the project. It is our understanding that the Township will provide the front-end documents required for inclusion into the project specifications

Our office will submit 90% and 100% submissions to your office for review. Written comments will be addressed and/or incorporated into the final construction documents. The submissions will include the following:

1. 90% submission
 - Five (5) sets of progress drawings; hard copies and PDF's will be provided to the Township
 - Five (5) copies of the technical specification sections for the project
 - Estimate of probable cost of construction
2. 100% submission (final construction documents)
 - Twenty (5) sets of bid documents; hard copies and PDF's will be provided to the Township
 - Drainage report (if required)

Written comments from the Township from the above mentioned 90% submissions will be incorporated into the final construction documents for the project.

Matrix will attend up to three (3) meetings with the Township as part of this task. Based on our discussion above about the size of the future park, a building is not included in this scope of work.

FIXED FEE: \$44,500.00

ITEM 4: PERMITTING AND APPROVALS

Based on the RFP, Matrix anticipates the following permits and approvals will be required for the project:

Letter Of Interpretation (LOI) Application

In order to obtain state confirmation of the field delineated limits of jurisdictional wetlands within the boundary of the site, Matrix will prepare and submit to the New Jersey Department of Environmental Protection, Division of Land Resource Protection an application for a Letter of Interpretation (LOI) to verify the extent of wetlands, open waters, and wetland transition areas on the site. The LOI application will be prepared in accordance with the Freshwater Wetlands Protection Act Rules in effect as of the date of this proposal. Once issued, the LOI will remain valid for a period of five years from the date of issuance.

FIXED FEE: \$4,500.00

NJDEP Freshwater Wetlands Protection Act Permit Application

As noted within the request for proposals (RFP), proposed improvements will likely require state approval of multiple Statewide General Permits under the Freshwater Wetlands Protection Act Rules. Permits may include minor outfalls and intake structures (GP 11), Trails and Boardwalks (GP 17) Docks and piers (GP 19), bank stabilization (GP 20), above ground utility lines (GP 21), and minor channel or stream cleaning for government agencies (GP 25). As such, Matrix will prepare and electronically submit to NJDEP an application for up to six (6) Statewide General Permit under a single permit application submission. Also, if required, Matrix will include an application for a transition area waiver to allow minor encroachments into the wetland transition areas. The application will be prepared and submitted consistent with the requirements set forth within the Freshwater Wetlands Protection Act Rules in effect as of the date of this proposal.

It is assumed that the proposed activities will comply with the requirements of the Statewide General Permit program and transition area waivers. Therefore, an individual wetlands permit will not be required and is excluded from this scope of work. It is also assumed that the disturbance to the wetlands/waters will not require mitigation.

FIXED FEE: \$18,500.00

NJDEP Flood Hazard Area (FHA) Individual Permit Application (if required)

As noted within the RFP, the site is subject to a 300 foot wide Riparian Zone regulated under the New Jersey Flood Hazard Area Control Act. Additionally, based on a review of available background mapping, a portion of the site is located within the flood hazard area of a tributary to the Passaic River. If desired improvements are proposed within the flood hazard area or riparian zone of Crystal Lake do not meet FHACA Permit-by-Rule criteria, then prior NJDEP approval pursuant to the Flood Hazard Area Control Act Rules (N.J.A.C. 7:13) will be required. Therefore, if needed, under this item Matrix will prepare and electronically submit to NJDEP an application for a flood hazard area individual permit. The application will be prepared and submitted consistent with the requirements set forth within the Flood Hazard Area Control Act Rules (Rules) in effect as of the date of this proposal.

The flood hazard area design flood elevation will be determined using the higher of either Method 1 (DEP Flood Study) or Method 3 (FEMA fluvial method) as outlined in the Rules. It is assumed that activities within regulated areas will comply with the requirements of the Rules.

Therefore, an application for a hardship exception from any portion of the Rules is excluded from this scope of work. It is also assumed that disturbance to regulated areas will not exceed any threshold requiring mitigation.

FIXED FEE: \$19,500.00

Soil Conservation District Certification

This item is for the preparation and submission of soil erosion and sediment control plans, and the accompanying application to the Soil Conservation District as required for a soil erosion and sediment control certification. Any application or permit fees required for this project are expected to be paid directly by the Township and have not been included herein.

In addition to the development plan information, and in accordance with the soil erosion and sediment control requirements, the application will include the following:

1. Soil Conservation District application
2. Soil erosion and sediment control plans:
 - Proposed sequence of development including duration of each phase in the sequence
 - Site grading plan showing delineation of land areas to be disturbed including proposed cut and fill areas together with existing and proposed profiles
 - Contours at a minimum two feet interval, showing present and proposed ground elevation
 - Locations of all streams and existing and proposed drains and culverts
 - Stability analysis of areas below all points of stormwater discharge which demonstrates a stable condition will exist or there will be no degradation of the existing condition
 - Location and detail of all proposed erosion and sediment control structures
 - Locations and details of all proposed nonstructural methods of soil stabilization including types and rates of lime, fertilizer, seed, and mulch to be applied
 - Control measures for non-growing season stabilization of exposed areas where the establishment of vegetation is planned as the final control measure
 - Plans with a notation for maintenance of permanent soil erosion, and sediment control measures and facilities during and after construction, also indicating who shall have responsibility for such maintenance

FIXED FEE: \$4,500.00

Additional permits other than what is listed above are not anticipated for this project. Construction permits will be filed by the contractor awarded to build the project.

PHASE 3 - BID PHASE

ITEM 1: BID PHASE SERVICES

Once the project is out to bid our office will support the Township during the bidding process by providing the following services:

- Respond to Contractor's request for information (RFI) during the bid period
- Attend the bid opening
- Provide an engineering review of the contractor's bids
- Provide a written recommendation to the Township of the lowest responsible bidder

The bid services described above are for one (1) bidding period. If the project is rebid, Matrix will provide a separate scope and fee for these services.

FIXED FEE: \$3,300.00

PHASE 4 - CONSTRUCTION STAGE

ITEM 1: Limited Construction Support Services

Matrix will provide the following construction support activities during the duration of the construction project:

- Attend one (1) pre-construction meeting
- Provide drawings to the contractor for obtaining construction permits (3 sets) for the project. It is the contractor's responsibility to file and obtain all construction permits for the project
- Review contractors shop drawings. This includes review of up to one (1) resubmittal of a specific shop drawing
- Review contractor's application for payment
- Provide full-time field observations which will include any progress site meetings during the construction of the project (4-week construction period as stated in the RFP)
- Provide a punch list for the project

If the project extends beyond the construction period described above or the Township requests additional site visits/meetings our office will provide a scope and fee for the additional time required for the project.

FIXED FEE: \$29,050.00

LIMITED DIRECT EXPENSES

Direct expenses are an estimated cost which includes printing, postage (including certified notifications), travel, and other miscellaneous project-related costs. The amount may vary based on the additional requirements of the project and will be billed at the rates provided in this proposal.

ESTIMATED FEE: \$1,500.00

TOTAL FEE FOR PHASES 1, 2,3 AND DIRECT EXPENSES: \$134,500.00

TOTAL FEE FOR PHASE 4: \$29,050.00

ASSUMPTIONS AND EXCLUSIONS

- All work areas are accessible.
- NJDEP Green Acres Program submission or review is excluded
- Costs assume that the work described above will be performed in Level D personal protective equipment (PPE)
- Costs do not include any activities beyond what is included in this proposal.
- This proposal does not include costs to retain an LSRP
- Geotechnical investigation or reports
- Site specific seismic evaluation
- Construction oversight or inspection services beyond what is listed above
- Application for any permits or approvals not specifically described above are excluded
- Application fees are excluded

- Any pavement cores, temporary or permanent wells, test pits, or test strips, if and as warranted or required
- County or local planning board submissions are excluded
- Traffic engineering is excluded
- Preparation of a Phase I Environmental Site Assessment (ESA) is excluded
- Structural engineering shall be limited to light pole and shade structure foundations and calculations

CLOSING

Any item listed above which is not ordered will not be billed. Separate authorization from the client will be requested prior to commencing services outside the scope of this proposal.

All out-of-pocket expenses including, but not limited to, application fees, laboratory testing costs, mylar copies, certified mailings, photographs, blueprints, and special deliveries are considered additional to the proposal items unless specifically noted within the scope of this proposal.

This proposal is submitted solely and exclusively for the use of the Township of West Orange for consideration of the professional services of Matrix. Disclosure of this proposal's content to any third party without prior written authorization from Matrix is expressly prohibited.

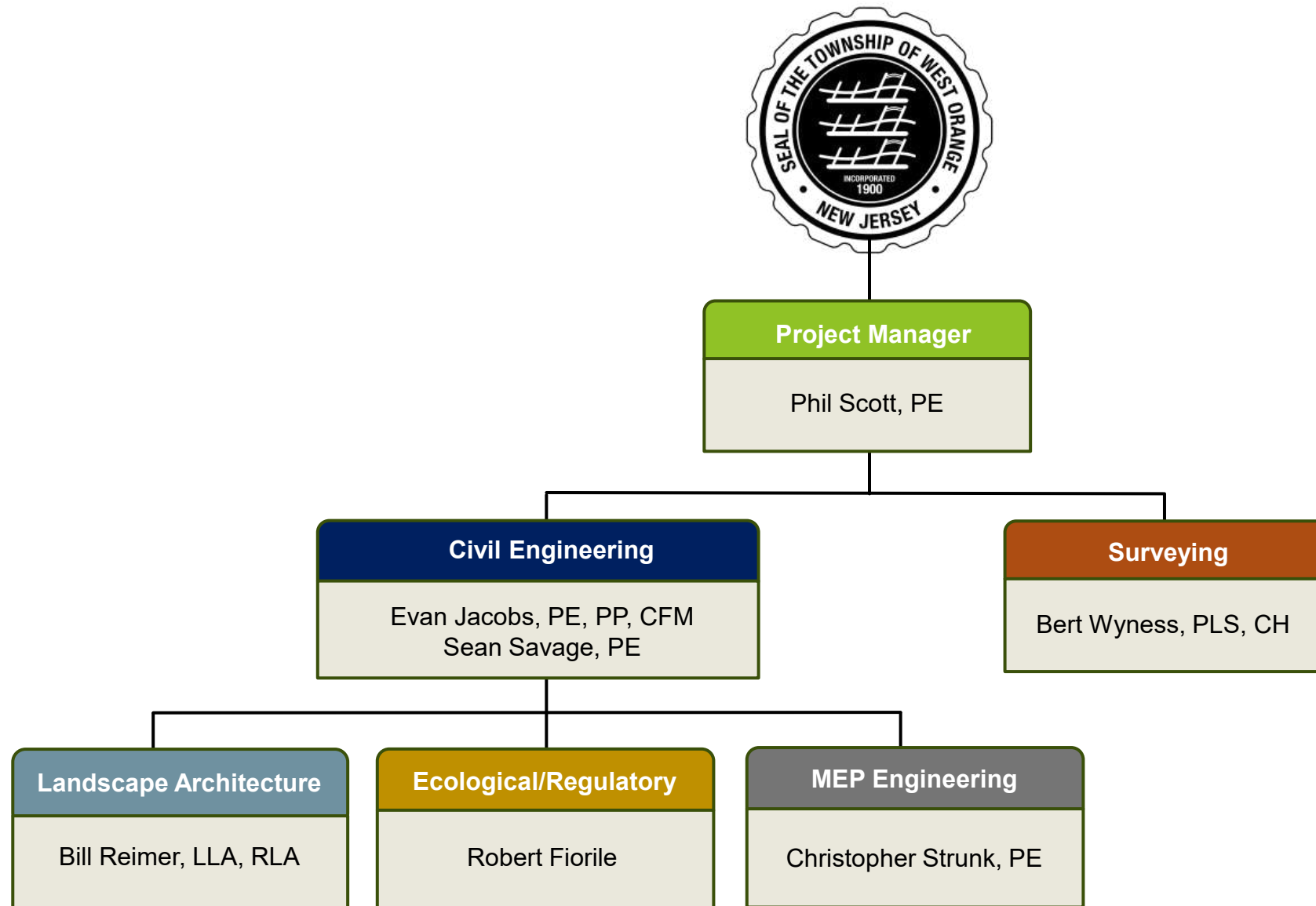
In addition to the specific items as listed herein, the client may be required to demonstrate compliance with certain permit and approval conditions as may be imposed by one or more of the regulatory agencies. These conditions may require revisions to the plans and/or preparation of additional supporting documentation. This proposal does not include these additional items unless specifically outlined within the scope of this proposal.

SECTION 2 – KEY PERSONNEL

ORGANIZATION CHART

RESUMES

Organization Chart



PHILLIP SCOTT, PE, CME

Project Manager

Professional Qualifications

Mr. Scott serves as a Senior Project Manager with over 24 years of experience in the public and private sectors. Mr. Scott was formerly the Director of Engineering at the City of Newark responsible to improve, maintain, plan, operate, and repair the City's infrastructure. He was responsible for improvements and enhancement of roadways, traffic and transportation, municipal parks, code enforcement and the office of the Uniform Construction Code. As Director of the Department of Engineering, Mr. Scott oversaw a staff of approximately 150 employees, managed a budget of over \$14 million, was the Mayor's voting representative on the Board of Trustees for the North Jersey Transportation Planning Authority (NJTPA), and served as the City's flood administrator for FEMA.

The majority of his experience has been associated with residential subdivisions and office/commercial site developments. He has extensive experience in urban revitalization and the redevelopment of affordable housing sites. Mr. Scott is also responsible for several large redevelopment projects in Newark and the surrounding municipalities.

Professional Experience

One Theatre Square, Newark, NJ - Project Manager for the development of NJPAC's first major expansion since its opening in 1997. The project consists of the construction of a 22-story residential tower with over 250 rental apartment units, sub-station for the Newark Police Department, parking garage, and a streetscape with 20,000 sq. ft. of high-quality retail.

Walter G. Alexander Redevelopment, City of Orange, NJ - Project Manager for redevelopment project in the Central Orange Redevelopment Plan area comprised of two phases – Family Housing and Senior Housing. The Family Housing component consists of the demolition of an existing high-rise public housing building and is being replaced with 66 rental townhouse units and community space. The Senior Housing component consists of the demolition of an existing high-rise public housing building and is being replaced with 48 senior rental units in a single building that is designed to complement the adjacent townhouse development design from the previous phase of development.

City of Newark, Passaic Tidal Coastal Risk Management Study, USACE - The U.S. Army Corps of Engineers, New York District is conducting a study in partnership with the NJDEP to evaluate potential coastal storm risk management measures for the tidally influenced and surge-prone areas in the lower Passaic and Hackensack Rivers, and Newark Bay, New Jersey that were included in the authorized Passaic Main Stem project. It includes portions of the City of Newark (Essex County), and its suburbs of Harrison and Kearny (Hudson County). US Army Corps of Engineers (Newark Flanking Plan + Minish Park).

NEWARKGO, Shared Micromobility Pilot Project - Lead the development and creation of the City of Newark's share program that has brought 2,000 bikes and e-scooters to all neighborhoods in the city. NewarkGO Shared Micromobility Pilot Project, Establishing Ordinance + Program rules and regulations.

City of Newark, Small Cell Wireless Facility (5g) Ordinance and Regulations (Small Cell Coordinator) - Lead the development and creation of the City of Newark's Small Cell Wireless Facility Permitting Process which included and not limited to, establishment and adoption of a Municipal Ordinance, adoption of a Wireless Telecommunications Facilities Manual and created a permitting process in accordance with FCC rules and orders. Small Cell Wireless Facility (5G) Regulations + Ordinance.

A. Harry Moore Redevelopment, Jersey City, NJ - Project Manager for the phased redevelopment of a Jersey City Housing Authority site. The residential development comprised of five mid-rise buildings and associated parking.



EDUCATION

B.S. Civil Engineering, New Jersey Institute of Technology, 1998

PROFESSIONAL REGISTRATIONS

Professional Engineer – New Jersey, #24GE04417900, 2003

Certified Municipal Engineer – New Jersey, #04-37

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers
New Jersey Society of Professional Engineers

PHILLIP SCOTT, PE, CME
Project Manager

City of Newark, Stormwater Utility Fee Feasibility Study - Evaluating the City's ability to create and implement New Jersey's first stormwater utility designed to effectively manage and maintain Newark's stormwater infrastructure, create a dedicated funding source to implement Best Management Practices, and identify and implement required activities to ensure State and Federal regulatory compliance.

City of Newark Energy Savings Plan - Lead the City's efforts to develop and implement a comprehensive Energy Savings Plan in seventeen of the most energy intensive public buildings with the goal of identifying and implementing cost-effective and creative solutions to reduce our municipal energy consumption by at least 20 percent.

Newark Greenstreets Report - Feasibility study funded by the North Jersey Transportation Planning Authority, focused on assessing the City's ability of installing green infrastructure systems within the public rights-of-way to help manage stormwater runoff during precipitation events, improve quality of life for City residents and complied with local, State, and Federal transportation regulations.

Central Avenue Revitalization Streetscape, East Orange, NJ - Provided civil engineering design services for the revitalization of 4,800 linear feet of the Central Avenue Business Corridor. Designed and implemented streetscape concept plans, engineering drawings, and bid documents to complement the existing historical elements.

Douglas Harrison Redevelopment, Newark, NJ - Project Manager for the design, permitting, and construction oversight of the outdated Douglas Harrison Homes in Newark's Central Ward. The project proposes to construct "brownstone" style family rental units, a mid-rise senior building, and two public parks to be dedicated to Green Acres.

Baxter Park South, Newark, NJ - Project Manager for the redevelopment of Baxter Terrace, a recently demolished low-income housing development owned and operated by the Newark Housing Authority. This project consists of the design, permitting, and construction administration of two 4-story mixed-use buildings with a total of 90 residential units, and ground floor retail space. Baxter Park South will be the first of many redevelopment projects in the City of Newark's Broad Street Station Redevelopment Area.

Montgomery Heights, Newark, NJ - Project Manager for the first phase of the redevelopment of Brick Towers, a recently demolished property owned and operated by the Newark Housing Authority. The project consists of a 5-story mixed-use building with 80 residential units, 9,700 SF of retail space, and 108 parking spaces.

Alexander Hamilton Redevelopment, Paterson, NJ - Project Manager for progressive and ambitious rehabilitation of outdated urban housing authority project consisting of lower density townhouses and stacked townhouses for a total of 201 new units, including 32 for-sale homes; all homes will meet the COAH affordable housing guidelines.

Lincoln Park Redevelopment, Newark, NJ - Project Manager for a mixed- use residential development comprised of 21 residential units, including seven live-work townhouses, an eight-unit condominium, and a six-unit loft condominium with a ground floor retail space.

City View Landing, Newark, NJ - Project Manager for the redevelopment of a former public housing site that contained a mix of uses, including 58 rental units, 16 home ownership units, and a mid-rise building with 48 senior units and 3,000 SF of retail space.

Trinitas Center of Regional Education (CORE), Elizabeth, NJ - Redevelopment of a 2.4-acre site with a two-story building and surface parking to provide emergency response, community, and medical education.

Saint Michael's Medical Center, Newark, NJ - Redevelopment of a 9-acre medical center to construct a new emergency department and main lobby entrances and parking.

EVAN M. JACOBS, PE, PP, CFM
Civil Engineer**Professional Qualifications**

Evan Jacobs is a civil engineering project manager with 17 years of experience managing, designing and overseeing the construction of a multitude of land development projects. He is well-versed in all aspects of the design of public and private land development, site planning, grading and earthwork management, drainage and stormwater management, utility design, land use permitting, municipal board approvals and preparation of construction documents for public bidding. Mr. Jacobs' projects have included a wide-range of sectors, including K-12 and higher education, sports and recreation facilities, multi-family residential developments, commercial and industrial sites, bridge and culvert replacements, utility infrastructure, large-scale brownfield redevelopment sites, flood mitigation and prevention, and septic system design. Mr. Jacobs also brings nearly seven years' experience as a municipal engineer and planner, having served multiple municipalities, handling all aspects of capital construction projects, apply for and securing grant opportunities, and representing the engineering and construction interests of the municipality. Mr. Jacobs also represented municipal land use boards as both a professional engineer and professional planner serving both Planning Boards and Zoning Boards of Adjustment. Mr. Jacobs has also provided expert witness testimony regarding engineering and land development in both County and Federal courtrooms.

Professional Experience

Oil/Water Separator Replacements, Public Service Electric & Gas Co. (PSE&G), Various NJ Locations - Project Manager and site/civil engineering lead responsible for the design and preparation of construction documents for replacement of oil/water separators at 23 PSE&G vehicle maintenance garages throughout the state. Additional responsibilities included full site investigation and design, existing utility and infrastructure mapping, local sewer authority permitting, plumbing and electrical design to support the new OWS as well as modifications to existing plumbing and sewer systems, grading and drainage design, bid support services, as well as municipal construction permits and sub-code permits for plumbing, electrical, and building.

Pathside Museum Project, Jersey City, NJ – Project Manager and site/civil engineering lead responsible for the design and preparation of construction documents for site improvements for the museum redevelopment of the existing Pathside Building in Journal Square, including a new loading dock berth, stormwater and utility infrastructure improvements, site and landscape improvements for an outdoor plaza and perimeter pedestrian areas, and ADA accessibility improvements.

Military Ocean Terminal at Bayonne Yard, Bayonne, NJ – Site/civil engineering lead responsible for the design of five miles of new urban roadway, utilities, and stormwater infrastructure to support future mixed-use residential development on a 75-acre redevelopment parcel.

Royal Caribbean Cape Liberty Cruise Terminal, Bayonne, NJ – Site/civil engineering lead responsible for the design of the site and supporting infrastructure for the new Royal Caribbean cruise terminal at the MOTBY site. Responsibilities included extensive coordination with Royal Caribbean and the Port Authority of New York & New Jersey, as well as site circulation, passenger and bus queuing and parking design, stormwater and utilities, bollard and mooring layout, and permitting.

**EDUCATION**

MS Civil Engineering, New Jersey Institute of Technology, May 2012
BS Civil Engineering, New Jersey Institute of Technology, May 2007

PROFESSIONAL REGISTRATIONS

Professional Engineer – New Jersey (April 2012)
Professional Planner – New Jersey (September 2017)

PROFESSIONAL CERTIFICATIONS AND TRAINING

Certified Floodplain Manager (Association of State Floodplain Managers), January 2020
HAZWOPER and OSHA 40-hour certification (initially licensed in March 2013, currently expired)

PROFESSIONAL AFFILIATIONS

Association of State Floodplain Managers, January 2020

EVAN M. JACOBS, PE, PP, CFM
Civil Engineer

Union County Bridge Replacements, Various Bridges in Union County, NJ – Project Manager and site/civil engineering lead responsible for design of the site and roadway layout, stream corridor improvements, hydrologic and hydraulic modeling and design for the new structures, and NJDEP land use permitting for wetlands and flood hazard areas for either the rehabilitation, reconstruction, or complete replacement of multiple bridges and culverts under Union County jurisdiction (including but not limited to: Central Avenue – Westfield, Pedestrian Bridge at Nomahegan Park – Cranford, W.R. Tracy Road Bridge – Watchung Reservation – Mountainside, Inwood Place – Plainfield, Allen Avenue – Union).

New Lyndhurst Junior High School, Lyndhurst, NJ – Site/civil engineering lead responsible for the site design, grading, drainage, utilities, and storm for a new 650-student campus, including parking lots and athletic fields. Challenging geology and topography required extensive rock surface modeling and coordination with contractor regarding means and methods for a 40-foot retaining wall and four detention basins.

Oak Ridge Park Improvements, Clark, NJ – Site/civil engineering lead responsible for the design and preparation of construction documents for a multi-sport recreation complex for NCAA-level competition and broadcasting, including an 800-person bleacher with press boxes on an historic property. Responsibilities included extensive site design, grading, drainage and stormwater management, outfall construction, NJDEP Land Use permitting, State Historic Preservation Office coordination and approval, and extensive engineering support during construction.

Gunnell Oval Recreation Complex, Kearny, NJ – Site/civil engineering lead responsible for the design of a 26-acre multi-sport recreation complex on a contaminated site within a flood hazard area. Responsibilities included overall site design, grading and earthwork design and analysis, coordination with LSRP and remedial action efforts and grant funding, extensive stormwater conveyance design relying on a large pump station, securing funding through the New Jersey Environmental Infrastructure Trust, obtaining numerous NJDEP Land Use permits, extensive coordination and securing of a license agreement with Norfolk-Southern for a utility crossing and stormwater discharge under a rail line, as well as extensive coordination with the U.S. Army Corps of Engineers and the New Jersey Sports and Exposition Authority regarding improvements within the tidal wetlands of the marsh.

Bonsal Preserve Sanitary Sewer Relocation, Clifton, NJ – Site/civil engineering lead responsible for the design and preparation of construction documents for the relocation of an existing 12" sanitary sewer main under a nature preserve utilizing trenchless technologies. Responsibilities included sanitary sewer design and modeling, procuring a geotechnical engineer for an extensive subsurface investigation rock modeling, extensive NJDEP Land Use and Treatment Works Approval permitting, coordination with multiple water utility providers with facilities under and over the main, extensive landscape restoration and outreach with the public.

West Side Drainage Study, Berkeley Heights, NJ – Lead civil engineer/hydrologist to investigate the causes of and design of efforts to mitigate flooding for about one-third of the Township. Responsibilities included procurement of large-scale Lidar mapping, existing watershed delineation and modeling, complete hydrologic and hydraulic analysis, HEC-RAS stream study, conveyance system assessment and redesign, stream channel assessment and redesign, project cost estimating and planning, New Jersey Environmental Infrastructure Trust coordination, easement and property takings, and conceptual design plan preparation.

Orchard Creek Flood Study, Rahway, NJ – Lead civil engineer/hydrologist to investigate the causes of and design of efforts to mitigate flooding for a reach of the Orchard Creek within the City of Rahway. Responsibilities included procurement of large-scale Lidar mapping, existing watershed delineation and modeling, complete hydrologic and hydraulic analysis, HEC-RAS stream study, stream channel assessment and redesign, preliminary sediment transport modeling, project cost estimating and planning, and conceptual design plan preparation.

Storm and Sanitary Sewer System Study, Hasbrouck Heights, NJ – Lead civil engineer/hydrologist to investigate the causes of and design of efforts to mitigate flooding for about half of the Borough and multiple areas of major sewer back-ups as a result of Hurricane Ida. Responsibilities included procurement of large-scale Lidar mapping, existing watershed delineation and modeling, complete hydrologic and hydraulic analysis, stormwater conveyance system assessment and redesign, project cost estimating and planning, sanitary sewershed and conveyance modeling, sanitary sewer video inspections and smoke testing, and conceptual design plan preparation.

SEAN M. SAVAGE, PE, LEED AP**Civil Engineer / Director of Land Development****Professional Qualifications**

Sean Savage serves as a Director of Land Development. Mr. Savage has more than 25 years of in-depth experience that includes a wide range of residential and commercial site design/layout, storm/sanitary sewer design, landfill construction management, landfill capping projects, landfill odor studies, sanitary sewer infiltration/inflow studies, a municipal sewage treatment plant expansion pilot study, field inspection, and permitting compliance. In addition, he has been responsible for the completion and submission of various state/municipal permits and applications some of which include CAFRA and Army Corps permitting, Treatment Works Approvals, Water Main Extension permits, Soil Erosion applications, and Pinelands Commission. Mr. Savage has also served as project and client manager on numerous residential and commercial projects varying from small to large located throughout New Jersey.

Professional Experience

18 Central Avenue Mixed-Use Development, West Orange, NJ - Mr. Savage provided project management, and engineering design services for this multi-family housing development consisting of 94 units and 3,500 sf of retail within a 5-story building. Responsibilities included the preparation of site plans for submission to City and NJDEP, stormwater management design, NJDEP flood hazard area (FHA) permitting, and will include obtaining City Planning Board and outside agency approvals including soil erosion, County, sanitary sewer and water main extension approvals. Also responsible for flood volume displacement calculations required for the NJDEP FHA application. Mr. Savage also coordinated with the client's architect as needed to complete the design documents.

Heritage Village at Wall, Wall Township, NJ - Mr. Savage provided project management and engineering design services for this development consisting of 152 senior affordable residential units located within a 3-story building. Design services included preparation of site plans, site grading, stormwater management, water and sanitary sewer connections, and lighting. Project also included obtaining Borough Planning Board approval, County approval, soil erosion approval, NJDEP Wetlands permits and NJDEP permits for water main and sanitary sewer extensions. Mr. Savage also coordinated with the client's architect as needed to complete the design documents.

Vermella New Brunswick, New Brunswick, NJ - Mr. Savage provided project management and engineering design services for this mixed-use redevelopment project consisting of 186 townhouse units, 534 apartment units, and approximately 25,000 sf of retail space. Design services included preparation of site plans, site grading, stormwater management, water and sanitary sewer design, and lighting. The project also included obtaining City Planning Board approval, County approval, soil erosion approval, and NJDEP permits for water main and sanitary sewer extensions. Mr. Savage also coordinated with the client's other consultants (surveyor, geotechnical services, traffic engineer, and architect) as needed to complete the design documents.

One Sunset Avenue, Township of Verona, NJ - Mr. Savage provided project management and engineering design services for this apartment development consisting of 200 residential units located within a multi-story building. Design services included preparation of site plans, site grading, stormwater management, water and sanitary sewer connections, and lighting. Project also included obtaining Borough Planning Board approval, County approval, soil erosion and NJDEP permits for water main and sanitary sewer extensions. Mr. Savage also coordinated with the client's architect and landscape architect as needed to complete the design documents.

**EDUCATION**

BS, Civil Engineering, University of Maryland, 1992

M.Ed., School Business Administration, Rutgers University, 2000

PROFESSIONAL REGISTRATIONS

Professional Engineer – New Jersey, 2003

Professional Engineer – New York, 2015

LEED AP

PROFESSIONAL AFFILIATIONS

Shore Builders Association of Central New Jersey (SBACNJ)
New Jersey Builders Association (NJBA)

AWARDS

New Jersey Alliance for Action 2015 Distinguished Engineering Award for the Sandy Hook Bay Marina and Navesink Development project

SEAN M. SAVAGE, PE, LEED AP

Civil Engineer / Director of Land Development

143 West Front Street, Red Bank, NJ – Mr. Savage was responsible for creating profile and cross-section plans. He also was responsible for grading design and updating drainage report. He was responsible for submitting Soil Erosion and County Planning Board applications, as well as submitting TWA and water main extension permits. Mr. Savage was involved in the redesign of grading after building layout changes. He coordinated with client and architect on plan revisions.

Middletown Senior Housing, Middletown, NJ – Mr. Savage was Responsible for site grading, sanitary/drainage sewer design, stormwater detention basin design, and preparation of drainage report. He was also responsible for general site plan preparations.

Traditions at Tinton Falls, Tinton Falls, NJ – Mr. Savage was responsible for drainage calculations, stormwater detention basin design and routing. He also worked on drainage and sewer pipe layout and prepared site plan, subdivision, and soil erosion applications.

Monmouth Shores Corporate Park, Wall, NJ – Mr. Savage worked on preparation of a land use study for this site which involved creating alternative site layout options including building placement and parking layout. He was responsible for grading of the site and designed drainage and sanitary sewer systems. He organized the creation of the project site plans and also coordinated with client and architect as needed.

Hoboken Senior Housing, Hoboken, NJ – Mr. Savage provided project management and engineering design services for this development consisting of 36 residential units located within a 6-story building. Design services included preparation of site plans, site grading, stormwater management, water and sanitary sewer connections, landscape and lighting. The project will also include obtaining City Planning Board approval, County approval, soil erosion, and NJDEP permits for water main and sanitary sewer extensions. Mr. Savage also coordinated with the client's architect as needed to complete the design documents.

Liberty Harbor North, Jersey City, NJ – NJDEP Waterfront Permitting Plans - Mr. Savage provided project management and engineering design services for this mixed-use development consisting of 694 residential units and approximately 11,000 sf of retail located within a multi-story building and a stand-alone restaurant building. Design services included preparation of site plans, site grading, stormwater management, water and sanitary sewer connections, landscaping, and lighting. Mr. Savage also coordinated with the client's architect as needed to complete the design documents.

PSE&G Spring Valley Road Substation, Paramus, NJ – Mr. Savage provided project management and permitting services for this proposed electrical substation improvement project. The scope of services included peer review of design plans prepared by another consultant and preparation of applications for zoning permit, site work permit and building permits.

Ridgefield Warehouse Development, Ridgefield, NJ – Mr. Savage provided project management, professional testimony, and engineering design services for this approximately 350,000 SF warehouse development. Responsible for preparation of site plans, stormwater management design and obtaining Township and outside agency approvals including soil erosion, NJDEP flood hazard area permitting, NJDEP water main extension, NJDEP treatment works approval, SUEZ water company and County. Mr. Savage also managed other services including survey and landscape design as well as coordinated with the client's other consultants (traffic engineer and architect) as needed to complete the design documents. In addition, Mr. Savage was responsible for preparation of NJDEP flood hazard area permitting plans.

River Road Redevelopment, Borough of Chatham, NJ - Mr. Savage provided project management and engineering design services for this development consisting of 320 residential units located within a 4-story building. Design services included preparation of site plans, site grading, stormwater management, water and sanitary sewer connections, and lighting. Project also included obtaining Borough Planning Board approval, County approval, soil erosion and NJDEP permits for water main and sanitary sewer extensions. Mr. Savage also coordinated with the client's architect as needed to complete the design documents.

BARTHOLOMEW C. WYNESS, PLS, CH

Survey Department Manager

Professional Qualifications

Bartholomew (Bert) Wyness has more than 37 years of experience in the survey field and a prior eight years in the electrical and electronic engineering discipline. He is experienced in and knowledgeable of land survey techniques, including topographic surveys, boundary surveys, geodetic control surveys, aerial photo control surveys, and writing of legal descriptions. Mr. Wyness is also experienced in hydrographic and marine geophysical surveys, including multi-beam and single-beam survey collection and processing procedures, as well as side-scan, sub-bottom, and magnetometer survey collection and processing procedures. Bert Wyness is knowledgeable of survey standards and principles, project and department management relating to land and hydrographic survey missions, workflow, and logistic design.

Professional Experience

Estling Lake Dam Embankment Stabilization, Denville Township, NJ – Project management team member responsible for survey services including boundary surveys, topographic and utility surveys, and railroad surveys.

Historic Area Remediation Site (HARS), USACE NY District, NJ – Chief Hydrographer responsible for the survey of 15 square miles utilizing multibeam technology. The offshore survey was run around the clock, weather and fuel permitting. A submersible gauge was set and buoyed on the seafloor. Sound velocity profiles were collected at a maximum of three hours.

Passaic River (Mouth to the Dundee Dam), USACE NY District, NJ – Responsible for supervising the necessary tasks to collect enough hydrographic data to ensure the success of restoring this part of the Passaic River to its original bathymetry. The water depth of the project area ranged from 0ft to 30ft, with three survey vessels used to accommodate the various river depths.

Jersey City Redevelopment Agency- Project Manager for surveying services in connection with the creation of the Courthouse Park to be located on the current site of the Hudson County Administration Building at 595 Newark Avenue in the City of Jersey City

Northeast Supply Enhancement: Williams Pipeline, NY & NJ – Responsible for the performance of geophysical surveys of a 23-mile proposed pipeline route from Morgan, NJ to Rockaway, NY. Responsibilities included the collection of all hydrographic and geophysical survey data and subsequent management of data processing workflow and delivery to client.

PANYNJ Marine Terminals, NJ, and NY – Responsible for collection of hydrographic data at these facilities. As chief hydrographer on the survey vessel, charged with ensuring the correct procedural and technical processes are adhered to, and in the office, assisting in all aspects of final product delivery.

NYCDEP Bypass Tunnel Construction - CDA - BT2_Tunnel – Project Manager for several work order tasks, including site surveys, property boundary surveys, and control point surveys related to site settlement monitoring at various power generating and wastewater facilities, near a new NYCDEP Bypass Tunnel.



EDUCATION

BS, Survey Engineering, New Jersey Institute of Technology, 2014
AS, Electrical & Electronic Engineering, Napier University – Edinburgh, Scotland, 1981

PROFESSIONAL REGISTRATIONS

Professional Land Surveyor – New Jersey, 2016 - New York, 2010 - Louisiana, 2021 – Connecticut, 2021

PROFESSIONAL CERTIFICATIONS AND TRAINING

ACSM Certified Hydrographic, 2005
Remote Pilot Knowledge Test, 2018
Adjunct Professor at NJIT – Marine Surveying
NOAA Coastal Multi-Beam Training – University of New Brunswick
Trimble Geomatics Post-Processing and Network Adjustment
Wetland Delineation Program – Rutgers University
Continuous Education – Hydrographic and land survey conferences, GIS, and specialized survey seminars

PROFESSIONAL AFFILIATIONS

American Congress on Surveying & Mapping (ACSM)
National Society of Professional Surveyors (NSPS)
New York State of Land Surveyors, Inc. (NYSAPLS)
American Society for Photogrammetry and Remote Sensing (ASPRS)
Association for Unmanned Vehicle Systems International (AUVSI)

BARTHOLOMEW C. WYNESS, PLS, CH
Survey Department Manager

NYCDPR Captain George H. Tilly Park, Landscape Design and Survey Services – Project Manager for all survey services associated with topographic, utility, boundary and bathymetric surveying related to landscape design services for the reconstruction of the pond, retaining wall and drainage, and miscellaneous site work.

NYCEDC Lower Manhattan Coastal Resiliency (EDC Project Number #7788) - Project Manager responsible for topographic, boundary and utility survey of Battery Park, Manhattan, New York City.

NYCDPR MacNeil Park, Queens, NY Civil Engineering Design Services – Project Manager for all survey services associated with topographic, utility, boundary and photogrammetric surveying related to civil engineering services for the reconstruction of the seawall, and miscellaneous site work.

NYCDPR South Rochdale Playground Area. Landscape Architecture Design & Survey Services – Project Manager for all survey services associated with topographic, utility, boundary and surveying related to landscape architecture services for the reconstruction of playground area.

NYCDPR Mullaly Bike Park Reconstruction, Borough of The Bronx – Project Manager for all survey services associated with topographic, utility, boundary and photogrammetric surveying related to Landscape Architectural Design Services to prepare Construction Documents.

NYCT MTA CM-1686 Various Task Orders - SBMP (Station Stairs) - Project Manager responsible for surveying services associated with the ADA update of station stairs throughout the 5-Boroughs.

NYCEDC On Call Surveying Services (Various Task Orders)- Project Manager for surveying services associated with shoreline protection projects.

NYCOMB and NYCDPR, Facility Conditions Assessment & Structural Investigation of The Thomas Jefferson Recreation Center & Pool Complex, Thomas Jefferson Park – Project Manager for all survey services associated with topographic, utility, boundary and surveying related to pre-scoping services for a Facility Conditions Assessment and Structural Investigation of the Thomas Jefferson Recreation Center (TJRC) and Pool Complex in Thomas Jefferson Park.

NYCDEP BWSO Surveying Services (Various Task Orders)– Project Manager responsible for all surveying services associated with property acquisition, infrastructure design, confirmation of legal boundaries and grades, wetland delineation, or other feature mapping as described in the List of Potential Services.

NYC MTA Metro-North Railroad: Rehabilitation of the Grand Central Terminal Train Shed- Project Manager responsible for topographic, boundary and utility survey at street level and tunnel level, Park Avenue, Manhattan, New York City. (2020-present)

NYCT MTA CM-1533 Task Orders # 3 & 4 Additional Design Services Multiple Substation Facilities- Project Manager responsible for topographic, utility and boundary surveys of 15 substations, Manhattan, Brooklyn and Queens, New York City.

NYCDEP GI-S Design-1 Task Order Contract for Design Services for Green Infrastructure – Doe, NYC– Project Manager responsible for topographic, boundary and utility surveys of various green infrastructure school sites throughout New York City.

NYCEDC Ferry System Consulting Services, New York City- Project Manager responsible for bathymetric and topographic survey of various proposed potential ferry terminal sites, New York City.

C.E.P.D. Tidal Study, USACE, NY District, NY – As Project Manager for multiple CEPD projects for the Army Corps NY District, responsible for all planning, field work coordination, computations, data analysis and reporting for these projects consisting of remote tidal monitoring, static, RTN GNSS, and traditional land survey methodologies. Results from these surveys and analysis were used to confirm the MLLW datum determination and its correlation with NOAA's datum determination as used on the various USACE Federal channel projects.

WILLIAM D. REIMER, LLA, RLA**Director of Landscape Architecture****Professional Qualifications**

William Reimer is the Director of Landscape Architecture responsible for the design and oversight of all landscape architecture projects and services and serves as project manager for site planning and site engineering projects. With extensive experience in landscape architecture, site development, and construction management, Mr. Reimer has completed the design, planning, and construction management for numerous state, commercial, and institutional projects for clients that include the New York City Department of Environmental Protection (NYCDEP), New Jersey Department of Transportation, New Jersey Department of Environmental Protection, and the U.S. Army Corps of Engineers. He has designed parks, plazas, and large-scale site plans for both residential and commercial developments.

**Professional Experience**

NJ Transit Roseville Tunnel and Track Bed Rehabilitation Design And Construction Services Andover & Byram Townships, NJ – assessed the tree species and tree canopy for the entire length of the project (approx. 8,000 LF) to determine in the project area was forested or not.

Nellie Bennet Marsh Restoration, Pt. Pleasant, NJ– Landscape architect responsible for the design and development of drawings for the restoration of approximately 20 acres of salt marsh. The new marsh will include low marsh, high marsh, tidal pools and maritime forest areas.

NYC Transit Broadway Mall, NY – Landscape Architect for the rehabilitation of subway ventilators on the Broadway Mall from 144th Street to 146th Street. Matrix provided an inventory of all trees, including their diameter and distance from the walkway. Provided the construction drawings for existing conditions and the proposed landscape design.

Neilson Street Park, New Brunswick, NJ – Project manager and lead Designer for this new downtown park for the city. Public outreach was performed to gather input on what the community wanted to see in the park spaces. The \$3 million new park will include a dog park, a custom slide, tiered gathering spaces to provide multiple programming opportunities at the park and traffic calming to allow for safe access to the park from the surrounding communities.

Feaster and Pittman Parks, New Brunswick, NJ – Project manager and lead Designer for the reconstruction of the parks. Public outreach was performed to gather input on what the community wanted to see in the park spaces. The \$4 million new park includes a children's playground for the adjacent school, outdoor classroom, two basketball courts, outdoor exercise area, open plaza spaces, outdoor game tables, community gardens, spray park, and Amphitheater for community activity space.

NYCDEP Honk Falls Dam Restoration, Wawarsing, NY– Landscape architect responsible for the design and development of drawings for the stream restoration of Honk Lake after the removal of the former dam. During construction of the plantings provided direction on plant layout and reviewed the quality of plant material at the site.

Welton Street Park, New Brunswick, NJ – Landscape Architect/Project Manager for the Welton Street Park project. The design includes spaces for community gathering, and educational and recreational activities for nearby schools. The park also includes a rain garden and pervious pavements, which will help reduce pressures on the existing stormwater infrastructure.

Maywood Avenue Wetland Restoration, Maywood, NJ – Project manager and lead designer for the project. Matrix will be providing a monitoring report of the site for NJDEP for the next five years to ensure the success of the installed plant material.

EDUCATION

BS, Landscape Architecture,
Rutgers University, 1992

PROFESSIONAL REGISTRATIONS

Registered Landscape Architect,
New York, 1999, Pennsylvania
1999, New Jersey, 1999,
Connecticut, 2021, Louisiana, 2021,
Mississippi, 2023

PROFESSIONAL CERTIFICATIONS AND TRAINING

CLARB

PROFESSIONAL AFFILIATIONS

NJASLA

WILLIAM D. REIMER, LLA, RLA
Director of Landscape Architecture

18 Central Avenue, West Orange, NJ - Landscape architect responsible for the design and development of the landscape plans for the project.

Swimming River Park, Monmouth, NJ – landscape architect/ lead designer responsible for the design and development drawing a concept plan for the proposal which included a proposed wetland with a boardwalk through the proposed forest, a kayak launch, boat ramp, fishing pier, and a new building.

Summit Ave, Jersey City, NJ - Landscape architect responsible for the design and development of the landscape plans for the project.

Delancey Street Redevelopment- Newark, NJ - Landscape architect responsible for the design and development of the landscape and streetscape plans for the project.

Sylvan Lake, Avon, NJ – Landscape Architect responsible for the design of living shoreline elements and stormwater treatment wetlands for the project. When installed, the plantings will provide a more stable edge for the lake and the stormwater treatment wetlands will improve the lake's water quality. Assisted in the creation of the construction drawings. The project included a living shoreline and public water access points.

Former SML Site, Hillside, NJ – Landscape architect for the design, development, construction drawings, permitting, and renderings for the facility, which was remediated by Matrix under Industrial Site Recovery Act (ISRA) regulations. The design included a foundation planting, screening from adjacent property, and planting along the street frontage. Matrix's role included overseeing the construction documents, permitting, and completion of remediation actions for the contaminated site.

PANYNJ Harrison Car Maintenance Facility Waterfront Restoration, Harrison, NJ – Landscape architect responsible for the design of wetland restoration and mitigation landscape plans along the Passaic River to mitigate impacts to the flood plain area caused by the proposed improvements to the flood wall. Mr. Brosseau's responsibilities included plant material selection and placement along the Passaic River. The plans were one part of the total project that included the design and construction of a new storage yard for rail cars, raising tracks G and H between AMTRAK Flyover and Hackensack bridges, extending the PATH of South Street Yard, completing a cost estimate for a crossover between Christopher St. and 9th St. for the PATH tunnels along the west side of Manhattan, modifying PATH Substation 14, installing concrete flood walls at the Grove St. and Newport PATH Stations, and identifying transportation technology/Intelligent Transportation Systems (ITS) applications to enhance PATH Rail Transit operations and real-time intra- and inter-agency information sharing.

Newark Bay Waterfront Access - 16th Street, Bayonne, NJ – Landscape Architect/Lead Designer for project to increase waterfront access in neighborhoods surrounding the park. Design includes the construction of a boardwalk and fishing pier, reconstruction of a boat ramp, and construction of groins/sand placement to create a small beach and establish living shoreline plantings.

Soil & Water Investigation/Remediation at Former Unidynamics Facility, Roseland, NJ – Landscape Architect for the former industrial facility located in Roseland, NJ. Specific activities included assessment of potential soil gas/vapor intrusion issues of the existing facility, remedial investigation of on-site areas of concern and groundwater, development of a site-specific impact to groundwater soil remediation standards for contaminated chlorinated VOCs in groundwater, and development of a cleanup plan for both soils and groundwater.

McDonald's Brook Flood Control Project, Passaic, NJ – Project Manager overseeing landscape architecture, geotechnical engineering, and environmental services in Veterans Memorial Third Ward Park. The work included widening and realigning sections of the existing brook to provide a smoother channel and help mitigate erosion during storm events.

Fleischmann Pier, Peekskill, NY – Landscape Architect responsible for concept designs of the overall site and preparation of construction drawings for the project. Mr. Reimer presented the final concept to the council at a public meeting.

ROBERT R. FIORILE**Vice President/Technical Director – Ecological and Regulatory Services****Professional Qualifications**

Robert Fiorile is a Senior Scientist with more than 30 years of experience working in the environmental field. Responsible for the completion of environmental reviews, ecological studies/surveys, natural resource inventories, and State and Federal environmental permit applications, Mr. Fiorile has served various client types with an emphasis on environmental assessments and impact statements in accordance with the National Environmental Policy Act (NEPA), as well as NY and NJ State environmental review regulations. He is also highly skilled in preparing permit applications for complex projects involving activities regulated under various State's freshwater wetlands protection programs, flood hazard area control programs, coastal zone management programs, and U.S. Army Corps of Engineers Section 10 and 404 programs.

Mr. Fiorile's experience includes various types of terrestrial and aquatic ecological studies/surveys, including watershed management plans, lake diagnostic-feasibility studies, lake restoration/management programs, nuisance aquatic species control programs, wetland delineations, seagrass surveys, shellfish surveys, acid soils surveys, and seagrass and wetland mitigation/restoration.

Professional Summary

- Preparation of Freshwater Wetlands Protection Act Individual and Statewide General Permit applications for private development, utility installations, and county/municipal improvements.
- Preparation of Flood Hazard Area Control Act Individual and General Permit applications for private development, utility installations, and county/municipal improvements.
- Delineation of coastal and freshwater wetlands utilizing methodology presented in the Federal Manual for Identifying and Delineating Jurisdictional Wetlands (Federal Interagency Committee for Wetland Delineation, 1989) and the Corps of Engineers Wetlands Delineation Manual (Technical Report Y-87-1, January 1987).
- Wetland mitigation and restoration monitoring in accordance with State and Federal permitting requirements for the purpose of determining the success of wetland mitigation/restoration projects.
- Performance of seagrass surveys conducted in accordance with National Marine Fisheries Service's Seagrass Survey Guidelines to assess impacts resulting from projects occurring within the boundaries of submerged aquatic vegetation beds.
- Performance of seagrass research/restoration projects conducted as part of State and Federal funded grants.
- Preparation of Environmental Impact Statements completed in accordance with local municipal ordinances.
- Preparation of Upland and In-water Waterfront Development Individual Permit applications for dredging projects, utility line installations, and port facility improvements.

Professional Experience

Nellie Bennett Marsh Restoration Plan, Point Pleasant, Ocean County, NJ - Project Manager currently responsible for ecological and engineering services for the completion of site assessments, resource surveys, stakeholder outreach coordination, and preliminary design for the stabilization of 2,600 feet of eroding shoreline and the restoration of 20 acres of tidal salt marsh in upper Barnegat Bay. Matrix is working with the Barnegat Bay Partnership (BBP) and their project stakeholders to develop a comprehensive living shoreline and saltmarsh restoration design plan for Nellie Bennett Marsh, which is currently undergoing subsidence and edge erosion. Our design focuses on developing a phased approach for the protection of the entire marsh complex that can be implemented in phases as funding allows and that is adaptable as effects of climate change and sea level rise are realized over time. Our professionals conducted a comprehensive evaluation of existing site conditions and utilized

**EDUCATION**

B.S. Environmental Studies, Stockton University, 1993

PROFESSIONAL REGISTRATIONS

NAUI Open Water 1-SCUBA Diving Certification

PROFESSIONAL CERTIFICATIONS AND TRAINING

Georgian Court University – Master of Biology Program

Rutgers, The State University of New Jersey – Cook College

- Methodology of Delineating Wetlands
- Plant Identification for Wetland Delineation
- Hydric Soils
- Coastal Project Review

New Jersey Marine Science Consortium

- Marine Fossils

ROBERT R. FIORILE

Vice President/Technical Director – Ecological and Regulatory Services

historical data to understand the causality of the rapid loss to the surface area of the marsh complex. We analyzed best methods for re-establishing marsh edges to the maximum allowable regulatory footprint and protecting the complex from future any future loss.

Newark Bay Wetlands Restoration, City of Newark, NJ – Practice Lead responsible for the implementation of a coastal wetland restoration project funded by a grant made to the City of Newark by the Department of Interior National Fish and Wildlife Foundation (NFWF) through the Hurricane Sandy Coastal Resiliency Competitive Grant Program. The project entails the restoration and protection of a 12-acre wetlands complex located along Newark Bay. The site, which was historically separated from Newark Bay by an 800-foot revetment wall, is one of only a few remaining natural areas remaining in this highly-industrialized portion of Newark Bay. Although some healthy tidal wetlands remain, most of the site has become highly degraded by invasive species and severe shoreline erosion. This project will restore, enhance, and protect the wetland complex through the implementation of multiple resilient and sustainable measures. These include a living shoreline, saltmarsh restoration, and invasive species eradication. The project will ultimately buffer the wetland complex from continued erosion from the tidal action of Newark Bay, improve flood control for the adjoining upland areas in the City of Newark, and restore the natural habitat.

Lenake Lane Drainage Improvements – Responsible for the preparation of Freshwater Wetlands Protection Act Statewide General Permit and Flood Hazard Area Control Act Individual Permit applications required for drainage improvements within a residential neighborhood.

Sylvan Lake Living Shoreline 310(h) Grant Program, Avon-By-The-Sea, Monmouth County, NJ – Responsible for the preparation and submission of grant application to the New Jersey Department of Environmental Protection (NJDEP) to request funding under the State 319(h) Grant Program for the borough of Avon-By-The-Sea to implement Sylvan Living Shoreline Project. In addition, The Sylvan Lake Living Shoreline project also incorporates creation of bioswales and constructed wetlands, designed to mitigate the nonpoint source (NPS) pollution impacting Sylvan Lake, which is a coastal lake located on the border of Avon-By-The-Sea and Bradley Beach in Monmouth County, New Jersey. The borough successfully received the grant to implement the project.

Tier A Municipal Stormwater General Permit Stormwater Outfall Pipe Inspections, Lakewood, NJ – Task Manager for the implementation of a township-wide EPA Phase II stormwater outfall sampling program in accordance with monitoring and assessment procedures guidance presented within the United States Environmental Protection Agency (USEPA) National Pollutant Discharge Elimination system (NPDES) Stormwater Sampling Guidance Document. Efforts included initial physical inspection of stormwater outfall pipes, sampling and field analyses for outfalls that exhibited dry weather flow, follow-up Inspections for outfalls that exhibited signs of intermittent flow, and project documentation and reporting.

Strategic Water Quality Improvement Plan for Surface Water Quality Improvements of the Long Swamp Creek Watershed, Toms River, NJ – Task Manager for the completion of field work and preparation of the final report for a NJDEP approved watershed management plan for the entire Long Swamp Creek watershed, which included spatial analyses of lake subwatersheds and key land use characteristics.

Lake Pohatcong Watershed Analysis – Securing of grant funding for and the implementation of a Rosgen stream analysis as well as the development and implementation of watershed management plan that included the development and implementation of a bacteria source assessment program and the identification of appropriate restoration BMPs for the Lake Pohatcong subwatershed.

Phase 1 Diagnostic-Feasibility Study of Lake Carasaljo – Task Manager for the completion of a NJDEP approved watershed management plan for the entire Lake Carasaljo watershed, which included the development and implementation of a nutrient loading assessment.

Lake Management/Restoration Program for Lake Alberta – Securing of grant funding and the performance of multiple lake and stormwater management BMPs designed to improve water quality conditions by reducing the level of NPS pollutants within this municipal lake.

Christopher T. Strunk, P.E. Owner / Professional Engineer

Christopher Strunk serves as a Owner in Strunk-Albert Engineering LLC and is responsible for final approval of all projects and is responsible for all design, project scheduling and staff coordination relating to mechanical, plumbing and fire protection systems design. He also oversees and is actively involved in all client interface and project coordination with other design professionals. Mr. Strunk strives to uphold a high level of professionalism and technical understanding of his subject matter while maintaining the capacity to effectively communicate his knowledge with those beyond the field of engineering.

Mr. Strunk's career started with Strunk-Albert Engineering in 2001 as a college intern and began full time employment upon his graduation from college in 2004. Chris worked his way up through the company and, upon his cousin David Strunk's retirement in 2019, became Owner in the firm. In his nearly 20 years of experience, Christopher has been involved in the design and/or evaluation of numerous projects associated with all manners of building types and associated systems.

Mr. Strunk is a graduate of the Pennsylvania State University, University Park, with a degree in Mechanical Engineering. He is a registered professional engineering in PA, NY, TN, DE, NJ, CT, SC, KY, MD and CO.

Project Experience:

- Educational – University, Colleges & K-12 Facilities
- Medical – Outpatient Care, Urgent Care, Laboratory
- Libraries
- Historical Facilities – Residences, Museums
- County & Municipal Facilities
- Residential
- Recreational Facilities
- Religious Facilities
- LEED Facilities (Certified, Silver, Gold & Platinum)
- Pool / Natatorium Facilities
- Retail Facilities
- Indoor Shooting Ranges
- Science & Technology Facilities
- Veterinary Facilities
- Fitness / Health Club Facilities
- Corporate Office Facilities
- Garage / Maintenance Facilities
- Institutional Facilities
- Auto Dealerships
- Tenant Fit-Outs
- Warehouse / Distribution
- Manufacturing
- Indoor Growing Facilities
- Food / Restaurant Facilities
- Building Evaluations

Registrations:

Professional Engineer
Commonwealth of Pennsylvania
2012

State of New York
2019

State of Tennessee
2019

State of Delaware
2019

State of New Jersey
2019

State of Connecticut
2020

State of South Carolina
2020

State of Maryland
2021

State of Colorado
2022

Engineer in Training
Commonwealth of Pennsylvania
2006

Education:

Bachelor of Science
Mechanical Engineering
The Pennsylvania State University
2004

Professional Organizations

ASHRAE, ASPE, NFPA



SECTION 3 – EVIDENCE OF INSURANCE



CERTIFICATE OF LIABILITY INSURANCE

3/2/2025

DATE (MM/DD/YYYY)

8/22/2024

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 have ADDITIONAL INSURED provisions or 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 Lockton Companies, LLC 444 W. 47th Street, Suite 900 Kansas City MO 64112-1906 (816) 960-9000 kcasu@lockton.com	CONTACT NAME: PHONE (A/C, No, Ext): FAX (A/C, No): E-MAIL ADDRESS:														
INSURED 1546952 MATRIX NEW WORLD ENGINEERING, LAND SURVEYING AND LANDSCAPE ARCHITECTURE, PC 26 COLUMBIA TURNPIKE FLORHAM PARK NJ 07932	<table border="1"><thead><tr><th>INSURER(S) AFFORDING COVERAGE</th><th>NAIC #</th></tr></thead><tbody><tr><td>INSURER A: Nautilus Insurance Company</td><td>17370</td></tr><tr><td>INSURER B: Great Divide Insurance Company</td><td>25224</td></tr><tr><td>INSURER C: Allmerica Financial Alliance Ins Co</td><td>10212</td></tr><tr><td>INSURER D: Houston Casualty Company</td><td>42374</td></tr><tr><td>INSURER E:</td><td></td></tr><tr><td>INSURER F:</td><td></td></tr></tbody></table>	INSURER(S) AFFORDING COVERAGE	NAIC #	INSURER A: Nautilus Insurance Company	17370	INSURER B: Great Divide Insurance Company	25224	INSURER C: Allmerica Financial Alliance Ins Co	10212	INSURER D: Houston Casualty Company	42374	INSURER E:		INSURER F:	
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INSURER F:															

COVERAGES **CERTIFICATE NUMBER:** 20860343 **REVISION NUMBER:** XXXXXXXX

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 INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	☒ COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☒ OCCUR ☒ Pollution Liab ☒ Contractual Liab GEN'L AGGREGATE LIMIT APPLIES PER: ☐ POLICY ☒ PRO-JECT ☐ LOC ☒ OTHER: Poll Per Claim: \$2M	N	N	ECP201734119	3/2/2024	3/2/2025	EACH OCCURRENCE \$ 2,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 300,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 2,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/DP AGG \$ 2,000,000 \$
C	AUTOMOBILE LIABILITY ☒ ANY AUTO ☐ OWNED AUTOS ONLY ☒ HIRED AUTOS ONLY ☐ SCHEDULED AUTOS ☒ NON-OWNED AUTOS ONLY	N	N	AWYJ42223301	3/2/2024	3/2/2025	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ XXXXXXXX BODILY INJURY (Per accident) \$ XXXXXXXX PROPERTY DAMAGE (Per accident) \$ XXXXXXXX \$ XXXXXXXX
A	☒ UMBRELLA LIAB ☒ OCCUR ☒ EXCESS LIAB ☐ CLAIMS-MADE DED RETENTION \$	N	N	FFX201734219	3/2/2024	3/2/2025	EACH OCCURRENCE \$ 10,000,000 AGGREGATE \$ 10,000,000 \$ XXXXXXXX
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N	N/A	WCA2017344	3/2/2024	3/2/2025	☒ PER STATUTE ☐ OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
A	PROFESSIONAL LIABILITY	N	N	ECP201734119	3/2/2024	3/2/2025	LIMIT PER CLAIM: \$2M
D	CYBER	N	N	H23NGP22309701	3/2/2024	3/2/2025	LIMIT OCC/AGG: \$5M

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
RE: EVIDENCE OF INSURANCE

CERTIFICATE HOLDER

20860343
SAMPLE CERTIFICATE HOLDER

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

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**Consulting & Municipal
ENGINEERS**

1460 Route 9 South
Howell, NJ, 07731
732.462.7400 ☎
www.cmeusa1.com 🌐

October 24, 2024

Sent Via Electronic and Regular Mail

Zayibeth Carballo, Director / Municipal Engineer
Township of West Orange
66 Main Street
West Orange, NJ 07052

**Re: *Estimate of Fees for Professional Engineering Services
Oskar Schindler Performing Arts Center and Crystal Lake Improvements
Township of West Orange, Essex County, NJ***

Dear Ms. Carballo:

We are pleased to present our estimate of fees for the design, permitting and construction phase services for the above-referenced project.

It is our understanding that the Township is seeking to improve the Okar Schindler Performing Arts Center (OSPAC) and Crystal Lake by creating additional amenities and better utilize the park's area. The Township envisions the improvements to OSPAC consisting of furnishing and installing a sound system for the amphitheater including the installation of ADA accessible bleachers on concrete pads. Crystal Lake improvements will consist of the reconstruction of approximately 0.5 miles of stone dust and/or HMA pathway around the lake between 6 ft. to 8 ft. wide including the installation of decorative pathway LED lighting, electronic entrance LED sign, benches, and trash receptacles. Other possible amenities might include the construction of a fishing pier and floating dock, paddle boats and canoes launch area, prefab pedestrian bridge, the construction of a small shoreline with outdoor showers, seating area pavilion, a playground, and a concession stand.

The project might also include retrofitting certain storm drain inlets along drains in the vicinity of the lake to meet standards outlined in the Stormwater Management rules. The retrofitting focuses on solids and floatable control to help reduce the amounts of pollutants that may enter the stormwater system that impact receiving waters.

Crystal Lake is a spring-fed lake and the headwater to the Rahway River and a passive park facility that is underutilized by West Orange residents. According to FEMA's Flood Insurance Rate Map (FIRM) Map # 34013C0111F with an effective date of June 4, 2007, Crystal Lake is within Zone A flood hazard area.

CONSULTING AND MUNICIPAL ENGINEERS LLC

NJ CERTIFICATE OF AUTHORIZATION NO. 24GA28359000

Barnegat • Berlin • Camden • Howell • Medford • Monmouth Junction • Parlin



Ms. Zayibeth Carballo
Township of West Orange
Re: Professional Engineering Services
Oskar Schindler Performing Arts Center and
Crystal Lake Improvements

October 24, 2024

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It is noted that the project construction will be partially funded by the American Rescue Plan (ARPA) which the funds will need to be expended by December 2025 for said improvements.

With this in mind, we anticipate the following scope of services per the RFP:

1. Land Surveying Services

The following services will be provided under this phase:

- A. Preparation of a Base Map utilizing aerial orthographic photographs with field data to supplement planimetric features such as tax map data to be provided by the Township in CAD for the preparation of Concept Plans;
- B. Boundary and Topographic Survey for OSPAC and Crystal Lake for the preparation of permitting and construction plans;
- C. Map the location of wetlands, buffers, riparian zones, limits of the 100-Year Flood Hazard Area (FHA) and top of bank location as per Professional Wetlands Scientist and Engineer;
- D. Location of tree canopy around the lake needs to be established;
- E. Sufficient topographic information is to be provided for the design of proposed curb ramps and ADA accessible areas;
- F. Establish horizontal control based on North American Datum 1983 (New Jersey State Plane Coordinate System-NAD 83) and North American Vertical Datum 1988 (NAVD 88);
- G. Establish water surface elevation of Crystal Lake;
- H. Benchmark(s) to be set on site for future use;
- I. Existing conditions/Survey Control plan; and.
- J. Coordinate utility mark-outs.

As part of the deliverables, an electronic AutoCAD file of the Boundary and Topographic Survey is to be provided for the design of the Playground Area by the Township.



Ms. Zayibeth Carballo
Township of West Orange
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2. Civil Engineering Services

CONCEPT PHASE & NJDEP PRE-APPLICATION MEETING

Under this phase, our office will prepare a Concept Plan of the overall improvements in consultation with the Township representatives.

- A. Develop two (2) color renderings for review with the Township;
- B. Confirm and establish Drainage Area for this project as to whether or not is greater than 50 acres to establish whether or not it has a regulated floodplain;
- C. Establish the still water surface elevation for Crystal Lake;
- D. Perform a Wetlands delineation and establish the riparian zones;
- E. Attend Pre-Application meeting* and draft meeting notes;
- F. Provide design recommendations to the Township based on NJDEP's feedback, regulatory challenges, design conflicts and project feasibility;
- G. Determine/discuss the appropriate improvements in conjunction with the Township and its representatives to determine the best course of action to facilitate the project goals.

***Pre-Application Meeting**

CME will coordinate and attend a pre-application meeting with the appropriate representatives from the Department. The meeting is typically held on Microsoft teams. Prior to the meeting, CME will prepare the required information as outlined by the Pre-Application Request Submittals checklist provided in the RFP. After the meeting, CME will provide meeting minutes and design recommendations to the Township and identify any regulatory challenges and design conflicts.

NJDEP PERMITTING SUBMISSION PACKAGE

Under this task, our office will prepare a NJDEP Permitting Package following the feedback obtained from Civil Engineering Services task. In review of the proposal, our office has determined the following permitting scope:



Ms. Zayibeth Carballo
Township of West Orange
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Flood Hazard Area Control Act Rules (FHA)

The proposed improvements are near and within the regulated areas of the Crystal Lake. Crystal Lake is considered a FW2-NT water (according to the rules found within the Surface Water Quality standards found at N.J.A.C. 7:9B) and as a result will require a 50-foot riparian zone (as found at N.J.A.C. 7:13-4.1). Additionally, Crystal Lake is mapped as a FEMA Flood Zone A with no base flood elevations determined.

Given the proposed improvements may take place within the riparian zone or within the flood hazard area, various Flood Hazard Area Permits may be required including but not limited to, Permit-by-Rules, General Permits, or an Individual Permit. If the project is considered a major development in terms of stormwater, as in there will be more than 1 acre of ground disturbance or more than $\frac{1}{4}$ acre of new impervious surface, an Individual Permit will be required. Once the concept plan is developed, the specific permits required will be identified and discussed with the NJDEP during a pre-application meeting.

Based on a preliminary review of USGS StreamStats, Crystal Lake appears to drain less than 50 acres and therefore would not have a flood hazard area associated with it (in accordance with N.J.A.C. 7:13-2.3). CME will confirm these findings and discuss with the NJDEP during the pre-application meeting.

CME will prepare and submit all required information for a NJDEP Permit application based on the final design. This includes preparing public notices, an Environmental Report demonstrating compliance with the regulations, permit plans, and a stormwater/design report where necessary. It is understood that the permit fees are the responsibility of the Township.

Freshwater Wetland Protection Act Rules

While freshwater wetlands are not mapped on site, it is probable that wetlands will exist within the vicinity of Crystal Lake. As such, a site visit will be conducted to confirm these findings. If wetlands are identified in the area, it is likely that the wetlands will be considered intermediate resource value and require a 50-foot transition area (as found at N.J.A.C. 7:7A-3.3(d)).

Should freshwater wetlands, transition areas, or State open waters be disturbed for this project, various General Permits will be required including but not limited to General Permit 11 – outfalls and intake structures, General Permit 17 – trails and boardwalks, General Permit 19 – docks and piers, General Permit 20 – bank stabilization, General Permit 21 – above ground utility lines, or General Permit 25 – minor channel or stream cleaning for local



Ms. Zayibeth Carballo
Township of West Orange
Re: Professional Engineering Services
Oskar Schindler Performing Arts Center and
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October 24, 2024

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government agencies. The project will be required to comply with various requirements specific to each permit.

Once the concept plan is developed, the specific permits required will be identified and discussed with the NJDEP during a pre-application meeting.

CME will prepare and submit all required information for a NJDEP Permit application based on the final design. This includes preparing public notices, an Environmental Report demonstrating compliance with the regulations, permit plans, and a stormwater/design report where necessary. It is understood that the permit fees are the responsibility of the Township.

Site Investigation

Based on a preliminary desktop assessment of the environmental conditions revealed within the NJDEP's GeoWeb online GIS resource and the USDA Web Soil Survey, freshwater wetlands do not appear to be located within the project area. Therefore, CME will conduct a site visit to confirm these findings, utilizing the methodologies outlined in the Federal Manual for Identifying and Delineating Jurisdictional Wetlands (1989), as required by the NJDEP under the Freshwater Wetlands Protection Act Rules. If wetlands are present, the wetland/upland boundaries will be determined based upon field examination of topography, hydrology, soils, and vegetation characteristics at the site. Additionally, CME will also identify top of bank for regulated waters within the proposed work area to accurately represent the riparian zones associated with the State open waters adjacent to the site. Top of bank is typically characterized by an observable change or break in the slope of the land along a regulated water. In the event this break is not identifiable, other methods described in Flood Hazard Area Control Act Rules will be utilized to define top of bank.

State Historic Preservation Office (SHPO)

The project site is not mapped as a historic property, historic district, or historic archeological site according to the Departments NJ-GeoWeb online GIS resources. As such, SHPO comments are not anticipated while the wetlands application is being reviewed. This will be discussed during the pre-application meeting.

Geotechnical Phase

This phase includes an exploration of the subsurface soil and groundwater conditions within the zone of influence of the proposed construction and evaluation of soil conditions with respect to their engineering properties. These investigations will be critical to the placement,



Ms. Zayibeth Carballo
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Oskar Schindler Performing Arts Center and
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design, and permitting if stormwater improvements are required. Soil testing will be carried out in accordance with the requirements of the N.J.A.C. 7:8 and the *NJ Stormwater Best Management Practices Manual*, Chapter 12.

Soil Exploration – CME Associates will conduct up to 10 soil profile pit assessments to depths of 12-15 feet below grade or until the water table is encountered. These assessments will be conducted in accordance with the NJDEP's Stormwater Best Management Practices Manual, Chapter 12: Soil Testing Criteria. A minimum of one (1) soil sample will be collected in the most hydraulically restrictive soil layer above the seasonal high-water table elevation and below the bottom of the proposed basin in each pit. Permeability testing will be conducted utilizing the tube permeameter methodology. The results of the test pits and permeability testing will be included in the Stormwater Management Report/Drainage Narrative.

NJDEP Regulatory permit fees are to be provided by the Township at the time of the application.

3. HUDSON-ESSEX-PASSAIC SOIL CONSERVATION DISTRICT (SCD)

It is anticipated that Certification by the Hudson-Essex-Passaic SCD will be required due to the limits of disturbance. Our office will prepare and submit the following items in support of the SCD application:

- SCD application form;
- Soil Erosion and Sediment Control Plans in accordance with "Standards" pursuant to N.J.S.A. 4:24-39 and N.J.A.C. 2:90-1.1;
- Revisions as requested from the SCD within the 60-day review & approval period; and
- Request for NJDEP Stormwater General Permit Authorization (RFA) to discharge stormwater from a construction site.

The SCD certification, inspection, and administrative fee and RFA is to be provided by the Township at the time of the applications.

4. FINAL DESIGN SERVICES

The work under this task will include the following:

- A. Prepare Preliminary Plans and Cost Estimate for final review and approval;



Ms. Zayibeth Carballo
Township of West Orange
Re: Professional Engineering Services
Oskar Schindler Performing Arts Center and
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- B. Prepare a Drainage Report;
- C. Prepare a Final Plan Set incorporating Township Comments to include but not be limited to the following:
 - Cover Sheet with location map
 - General and Construction Notes with legends
 - Existing Conditions/Survey Plan
 - Control Plan
 - Demolition Plan
 - Construction Plan
 - Grading Plan and Earthwork Summary
 - Utility Plan including profiles
 - Landscaping Plan
 - Soil Erosion and Sediment Control Plan and Details
 - Traffic Control and Detour Plans and Construction Details
- D. Prepare Specifications;
- E. Prepare Final Engineer's Estimate; and,
- F. Attend four (4) meetings with the Township Officials for Kickoff, Preliminary Design, Public Presentation and Final Design.

5. BID PHASE

The work under this task will include the following:

- A. Provide 20 sets of plans and specifications;
- B. Respond to Request for Information (RFI) during the bid period;
- C. Issuance of Addenda(s) to the Qualified Purchasing Agent;
- D. Bidding documents (plans and specifications) deliverables to the Township via AutoCAD, hard copy and PDF files.



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Township of West Orange
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Fee Estimate

We will provide the necessary engineering services as described above based upon the cost breakdown as noted below:

A. Land Surveying Services.....	\$40,000.00
B. Civil Engineering Services.....	\$80,000.00
C. Soil Conservation District	\$1,500.00
D. Final Design Services.....	\$35,000.00
E. Bid Phase Services	\$3,500.00

Total Lump Sum Fee for Services \$160,000.00

Construction Administration Services (Separate Fee)

The following services will be provided under this phase:

- A. Contract preparation including review of bonds, insurance certificates and project manning reports;
- B. Attend preconstruction meeting;
- C. Provide assistance with interpretation of contract documents;
- D. Review shop drawings for site-related items;
- E. Provide construction observation services, prepare contractor punch lists and review and prepare pay estimates; and,
- F. Perform project close out and final pay estimate/close out change order.

The Lump Sum fee for Construction Administration Services is **\$60,000.00**.

Exceptions:

- Any work not specified as listed in the above phase shall be considered additional services and will be invoiced at the time said work is authorized by the Township.



Consulting & Municipal
ENGINEERS

Ms. Zayibeth Carballo
Township of West Orange
Re: Professional Engineering Services
Oskar Schindler Performing Arts Center and
Crystal Lake Improvements

October 24, 2024

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Should this fee estimate meet your approval, please provide our office with a professional services agreement or resolution as an indication of the work to proceed. In the meantime, should you have any questions concerning this matter, please do not hesitate to contact this office.

Very truly yours,

CME Associates

Trevor J. Taylor, PE, PP, CME, CFM
For the Firm

TT/ab/pv

Proposal For Professional Services

Oskar Schindler Performing Arts Center (OSPAC) And Crystal Lake Improvements West Orange Township, Essex County, New Jersey

October 25, 2024



Submitted to:
West Orange Township

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October 25, 2024

Zayibeth Carballo, PE, PLS, PP, CME, CFM, CFS
Director, Municipal Engineer
Department of Engineering
Township of West Orange
25 Lakeside Avenue
West Orange, NJ 07052

Re: Proposal for Professional Services
Oskar Schindler Performing Arts Center (OSPAC)
and Crystal Lake Improvements

Dear Ms. Carballo:

Greenman-Pedersen, Incorporated (GPI) is pleased to submit our proposal for professional services related to improvements at the Oskar Schindler Performing Arts Center (OSPAC) and the adjoining Crystal Lake. The specific scope of work is set forth in the Request for Proposals, issued by the Township of West Orange and dated October 11, 2024, as may be clarified herein.

In our review of the Request for Proposals, we note that the scope includes activities that will require permitting from the New Jersey Department of Environmental Protection (NJDEP) while other activities do not. This office is recommending that the Township consider bidding those items requiring NJDEP approvals separate from those that do not. By splitting the project into two bid schedules the ordering of potential long-lead items, including but not limited to the electronic entrance sign, site furniture and playground equipment, will not be delayed by the NJDEP review process.

Our November 28, 2023 Qualifications Statement submitted to the Township demonstrates that our experienced staff can handle the project.

Enclosed for your review is our Proposal to Provide Professional Engineering Services, dated October 25, 2024.

We are pleased to have this opportunity to be of continued service to the Township of West Orange and hope you will find our proposal favorable. We would be happy to provide additional information or assistance as your needs dictate.

Respectfully submitted,



Andrew Cangiano, PE, CME
Director of Engineering



Thomas R. Lemanowicz, PE, PP, CME
Principal Engineer

AC/TRL/rem
attachment

m:\proposal\trl\west orange\2024 oskar schindler art center\corresp\outgoing\2024-10-25 crystal lake proposal.docx

Section 1

Scope of Services / Fee Schedule



SCOPE OF SERVICES

DESIGN SERVICES

The Base Scope of Work will include the installation of ADA accessible seating for the amphitheater, the installation/rehabilitation of a 6 foot wide stone path around the perimeter of the lake, the installation of decorative LED pathway lighting along the perimeter path, the installation of a monument sign with programmable message board, and the installation of miscellaneous site furnishings such as benches and trash receptacles.

With respect to the work on the pathway, this proposal assumes that the surface will not be HMA as this surface will be counted as impervious and could qualify the project as a Major Development for Stormwater Design. Further, the RFP lists the pathway width as 6 to 8 feet. Since Freshwater Wetlands General Permit #17 will be utilized for this work, and since the permit conditions restrict the maximum pathway width to 6 feet, the pathway work will not widen any part of the pathway to more than 6 feet.

The project is not intended to qualify as a Major Development for Stormwater Design. Therefore, while not specifically required, GPI will include the replacement of inlet heads and grates as required by the stormwater management rules.

There are additional items listed in the Alternate Scope of Work. These items are specifically discussed in Section I of this proposal. The Township's decision on which, if any, of the additional items will be included in the project must be early in the project schedule to assure compliance with the timeline in the RFP.

A. SURVEYING SERVICES

1. Prepare a Conceptual Base Map utilizing public domain aerial orthographic images with tax map parcel and feature overlays, to be provided by the Township in CAD format.
2. Prepare a Boundary and Topographic Survey of the subject parcels, being known as Lot 1.02 (Crystal Lake) and Lot 5 (Oskar Schindler Performing Arts Center) and the area of the walking trail, with all three mentioned parcels encompassing approximately 9.3 acres of land, in accordance with N.J.A.C. 13:40-5.1 in support of permitting and construction plans. Corner markers will NOT be set under this agreement. We will obtain a ten-foot (10') overlap onto adjoining properties where accessible.

Prior to commencing with the survey, we require that the Township supply or make available, all pertinent information and documentation in the Township's possession relative to the subject parcel. Such information includes, but is not limited to, title reports/searches, area surveys, construction plans related to prior improvements to the property, records, deeds, original tract maps, public records, State, County, or Municipal maps. We also require any information on adjoining properties in the Township's possession. If the information supplied is not sufficient to render an accurate survey, GPI will make all reasonable efforts in accordance with the industry standard of care, to obtain additional required information. If, as a result of these efforts, not enough information is found to prepare a boundary survey, or if a title search is not supplied, or if ambiguous or clouded title areas are found, the Township will be notified in writing of the various options for proceeding with the project. These options may consist of additional fees necessary by either GPI, a title search consultant, attorneys, or other expert professionals to further research subject and adjoiner deeds, investigate the chain of title, trace ownership to original cloth, identify easements, or other services pertaining to the specific problem related to the project. Our firm does not provide title search services; therefore, boundary surveying services offered herein will be subject to such facts as a complete title search might disclose.

3. Map the location of wetland flags and depict the locations of the associated buffers, FEMA Special Flood Hazard Area Zone lines, and riparian zones on the Survey plan.
4. Depict the horizontal limits of the tree canopy encompassing Crystal Lake.
5. Collect sufficient topographic information in the improved area of the OSPAC for the design of curb ramps and ADA accessible areas.

We will obtain horizontal and vertical information on the referenced site, including buildings, walks, driveways, concrete pads, walls, fences, curbs, curb ramps, swales, streams, top of bank, tree lines, horizontal limits of tree canopy, limits of parking areas, porches, steps, ramps, and visible storm, sanitary and other utility structures including utility poles. Individual, isolated trees will be located. We will obtain horizontal and vertical information, including the nearest upstream and downstream structure, type of structure, type of casting, size and types of pipes entering the structure, and inverts on accessible pipes from aboveground observation of the storm and sanitary sewer system.

Elevations on hard surfaces will be shown to the nearest hundredth foot (0.01') and ground elevations will be shown to the nearest tenth foot (0.1'). Contour lines will have a one-foot (1') interval.

6. Tie the field work horizontally into the North American Datum of 1983 (NAD 83), and vertically into the North American Vertical Datum of 1988 (NAVD 88).
7. Record water surface elevation information at Crystal Lake.
8. Set a minimum of two (2) elevation benchmarks on-site for future use by the Township or its agents.
9. Generate final topographic mapping at a scale of one inch equals fifty feet (1" = 50') or other appropriate scale that will be available in AutoCAD® Civil3D® 2024 ".dwg" format along with the boundary survey and survey control information.
10. Contract with an underground utility locating firm to provide a Level "B" markout on the OSPAC property and to provide sketches, ground surface marks, and a summary report of findings. We will locate markings on the ground which in conjunction with field sketches and reports by the utility locator subcontractor will be depicted on the Survey plan.

B. CONCEPT PHASE

1. Perform site inspection to establish extent of wetlands within work area. Assume the required buffers for Concept Plan discussion purposes.
2. Coordinate a Kick-off/Concept Plan meeting with municipal officials and/or department heads to finalize the Scope of Work. GPI will prepare a meeting agenda to establish meeting goals.
3. Prepare a draft Concept Plan for the overall project based upon Township clarifications. The Concept Plan is anticipated to be returned to the Township within one week of the Concept Plan meeting.
4. Prepare two color renderings based upon the Concept Plan and comments received within one week of the submission of the draft plan to the Township.
5. Create the Concept Plan while acknowledging that the version to be discussed with the NJDEP as part of permitting will only show the activities requiring NJDEP permits.

C. NJDEP PRE-APPLICATION PROCESS

1. Prepare a Pre-Application package in preparation for a Pre-Application meeting with the NJDEP. The package will follow the requirements of the checklist provided in the RFP.
2. Coordinate Pre-Application meeting with the NJDEP. Attend and prepare minutes of meeting.
3. Coordinate a meeting with Township officials to discuss NJDEP comments and their impact on the Concept Plan.
4. Establish final scope of work and project layout.

D. NJDEP PERMIT SUBMISSION PACKAGE

1. Pursuant to NJAC 7:13-2.3(b), *a flood hazard area exists along every regulated water that has a drainage area of 50 acres or greater. If a regulated water has a drainage area of less than 50 acres, the water does not possess a flood hazard area that is regulated under this chapter.* Based upon the documentation attached to the RFP, and our independent review, the Crystal Lake has a drainage area of approximately 23 acres. Therefore, Flood Hazard Area permitting relating to flood hazard areas is not anticipated, or included in this proposal. However, it is acknowledged that permitting will be required for disturbance in the Riparian Zone.
2. Crystal Lake is tributary to the Rahway River. Pursuant to NJAC 7:9B-1.15(f), the Rahway River is not a Category One Water. Therefore, design considerations, including mitigation, for Category One Waters are not anticipated or included in this proposal.
3. Prepare combined application for Freshwater Wetlands (FWW) Letter of Interpretation (LOI) and FWW General Permits (GP) for the improvements shown on the accepted Concept Plan. The need for an FWW Individual Permit (IP) is not anticipated. Potential permits are as follows:
 - a. General Permit 2—Underground utility lines.
 - b. General Permit 11—Outfalls and intake structures.
 - c. General Permit 17—Trails and boardwalks.
 - d. General Permit 19—Docks and piers.
 - e. General Permit 20—Bank stabilization
 - f. General Permit 21—Above ground utility lines.
 - g. General Permit 25— Minor channel or stream cleaning for local government agencies.

E. HUDSON-ESSEX-PASSAIC SOIL CONSERVATION DISTRICT (SCD)

1. Complete SCD application forms.
2. Include Soil Erosion and Sediment Control Plan, with construction details, in the plan set.
3. Prepare Engineering Report.
4. Complete revisions as may be requested by SCD.
5. Request NJDEP Stormwater General Permit Authorization (RFA).

F. FINAL DESIGN OF CONSTRUCTION PLANS

GPI assumes the need for the preparation and submission of two separate sets of bid construction documents. One set will be prepared in advance for work not under NJDEP jurisdiction. A second set for work requiring NJDEP permits will also be prepared. The following sequence is for each bid package submission:

1. Finalize preliminary plans incorporating permit conditions and contract items in comprehensive plans set to be reviewed by the Township. Prepare preliminary cost estimate for the project.
2. Coordinate a Final Design meeting with Township officials to establish consensus of the final design.

3. Coordinate and attend a Public Presentation meeting for the project.
4. Following plan approval by Township, prepare construction plans, specifications and estimate to be supplemented by the West Orange front-end documents to be provided by the Township.

Adherence to bid schedule is contingent upon timely responses from the Township with respect to choosing the make and model of site improvements such as light fixtures, entrance sign, floating dock, seating, pedestrian bridge, playground equipment and surface type, etc. as may be applicable to the ultimate content of the improvements.

G. BID PHASE

1. Assemble 20 copies of two bid packages with separate work scopes. The first bid package will include those work items not under the jurisdiction of the NJDEP permitting process and is anticipated to be advertised in the Spring of 2025. The second bid package will include those work items requiring NJDEP permits and is anticipated to be advertised in July of 2025. Bid packages will be provided to the Township of West Orange for distribution to bidders.
2. Respond to Requests for Information (RFI) from prospective bidders.
3. Issue addenda and/or clarifications as required.
4. Attend bid opening and prepare Recommendation of Award.

H. CONSTRUCTION ADMINISTRATION SERVICES

1. Coordinate Pre-Construction Meeting with successful bidder and Township officials. Township to provide list of Township officials to be invited to the Pre-Construction Meeting.
2. Chair Pre-Construction Meeting and provide draft minutes to all attendees within one week of meeting. Minutes to be amended based upon attendee comments and become final one week from distribution of draft minutes.
3. Provide full-time construction observation and prepare daily observation reports.
4. Review and respond to change order requests by contractor.
5. Review and respond to payment requests by the contractor.
6. Perform initial project completion walk-through and punch list preparation.
7. Perform final project walk-through for final approval.
8. This item is specifically limited to 150 hours of construction management and 800 hours of construction observation. This is based on an assumed five month construction period encompassing both construction contracts as proposed above.

I. ALTERNATE CONSTRUCTION ITEMS

The RFP sets forth a number of significant alternate construction items that are being considered. The listing below represents our understanding of the scope of work involved with each of the alternate items. It is expected that the Township will advise which, if any, of the alternate items will be included in the project at the Kick-off/Concept Plan meeting as noted in Scope Item B2, herein. Changing the inclusion or exclusion of an alternate item during the design process may result in extra design fees.

The following is offered:

1. Fishing Pier and Floating Dock

It is anticipated that these will be pre-manufactured items chosen by the Township. This item will require NJDEP permitting, representation on the plans and construction details, and in the technical specifications. Additional construction administration will also be required in the form of shop drawings, inspections, and payment coordination. The work performed by GPI specifically is limited to the foundation design of the pier and/or dock. The structural design is to be performed by a professional engineer, licensed in the State of New Jersey, under the responsibilities of the pier and/or dock vendor.

2. Paddle Boat/Kayak Launch Area

This item will require NJDEP permitting, representation on the plans and construction details, and in the technical specifications. Additional construction administration will also be required in the form of shop drawings, inspections, and payment coordination. The work performed by GPI specifically is limited to the foundation design of the paddle boat/kayak launch area. The structural design is to be performed by a professional engineer, licensed in the State of New Jersey, under the responsibilities of the paddle boat/kayak launch area vendor.

3. Prefabricated Pedestrian Bridge

This item will require NJDEP permitting, representation on the plans and construction details, and in the technical specifications. Additional construction administration will also be required in the form of shop drawings, inspections, and payment coordination. The work performed by GPI is limited to the foundation design of the bridge. The structural design is to be performed by a professional engineer, licensed in the State of New Jersey, under the responsibilities of the bridge vendor.

4. Small Shoreline with Outdoor Shower

This item will require NJDEP permitting, representation on the plans and construction details, and in the technical specifications. Additional construction administration will also be required in the form of shop drawings, inspections, and payment coordination. The work will assume that the showers are basically a shower head over a concrete pad that will drain to the surface. It is also assumed that water will be available from one of the existing structures and that structure will have sufficient space and utility capacity for a water heater, if desired. GPI will design piping and utility connections associated with this item.

5. Seating Area Pavilion

It is anticipated that this will be a pre-manufactured item chosen by the Township. This item will require representation on the plans and construction details, and in the technical specifications. Additional construction administration will also be required in the form of shop drawings, inspections, and payment coordination. The work performed by GPI will include foundation design for the pavilion. The structural/architectural design is to be performed by a professional engineer, licensed in the State of New Jersey, under the responsibilities of the pavilion vendor.

6. Playground

It is anticipated that the playground equipment will be pre-manufactured items chosen by the Township. This task will require representation on the plans and construction details, and in the technical specifications. Additional construction administration will also be required in the form of shop drawings, inspections, and payment coordination. The work performed by GPI specifically excludes the structural design of the playground equipment. The structural/footing design is to be performed by a professional engineer, licensed in the State of New Jersey, under the responsibilities of the playground equipment vendor.

7. Concession Stand

Pursuant to a clarification email from the Township of October 18, 2024, this item will consist of a paved area for a food truck to park. The food truck parking space will be provided with a 50 Amp waterproof outlet on a pedestal to allow the food truck to operate under electrical power without running an individual generator.

ASSUMPTIONS

1. The project timeline is acknowledged to be somewhat aggressive due to grant conditions. This proposal assumes that the Township will provide its choice of all required furnishings (entrance sign, benches, playground equipment, light fixtures, pavilion, seating, fishing pier, floating dock, etc.) in a timely manner so as to not delay the preparation of the documents listed herein.
2. The alternate construction item(s) to be included into the project, if any, will be specified at the Kick-off/Concept Plan meeting described in Scope of Work Item B2 herein.
3. The on-site utilities are sufficient to support the furnishings included in the Scope of Work.
4. The project will not be LEED or Energy Star certified.
5. Grant coordination is not included in the GPI Scope of Work.
6. Geotechnical explorations and soil testing for regulated materials are not included in the GPI Scope of Work.
7. The design of the complete project will not cause the project to qualify as a Major Development for Stormwater Design.
8. The design will abide by the restrictions of the NJDEP General Permit(s) applicable to the work.
9. The Township will pay all application, permit and review fees directly to the jurisdictional entity.
10. GPI will provide copies of all submitted documents in paper form as well as electronic (.pdf) format. Drawings, including the Boundary and Topographic Survey, will be provided in AutoCadd (.dwg) format.

BASE FEE SCHEDULE

Surveying Services	\$45,200.00
Concept Phase	\$22,700.00
NJDEP Concept Phase	\$7,800.00
NJDEP Permit Submission Package	\$28,000.00
Hudson-Essex-Passaic Soil Conservation District	\$3,700.00
Final Design of Construction Plans & Specifications	\$41,200.00
Bid Phase	\$3,500.00
Construction Administration Services – Not To Exceed(1)	\$114,000.00
Reimbursable Expense - Underground Utility Location	\$8,000.00
Reimbursable Expenses (Reproduction, Mileage, Postage) – Not to Exceed	\$1,500.00

TOTAL BASE FEE **\$275,600.00**

- (1) GPI has prepared its fee based upon full-time inspection for the construction period specified in the RFP to be invoiced on a Time & Expense basis with the Not to Exceed amount listed above.

ALTERNATES FEE SCHEDULE

Fishing Pier & Floating Dock	\$10,700.00
Paddle Boat / Kayak Launch Area	\$10,700.00
Pre-Fabricated Pedestrian Footbridge	\$11,400.00
Shoreline and Outdoor Showers	\$9,600.00
Seating Area Pavilion	\$9,600.00
Playground	\$7,800.00
Food Truck Area	\$7,200.00

HOURLY BILLING RATES

As submitted in our Qualification package to the Township of West Orange on November 28, 2023, following are our municipal billing rates for 2024:

PROFESSIONAL ENGINEER	\$ 180.00
SENIOR PROJECT MANAGER, ENGINEERING	\$ 160.00
SENIOR PROJECT MANAGER, LANDSCAPE ARCHITECTURE	\$ 150.00
SENIOR DESIGNER	\$ 125.00
DESIGNER	\$ 95.00
INSPECTOR	\$ 105.00
ENGINEERING TECHNICIAN	\$ 85.00
PROFESSIONAL LAND SURVEYOR	\$ 170.00
SENIOR PROJECT MANAGER, SURVEYING	\$ 150.00
PROJECT SURVEYOR	\$ 135.00
SURVEYING TECHNICIAN	\$ 105.00
PARTY CHIEF	\$ 110.00
INSTRUMENT PERSON	\$ 95.00
ADMINISTRATIVE SUPPORT	\$ 75.00

Rates Subject to Change Annually

Section 2

Personnel Assignments



PERSONNEL ASSIGNMENTS

Thomas Lemanowicz, PE, PP, CME, Principal Engineer, will be responsible for the overall design, contract adherence, and overall project supervision. He will be assisted by Engineering Department staff members Michael Pirog, PE, CME, Project Engineer and Ryan Mangano, Senior Designer. Quality Assurance-Quality Control (QAQC) will be performed by Andrew Cangiano, PE, CME, Director of Engineering – Morris Plains Office.

Section 3

Sample Insurance Certificate





CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

12/19/2023

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 have **ADDITIONAL INSURED** provisions or 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 PG Genatt Group LLC 3333 NEW HYDE PARK RD SUITE 409 NEW HYDE PARK NY 11042	CONTACT NAME: Jeff Kozarsky PHONE (A/C, No., Ext): 516-869-8788 E-MAIL: jkozarsky@genattgrp.com FAX (A/C, No.): 516-470-0338
INSURED Greenman Pedersen, Inc. (Morris Plains) 301 Gibraltar Drive, Suite 2A Morris Plains NJ 07950	INSURER(S) AFFORDING COVERAGE INSURER A: XL Specialty Insurance Company INSURER B: Everest National Insurance Company INSURER C: North Pointe Insurance Company INSURER D: QBE Insurance Corporation INSURER E: Stonington Insurance Company INSURER F: Allied World Assurance Company (U.S.) Inc.

COVERAGES**CERTIFICATE NUMBER:** 1051438221**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 INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
D	☒ COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☒ OCCUR GEN'L AGGREGATE LIMIT APPLIES PER ☐ POLICY ☒ PRO-JECT ☒ LOC ☐ OTHER			171000795	12/31/2023	12/31/2024	EACH OCCURRENCE \$ 2,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 500,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 4,000,000 PRODUCTS - COMP/OP AGG \$ 4,000,000 \$
C	☒ AUTOMOBILE LIABILITY ☒ ANY AUTO ☐ OWNED AUTOS ONLY ☒ HIRED AUTOS ONLY ☐ SCHEDULED AUTOS ☒ NON-OWNED AUTOS ONLY			161001112	12/31/2023	12/31/2024	COMBINED SINGLE LIMIT (Ea accident) \$ 2,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
B	☒ UMBRELLA LIAB ☒ OCCUR ☐ EXCESS LIAB ☐ CLAIMS-MADE ☐ DEF ☒ RETENTION \$ 10,000			XC5CU00324231	12/31/2023	12/31/2024	EACH OCCURRENCE \$ 5,000,000 AGGREGATE \$ 5,000,000 \$
E	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N ☐	N/A	152000765	12/31/2023	12/31/2024	☒ PER STATUTE ☐ OTHER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
A F	Property Professional Liability			UM00082200MA23A 03141016	12/31/2023 12/31/2023	12/31/2024 12/31/2024	Valuable Papers \$150,000 Each Claim \$2,000,000 Aggregate \$2,000,000

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

CERTIFICATE HOLDER**CANCELLATION** 30 day notice applies

SAMPLE
FOR INFORMATIONAL
PURPOSES ONLY

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

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