

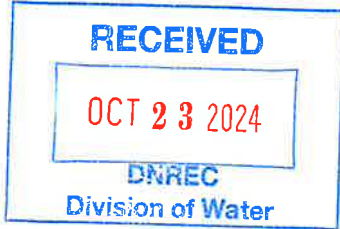


# LETTER OF TRANSMITTAL

TO:

DNREC, DIVISION OF WATER, SWDS  
89 KINGS HIGHWAY  
DOVER, DE 19901

18072 Davidson Drive  
Milton, DE 19968  
(302) 684-8030  
www.pennoni.com



DATE:	October 22, 2024	JOB NO.	RIBER21006
ATTENTION:	Mr. GORDON WOODROW		
RE:	BALLENGER SUBDIVISION		

WE ARE SENDING YOU  Attached  Under separate cover via UPS the following items:

Shop Drawings     Prints     Plans     Samples     Specifications  
 Copy of Letter     Change Order     \_\_\_\_\_

LIST OF ITEMS TRANSMITTED			
COPIES	DATE	NO:	DESCRIPTION
1		1	WPCC -Application Ballenger
1		2	Check #24635 \$825.00
1		3	Check #24636 \$300.00
1		4	Wastewater Narrative
1		5	Ballenger System, Pump Curves and Storage computations DNREC
1		6	Preliminary Subdivision Plan – Notice of Decision Letter
1		7	Utility Plan Set
1		8	Pump Station Plan Set
1		9	Record Plan Set
1		10	CD – PDF'S

THESE ARE TRANSMITTED as checked below:

- For approval     Approved as submitted     Resubmit \_\_\_\_\_ copies for approval  
 For your use     Approved as noted     Submit \_\_\_\_\_ copies for distribution  
 As requested     Returned for corrections     Return \_\_\_\_\_ corrected prints  
 For review and comment     \_\_\_\_\_  
 FOR BIDS DUE \_\_\_\_\_     PRINTS RETURNED AFTER LOAN TO US

REMARKS: Any questions please contact this office, Mr. Alan Decktor, [adecktor@pennoni.com](mailto:adecktor@pennoni.com)  
PENNONI Associates

COPY TO: \_\_\_\_\_

SIGNED: Katherine E Davidson/file

If enclosures are not as noted, kindly notify us at once.



Department of Natural Resources  
and Environmental Control  
89 Kings Hwy  
Dover, DE 19901  
dnrec.delaware.gov

Division of Water  
Commercial and Government Services Section

Phone: (302) 739-9946  
Fax: (302) 739-2296

### **INSTRUCTIONS FOR COMPLETING THE PERMIT APPLICATION FOR THE CONSTRUCTION OF WASTEWATER COLLECTION AND CONVEYANCE SYSTEMS**

The following items must accompany the application. **Please note that incomplete application packages will be returned in their entirety and not reviewed until such time as all required information is received.**

- 1. A narrative summary of the intended purpose and design of the proposed facilities.
- 2. One (1) set of final construction plans and specifications (paper copy), if applicable, signed and sealed by a Delaware-registered Professional Engineer, or a Delaware-registered Professional Land Surveyor for gravity systems only.
- 3. One (1) electronic copy of final Plans.
- 4. The final plans must be drawn to scale showing slopes, inverts, pipe types and sizes, existing and proposed ground surfaces, tops of manholes, water lines, stormwater and stream crossings, encasements shown in plan and profile, and other information if pertinent or requested.
- 5. For pump/lift stations and force mains, include all calculations and pump/performance curves.
- 6. A check made payable to the State of Delaware for eight hundred twenty-five dollars (\$825.00), the non-refundable permit review fee. This fee covers the initial review and one follow-up review of any corrections or changes made to address the Division's comments. An additional eight hundred twenty-five dollars (\$825.00) non-refundable review fee must be submitted for resubmission of the plans if changes are made to the project which trigger a complete review of the permit application.
- 7. Your permit will have a public notice requirement if your system includes force mains or pump/lift stations. Include a check made payable to the State of Delaware for three hundred dollars (\$300.00) for the reimbursement of legal notices if the system has a force main connection or a pump/lift station.
- Please submit the completed application package, as outlined above, to DE DNREC, Division of Water, Commercial and Government Services Section, 89 Kings Highway, Dover, DE 19901. Please note, a new application, including the review fee, must be submitted if the Division's comments are not addressed or if requested supplemental information is not provided within one (1) year of the comment or request date.
- The following items must be submitted prior to permit issuance:
- 8. Verification from the appropriate county or municipal planning authority that the project has the proper zoning approval.
- 9. A letter from the owner/operator of the wastewater facilities to which the proposed collection and conveyance facilities connect. The letter must include confirmation that the owner/operator has approved the project, that the owner/operator will take responsibility for treating and disposing of the wastewater to be conveyed and that the downstream facilities have the capacity to manage the additional flows without causing or contributing to violations of Delaware's Environmental Protection Act (7 Del. C., Chapter 60) and the regulations promulgated thereafter. This includes, but is not limited to, unauthorized discharges such as overflows at manholes and violations of the treatment system's operating permit (for example, the National Pollutant Discharge Elimination System (NPDES) permit).

- Visit us on the web at: <https://dnrec.delaware.gov/water/commercial-government/>

**APPLICATION FOR THE CONSTRUCTION OF  
WASTEWATER COLLECTION AND CONVEYANCE SYSTEMS**

Application must be complete, typewritten or clearly printed

Date Application Submitted \_\_\_\_\_

<b>PROJECT INFORMATION</b>			
Project Name and Location/ Address <b>BALLENGER SUBDIVISION HOLLYMOUNT ROAD HARBESON DE 19951</b>			
Tax Parcel Number(s) <b>234-11.00-103 &amp; 234-11.00 -103.01</b>			
County <input type="checkbox"/> Kent <input type="checkbox"/> New Castle <input checked="" type="checkbox"/> Sussex	Watershed (www.dnrec.delaware.gov/swc/wa/Pages/WatershedAssessment.aspx) <input type="checkbox"/> Chesapeake Bay <input type="checkbox"/> DE Bay/Estuary <input checked="" type="checkbox"/> Inland Bays/Atl Ocean <input type="checkbox"/> Piedmont		
Sewer District or Interceptor <b>N/A</b>	Wastewater Treatment/Disposal Facility Name <b>SUSSEX COUNTY INLAND BAYS WTF</b>		
Anticipated Construction Start Date <b>JUNE 2025</b>	Treatment/Disposal Facility Owner and Operating Permit Number <b>SUSSEX COUNTY INLAND BAYS WTF Permit # 359141-05</b>		
Please note, construction permits expire three (3) years from the date of permit issuance.			
Are you requesting plan review and comment or WPCC Construction Permit issuance? (circle one)			
Design Flow (gallons/day) Average <b>28313</b>	Peak <b>113252</b>	Peak Factor <b>4.0</b>	Basis of Design <b>ACCUMULATED EDUs</b>
Description <b>SUBDIVISION (49 LOTS) WASTEWATER COLLECTION SYSTEM, WASTEWATER PUMPING STATION AND FORCE MAIN</b>			
<b>OWNER/DEVELOPER</b>			
Company Name <b>RIBERA DEVELOPMENT LLC</b>			
Mailing Address <b>8684 VETERANS HIGHWAY , SUITE 203</b>			
City <b>MILLERSVILLE</b>	State <b>MD</b>	Zip <b>21108</b>	
Contact Name <b>JOHN STAMATO</b>			
E-Mail Address <b>JOHNSTAMATO@RIBERADEV.COM</b>			
Telephone <b>443 871 0486</b>	Cell	Fax	

ENGINEER					
Company Name <b>PENNONI ASSOCIATES INC</b>					
Mailing Address <b>18072 DAVIDSON DRIVE</b>					
City <b>MILTON</b>			State <b>DE</b>		Zip <b>19968</b>
Contact Name <b>ALAN DECKTOR</b>					
E-Mail Address <b>ADECKTOR@PENNONI.COM</b>					
Telephone <b>302 684 8030</b>		Cell		Fax	
GRAVITY SEWER INFORMATION					
Ownership <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	Type of Sewer System <input checked="" type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Other?			If Other, list below	
Type of Pipe <b>C900 PVC SDR 26</b>	Length (ft) <b>4558</b>	Diameter (in) <b>8 INCH</b>	Joint Specification <b>PUSH ON</b>	Min. Slope (ft/ft) <b>0.0028</b>	Min. Velocity (ft/sec) <b>2</b>
Minimum Pipe Cover (ft) <b>4.0</b>	Number of Manholes <b>24</b>	Drop manholes provided? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Maximum Distance Between Manholes (ft) <b>400</b>	
Minimum ten foot (10') horizontal & eighteen inch (18") vertical separation from water lines maintained? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			If not, explain provisions to prevent cross-contamination:		
Explain any special challenges (for example, stream, highway and/or railroad crossings, directional drilling, elevated sewers, etc.)					
Comments					

PUMP/LIFT STATION INFORMATION				
Ownership <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private		Type of Wastewater <input checked="" type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Other?		If Other, list below
Pump Station Flows (gallons/day) Design 76.6 gpm		Average 28313	Peak 113252	Peak Factor 4.0
Basis of Design ACCUMULATED EDUs			Pump Type SUBMERSIBLE	
Will peak flows be accommodated if largest unit fails? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Pump calc's and pump curves attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Cycle Time (minutes) 10 MIN	Wet Well Detention Time (minutes) 7.5 MIN
Check valves provided on discharge line? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			Gate valves provided on discharge line? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
If not, explain alternate procedure:				
Ventilation provided in wet well? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Dry Well? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Is an alarm system included? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Alternate source of power? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
What other provisions for emergency operations? BYPASS CONN.				
Height of Influent Above Pump (suction head) (ft) 2.41		Height of Effluent Above Pump (discharge head) (ft) 22.6		Friction Loss (ft) 0.85
Pump Design Point 76.6	Pump Operating Point 22.63	Static Head (ft) 21.75	Total Head (ft) 22.60	Required Motor Horsepower (hp) 2.7
FORCE MAIN INFORMATION				
Type of Pipe C900 PVC SDR18		Length (ft) 145 FT		Diameter (in) 4 INCH
Hazen-Williams "C" Design Factor 150	Type of Joints PUSH ON	Velocity Under Design Conditions (ft/sec) 2.5		Minimum Pipe Cover (ft) 4.0
Air relief valves specified? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Clean-outs provided? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Maximum distance between clean-outs (ft)	
Minimum ten foot (10') horizontal & eighteen inch (18") vertical separation from water lines maintained? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		If not, explain provisions to prevent cross-contamination:		
Comments				

# **Ballenger Sub-Division**

## **Introduction**

Ballenger is a proposed sub-division located in Harbeson Delaware. The property is identified by Tax parcel Numbers 234-11.00-103.00 and 243-11.00-103.01 The site is bordered by Hollymount Road in the North, *Unity Branch* to the south and halfway between Route 5 in the west and route 24 in the east

As two phases with the pumping station installed as part of phase 1 The Ballenger subdivision will consist of 107 lots for single-family units. Additional facilities on site will consist of a Clubhouse and pool.

The sub-division will be developed in two phases with the pumping station to be completed in the first phase of the development.

## **Sewer Collection System**

The sewer collection system and disposal system will be public and will be managed, operated and maintained by Artesian Wastewater Management Inc. Discharge of effluent will be at the Beaver Creek Regional Wastewater Facility.

**Sewer Conveyance System** Average daily flow for the 107-unit sub-division is computed at 28,313 gallons per day. Using the Artesian Peak 1 hour flow factor of 4.0 the peak hour flowrate is computed at 78.6 gallons per minute. The pumps are designed to meet the 1-hour peak flow rate with 1 pump running.

The wastewater pumping station will include a 8-foot diameter wet well with dual Flygt submersible pumps for the conveyance of the sub-division wastewater.

Pumps will operate in the traditional method of alternating pumps with each cycle. Controls will be achieved with variable frequency drives with dual flow monitoring systems consisting of a primary pressure transducer with a float switch back up system to manage and monitor pump operation. Wet well ventilation will be forced air with a minimum of 12 air changes per hour and will operate continuously. A magnetic flow meter will be installed to monitor wastewater flows. Check valves and isolation valves are to be housed in an above ground enclosure with appropriate protection from freezing.

Back up power will be provided by diesel generator, supported by an automatic transfer switch, capable of operating the entire pumping station in the event of the loss of primary power.

The station will have an 8-foot security fence and screening will include appropriate landscaping.

## PLANNING & ZONING COMMISSION

ROBERT C. WHEATLEY, CHAIRMAN  
HOLLY J. WINGATE, VICE-CHAIRMAN  
J. BRUCE MEARS  
GREGORY SCOTT COLLINS  
BRIAN BUTLER



## Sussex County

DELAWARE  
sussexcountyde.gov  
302-855-7878 T  
302-854-5079 F  
JAMIE WHITEHOUSE, AICP MRTPI  
PLANNING & ZONING DIRECTOR

January 27<sup>th</sup>, 2023

Alan M. Decktor, PE, ENV SP  
Pennoni and Associates, Inc.  
18072 Davidson Drive  
Milton, DE 19968

By email to: [ADecktor@Pennoni.com](mailto:ADecktor@Pennoni.com)

RE: Notice of Decision Letter for the Preliminary Subdivision Plan for Ballenger Subdivision (F.K.A. Warrington) (2022-26) for the creation of a AR-1 Subdivision utilizing the Cluster option in the Low Density Area to consist of (106) single-family lots located on the south side of Hollymount Road (Route S.C.R. 48).

Tax Parcels: 234-11.00-103.00 & 234-11.00-103.01

Dear Mr. Decktor,

At their meeting of **Wednesday, January 3, 2024**, the Planning & Zoning Commission **approved** the **Preliminary Subdivision Plan for Ballenger Subdivision (F.K.A. Warrington) (2022-26)** for the creation of an AR-1 Subdivision utilizing the Cluster option in the Low Density Area to consist of (106) single-family lots. The parcels are located on the south side of Hollymount Road (S.C.R. 48) approximately (0.4) miles east of Beaver Dam Road (Route 23). The parcels are zoned Agricultural Residential (AR-1) Zoning District and lie within the *Low Density Area* per Sussex County's 2018 Comprehensive Plan.

The Preliminary Subdivision Plan is valid for three (3) years from the date of Planning Commission decision. A Final Subdivision Plan shall be approved within three (3) years of the date of approval of the Preliminary Subdivision Plan, or the action of the Planning Commission shall be deemed canceled. Unless an extension is granted, approval shall be rendered null and void if substantial construction is not commenced within five (5) years of the date of recordation of the final plat.

As part of their motion, the Planning Commission acted to approve the development subject to the following conditions (which shall be clearly annotated on the Revised Preliminary and Final Subdivision Plans):

- a. There all be no more than 106 lots within the subdivision.
- b. The developer shall establish a homeowner's association responsible for maintenance of the streets, buffers, stormwater management facilities, and other common areas.



COUNTY ADMINISTRATIVE OFFICES  
2 THE CIRCLE | PO BOX 417  
GEORGETOWN, DELAWARE 19947

- c. As shown on the Preliminary Site Plan, approximately 28 total acres or 52% of the site shall remain as open space.
- d. The stormwater management system shall meet or exceed the requirements of the State and County and the Final Site Plan shall contain the approval of the Sussex Conservation District. The system shall be maintained and operated using Best Management Practices.
- e. There shall be a forested and/or vegetated buffer strip that is at least 30 feet wide along the perimeter of the subdivision. This buffer shall utilize existing forest or similar vegetation where it exists in the buffer area. Where trees currently exist in the buffer area, stump removal or construction activities that disturb the existing grade of the area within the buffer shall be prohibited. All silt fencing shall be located along the interior limit of the buffer area (the edge of the buffer nearest the interior development) and the Final Site Plan shall identify the "Limit of Disturbance" to prevent disturbance of the buffer area.
- f. The development shall comply with DelDOT entrance roadway improvement requirements.
- g. Street design shall meet or exceed Sussex County standards.
- h. The subdivision shall be served by central sewer and central water.
- i. Sidewalks shall be installed on both sides of all internal streets.
- j. Construction, site work, and deliveries shall only occur on the site between the hours of 7:00a.m. and 6:00p.m. Monday through Saturday. No Sunday hours are permitted. A 24 inch by 36 inch "NOTICE" sign confirming these hours in English and Spanish shall be prominently displayed at the site entrance during construction. During sitework and initial construction, all dumpsters and roll-off containers shall be covered to prevent construction materials and debris from blowing across the site or onto neighboring properties.
- k. The Applicant shall coordinate with the local school district for a school bus stop within the subdivision. If required by the school district, the location of the bus stop area shall be shown on the Final Site Plan.
- l. There shall be on-site active and passive amenities including a playground, clubhouse, swimming pool and walking trail. These amenities shall be completed and open to use as required by Section 99-21E of the Subdivision Code.
- m. There shall be at least 13 acres (or 44%) of the existing forest preserved within this development. The Final Site Plan shall include a Landscape Plan depicting all landscaping to be provided and all of the forested areas that will be preserved. The Landscape Plan shall also identify all "Limits of Disturbance" within the site.
- n. The Final Site Plan shall include a Grading Plan for the site. No building permit shall be issued for individual lots until an individual lot grading plan has been supplied to and approved by Sussex County. No certificate of occupancy shall be issued until a grading certificate is submitted to the Building Code Department demonstrating general conformity with the individual site grading plan.
- o. A revised Preliminary Site Plan either depicting or noting these conditions must be submitted to the Office of Planning and Zoning.
- p. The Final Site Plan shall be subject to the review and approval of the Planning and Zoning Commission.



The Final Subdivision Plan must comply with the County's Subdivision Code, including submission of agency approval letters to the Planning and Zoning Office.

Please submit a minimum of **one (1) full size (24"x36")** and **one (1) electronic PDF copy** of a Final Subdivision Plan to the Planning and Zoning Office for consideration on the next available agenda for Planning Commission. It is recommended that **two (2) copies** of a check print are first submitted to staff for review.

**Please note that a \$10.00 per lot fee will be required to be paid prior to the approval of any Final Subdivision Plan. For 249 lots, the fee is \$2,490.00.**

Please feel free to contact me during business hours with any questions from 8:30 AM – 4:30 PM, Monday through Friday, at 302-855-7878.

Sincerely,



Mr. Michael Lowrey  
Planner III

CC: Ms. Susan Isaacs, Sussex County Engineering Project Coordinator Engineering – Public Works  
Mr. Leslie Dick, Sussex County Chief Constable – Assessment/Constable's Office  
Mr. Andy Wright, Chief of Building Code – Sussex County Building Code  
Mr. John Ashman, Director of Utility Planning & Design – Engineering  
Mr. John Stamato – Ribera Development, LLC

**RECEIPT**

	October 23rd, 2024				<b>125</b>
RCVD FROM	Ribera Development LLC				\$825.00
	Eight Hundred twenty-five dollars and 00/100				DOLLARS
FOR	Plan review fee WPCC 3091/24 Ballenger Subdivision				
ACCT	\$	825.00	x	CHECK #	24635
PAYMENT	\$	825.00		CASH	
	\$	-		OTHER	BY Kevin Bronson

DNREC, Commercial & Government Services Section, 89 Kings Hwy, Dover, DE 19901

**RECEIPT**

	October 23rd, 2024				<b>126</b>
RCVD FROM	Ribera Development LLC				\$300.00
	Three Hundred Dollars and 00/100				DOLLARS
FOR	WPCC Public Notice Reimbursement 3091/24				
ACCT	\$	300.00	x	CHECK #	24636
PAYMENT	\$	300.00		CASH	
	\$	-		OTHER	BY Kevin Bronson

DNREC, Commercial & Government Services Section, 89 Kings Hwy, Dover, DE 19901