

3020/24



ARCHITECTS
ENGINEERS

TRANSMITTAL

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SALISBURY
BALTIMORE
SEAFORD

www.gmbnet.com

DATE: March 8, 2024 GMB NO: 230004
TO: DNREC RE: Oaks at Georgetown – Phase 2
Division of Water Pump Station
Commercial & Government Town of Georgetown, DE
Services Section
89 Kings Highway
Dover, DE 19901
ATTN: Plan Reviewer UPS
Ground

COPIES:	DESCRIPTION
1	Oaks at Georgetown- Pump Station Plans (24 x 36)
1	Oaks at Georgetown – Pump Station Plans (electronic)
1	Oaks at Georgetown – Pump Station Application for Pumpstation WPCC
1	Oaks at Georgetown – Pump Station Specifications
1	Narrative Summary
1	Town of Georgetown Planning Commission Meeting Minutes, dated 8/16/2023, Approval of Preliminary Site Plan
1	GMB Check - \$300.00 – Advertising Fee
1	GMB Check - \$825.00 – Review Fee

REMARKS: Please find enclosed the Oaks at Georgetown – Pump Station Sewer Plans, Application, Narrative Summary, Zoning Approval Specifications, and Review Fee for your review and approval. Please contact our office with any questions or comments.

COPIES TO:
JLAM GT Oaks, LLC
Attn: Doug Motley (w/o encl.)


Chris Derbyshire, P.E.
Sr. Vice President

The Oaks at Georgetown

Pump Station

Narrative Summary

The Oaks development pump station consists of a new developer-built pump station that will be turned over to the Town of Georgetown after completion. The proposed pump station will serve 387 equivalent dwelling units (EDUs), those EDUs are comprised of units in Phases 2 & 3 (367) of the development and an allowance of 10 EDUs for each of the two (2) pool houses. The gravity sewer collection system for Phase 2 was previously submitted to DNREC under separate cover. Phase 3 will be a future development phase of the project.

The pump station will consist of a six (6) foot diameter, round precast concrete wet well with two (2) 23HP submersible non-clog pumps w/removable guiderail system and wet well ventilation supply fan. The station will also include a precast concrete valve vault to house check valve and isolation valves, emergency bypass pumping connection, emergency generator and controls cabinet. Alarms will be monitored through the Town's SCADA system.

The pump station has an operating capacity of approximately 218 gpm, which satisfies the design point of 212 gpm. The pumps have been designed to operate under flow conditions developed by the Town's Engineering Consultant (DB&F) as the proposed 4-inch force main connects to a 20-inch sewage force main located along Arrow Safety Road. When the 20" FM is under design/high flow condition, the pressure at 4" FM connection point will be 43 psi and under low flow conditions 21.5 psi. The Oaks PS is designed to achieve its rated capacity at high flow pressure condition. Under low flow conditions, the reduced pressure at tie-in will allow the pump station to "run out" and operate at 320 gpm. The wet well levels for the proposed PS have been set to allow the design T_{min} to be achieved during run out pumping condition.



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) 739-8369

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, if applicable, signed and sealed by a Delaware-registered Professional Engineer, or a Delaware-registered Professional Land Surveyor for gravity systems only. One (1) electronic copy of final Plans.
- 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. A check made payable to the State of Delaware for three hundred dollars (\$300.00) for the reimbursement of legal notices (advertisement filing expense.)

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.alpha.delaware.gov/water/surface-water/>

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

Application must be complete, typewritten or clearly printed

Date Application Submitted 3/11/2024

PROJECT INFORMATION			
Project Name and Location/ Address Oaks at Georgetown - Phase 2 Pump Station 24015 Crab Apple Court, Georgetown, DE 19947			
Tax Parcel Number(s) 135-20.00-6.00			
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 checked="" type="checkbox"/> DE Bay/Estuary <input type="checkbox"/> Inland Bays/Atl Ocean <input type="checkbox"/> Piedmont	
Sewer District or Interceptor Town of Georgetown		Wastewater Treatment/Disposal Facility Name Town of Georgetown	
Anticipated Construction Start Date 10/2024		Treatment/Disposal Facility Owner and Operating Permit Number Town of Georgetown WWTP	
Please note, construction permits expire three (3) years from the date of permit issuance.			
Are you requesting plan review and comment on WPCC Construction Permit issuance? (circle one)			
Design Flow (gallons/day) Average 87,075		Peak 304,763	Peak Factor 3.5
Basis of Design 225 GPD/EDU			
Description The Oaks development pump station consists of a new developer-built pump station that will be turned over to the Town of Georgetown after completion. The proposed pump station will serve 387 equivalent dwelling units (EDUs), those EDUs are comprised of units in Phases 2 & 3 (367) of the development and an allowance of 10 EDUs for each of the two (2) pool houses.			
OWNER/DEVELOPER			
Company Name JLAM GT Oaks, LLC.			
Mailing Address 246 Rehoboth Ave.			
City Rehoboth Beach		State DE	Zip 19971
Contact Name Doug Motley			
E-Mail Address dmotley@jlamre.com			
Telephone 302-226-6645		Cell	Fax

ENGINEER					
Company Name George, Miles & Buhr, LLC.					
Mailing Address 206 West Main Street					
City Salisbury		State MD		Zip 21801	
Contact Name Christopher B. Derbyshire, P.E.					
E-Mail Address cderbyshire@gmbnet.com					
Telephone 410-742-3115		Cell 443-614-8920		Fax	
GRAVITY SEWER INFORMATION					
Ownership <input type="checkbox"/> Public <input type="checkbox"/> Private	Type of Sewer System <input type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Other?			If Other, list below	
Type of Pipe	Length (ft)	Diameter (in)	Joint Specification	Min. Slope (ft/ft)	Min. Velocity (ft/sec)
Minimum Pipe Cover (ft)	Number of Manholes	Drop manholes provided? <input type="checkbox"/> Yes <input type="checkbox"/> No		Maximum Distance Between Manholes (ft)	
Minimum ten foot (10') horizontal & eighteen inch (18") vertical separation from water lines maintained? <input 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 <p style="text-align: center;">Submitted under separate application.</p>					

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 304,763		Average 87,075 gpd	Peak 304,763	Peak Factor 3.5
Basis of Design Submersible Wet Well w/Seperate Valve Vault			Pump Type Submersible, Non-Clog	
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) Tmin = 7 Minutes	Wet Well Detention Time (minutes) 18.5 Min (above pump off)
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 pumping connection.				
Height of Influent Above Pump (suction head) (ft) N/A, flooded suction.		Height of Effluent Above Pump (discharge head) (ft) 13.83		Friction Loss (ft) 26.52 + 43 psi (DBF tie-in)
Pump Design Point 212 gpm	Pump Operating Point 218/320 gpm	Static Head (ft) 13.83	Total Head (ft) 139 ft @ 212 gpm	Required Motor Horsepower (hp) 23
FORCE MAIN INFORMATION				
Type of Pipe PVC DR18		Length (ft) 1,146		Diameter (in) 4
Hazen-Williams "C" Design Factor 140	Type of Joints Push-on & restrained	Velocity Under Design Conditions (ft/sec) 4.7 fps	Minimum Pipe Cover (ft) 4	
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) N/A		
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 None.				

TOWN OF GEORGETOWN - PLANNING COMMISSION

Meeting Minutes August 16, 2023

ATTENDANCE

Commissioners

Larry Rohlffing

Linda Dennis

Lance Mears - absent

Edwin Wise - absent

Eric Evans

Staff

Jocelyn Huff, Planning

Jamie Craddock, Planning

Tim Willard, Solicitor

Ring Lardner, Engineer

Stephanie Roblero, Planning

1. CALL MEETING TO ORDER

Commission Chair Rohlffing called the meeting to order at 6:00 p.m.

2. APPROVAL OF JULY 19, 2023 MEETING MINUTES

Commissioner Evans moved, seconded by Commissioner Dennis, to approve the July 19, 2023 regular meeting minutes as presented. **APPROVED** (UNANIMOUS)

3. PRELIMINARY SITE PLAN REVIEW

A. 2023-04 THE OAKS AT GEORGETOWN - PHASE 2 (AMENDED)

An application by JLAM GT OAKS, LLC., for the preliminary review and approval of phase 2, to construct 216 townhomes, club house and pool. The property is located at the corner of South Bedford Street & Arrow Safety Road, identified as SC Tax Parcels 135-20.00-6.00, 498.00-893.00, mixed zoned MR1 (Multifamily Residential District)/UR1 (Urban Residential District) with an RPC Overlay (Residential Planned Community).

Steve Marsh, of GMB LLC, presented the application. Also in attendance is Lawton Myrick, of GMB, and developer Doug Motley, of JLAM GT Oaks LLC.

The project received original approval in 2008. Phase 1 involved the construction of the apartments. Phase 2 includes the townhouses with a reduction from 244 units to 216 units and the widths of the units are increasing from 22 feet to 24 feet. Amenities of a pool and community center have been added along with a dog park and pond overlook area. Additional sidewalk and trails were added to connect the internal sidewalks with the multimodal path to loop around this quadrant. The units will now be front loading instead of rear loading, without alleys behind the units as originally approved. Construction of a new pump station will be included with this phase and the stormwater retention area. The applicant is working with DelDot on modifications to the entrance on South Bedford Street.

The Commission questioned amenity access between townhouse and apartment residents and the applicant confirmed access is by key fobs. Applicant was asked to consider a large enough one car garage to handle most larger vehicles. Confirmation

was requested that privacy fence will be installed for all units and consideration of lawn mowing by contracted companies.

Additional buffer of raised undulation (mounds) in the buffer along the exterior of the phase was requested.

Commissioner Evans moved, seconded by Commissioner Dennis, to APPROVE the application contingent upon the following:

- 1. Satisfaction of Town Engineer's comments**
- 2. Receipt of State/outside agency approvals**
- 3. Engineer approval of raised undulation in the buffer, once submitted.**

Rollcall vote:

Commissioner Evans – Yes, as discussed.

Commissioner Dennis – Yes.

Chairman Rohlfig – Yes, project looks good and in favor of improvements to the plan.

APPROVED (UNANIMOUS)

4. REVIEW AND ADOPTION OF PUBLIC COMMENT GUIDELINES

Commissioner Dennis moved, seconded by Commissioner Evans, to approve the Public Comment Guidelines, as presented. APPROVED (UNANIMOUS)

5. PUBLIC COMMENT

Charlie Koskey, 21407 Park Avenue, is the chairman of the Megee tax ditch which the project empties into. Concern was expressed for the stormwater management to be provided. Commission asked to ensure it is adequate.

6. PLANNING DEPARTMENT REPORT

Project updates were provided to the Commission.

7. ADJOURNMENT

Commissioner Evans moved, seconded by Commissioner Dennis, to adjourn the meeting at 6:35 p.m. APPROVED (UNANIMOUS)

APPROVED:



Larry Rohlfig, Chairperson

ATTEST:



Jocelyn Huff, Planning

RECEIPT

March 20, 2024

27

RCVD FROM

George, Miles & Buhr, LLC

\$825.00

Eight Hundred twenty-five dollars and 00/100

DOLLARS

FOR

Plan review fee WPCC 3020/24 Oaks at Georgetown Pump Sta

ACCT	\$	825.00
PAYMENT	\$	825.00
	\$	-

<input checked="" type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

CHECK # 3960

CASH

OTHER BY

Kevin Bronson

DNREC, Surface Water Discharges Section, 89 Kings Hwy, Dover, DE 19901

RECEIPT

March 20, 2024

28

RCVD FROM

George, Miles & Buhr, LLC

\$300.00

Three Hundred Dollars and 00/100

DOLLARS

FOR

WPCC Legal Notice Reimbursement 3020/24

ACCT	\$	300.00
PAYMENT	\$	300.00
	\$	-

<input checked="" type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

CHECK # 3961

CASH

OTHER BY

Kevin Bronson

DNREC, Surface Water Discharges Section, 89 Kings Hwy, Dover, DE 19901