

AGENDA
REGULAR MEETING OF THE MAYOR AND COUNCIL
July 26, 2016
SEAFORD CITY HALL - 414 HIGH STREET

- 7:00 P.M.** - Mayor David Genshaw calls the Regular Meeting to Order.
- Invocation
 - Pledge of Allegiance to the Flag of the United States of America.
 - Changes to agenda for this meeting.
 - Approval of minutes of the regular meeting on July 12, 2016.
 - Approval of minutes of the Public Hearing held on July 14, 2016.

CORRESPONDENCE:

1.

NEW BUSINESS:

1. Presentation on Eastern Shore Forest Products, Inc. seeking waiver of outside storage requirements outlined in the covenants for the Seaford Industrial Park.
2. Present an agreement between the City of Seaford and Two Farms, Inc. (dba Royal Farms) which would allow them to take over the contract of Purchase and Sale Agreement currently with Seaford Development Associates, Inc.
3. Present the information on the emergency repairs authorized for the damage that occurred during the July 13th storm at the Our Lady of Lourdes Church bioretention area prepared by George, Miles, and Buhr.
4. Present the proposed name of Cottage Ln on behalf of Manor House located in Seaford to rename the street for the cottages related to new cottages being constructed.
5. Bill Bennett, Supt. of Electric to present information on need to replace controller in Pine Street Substation which is a non-budget expense.

AGENDA

REGULAR MEETING OF THE MAYOR AND COUNCIL

July 26, 2016

NEW BUSINESS (Continued):

6. Charles Anderson, ACM to present information on placing a net along Sussex Avenue adjacent to the driving range to minimize golf balls from landing on private property.
7. Charles Anderson, ACM to present information on a planning grant for the shore line stabilization at the Wastewater Treatment Plant.

OLD BUSINESS:

- 1.

REMINDER OF MEETINGS & SETTING NEW MEETINGS:

1. Public Hearings scheduled for Pine Street Electrical Substation Expansion and Reconstruction including other distribution work for 7 p.m. on July 28, 2016.

COMMITTEE REPORTS:

1. **Police & Fire - Councilwoman Leanne Phillips-Lowe**
2. **Administration - Councilman Orlando Holland**
3. **Code, Parks and Recreation - Councilwoman Grace Peterson**
4. **Public Works & WWTF - Councilman William Mulvaney**
5. **Electric - Councilman Dan Henderson**

Mayor Genshaw solicits a motion to adjourn the regular council meeting.

NOTE: Agenda shall be subject to change to include or delete Additional items (including executive session) which arise at the time of the meeting. (29 Del. C. S1004 (e) (3))



Memorandum

N.B.1
7-26-16

To: Mayor & Council

From: Trisha Newcomer, Economic Development/Information Technology Manager

Date: July 22, 2016

RE: Eastern Shore Forest Products, Inc. Covenants Relief

On Monday, July 18, 2016 the Economic Development Committee meet with regard to Eastern Shore Forest Products, Inc. (ESFP) seeking relief from the Seaford Industrial Park Covenants with regard to outside storage.

Their company is potentially considering the purchase of the former BASF facility in the Seaford Industrial Park. The zoning in the Industrial park is M-1 and ESFP meets those regulations and with this purchase, would bring several new jobs to our community.

With their process of lumber, there is a need for outside storage, of which the covenants of the Seaford Industrial Park states the following:

"Unless specifically approved by developer in writing, no materials, supplies or equipment (including company owned or operated vehicles) including but not limited to trash and garbage receptacles, shall be stored in any area on a Site except inside a closed building, or behind a visual barrier screening such areas from the view of adjoining properties and/or public street."
(See attached)

At a public hearing of the City Council on March 22, 2011, Council amending the zoning ordinance:

Article 4. INDUSTRIAL DISTRICT, Division 1. M-1 Light Industrial District, Sec. 15-51.
Accessory uses to read *"All materials stored outdoors must be of new materials and must be used in production within a reasonable time frame. (6 months)"*
(See attached)

Based upon the information above and discussions with the potential business with regard to property screening, it is the Economic Development Committee's recommendation that City Council grant ESFP waiver of relief from the Seaford Industrial Park Covenants, regarding outside storage of materials.

- (3) Logos: A logo for a single or multi-line sign, or a logo to be mounted separately, must be sized with the total sign area allowed by Section 15-67 of the City of Seaford Zoning Ordinance and as required in Item 3.c. (2) of this Section.
- (4) No logos or other signs may be mounted so as to project above the roofline of any facility nor can same be ground mounted under any circumstances.
- (5) Approval of all signs must be made by Developer, and final approval will be based on reasonable architectural standards and overall balance as same applies to identification displays. It should also be understood that Developer must approve the manner in which the sign is constructed, lighted and mounted.



4. Outdoor Storage:

- a. Unless specifically approved by developer in writing, no materials, supplies or equipment (including company owned or operated vehicles) including but not limited to trash and garbage receptacles, shall be stored in any area on a Site except inside a closed building, or behind a visual barrier screening such areas from the view of adjoining properties and/or public street.
- b. Screening of Service Containers: Garbage and refuse containers shall be concealed by means of a screening wall of material similar to and compatible with that of the building. These elements shall be integral with the concept of the building plan, be designed so as not to attract attention, and shall be located in the most inconspicuous manner possible. Unless specifically approved by the Developer in writing, no materials, supplies or equipment shall be stored on the Property except inside a close building, or behind a visual barrier screening such areas so that they are not visible from neighboring streets and property.

5. Maintenance Requirement, Refuse Collection, and Prohibition of Junk Storage.

- a. Each Site Owner, lessee, or occupant shall at all times keep his premises, buildings, improvements and appurtenance in a safe, clean, neat, and sanitary condition and shall comply with all laws, ordinances and regulations pertaining to health and safety. Each Site Owner shall provide for the removal of trash and rubbish from his premises. The Sites shall not be used for storage of any scrap materials without the approval of the Developer.
- b. During construction, it shall be the responsibility of each Site Owner to insure that the construction sites are kept free of unsightly accumulations of rubbish and scrap materials, and that construction materials, trailers, shacks, and the like are kept in a neat and orderly manner.

6. Utilities Placement and Design:

PUBLIC HEARING

You are hereby notified the below matter will be before:

The City of Seaford Mayor and Council on Tuesday, March 22, 2011 at 7:05 p.m. in the Council Chambers of City Hall, 414 High Street, Seaford, Delaware, to publicly review an Amendment to the Zoning Ordinance: .

ARTICLE 4. INDUSTRIAL DISTRICT, Division 1. M-1 Light Industrial District, Sec. 15-51. Accessory uses by DELETING #3 and replacing as shown:

Sec. 15-51. Accessory uses.

(a) Only the following accessory uses shall be permitted:

- (1) Restaurant or cafeteria facilities for employees.
- (2) Recreational facilities for employees and occupants.
- (3) ~~Storage within a completely enclosed building in conjunction with a permitted use.~~
(3) All materials stored outdoors must be of new materials and must be used in production within a reasonable time frame (6 months)
- (4) Other accessory uses on the same lot with and customarily incidental to any of the permitted uses in Section 15-50 and not detrimental to the neighborhood.
- (5) All accessory uses structures shall not be less than five feet from the side or rear property line and no closer than the front building setback line.
- (6) All accessory use structures shall not be less than five (5) feet from the side or rear property line.

(Zoning Ord. §401.1, 9/23/69)

Amended 6/10/03

Should you wish to present your position or evidence, please attend. You may have counsel attend on your behalf.

Issued this 10th day of March 2011 pursuant to the Rules heretofore adopted by the City of Seaford.

THE CITY OF SEAFORD
Dolores J. Slatcher
City Manager

OR-01-11

Seaford Economic development Opportunities

About ESFP

Air + Water = Renewable trees + Factory and workers = New \$\$ to Delaware

For more than 35 years Eastern Shore Forest Products Inc., has been dedicated to producing high quality products from the forests of the Eastern Shore of Maryland.

We are well known for providing exemplary service and solving customer problems that fall within our areas of expertise and core competencies.

Not the traditional Forest Products company that many would expect, we utilize local small diameter logs and turn them into high value products that are shipped throughout the US. Our products can be found as far south as Texas, as far west as Indiana and as far north as Maine.

Products

The main products produced are Animal comfort products, Energy products, Mulch and Specialty soil products and Industrial wood fiber. There is a continuous pipeline of new products and innovative packaging that helps us maintain our steady growth.

We control the entire manufacturing process from harvesting the trees to final packaging of finished consumer products, all done right here on the Eastern Shore in our four manufacturing facilities.

We are a key supplier of quality bedding material to the poultry industry as well as national retailers.

Employment

ESFP directly employs in excess of 100 dedicated personnel. As well as many contractors ranging from harvesting crews to trucking companies and many allied suppliers.

We have increased our staff more than 100% since 2010'

Average wages are all well above the county averages for counties where we have processing plants

Sales Growth

Our company has averaged a 17% growth rate for the last 10 years.

Future Growth

Our position in the market place as a premiere provider of premium quality forest products offers us continued opportunity to grow our Eastern Shore manufacturing operations.

Delaware is uniquely positioned as the northern most wood basket of Southern Yellow Pine, a primary wood source for our products.*

It is our desire to locate our 5th manufacturing facility in the Seaford Industrial park. occupying the now shuttered BASF production facility.

Some facts about the potential Seaford operation:

- It is our desire to make this a core manufacturing operation focusing on our Animal comfort and retail packaged products.

1. Phase #1. (first 2 months)

Initially we would start up with a repackaging operation whereas we would bring in pre-dried wood shavings from our Pocomoke City operation in bulk bale form. The bulk bales would be opened inside the facility screened and packaged into small retail sized packages.

- Initial employment, although it would depend on sales, would most likely be around 10 people.
- Initial operations would require approximately 5 inbound and 6 outbound trucks per day

2. Phase # 2 (within one year)

In the second phase, we would install a dryer and at this point begin to dry pre-made wood shavings at the Seaford Site.

- The Drying operations would likely increase employment by 2-8 people, depending on sales.
- Truck traffic would increase by 2-4 loads per day.

3. Phase #3 (within 2 years)

In the third phase we would install machinery to actually manufacture the wood shavings at the Seaford site. At this time we would begin accepting wood from local forest owners.

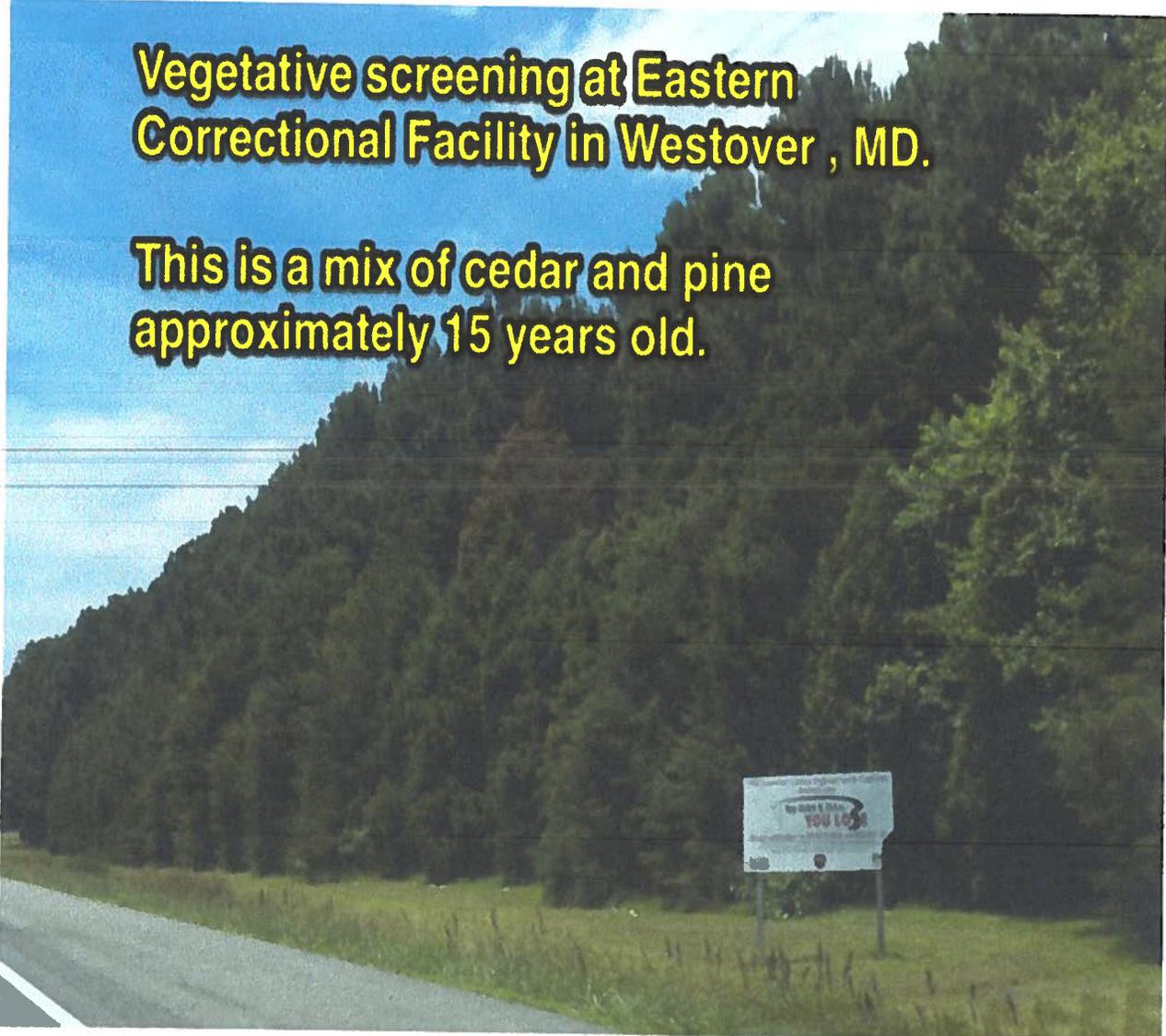
- At this phase direct employment may increase to 40 workers on site and an additional 40 contractors and allied suppliers.
- Truck traffic may increase to a total of 12-15 per day. This is comparable to the traffic that the BASF plant once had.

The aforementioned plans are just that, our plan. Much of this depends greatly on our abilities to develop the necessary sales within this timeline. We will adjust our timeline relative to sales.

We also are developing other markets for our wood fiber products and would expect that any growth in those areas would be at the Seaford plant.

- Screening

1. The property has some small berms and vegetative screening already in place.
2. We would expect to continue with this type of screening, although vegetative screening takes time to grow and may not totally screen the operations from street view for some time.
 - A mix of pine and cedar would make a good screen.



**Vegetative screening at Eastern
Correctional Facility in Westover , MD.**

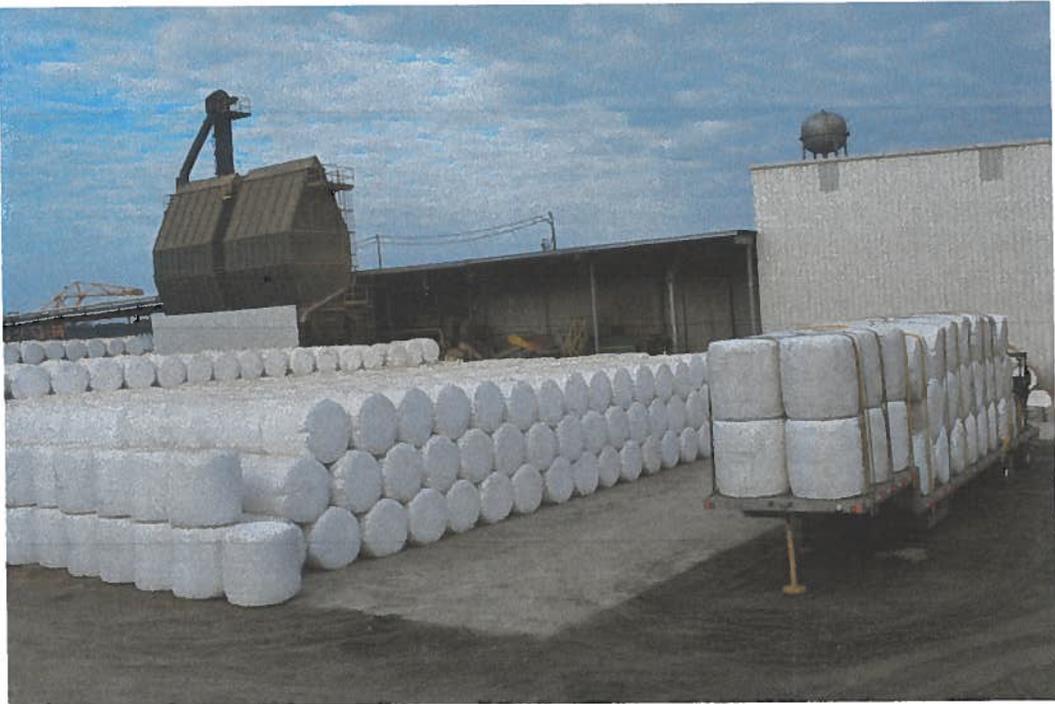
**This is a mix of cedar and pine
approximately 15 years old.**

- **Outside storage.**
 1. **Much of the raw materials and finished products will need to be stored outside. It is not economically feasible to store these in buildings.**
 2. **The main products that are expected to be stored outside are as follows:**

Raw wood ready for shaving



Bulk Bales ready for re-packaging



Bulk Goods stored neatly in bins



Finished Goods ready for Shipment



N.B. 2
7-26-16

CONSENT AGREEMENT

THIS CONSENT AGREEMENT (this "Agreement"), is dated _____, 2016, by and between City of Seaford (collectively, "Seller") and Two Farms, Inc., a Maryland corporation ("Purchaser").

WHEREAS, Seller and Seaford Development Associates, LLC entered into a Contract of Sale, dated October 23, 2015 (the "Contract") with regard to the sale and purchase of a certain parcel of land located in Seaford Hundred, Sussex County, Delaware (SCTP No. 4-31-5.00-208.00) (hereinafter, the "Property") all more particularly defined in the Contract; and

WHEREAS, Seaford Development Associates, LLC wishes to assign its rights under the Contract to Purchaser upon Purchaser obtaining all permits and approvals necessary for its intended use and closing on adjacent parcels shown on Exhibit A; and

WHEREAS, Seller consents to the assignment of the Contract from Seaford Development Associates, LLC to Purchaser;

NOW, THEREFORE, for and in consideration of the Property and the mutual covenants and promises hereinafter expressed, the parties mutually agree to as follows:

1. Seller agrees that the Contract is valid and enforceable; and
2. Seller consents to the assignment of all contract rights Seaford Development Associates, LLC has with respect to the Contract to Two Farms, Inc.; and
3. Seller agrees to the substitution of Two Farms, Inc. for Seaford Development Associates, LLC as purchaser under the Contract; and that Two Farms, Inc. may further assign its rights under the Contract to a related or controlled entity; and
4. Seller agrees to execute any necessary paperwork for the Escrow Agent to transfer and/or credit any deposits over from Seaford Development Associates, LLC to Two Farms, Inc. so that Two Farms, Inc. shall receive the full value of the deposits; and
5. Seller agrees that this Agreement shall not be effective unless and until Two Farms, Inc.: (i) acquires all permits and approvals necessary for its intended use of the Property; and (ii) closes on the adjacent parcels demarcated in RED on Exhibit A. If Two Farms, Inc. does not (i) acquire all permits and approvals necessary for its intended use of the Property; or (ii) close on the adjacent parcels demarcated in RED on Exhibit A, then this Agreement shall be void and of no further affect and the parties shall be released from any obligation to each other.

IN WITNESS WHEREOF, the parties hereto have duly executed or caused the execution of this Consent Agreement as of the date first above written.

WITNESS/ATTEST:

PURCHASER:

TWO FARMS, INC.

By: _____

SELLER:

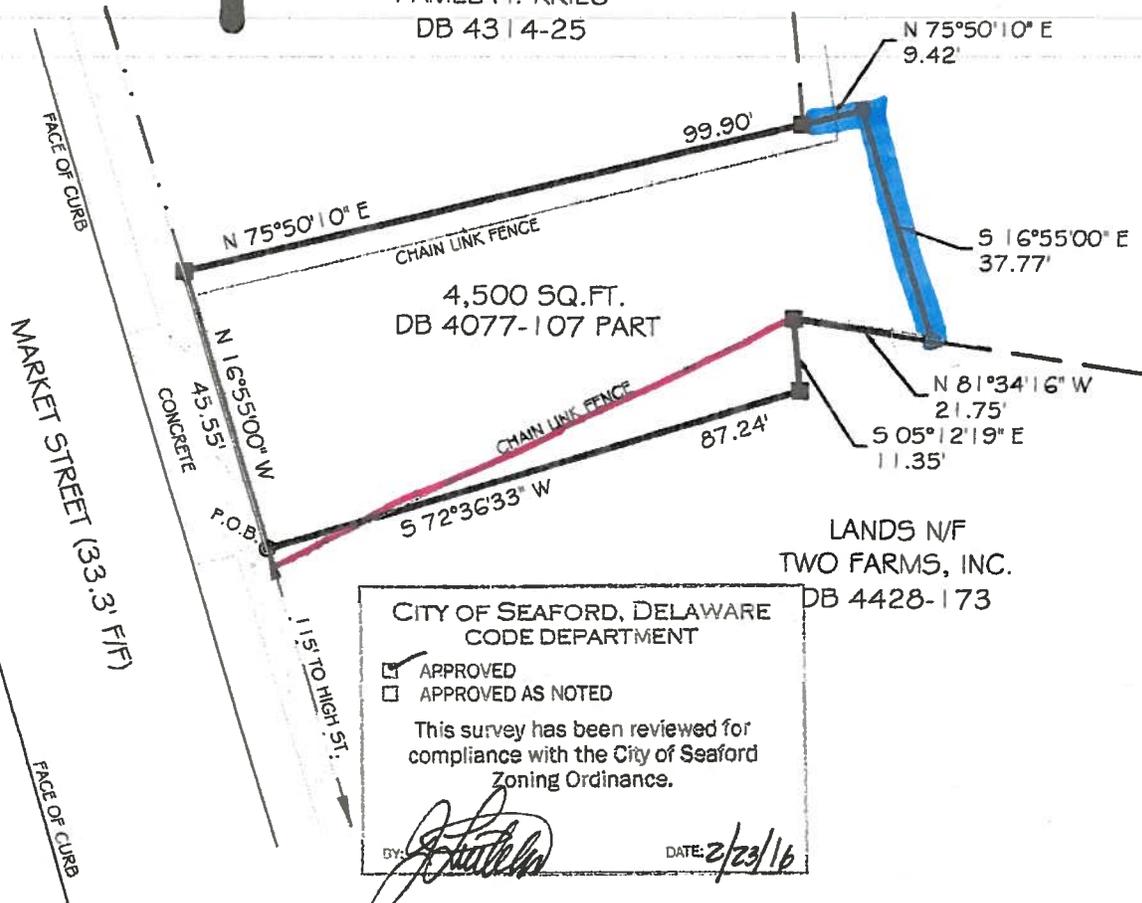
CITY OF SEAFORD

By: _____



LANDS N/F
PAMELA I. KRIEG
DB 4314-25

LANDS N/F
CITY OF SEAFORD
DB 4077-107



LANDS N/F
TWO FARMS, INC.
DB 4428-173

CITY OF SEAFORD, DELAWARE
CODE DEPARTMENT

- APPROVED
- APPROVED AS NOTED

This survey has been reviewed for compliance with the City of Seaford Zoning Ordinance.

BY:

DATE: 2/23/16

BOUNDARY SURVEY FOR PAMELA I. KRIEG

MARKET STREET
CITY OF SEAFORD
SEAFORD HUNDRED SUSSEX COUNTY
STATE OF DELAWARE

SCALE 1" = 30'

DECEMBER 16, 2015

■ CONCRETE MONUMENT (FOUND)

● IRON PIPE (SET)

⊙ DRILL HOLE



THIS SURVEY AND PLAT DOES NOT VERIFY THE EXISTENCE OR NON-EXISTENCE OF RIGHTS-OF-WAY OR EASEMENTS CROSSING THIS PROPERTY OTHER THAN THOSE SHOWN. NO TITLE SEARCH PROVIDED OR STIPULATED.

SURVEY CLASS: SUBURBAN

PREPARED BY:

**MILLER
LEWIS, INC.** LAND SURVEYING

Ph: 302-629-9895
FAX: 302-629-2391

1560 MIDDLEFORD RD.

• SEAFORD, DE. 19973



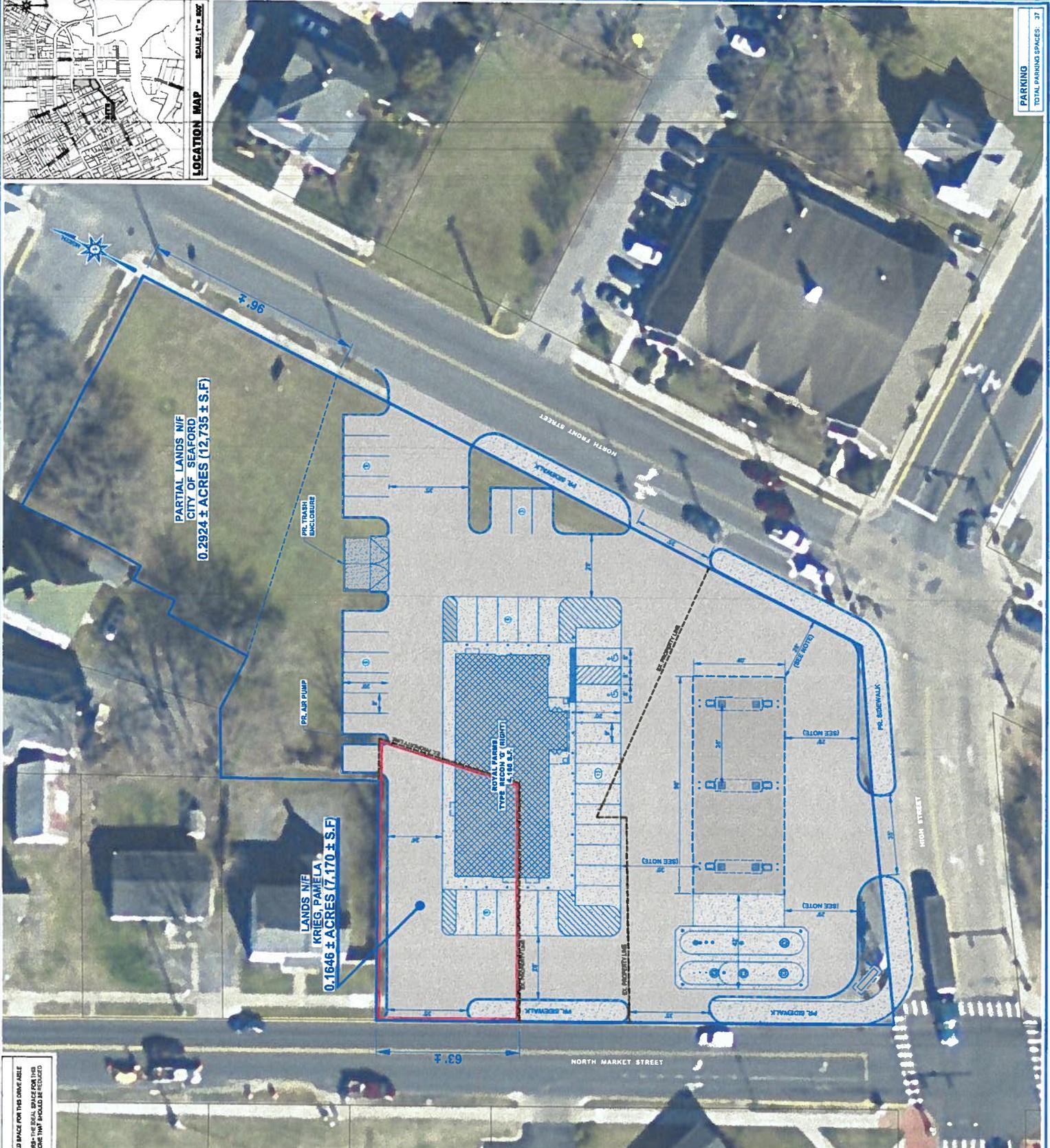
GENERAL NOTES: URBAN DRIVE ABLE SPACING

1. ALL DRIVE ABLE SPACING SHALL BE IN ACCORDANCE WITH THE CITY OF SEAFORD, DEPARTMENT OF PUBLIC WORKS, URBAN DRIVE ABLE SPACING ORDINANCE.
2. ALL DRIVE ABLE SPACING SHALL BE IN ACCORDANCE WITH THE CITY OF SEAFORD, DEPARTMENT OF PUBLIC WORKS, URBAN DRIVE ABLE SPACING ORDINANCE.
3. ALL DRIVE ABLE SPACING SHALL BE IN ACCORDANCE WITH THE CITY OF SEAFORD, DEPARTMENT OF PUBLIC WORKS, URBAN DRIVE ABLE SPACING ORDINANCE.

PARKING
 TOTAL PARKING SPACES: 27



MARK	DATE	DESCRIPTION
PROJECT NO.:	2015166.00	
DATE:	11/02/15	
SCALE:	1" = 20'	
DRAWN BY:	B.L.D. / PROJ. MOR. G.E.J.	



SEE SPACE FOR THIS DRIVE AISLE
UNLESS THE EXIST. SPACE FOR THIS
DRIVE AISLE IS SHOWN TO BE REDUCED



Memorandum

N.BZ
7-26-16

To: Mayor & Council

From: Trisha Newcomer, Economic Development/Information Technology Manager

Handwritten initials "TN" in blue ink, enclosed in a blue circle.

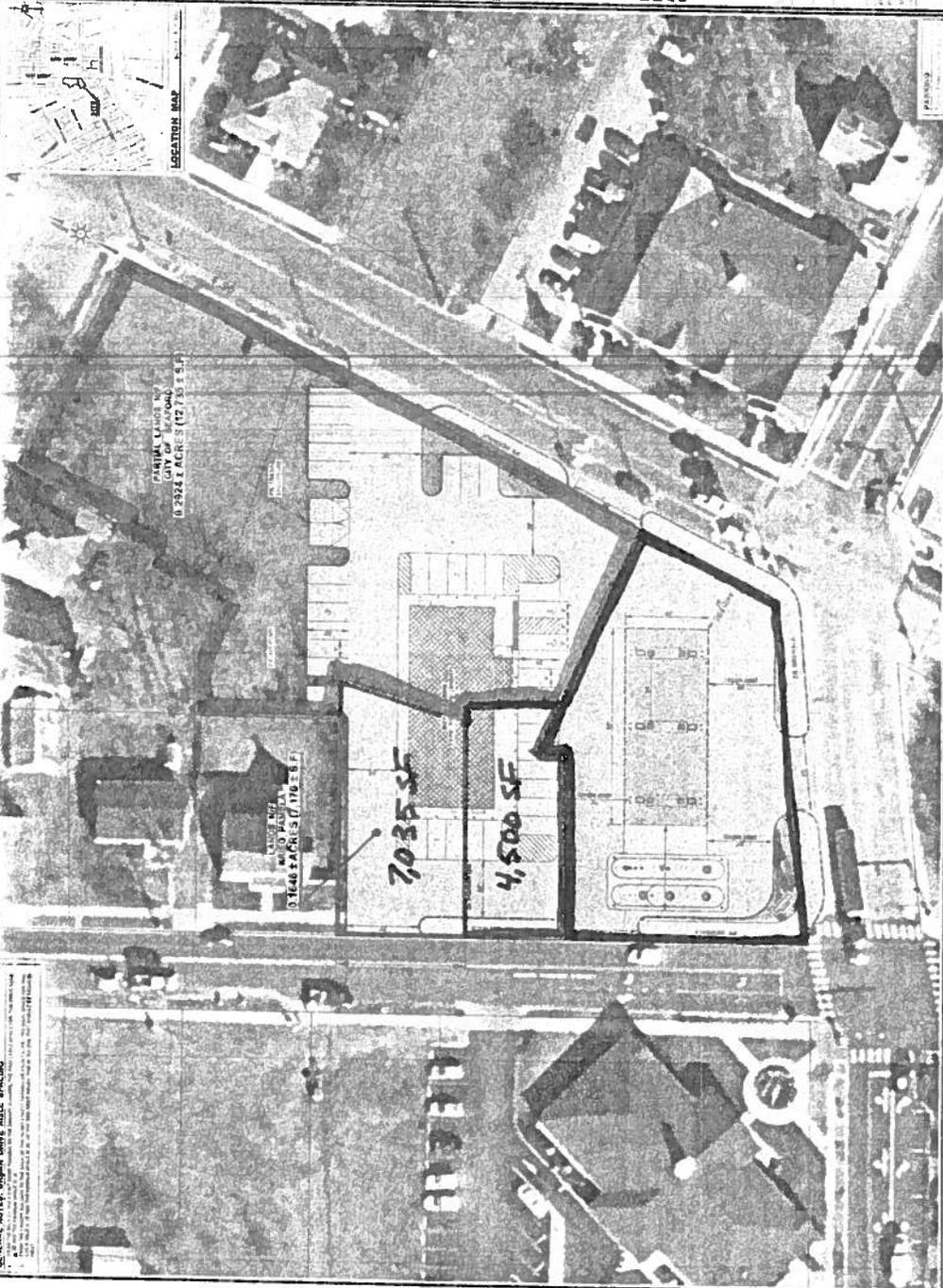
Date: July 22, 2016

RE: Two Farms, Inc. (dba Royal Farms)

On Monday, July 18, 2016 the Economic Development Committee meet with regard the agreement between the City of Seaford and Two Farms, Inc. (dba Royal Farms) and allowing them to take over the contract of sale from Seaford Development Associates, Inc. dated October 23, 2015 with regard to (SCTP No. 4-31-5.00-208.00) Allowing them to do so, will provide them the opportunity to potentially build a new Royal Farms store with better access. **(See attached)** They currently have an existing store, which is located on High Street, between Front & Market Streets.

Based upon the information above and discussions with the representative Mr. Randy Bendler, it is the Economic Development Committee's recommendation that City Council move forward with the agreement between the City of Seaford and Two Farms, Inc. (dba Royal Farms) and allow them to take over the contract of sale from Seaford Development Associates, Inc.

DATE	11/11/11
SCALE	1" = 100'
PROJECT NO.	11-001
CLIENT	ROYAL FARMS
LOCATION	11111 W. 111th St., Overland Park, MO



PARKING LOT
12 STALLS
0.2924 ACRES (12,735 S.F.)

PAVING
0.1648 ACRES (7,176 S.F.)

7,035 SF

4,500 SF

GENERAL NOTES: URBAN DRIVE ALLEY SPACING
1. ALL DIMENSIONS ARE TO FACE UNLESS NOTED OTHERWISE.
2. ALL DIMENSIONS ARE TO FACE UNLESS NOTED OTHERWISE.
3. ALL DIMENSIONS ARE TO FACE UNLESS NOTED OTHERWISE.
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8. ALL DIMENSIONS ARE TO FACE UNLESS NOTED OTHERWISE.
9. ALL DIMENSIONS ARE TO FACE UNLESS NOTED OTHERWISE.
10. ALL DIMENSIONS ARE TO FACE UNLESS NOTED OTHERWISE.



GEORGE, MILES & BUHR, LLC

N.B. 3
7-26-16

■ ■ ■ ■

ARCHITECTS
ENGINEERS

400 HIGH STREET
SEAFORD, DE 19973
PH: 302.628.1421
FAX 302.628.6350

SALISBURY
BALTIMORE
SEAFORD

www.gmbnet.com

■ ■ ■ ■

JAMES H. WILLEY, JR., PE
PETER A. BOZICK, JR., PE
JUDY A. SCHWARTZ, PE
CHARLES M. O'DONNELL, III, PE
W. BRICE FOXWELL, PE
A. REGGE MARINER, JR., PE
JAMES C. HOAGESON, PE
STEPHEN L. MARSH, PE
MICHAEL D. MCARTHUR, AIA
DAVID A. VANDERBEEK, PE
ROLAND E. HOLLAND, PE
JASON M. LYTLE, PE

JOHN E. BURNSWORTH, PE
MICHAEL G. KOBIN, PE
CHRIS B. DERBYSHIRE, PE
W. MARK GARDOCKY, PE
MORGAN H. HELFRICH, AIA
VINCENT A. LUCIANI, PE
JERRY KOTRA
ANDREW J. LYONS, JR., PE
KATHERINE J. MCALLISTER, PE

July 16, 2016

City of Seaford
P.O. Box 1100
414 High Street
Seaford, DE 19973

Attn: Charles D. Anderson

Re: Storm Damage Report
Seaford, Delaware
GMB File No. 2006255

Dear Mr. Anderson:

This letter is intended to report on the storm damage that occurred on Wednesday, July 13, 2016 within the Washington Street bioretention area next to the parking lot of Our Lady of Lourdes church.

The storm started shortly after 1:00 pm and lasted until about 5:00 pm. A total of 5½ to 10+ inches of rain was recorded in and around Seaford. The most intense rainfall occurred between 3 and 4 o'clock at a rate of greater than 2 ¼ in/hr. At this intensity, the storm was representative of a 200-year to 500-year return storm frequency. A graph of the rainfall intensity is enclosed for your information.

It was during the period of the highest rainfall intensity or very shortly thereafter, that a pipe failure occurred within the bioretention area. The pipe was a 30-inch diameter dual wall polypropylene pipe with watertight joints made for use in gravity-flow sewer and storm drainage applications. The pipe failure occurred at the joint which was not stiff enough to offset the hydrostatic pressure within the saturated soil matrix, causing the pipe to "float" upwards. The saturated soil matrix occurred due to the extreme volume of infiltration that occurred in such a short time period. In that saturated condition, the weight of the soil on top of the pipe was not enough to prevent buoyancy of the pipe. The watertightness of the pipe joint was also a contributing factor. Fortunately, and despite the ruptured pipe, Washington Street was not flooded and the bioretention area performed as intended.

In the aftermath of the storm, the area was temporarily stabilized by City forces and one section of pipe removed to avoid further compromise and prevent flooding should a second storm occur prior to the permanent repair. We are recommending that emergency action be taken to make permanent repairs and restoration. To that end, we have met with the pipe manufacturer representative who has arranged for the delivery of three new sections of pipe, at no cost to the City. Further, he has assisted in the design of a pipe anchorage method, using either helical screws or duckbill or concrete anchors. We are recommending replacement using new sections of the same pipe anchored with concrete.

Further, we sought assistance from a qualified contractor, Teal Construction, who is already mobilized and working on another project in Seaford and can provide a rapid response. The proposal from Teal dated July 15, 2016 is attached in the amount of \$9,280 which we believe to be a reasonable price. Teal stands ready to

"Designing the Future for 55 Years"

Mr. Charles D. Anderson
July 16, 2016
Page 2

make the repair in a day's time, upon delivery of the pipe which is scheduled to occur on Tuesday, July 19. GMB will provide on-site construction representation to oversee the repair work at no charge to the City.

Following the permanent pipe repairs, additional landscaping within the bioretention area may be warranted. We will assess damage to the plantings once Teal has completed their work.

Should you have any further questions, please do not hesitate to call.

Sincerely,



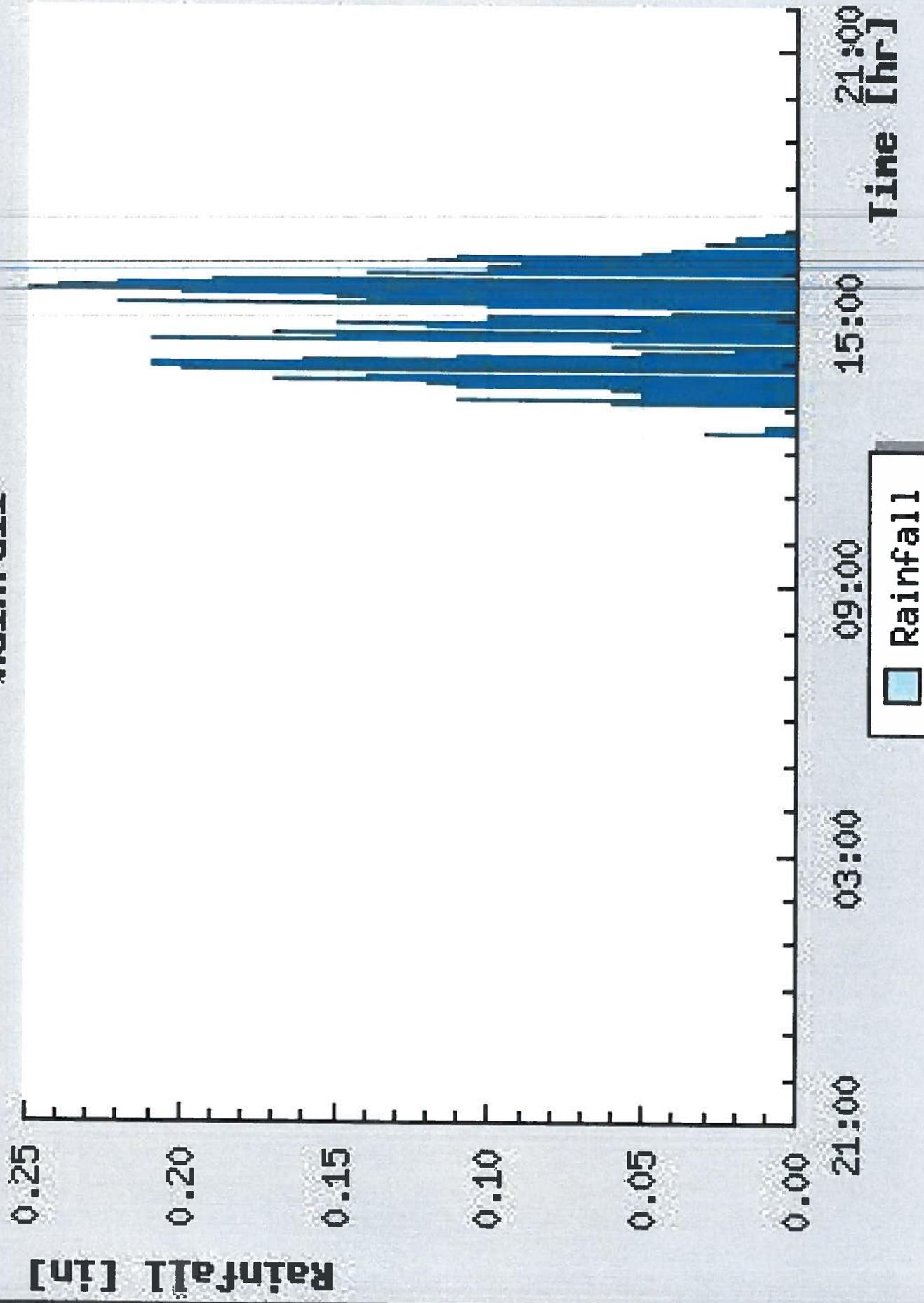
Judy A. Schwartz, P.E.
Sr. Project Director

JAS/ccd

Enclosures

cc: City of Seaford
Attn: Dolores J. Slatcher (w/ encl)

Rainfall



July 15, 2016

George, Miles & Buhr, LLC
Attn: Andrew Lyons
400 High Street
Seaford, DE 19973

RE: City of Seaford Storm Drain Repair

Dear Andrew:

Teal Construction, Inc., would like to provide the following quote for the repair of existing storm drain in the City of Seaford. Dale Kohout met on-site with representatives from both GMB and City of Seaford.

ITEMS INCLUDED

1. Labor & Equipment
2. Work is based on an 8 hour day
3. #57 Stone
4. Mulch
5. Pipe Straps for Concrete Anchors

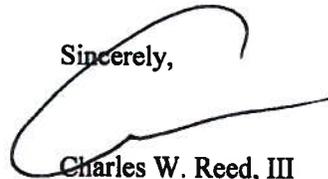
ITEMS NOT INCLUDED

1. Engineering
2. Pipe Material
3. Dewatering
4. Misc. Unforeseen Conditions
5. Concrete Material for Encasement will be Supplied by the City of Seaford

TOTAL LUMP SUM: \$9,280.00

If you have any questions, please call.

Sincerely,



Charles W. Reed, III

CWR/vll



MEMBER
Delaware Utility and Transportation
Contractors Association, Inc.
National Utility Contractors Association





Order Acknowledgement

Page No : 1 of 2

SOLD TO CASH SALE-LOGAN
 300 PROGRESS CT
 SWEDESBORO, NJ 08085-4539, US

SHIP TO CASH SALE-LOGAN
 CITY OF SEAFORD DELAWARE
 532 STEIN HIGHWAY
 CHURCH PARING LOT
 SEAFORD, DE 19973,US

Order # 12070280
Order Date 15-JUL-2016 12:37:36
Order Type US Delivery Order Type
Currency USD

Printed By: AFARLEY

CUSTOMER NO	91014	SALES REGION	Mid-Atlantic	TERMS	COD
CUSTOMER PO	CHURCH PARKING LOT	SALESPERSON	Holt, Michael	CSR	AFARLEY
CUSTOMER PHONE	8564674779	SALESPERSON 2		ENTERED BY	AFARLEY
CUSTOMER FAX		SALESPERSON 3		END USE CODE	SSSH
SHIP-TO COUNTY	SUSSEX	SALESPERSON 4		TOTAL POINTS	706

LINE	QTY ORDERED	QTY SHIPPED	SHIP BY DATE	U/M	PRODUCT NUMBER	DESCRIPTION	W/H	UNIT PRICE	EXTENDED PRICE
1.1	60		20-JUL-2016	FT	30300020IBHP	30" HP TWALL SANITITE.WTIB.SOLID.20'	P4#	\$0.00000	\$0.00000
2.1	1		20-JUL-2016	EA	0201LU	2# CAN LUBRICANT.(27XL)	P4#	\$0.00000	\$0.00000
SUB-TOTAL									\$0.00
SALES TAX									\$0.00
ORDER TOTAL									\$0.00

Notes:

=====PLEASE PICK UP DAMAGED 3 STICKS OF PIPE THANK YOU. NO RMA IS REQUIRED. AFARLEY.

=====MUST SHIP NO LATER THAN WEDNESDAY 7/20/16. AFARLEY

JS CONTACT: CHARLES ANDERSON 302-629-8307

Freight and Special Order Disclaimer

- Quotes must be accepted within 30 days from above quotation date. Orders must be shipped within 30 days of order placement.
- Freight/Drop charges will apply per the following parameters (order values listed below are not inclusive of Nyloplast, Baysaver, or Inserta Tee or non stock special order products which will incur actual freight charges or fuel surcharge as appropriate):
 - All orders \$3,500 or greater will be delivered freight prepaid.
 - All orders less than \$3,500 where ADS has ample time to match up the remainder of truck will incur a \$100 (minimum) drop charge.
 - All orders less than \$3,500 where ADS does not have ample time to match up the remainder of truck will incur the actual common carrier LTL rate.
 - These drop charges are separate and in addition to any applicable fuel surcharges.

SOLD TO CASH SALE-LOGAN
300 PROGRESS CT
SWEDESBORO, NJ 08085-4539,US

SHIP TO CASH SALE-LOGAN
CITY OF SEAFORD DELAWARE
532 STEIN HIGHWAY
CHURCH PARING LOT
SEAFORD, DE 19973,US

Order # 12070280
Order Date 15-JUL-2016 12:37:36
Order Type US Delivery Order Type
Currency USD

Printed By: AFARLEY

3. ADS reserves the right to re-quote when the quantities change by more than 10%. Prices quoted do not include state, local or use taxes. Prices quoted are based on the total project. Specific products such as Nyloplast Drain and Catch Basins, Custom pipe or Specialty fabricated products will be offered only as an engineered system with ADS pipe. All returns are subject to a 25% restocking fee. Fittings, Nyloplast, non-standard geotextiles and specialty ordered items cannot be returned. The quantities listed are estimated based on our interpretations of the project quantities. The bidder is responsible for confirming quantities. ADS does not imply that the material will be accepted on any jobsite for any specific project unless stated otherwise. Technical certification is available upon request.



ADVANCED DRAINAGE SYSTEMS, INC.
www.ads-pipe.com
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Order Acknowledgement

Page No : 1 of 2

SOLD TO CASH SALE-NEW MIAMI
2650 HAMILTON EATON ROAD
HAMILTON, OH 45011,US

SHIP TO CASH SALE-NEW MIAMI
CITY OF SEAFORD
8000 HERRING RUN ROAD
SEAFORD, DE 19973,US

Order # 12070417

Order Date 15-JUL-2016 14:06:54

Order Type US Delivery Order Type

Currency USD

Printed By: AFARLEY

CUSTOMER NO	28435	SALES REGION	Mid-Atlantic	TERMS	COD
CUSTOMER PO	CITY OF SEAFORD DE	SALESPERSON	Holt, Michael	CSR	AFARLEY
CUSTOMER PHONE	8007331384	SALESPERSON 2		ENTERED BY	AFARLEY
CUSTOMER FAX	5138635410	SALESPERSON 3		END USE CODE	SSSH
SHIP-TO COUNTY	SUSSEX	SALESPERSON 4		TOTAL POINTS	2

LINE	QTY ORDERED	QTY SHIPPED	SHIP BY DATE	U/M	PRODUCT NUMBER	DESCRIPTION	W/H	UNIT PRICE	EXTENDED PRICE
1.1	1		18-JUL-2016	EA	3067RCD	30" EXTERNAL SEAL/COUPLER:(DOUBLE WIDE)	P51	\$0.00000	\$0.00000
<p style="text-align: right;">SUB-TOTAL \$0.00 SALES TAX \$0.00 ORDER TOTAL \$0.00</p>									

Notes:

=====DO NOT CHARGE FREIGHT. THANK YOU =====

<<<

JS CONTACT: BERLEY MEARS 302-381-4580 OR CHARLES ANDERSON 302-629-8307

Freight and Special Order Disclaimer

1. Quotes must be accepted within 30 days from above quotation date. Orders must be shipped within 30 days of order placement.
2. Freight/Drop charges will apply per the following parameters (order values listed below are not inclusive of Nyloplast, Baysaver, or Inserta Tee or non stock special order products which will incur actual freight charges or fuel surcharge as appropriate):
 - a. All orders \$3,500 or greater will be delivered freight prepaid.
 - b. All orders less than \$3,500 where ADS has ample time to match up the remainder of truck will incur a \$100 (minimum) drop charge.
 - c. All orders less than \$3,500 where ADS does not have ample time to match up the remainder of truck will incur the actual common carrier LTL rate.
 - d. These drop charges are separate and in addition to any applicable fuel surcharges.
3. ADS reserves the right to re-quote when the quantities change by more than 10%. Prices quoted do not include state, local or use taxes. Prices quoted are based on the total project. Specific products such as Nyloplast Drain and Catch Basins, Custom pipe or Specialty fabricated products will be offered only as an engineered system with ADS pipe. All returns are subject to a 25% restocking fee. Fittings, Nyloplast, non-standard geotextiles and specialty ordered items cannot be returned. The quantities listed are

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estimated based on our interpretations of the project quantities. The bidder is responsible for confirming quantities. ADS does not imply that the material will be accepted on any jobsite for any specific project unless stated otherwise. Technical certification is available upon request.

MAPPING & ADDRESSING

MEGAN NEHRBAS
MANAGER OF GEOGRAPHIC
INFORMATION SYSTEMS (GIS)
(302) 855-1176 T
(302) 853-5889 F



Sussex County

DELAWARE
sussexcountyde.gov

*Agenda
7-26-16
N.B. 4*

CITY OF SEAFORD
P.O Box 1100
SEAFORD, DE 19968

RE: Manor House (Readdressing Project)

I have received proposed street names for Manor House located in Seaford. In reviewing the proposed street name(s) the following have been approved:

Cottage Ln		

Use only approved road names that you have written confirmation for or you will be required to rerecord.

Upon final approval, please forward a copy of the recorded site plan to my attention. Our office would appreciate a digital copy if at all possible for the purpose of addressing. Should you have any questions, please contact the **Sussex County Addressing Department** at 302-855-1176.

Sincerely,

Terri L. Dukes
Addressing Department

CC: Janelle Cornwell, Planning & Zoning



N.B. 6
7-26-16

D. Slatcher

From: Seaford Electric
Sent: Tuesday, July 19, 2016 6:22 AM
To: D. Slatcher
Subject: driving range net
Attachments: Driving Range Net.xlsx

Dolores

Here is the estimate for the driving range net. When we went to check the poles some of them sounded bad at the bottom and until you go to the top with the truck you don't if there is any rot at the top of the pole. I recommend using a 40' pole and put 6' in the ground. Placing a 25' net at the top that leaves 9' from the ground to the net. If we had to we could add a net at the bottom but I don't think it will be necessary after talking with the people at Hoopers Landing. The material cost is estimated at \$4,089.79, the labor is estimated at \$2,705.34 and the equipment cost is estimated at \$1,420.00 for a total cost of \$8,215.13. I did not get a delivery estimate.

Bill Bennett
Superintendent of Electric
City of Seaford
PO Box 1100
Seaford, DE 19973
Phone 302-629-9841
Fax 302-628-6022

ELECTRICAL WORK FORM
PROJECT DESCRIPTION: Driving Range Net
DATE: 7/14/16

II. EQUIPMENT USED

	<u>NO. HRS.</u>	<u>QTY.</u>	<u>COMMENTS</u>	<u>\$/HR</u>	<u>TOTAL PRICE</u>
LG. TRENCHER				\$ 40.00	\$ -
SM. TRENCHER				\$ 30.00	\$ -
LINE TRUCK	4	1		\$ 40.00	\$ 160.00
LG. BUCKET	12	2		\$ 40.00	\$ 960.00
SM. BUCKET				\$ 40.00	\$ -
PICK-UP	12	1		\$ 25.00	\$ 300.00
EXCAVATOR				\$ 40.00	\$ -
OTHER			[] \$/Hr Varies According to Equipment Type	\$ -	\$ -
OTHER			[] \$/Hr Varies According to Equipment Type	\$ -	\$ -
OTHER			[] \$/Hr Varies According to Equipment Type	\$ -	\$ -
OTHER			[] \$/Hr Varies According to Equipment Type	\$ -	\$ -
EQUIPMENT TOTAL \$:					\$ 1,420.00

III. LABOR EXPENSE

Effective 7/1/07

<u>NAME</u>	<u>NO. HRS.</u> (At 1 1/2 Time)	<u>REG.</u> <u>TIME</u>	<u>COMMENTS</u>	<u>\$/HR.</u>	<u>TOTAL PRICE</u>
ED T.		12		\$ 46.72	\$ 560.64
BILL B.		6		\$ 42.29	\$ 253.74
JOHN				\$ 44.72	\$ -
MIKE		12		\$ 34.21	\$ 410.52
GREG		12		\$ 43.00	\$ 516.00
DANNY P.				\$ 44.72	\$ -
DANNY W.		12		\$ 34.21	\$ 410.52
BLAKE				\$ 44.72	\$ -
JOE		12		\$ 24.78	\$ 297.36
TAYLOR		12		\$ 21.38	\$ 256.56
LABOR TOTAL \$:					\$ 2,705.34
TOTALS FOR: MATERIALS					\$ 4,089.79
EQUIPMENT					\$ 1,420.00
LABOR					\$ 2,705.34
GRAND TOTAL:					\$ 8,215.13

ADDITIONAL COMMENTS

N.B. 7

7-26-16

City of Seaford, Delaware
414 High Street
Tel 302-629-9173
www.seafordde.com

Proposal to Provide Design, Construction Documents, and Permitting of Living Shoreline + additional GI recommendations and planting plans.

***Riverview Playground & Waterfront Redevelopment
Seaford, DE***

AUGUST, 2016

*Surface Water Matching Planning Grant Application
DNREC, Division of Watershed Stewardship
Delaware Water Infrastructure Advisory Council*

TABLE OF CONTENTS

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Background & Justification

PROJECT CONTEXT

In late spring 2015, Dr. Jules Bruck, PLA worked on behalf of the City of Seaford to develop a master plan for a 1-acre site along Seaford's waterfront near the existing public Boat Ramp and at the start of the Captain John Smith National Trail on the Nanticoke River. University of Delaware's Coastal Community Specialist, Ed Lewandowski and Jen Walls, Principal Planner, Division of Watershed Stewardship, DNREC funded the project. The project description included the following:

Utilizing information from the City of Seaford's public documents, prior records & maps, and community focus group information, the design team will produce Conceptual Design drawings for an innovative concept for *Riverview Park*.

According to the 2008 City of Seaford Comprehensive Plan, the site for the new park is currently called Riverview Park and it includes the following characteristics:

"This is a passive recreational park that is...located on the Nanticoke River at the foot of Nanticoke Street. It features a pavilion for picnics."

The landscape architecture work included the creation of **Conceptual Design Drawings**. Specifically, the LA provided written and graphic documentation of the City of Seaford's creative process used to determine what would be suitable uses for the site and the spatial layout of the entire park space. The design took into account existing conditions (physical setting, current land use, current pavilion use, current vehicular use and parking, current open space and pedestrian circulation and stormwater), and the designer used an analysis process to determine opportunities and constraints.

The final concept was presented to the Seaford Parks and Recreation Committee on August 25, 2015. The committee approved the park concept with overwhelming support. The Assistant City Manager, Charles Anderson then presented the concept to other stakeholders for feedback. On September 16, 2015 the plan was presented to the Delaware Department of Natural Resources (DNREC's) Planning and Technical Advisory Committee (PTAC). Notes and recommendations from PTAC were used by the landscape architect to revise the concept.

PROJECT CONCEPT

The new Riverview Park concept developed as a children's Discovery Playground. The concept highlights elements of Captain John Smith's life and times, and has elements that can be interpreted as part of the Captain John Smith National Trail. In particular, the park highlights a large sailing ship play structure named after the ship Smith used to sail to the New World - *Discovery*. It also includes several suspended shallop play structures representing the actual type of small boat Smith used to explore the shallow waters of the Nanticoke River. A plan highlight includes a rope climbing structure modeled after a settlement wall. The designer was careful to provide separate uses for younger children. A fenced-off area, called Treasure Park, continues the Discovery theme.

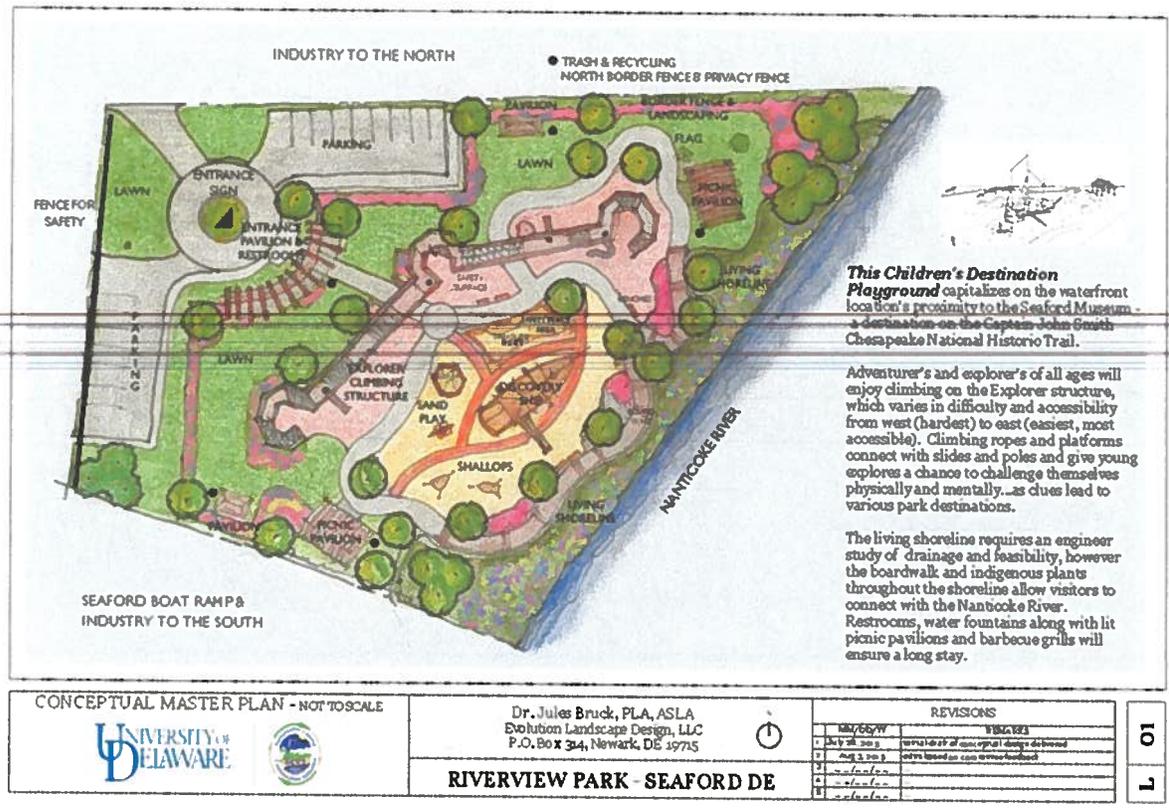


Figure 1. Conceptual design for Riverview Park, Seaford, DE. Designed by Jules Bruck, PLA

PROJECT AND SITE DESCRIPTION

The site has an existing inoperable stormwater inlet located on the western side of the property (see Figure 3) Along the waterfront visible erosion has occurred (see Figure 4), and the designer conceptually



proposed a living shoreline to provide habitat, shoreline resiliency, protection from sea-level rise induced flooding, and enhance water quality.

Figure 2. Site location highlighted in red



Figure 3. Existing stormwater inlet



Figure 4. Erosion along shoreline on site

FEASIBILITY STUDY

In September, 2015, Jules Bruck of Evolution Landscape Design, LLC (ELD) contracted with ForeSite Associates (FA), a landscape architecture and civil engineering firm located in New Castle, DE, to assist in determining the feasibility of a living shoreline at the proposed location. Funding for this phase of the project was provided by Jen Walls, Principal Planner, Division of Watershed Stewardship, DNREC.

FA scope of work from September 2015 – May 2016 was as follows:

Phase 1: Feasibility analysis and conceptual design

Feasibility elements involved site analysis and information gathering. The planning elements of the proposal utilized the feasibility information to determine the likely hydrologic regime along the Nanticoke River adjacent to the proposed playground. A concept plan, along with a schematic section, and a brief report was prepared to illustrate the proposed restoration techniques.

The project is likely to involve the removal of the existing riprap stone and a living shoreline treatment incorporated with the proposed park design elements [by others].

The restoration will encompass an area appropriately between 250 and 300 feet in length adjacent to Riverview Park. *Living shoreline strategies will be conceptualized to better connect the proposed playground design to the River's edge, to create a more natural tidal edge system in the area of the existing stone riprap, and strategies to encourage accretion of tidal marsh sediments to protect against sea level rise.* The concept plan will illustrate the proposed treatment and is provided to Evolution Landscape Design, LLC for consideration and public outreach.

In the draft report from FA, engineers concluded the proposed living shoreline treatment is feasible. Details are included in the report found in Appendix A. This report was shared at a DNREC Advisory Group meeting in Seaford, DE on May 16, 2016. Attendance included Dolores Slatcher, Seaford City Manager, Charles Anderson, Assistant City Manager, Berley Mears, Seaford Director of PW, James Chaconas, DNREC, Pat Emory, DNREC, James Brunswick, DNREC, Jules Bruck, ELD, Drew Hayes, FA, and Donna Shumpert, FA.

After the presentation, Jules Bruck committed to helping the City of Seaford complete a grant application to move the project toward implementation by generating construction documents for the proposed living shoreline.

PHASE II: DESIGN & CONSTRUCTION DOCUMENTS

This proposal requests funding to build on the Phase I information gathered during the execution of the prior *Feasibility Study*. Funding will allow the City of Seaford to complete the design and CD phase of the project and secure permits for the living shoreline at Riverview Park.

During this phase of the process, ELD and FA will share conceptual plans and work closely to create a comprehensive plan for Riverview Park that includes green infrastructure strategies within the playground site and the living shoreline.

This project is consistent with section 1.2-7 of the 2010 Clean Water and Drinking Water State Revolving Fund 20% Green Project Reserve: Guidance for Determining Project Eligibility - Establishment or restoration of permanent riparian buffers, floodplains, wetlands and other natural features, including vegetated buffers or soft bioengineered stream banks by restoring a natural stream morphology that is capable of accommodating a range of hydrologic conditions while also providing biological integrity. (2010 Clean Water and Drinking Water State Revolving Fund 20% Green Project Reserve: Guidance for Determining Project Eligibility, 2010).

SITE LOCATION & NEED

According to the Nanticoke Watershed Alliance, the Nanticoke River is *"one of the Chesapeake's healthiest rivers...its 725,000-acre watershed provides excellent habitat of national significance for many threatened plants and animals. The Nanticoke is the most biologically diverse watershed on Delmarva. The Nanticoke supports excellent fisheries. It has a rich history, properties on the National Register of Historic Places, and the northernmost stands of bald cypress on the Atlantic Coast. It also has the highest concentration of bald eagles in the northeastern United States."*

Seaford is located within the Upper Nanticoke Portion of the Nanticoke River 13 Watershed located within the greater Chesapeake Bay Watershed. The Nanticoke River starts in southern Delaware and flows southwest to the Chesapeake Bay through the Lower Eastern Shore of Maryland (USDA Natural Resources Conservation Service, Delaware, n.d.). The state has designated both the surface and ground waters in the Nanticoke watershed to be of high concern for water quality (USDA Natural Resources Conservation Service Delaware, n.d.). According to the 2008 Seaford Comprehensive Plan, “the pollutants targeted for reduction in the Nanticoke River watershed are nutrients (e.g., nitrogen and phosphorus) and bacteria. Chesapeake Bay drainage:

N- Reduction Requirements 30%

P-Reduction Requirements 50%

Bacteria - Reduction requirements 2%

The project site is referenced in Figure 2. This community improvement project meets the Surface Water Matching Planning Grant criteria because it provides an opportunity to improve water quality in the Nanticoke River through the design of a living shoreline and other green infrastructure treatments that will not only enhance habitat along the site, but also help to reduce runoff by designing areas of infiltration on the site. The implementation of the plan will ultimately establish a natural shoreline to enhance stability and resiliency. Through this grant funding, researchers will have the opportunity to study and design additional GI treatments for the playground. Suggestions from PTAC include exploring the feasibility of permeable pavers, increased native vegetation, and filtration strips along parking areas. We intend to educate the public through interpretive signs about important native fish species, and the management of those species along this portion of the Nanticoke. Finally, we will work to enhance public interest in aquatic systems by bringing them into closer contact with the river through the creative use of boardwalks and pathways.

Ultimately, we expect the playground will become an important destination on the Captain John Smith Historic Trail that will be the destination playground located at the start of the trail in Jamestown, VA. This park will provide a high-quality demonstration of what can be done in Sussex County, DE to protect and build resilience in small towns by utilizing green best management practices along industrial corridors.

The park along the river will create an educational, cultural, and ecologically valuable public experience that will instill pride among community members, and perhaps, spur economic development as tourists are drawn to this amenity.

Scope of Work

OBJECTIVE

The objective of this project is to provide design, construction documentation and permitting for a living shoreline (LS) project located in Seaford, DE (see below: Where will it be done). Specifically, the project allows for the continuation of a Phase I conceptual design and feasibility study for a living shoreline in this location. Additionally, up to three green infrastructure treatments, and a swale to the west of the existing boat ramp will be evaluated. This project has great potential for implementation based on desirability, feasibility, and eligibility to compete on the Project Priority List for Clean Water State Revolving Fund loans if the City of Seaford chooses to participate in that program.

The project will integrate with stormwater discharges, reduce erosion, and build resilience along the Nanticoke River in Seaford, DE. The new living shoreline will replace the eroding shoreline along Riverview Park, and create opportunities for educational interaction with the freshwater tidal marsh ecosystem. While the 1.0 acre site with only approximately 290 LF of shoreline is a small site, returning it to a more natural state will have a direct impact on water quality. As stated in recent DE Sea Grant Report, "Just as small amounts of rain add up quickly to large volumes of water downstream, individual sites' measures to manage stormwater can accumulate to significant and noticeable improvements in the overall health of a watershed. Site-scale stormwater management strategies complement regional and community-level stormwater management efforts with tangible tools that can be used throughout a community to help protect water quality." (Grant, 2009)

WHERE WILL IT BE DONE

The conceptual design for the Riverview Park encompasses the parcel between the existing City boat ramp and the Wastewater Treatment Facility past the convergence of Williams Pond and the Nanticoke River as it flows southwest toward the Chesapeake Bay.

This area was selected for the potential to improve a city open space amenity and to provide a destination for tourists and community members.

HOW THE PROJECT CORRESPONDS WITH THE COUNTY/MUNICIPAL COMPREHENSIVE PLAN

Consistent with the 2008 Seaford Comprehensive Plan, there is support from the City of Seaford to implement this community park plan as resources become available. The 2008 plan describes Riverview Park (1.0 Acres) as, "a passive recreational park that is...located on the Nanticoke River at the foot of Nanticoke Street. It features a pavilion for picnics." Further, the Comprehensive Plan states the City would like to provide more connections between downtown and the Nanticoke River and 'protect' the largest recreational amenity in the area - the Nanticoke River and its many tributaries. As stated in the plan, "People come from all around to go boating, canoeing, fishing and enjoy all the forms of water sports. It is essential that this great resource be protected." (City of Seaford, Sussex County, Delaware, Comprehensive Plan 2008, 2008). Our proposal takes an important step toward implementation of a project that will serve to protect and enhance the Nanticoke River.



Figure 5. Location of playground, living shoreline and existing swale

WHO WILL DO THE WORK

Proposals from *ForeSite Associates, Inc.* (FA) and Jules Bruck of *Evolution Landscape Design, LLC* (ELD) are included in this proposal. FA will complete the design, construction documents and permitting. ELD will implement further GI design considerations within the park consistent with the PTAC Committee Recommendations, design the planting plans and provide project management services. Both firms are familiar with site and the project as prior work has been completed by these parties to provide background justification. ELD designed the *Riverview Park* concept and FA Completed the Feasibility Report.

ORGANIZATIONAL CAPACITY

Both FA and ELD have the organizational capacity to complete the proposed work.

ForeSites Associates:

- **Andrew Hayes** of ForeSite Associates, Inc., is a Professional Engineer with a background in biology, civil engineering, and landscape architecture. Andrew has over 20 years' experience in the civil/site construction & engineering fields and brings his deep understanding of biological and human environments to each project to create high performance landscapes. Some of his recent projects include the new environmental campus for The Pilot School, stream restoration for an incised suburban stream, and oyster reef restoration for a private residence. Andrew will perform drainage studies, select shoreline treatments, and evaluate the feasibility of green infrastructure projects to manage stormwater and enhance ecosystem services.

- **James McCulley** of WatershedEco, LLC, has over 24 years of experience in wetland mitigation, habitat restoration, and stream restoration. Jim will perform preliminary wetland and ecological surveys, evaluate permitting requirements, and assist the project team with the evaluation of ecological opportunities within the recommended design strategies.
- **Matt Sturgis, P.E.**, a Civil Engineer at ForeSite Associates, Inc., has over 9 years' experience in the civil/site construction & engineering fields, with a focus on stormwater management in site design. Matt is an expert at AutoCAD Civil 3D for preparing sections, elevations, and models of stormwater design features and regularly works with county and government officials to streamline client permitting and project submissions. He will perform drainage studies, review GIS data and field surveys of outfalls, develop planning level recommendations for improvements to existing infrastructure to support future BMP design, and evaluate the feasibility of green infrastructure best management practices at each design area.
- **Donna Shumpert**, has a BS in Horticulture and an MLA in Landscape Architecture with a specialization in ecological restoration. Donna has over 12 years' experience designing plant communities for both aesthetics and function. Her most recent projects with us include constructed wetlands and bioretention areas for new and retrofitted developments. Prior to joining our firm last fall she worked for Andropogon Associates in Philadelphia. While there some of her projects included environmental master planning for the New England Wildflower Society and ecological restoration for the City of Alexandria. Donna will assist in evaluating the different areas for green infrastructure BMP's and prepare the schematic details for the selected BMP's and shoreline treatments.

Evolution Landscape Design, LLC

- **Jules Bruck**, PhD, PLA, ASLA is owner and sole proprietor of Evolution Landscape Design, LLC and associate professor of Landscape Architecture at University of Delaware. She will assist in design, coordination, and management for the project. Her work as designer and author on other municipal projects includes the popular *Ramble Plan* of Laurel, Delaware. She is a registered Professional Landscape Architect in Pennsylvania and Delaware.

These two firms have successfully worked together to complete feasibility studies and similar design of construction documentation for GIBMPs for the Town of Laurel.

Work Plan

A comprehensive phased work scope for this project is outlined below.

Phase II – Design, construction documents, and permitting of living shoreline; conceptual design and recommendations for up to three green infrastructure treatments within the playground, and planting plans.

ENVIRONMENTAL & MULTIPLE BENEFITS

The project team believes this proposal, once implemented, will present an effective demonstration project resulting in lasting land and water quality improvements in Seaford, DE.

Living Shorelines:

The primary goal of this project is the design and construction documentation of a living shoreline. According to the NOAA Habitat Conservation website, “Shorelines are often stabilized with hardened structures, such as bulkheads, revetment, and concrete seawalls. Ironically, these structures often increase the rate of coastal erosion, remove the ability of the shoreline to carry out natural processes, and provide little habitat for estuarine species... A “living shoreline” uses plants, sand, and limited use of rock to provide shoreline protection and maintain valuable habitat.” (Commerce, 2016)

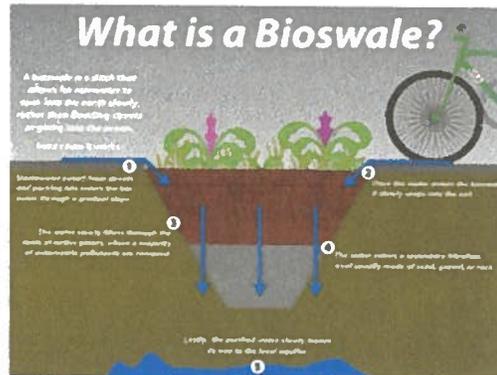
They go on to enumerate the benefits of living shorelines including the following:

- Stabilization of the shoreline.
- Protection of surrounding riparian and intertidal environment.
- Improvement of water quality via filtration of upland run-off.
- Creation of habitat for aquatic and terrestrial species.

Bioswales:

An existing swale at the public boat ramp site will be evaluated for planting as a functioning bioswale. Bioswales are vegetated or mulched channels that provide treatment and retention as they move stormwater from one place to another. Vegetated swales slow, infiltrate, and filter stormwater flows making this treatment consideration for the existing swale a good option.

As linear features, vegetated swales are particularly suitable along streets and parking lots ((USEPA), 2016). This swale is located between a large existing parking lot and the river. The effectiveness of bioswales increases when they are combined with other stormwater management practices ((USEPA), 2016) so its design will



be considered comprehensively with other green infrastructure treatments on the site. As bioswales include plants and low grasses to slow stormwater, the landscape architect will be engaged to help with plant selection.

Green parking

Other green infrastructure BMPs may be appropriate on the playground site to slow (infiltrate) stormwater before it runs to the Nanticoke River. Options such as green parking, which includes permeable pavement, rain gardens, and increased urban tree canopy, will be considered and factored into the design of the overall plan. Parking space in this design is considered a necessity; however, during this phase we can evaluate the possibility of enhancing the quality of the parking space. According to the Green Parking Council, "a successful parking lot is one that integrates its site conditions and context, takes measures to mitigate its impacts on the environment, and gives consideration to aesthetics as well as the driver-parker experience.

Green parking is defined as parking lots that integrate green infrastructure elements in their design (i.e. permeable pavement, rain gardens, bioswales and increased tree canopy). The utilization of green infrastructure in the design of the playground parking lot will help to mitigate vehicle water and air pollution in the local area.

Permeable pavement

"Permeable pavements are paved surfaces that infiltrate, treat, and/or store rainwater where it falls. Permeable pavements may be constructed from pervious concrete, porous asphalt, permeable interlocking pavers, and several other materials. These pavements are particularly cost effective where land values are high and where flooding or icing is a problem" ((USEPA), 2016). All sidewalks and new parking lots will be evaluated for appropriateness of being constructed using a permeable pavement in keeping with the nature of the project to promote green infrastructure.

Increased urban tree canopy

Trees are an important aesthetic features of the landscape and they also provide ecological services. For example, substantial rainfall water is captured by the canopy and then released into the



Figure 7. Typical green parking treatment

atmosphere; root systems helps to improve the infiltration characteristics of the soil; trees improve air quality by filtering pollutants and help to reduce urban heat islands. "Installing trees in locations that are engineered to retain stormwater is a great way to augment existing stormwater management systems, increasing their capacity and improving water quality while greatly improving urban forest canopy" (U.S. EPA, 2013). As part of this design, the landscape architect will select and place trees that will make the most valuable impact by providing a comprehensive array of ecosystem services.



Figure 8. Urban canopy in Janosik Park, Laurel, DE.

Time schedule and benchmarks

FEASIBILITY OF INSTALLATION (PHASE III)

According to the Chesapeake Bay Foundation, the installation techniques of a living shoreline project vary, and a hybrid project that includes a marsh fringe with breakwaters can cost between \$150 - \$500 per foot. This places the installation (Phase III) cost between \$43,500 - \$145,000. This is within a reasonable amount given the treatment is an innovative yet proven approach to protecting tidal shorelines from erosion. (Foundation, 2007)

Organizations such as the Chesapeake Bay Trust, NOAA-Restoration Center, Campbell Foundation, and National Fish and Wildlife Foundation all support implementation of living shorelines of public lands and future grant applications to these organizations will be submitted once construction documents are in hand.

As the playground progresses, various GI treatments outlined above will be included in those future phases.

BUDGET PHASE II

The budget for this proposal includes funding the design, construction documents and permitting, additional design of up to three green infrastructure practices, and the consideration of an existing swale as well as grant oversight. This budget is in line with other similar projects that have been funded in the past and deemed reasonable. The amount requested is \$49,500 and all itemized expenditures such as personnel, travel, equipment, supplies, contractual costs, indirect costs, and match sources and amounts are provided in a project budget included in the Appendix.

PROJECT BUDGET

TASKS		
DESCRIPTION/MILESTONES	TARGET DATE	ADDRESSES PROJECT OBJECTIVE BY:
1. <u>Topographic and Base Plan Preparation (FA)</u>	11/1/2017	Preparing accurate baseplan
2. <u>Tidal Study</u> : run for a minimum of one month to gather data on the tidal flux specific to the design location. Used to establish vertical design limits for the shoreline restoration plant community zones. (FA)	12/1/2017	Ensuring proper tidal data to prepare accurate design limits

3.	<u>Team Meetings</u> : Meet with The City of Seaford (x1). (FA + ELD)	4/1/2017	Allows for communication and updates
4.	<u>Preparation of Construction Drawings + Specifications (FA)</u>	9/1/2017	Providing CD's and specifications as stated in objectives of grant
5.	<u>Wetlands Delineation, Permitting + Agency Coordination (FA)</u>	9/1/2017	Assess impacts of design and coordinate with additional agencies
6.	<u>Conceptual plans for additional GI (ELD)</u>	9/1/2017	Developing concepts for additional stormwater BMPs
7.	<u>Preparation of Planting Plans (ELD)</u>	9/1/2017	Allows for full implementation at the conclusion of this project.

QUALIFICATIONS

The applicant for this grant is the City of Seaford. Their qualifications include complete authority to make decisions for Seaford. The prior received grants include: **XXXXXXX**

The land was purchased and improved with Land & Water grant funds since the early 1970's.

Jules Bruck, of Evolution Landscape Design, LLC successfully participated in the following DNREC Projects:

Bruck, J., (2014), *Design of Stormwater BMP's and Living Shoreline for "Governor's Park and Independence Playground"*, DNREC Surface Water Planning Grant, \$74,068.

Bruck, J., (2014), *Feasibility Study for EcoRestoration and Green Stormwater Infrastructure at the Ramble*. DNREC Coastal Management Grant, \$49,998.

Works Cited

(USEPA), U. E. (2016, June 18). *EPA Science Matters Newsletter: What is Green Infrastructure*. Retrieved from EPA US Environmental Protection Agency: <https://www.epa.gov/water-research/epa-science-matters-newsletter-what-green-infrastructure>

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Contact Information

Prepared for the City of Seaford by Jules Bruck, Evolution Landscape Design, LLC

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LANDSCAPE ARCHITECT

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DE Lisc. # S1-0000525

City Information

City of Seaford, Delaware

414 High Street

Tel 302-629-9173

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Appendix A



Figure 8. FA Draft Report

Appendix B

1400 Greenhill Ave
Wilmington, DE 19806
610-662-2986
julesbruck@gmail.com

Mr. Charles Anderson
City of Seaford
Assistant City Manager
414 High Street
Seaford, DE 19973

canderson@seafordde.com
302. 629.9173

RE: **Proposal for Green Infrastructure conceptual design, planting design, and grant management for Riverview Park in Seaford, DE**

Dear Mr. Anderson:

Thank you for the opportunity to submit a proposal to provide landscape architectural and design services in support of the above referenced project. As a follow up to the design and feasibility study conducted as part of our initial contract, I am pleased to provide consultant services to apply for a DNREC Surface Water Matching Planning Grant on behalf of the City of Seaford.

I have received a proposal from ForeSite Associates to design a living shoreline along the Nanticoke River at the Riverview Park location in Seaford, DE. This proposal includes services for the design and permitting of approximately 250 linear feet of shoreline restoration, to replace the existing rip rap revetment shoreline. The location of the project is a City parcel adjacent to the Seaford Boat Ramp, as noted in the aerial image below.

In addition to ForeSites work, the SWMPG proposal includes consideration of DNREC PTAC suggestions for additional green infrastructure projects within the new playground. This proposal includes fees for conceptual designs of additional GI treatments, planting plans, and to supervise and manage the SWMPG if the application is successful.



Jules Bruck, owner
Evolution Landscape Design, LLC

A. SCOPE OF WORK

1. PROJECT: Green Infrastructure conceptual design, planting design, and grant management for Riverview Park in Seaford, DE

- a. Conceptual plans for additional GI: utilizing the topographic and base plan map produced by ForeSites Associates, and working in conjunction with FA engineers, evaluate areas for up to three GI storm water management treatments and present conceptual designs for those areas. **\$3,600.00**
- b. Preparation of Planting Plans: Planting Plans will be produced for the major native plantings included in the living shoreline, the increased urban tree canopy, and the existing swale. The plan will exclude detailed plantings that will follow completion of the playground project. **\$5,070.00**
- c. Team Meetings: Meet with The City of Seaford one time to discuss the project and present GIBMPs and Planting Plan. The City will have a period of one month for comments on the plan set presented, after which the plan will be finalized. **\$1,080.00**
- d. Grant Management: Coordination of all meetings, creation of meeting minutes, four quarterly reports, budget management, and general oversight that results in successful grant management. **\$2,400.00**

Sub-total: \$12,150

Reimbursable Expenses: \$230.00

Total: \$12,380

Project Assumptions related to the above noted Scope:

1. Coordination with ForeSite Associates will allow ELD to access topographic and base maps including the location of all existing utilities.
2. Planting plan for living shoreline will be based on native ecosystems previously surveyed by ForeSite Associates and no additional survey work for the plan is necessary.

2. EXCLUSIONS

The following services are specifically excluded from this agreement. While these services are not included, we would be happy to provide them; they can be provided with written notice from your office in which case additional fees may apply:

- a. Design of playground structures or park pavilions;
- b. Design of playground entrance pavilion;
- c. Final design, entrance plan or additional plans required by DelDOT to address specifics of the parking lot improvements;
- d. Electrical & Lighting Design;
- e. Equipment based excavations, soil borings, and similar intrusive subsurface testing;
- f. Any meetings not expressly mentioned under Part I above;
- g. Legal fees and legal representation; application fees, processing fees, utility connection fees, review fees, permit fees, etc.;
- h. And any item not expressly noted under Part I, SCOPE OF WORK above.

3. REVISIONS

This proposal is inclusive of the report noted in Part I, SCOPE OF WORK. It is the intent of this proposal to provide landscape architecture and design services required to assist the City of Seaford with the project as described above. Changes made to the Scope of Work by Owner/Client decisions after the submission of design documents to agencies for review and/or any additional revisions beyond this scope will be charged/billed at time and material rates in accordance with our standard rates and payment policy (attached) and may require additional budget beyond the values suggested in this proposal.

4. SCHEDULE

We propose the following schedule after execution of this agreement.

Begin Work:	within 3 weeks of contract signing
Conceptual Plans for GI & Meeting:	four months from signing
Final Deliverable – Planting Plan set:	eleven months from signing
Grant oversight and management:	ongoing

5. FEES

This proposal is presented on a time and material basis with a not to exceed amount. All fees will be billed monthly or sooner if the project is complete. Services beyond those included in the scope of work will be billed on a time and material basis at our current rates and are not

included within the fee below. Any items that are not within the scope of work will require written or verbal authorization from your office beforehand.

The following not to exceed project budget:

Green Infrastructure conceptual design, planting design, and grant management for
Riverview Park in Seaford, DE **\$12,380.00**

B. ACCEPTANCE

Signature below or issuance of a purchase order indicates your acceptance of this proposal and all terms therein. Please have a signed copy of this proposal or a purchase order returned to our office via fax, mail, or email (scan). This proposal shall be valid for a period of 30 days.

Jules Bruck, PhD, PLA, ASLA

Date: _____

Accepted By: _____
Authorized Representative - City of Seaford

Date: _____

Mr. Charles Anderson
City of Seaford
Assistant City Manager
414 High Street
Seaford, DE 19973

canderson@seafordde.com
302. 629.9173

**RE: Proposal to Provide Construction Drawings + Permitting
for a Living Shoreline in Seaford, DE**

Dear Mr. Anderson:

Thank you for the opportunity to submit a proposal to provide civil engineering and ecological design services in support of the above referenced project. Based on our discussions, it is ForeSite Associates' (FA) understanding that Jules Bruck PhD., acting on behalf of the University of Delaware, is working with the City of Seaford (City), to apply for a DNREC Surface Water Matching Planning Grant, to design a living shoreline along the Nanticoke River in Seaford, DE. This proposal includes services for the design and permitting of approximately 250 linear feet of shoreline restoration, to replace the existing rip rap revetment shoreline, in the City parcel adjacent to the Seaford Boat Ramp, as noted in the aerial image below.



The construction documentation and permitting phase will build upon the feasibility and concept phase completed by FA in June of 2016. A construction plan set (CD's) will be prepared in accordance with DNREC & Sussex County Conservation District's guidelines. The plan set will be provided to the client for the client to submit to review agencies. The Scope of Work includes one round of revisions for comments received from review agencies.

The construction & permitting drawings will include schematic construction data for a boardwalk system along the proposed living shoreline. The extent of the boardwalk system is subject to approval from regulatory agencies. The schematic drawing(s) is intended to illustrate the general geometry of the project and to assist with permitting. Construction drawings for the boardwalk system are not included within the Scope of Work and it is assumed that the boardwalk system will be a design-build component within the future construction bids & contract(s).

I. SCOPE OF WORK

Seaford, DE: Shoreline Restoration - Phase 2: CD's + Permitting:

- a. **Topographic and Base Plan Preparation:** one site visit will be performed to confirm elevation readings taken during the feasibility phase; the data will be processed and a base plan prepared to identify site topography and utilities within the limits of the proposed work area. Utilities will be based on best available information. The property boundary will be based upon plans of record best fit to found evidence. A property survey is excluded from the scope of work.
\$2,290.00
- b. **Tidal Study:** a tidal study will be run for a minimum of one month to gather data on the tidal flux specific to the design location, which will be used to establish vertical design limits for the shoreline restoration plant community zones.
\$2,040.00
- c. **Team Meetings:** Meet with The City of Seaford one time to discuss the project and present a schematic base of the construction plan to be prepared. The City will have a period of one month for comments on the plan set presented, after which FA will proceed ahead with construction set completion.
\$2,640.00
- d. **Preparation of Construction Drawings + Specifications:** Prepare Construction Drawings showing plan & section views and related details. Provide Specifications where (and if) necessary to supplement those included within the Construction Drawings.
\$19,690.00

- e. **Wetlands Delineation, Permitting + Agency Coordination:** Correlate tidal study data to the project area and assess potential impacts to regulated resources. Assist the City with the application for Section 404 Wetlands, Section 10 Waters, Subaqueous Lands, and/or State Wetlands permits. Conduct pre-application meetings with the City and reviewing agencies for the proposed shoreline restoration.

\$8,470.00

Sub-total : \$35,130.00

Reimbursable Expenses : \$1,520.00

Total : \$36,650.00

Project Assumptions to the above noted Scope:

1. We will be able to procure sewer and other utility drawings from the City of Seaford and/or DNREC.
2. The City of Seaford will provide past environmental data for the project site including brownfield project reports, subsurface testing, etc. (the proposed shoreline work includes excavation along the existing shoreline).
3. Applications for permits and approvals will be made by the City of Seaford, ForeSite Associates, Inc. will assist but the City will be the applicant/owner.
4. No rare, threatened, or endangered species exist within the project area.
5. No structures will be proposed within the river such that the limit of work will approximately match the existing water's edge. Rip Rap shoreline protection may extend into the river.
6. Evaluation and planning for the integration for the future park improvements and design of those improvements will be provided by Evolution Landscape Design, LLC. and/or other entities and are not included in this proposal, nor will any concepts of such be illustrated in the plan set provided.

I. EXCLUSIONS

The following services are specifically excluded from this agreement. While these services are not included, we would be happy to provide them; they can be provided with written notice from your office in which case additional fees may apply:

- a. Property Survey(s) (existing data will be utilized for the project and supplemented with additional field work);
- b. Environmental Hazards Assessment and/or studies for buried contaminants, waste, etc.;
- c. Building Plans, Architectural Plans, Building Foundation Plans, etc.;

- d. Design and review of storm drain systems within the project area;
- e. Design of park improvements beyond the living shoreline zone;
- f. Electrical & Lighting Design;
- g. Equipment based excavations, soil borings, and similar intrusive subsurface testing;
- h. Environmental impact permits;
- i. Archeological investigations, reports, etc.;
- j. Any meetings not expressly mentioned under Part I above;
- k. Legal fees and legal representation; application fees, processing fees, utility connection fees, review fees, permit fees, etc.;
- l. And any item not expressly noted under Part I, SCOPE OF WORK above.

II. REVISIONS

This proposal is inclusive of the report noted in Part I, SCOPE OF WORK. It is the intent of this proposal to provide your office with the probable engineering and landscape design services required to assist your office with the project as described above. Changes made to the Scope of Work by Owner/Client decisions after the submission of design documents to agencies for review and/or any additional revisions beyond this scope will be charged/billed at time and material rates in accordance with our standard rates and payment policy (attached) and may require additional budget beyond the values suggested in this proposal.

III. SCHEDULE

We propose the following schedule after execution of this agreement.

Begin Work within 3 weeks of contract signing
 Schematic Plan & Meeting with the City of Seaford four months from signing
 Final Deliverable – Construction Plan set eleven months from signing

IV. FEES

This proposal is presented on a time and material basis with a not to exceed amount. All fees will be billed monthly** or sooner if the project is complete. Services beyond those included in the scope of work will be billed on a time and material basis at our current rates and are not included within the fee below. Any items that are not within the scope of work will require written or verbal authorization from your office beforehand.

We propose the following not to exceed project budget:

Seaford, DE : Shoreline Restoration	
Phase 2: CD's + Permitting :	\$36,650.00

V. ACCEPTANCE

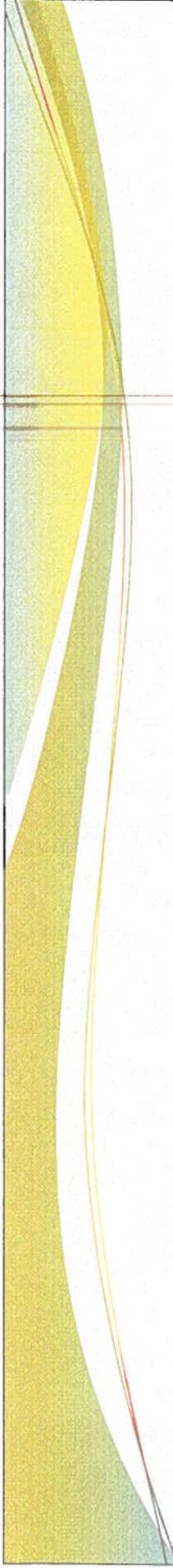
Signature below or issuance of a purchase order indicates your acceptance of this proposal and all terms therein. Please have a signed copy of this proposal or a purchase order returned to our office via fax, mail, or email (scan). This proposal shall be valid for a period of 30 days.

Andrew C. Hayes, P.E.
President

Date: _____

Accepted By: _____
Authorized Representative
City of Seaford

Date: _____



Proposed Project Costs

- Total Project Funding Needs - \$49,500
- Stormwater Planning Grant from DNREC SRF
- (50% Matching Funds Required)
- Matching Funds Amount required: \$24,750
- City of Seaford @ 25%: \$12,375
- Chesapeake Bay Regulatory @ 25% \$12,375
(or other available funds)