Florida Department of Environmental Protection

Notification/Application for Constructing a Domestic Wastewater Collection/Transmissions System

Part I - General

Subpart A: Permit Application Type (Check only one)*

☐ Individual permit for a domestic wastewater collection/transmission system serving **10 or greater** equivalent dwelling units (EDU). An EDU is equal to 3.5 persons. Criteria for an individual permit are contained in Rule 62-604.600(7), F.A.C.
Application fee: $500

☐ Individual permit for a domestic wastewater collection/transmission system serving **less than 10** equivalent dwelling units (EDU). An EDU is equal to 3.5 persons. Criteria for an individual permit are contained in Rule 62-604.600(7), F.A.C.
Application fee: $300

☐ Minor revision to an individual permit for a domestic wastewater collection/transmission system.
Application fee: $250

☑ Notice of Intent to use the general permit for a domestic wastewater collection/transmission system. Criteria for a general permit are contained in Rule 62-604.600(6), F.A.C. Projects not meeting the criteria in Rule 62-604.600(6), F.A.C., must apply for an individual permit.
Application fee: $250

*Note: Each non-contiguous project (i.e., projects that are not interconnected or are not located on adjacent streets or in the same neighborhood) requires a separate application and fee.

Subpart B: Instructions

(1) This form shall be completed for all public and private domestic wastewater collection/transmission system construction projects as follows:
- If this is a Notice of Intent to use the general permit, this notification shall be submitted to the Department **at least 30 days prior to initiating construction**.
- If this is an application for an individual permit, the permit must be obtained prior to initiating construction.

(2) One copy of the completed form shall be submitted to the appropriate DEP district office or delegated local program along with the appropriate fee, and one copy of the following supporting documents. Checks should be made payable to the Florida Department of Environmental Protection, or the name of the appropriate delegated local program. Forms and documents may be submitted electronically in accordance with the Wastewater Electronic Document Submission instructions available from DEP's website.
- If this is a Notice of Intent to use the general permit, attach a site plan or sketch showing the size and approximate location of new or altered gravity sewers, pump stations and force mains; showing the approximate location of manholes and isolation valves; and showing how the proposed project ties into the existing or proposed wastewater facilities. The site plan or sketch shall be signed and sealed by a professional engineer registered in Florida.
- If this is an application for an individual permit, one set of plans and specifications shall be submitted with this application. The plans and specifications shall include lift station design calculations if a lift station is proposed. Chapters 10 and 20 of *Recommended Standards for Wastewater Facilities*, 2014, provide helpful guidance on the proper preparation of plans and specifications. The plans and specifications shall be signed and sealed by a Professional Engineer registered in Florida.

(3) All information shall be typed or printed in ink if submitting paper forms. Where attached sheets (or other technical documentation) are utilized in lieu of the blank spaces provided, indicate appropriate cross-references on the form. For Items (1) through (4) of Part II of this application form, if an item is not applicable to your project, indicate "NA" in the appropriate space provided.

Part II – Project Documentation

(1) Collection/Transmission System Permittee

Name ______________________ Title ______________________

Company Name ______________________

Address ______________________

City ______________________ State __________ Zip __________

Telephone ______________ Cell______________ Fax ______________

Email ______________________

(2) General Project Information

Project Name ______________________

Project Address ______________________

City ______________________ State Naples Zip __________

County Collier County Latitude __________ Longitude __________

Project Description and Purpose (including the total length and material of each diameter of proposed gravity sewers and forcemains, total number of manholes, total number of pump stations, and connections to existing system):

Public:
Private:
Purpose:

Estimated date for: Start of construction ______________Completion of Construction ______________

Number of connections to existing system or treatment plant ______________________

(3) Project Capacity

Type of Unit	Number of Units	Population Per Unit	Total Population (Number of Units x Population Per Unit)	Per Capita Flow in Gallons per Day (GPD)	Total Average Daily Flow in GPD (Total Population x Per Capita Flow)	Peak hour flow in Gallons Per Minute (GPM)
Single-Family Home		2.5		100		
Mobile Home		2.5		100		
Apartment		2.5		100		
Commercial, Institutional, or Industrial Facility*						
Total	NA	NA		NA		

* Description of commercial, institutional, and industrial facilities and explanation of method used to estimate per capita flow for these facilities:

(4) Pump Station Data (attached additional sheets as necessary

Location	Type	Maximum Estimated Flow to the Station (GPD)	Average Estimated Flow to the Station (GPD)	Minimum Estimated Flow to the Station (GPD)	Operating Conditions [GPM @ FT (TDH)]

(5) Collection/Transmission System Design Information

A. This information must be completed for all projects by the applicant's professional engineer, and if applicable, those professional engineers in other disciplines who assisted with the design of the project. The checklist below shall be used for conventional collection/transmission systems while Attachment I to this form shall be used for low pressure sewer systems, including septic tank effluent pump (STEP) systems, and Attachment II shall be used for vacuum sewer systems (include Attachments I or II with the submittal of this form as applicable). These checklists cover important items but are not necessarily completely comprehensive of collection system construction and do not relieve the engineer from designing the collection system following sound engineering practices.

Complete the tables below (or Attachments I or II as applicable) as follows:

- The engineer shall initial each requirement if the project has been designed to comply with the standard or criteria.
- Mark "NA" if the requirement does not apply to this project and provide an explanation in section (5)B.
- Mark "NC" if the project has not been designed to comply with the requirement and provide an explanation in section (5)B, including any rule references.

Note, if the project has not been designed in accordance with the standards and criteria set forth in Rules 62-604.400(1) and (2), F.A.C., an application for an individual permit shall be submitted. However, if Rules 62-604.400(1) and (2), F.A.C., specifically allow for another alternative that will result in an equivalent level of reliability and public health protection, the project can be constructed using the general permit. Also note that each requirement below and in Attachments I and II includes a reference to guidance or rule for further information. The guidance documents given in the checklists are as follows:

- "RSWF" – Recommended Standards for Wastewater Facilities (2014). Health Research, Inc., Health Education Services Division, P.O. Box 7126, Albany, NY 12224, www.healthresearch.org
- "MOPFD-12" – Alternative Sewer Systems, Manual of Practice No. FD-12. Alternative Sewer Systems (1986). Water Environment Federation, 602 Wythe Street, Alexandria, VA 22314, www.wef.org.
- "FL DSG" – Design and Specification Guidelines for Low Pressure Sewer Systems (1981). Department of Environmental Protection, 2600 Blair Stone Road, MS 3540, Tallahassee, FL 32399-2400, www.floridadep.gov.
- "EPA ACS" - Alternative Wastewater Collection Systems (1991). EPA/625/1-91/024. NTIS# PB93-1162591N2; National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161, www.ntis.gov.

<u>General Requirements</u>

Initials (or "NA" or "NC")	Item Number	Requirement
	1	The project is designed based on an average daily flow of 100 gallons per capita plus wastewater flow from industrial plants and major institutional and commercial facilities unless water use data or other justification is used to better estimate the flow. The design includes an appropriate peaking factor, which covers I/I contributions and non-wastewater connections to those service lines.(Note, see Attachment I for low pressure sewer systems) [RSWF 11.243]
?	2	Procedures are specified for operation of the collection/transmission system during construction if work is performed on a system currently in operation. [RSWF20.15]
	3	The project is designed to be located on public rights-of-way, land owned by the permittee, or easements and to be located no closer than 100 feet from a public drinking water supply well and no closer than 75 feet from a private drinking water supply well; or documentation is provided in Part II.(5)B., showing that another alternative will result in an

Initials (or "NA" or "NC")	Item Number	Requirement
		equivalent level of reliability and public health protection. [62-604.400(1)(b) and (c), F.A.C.]
	4	The project is designed with no physical connections between a public or private potable water supply system and a sewer or force main and with no water pipes passing through or coming into contact with any part of a sewer manhole. [RSFW 38.1]
	5	The project is designed to preclude the deliberate introduction of storm water, surface water, groundwater, roof runoff, subsurface drainage, swimming pool drainage, air conditioning system condensate water, non-contact cooling water except as provided by Rule 62-610.668(1), F.A.C., and sources of uncontaminated wastewater, except to augment the supply of reclaimed water in accordance with Rule 62-610.472(3)(c), F.A.C. [62-604.400(1)(d), F.A.C.]
	6	The project is designed so that all new or relocated, buried sewers and force mains, are located in accordance with the separation requirements from water mains and reclaimed water lines of Rules 62-604.400(2)(g) and (h), F.A.C. Note, if the criteria of Rules 62-604.400(2)(g) 4. or (2)(h)3., F.A.C., are used, describe in Part II.(5)B. alternative construction features that will be provided to afford a similar level of reliability and public health protection. [62- 604.400(2)(g) and (h), F.A.C.; 62-555.314, F.A.C.]

Gravity Sewers

Initials (or "NA" or "NC")	Item Number	Requirement
	7	The project is designed with no public gravity sewer conveying raw wastewater less than 8 inches in diameter. [RSWF 33.1]
	8	The design considers buoyancy of sewers, and appropriate construction techniques are specified to prevent flotation of the pipe where high groundwater conditions are anticipated. [RSWF 33.3]
	9	All sewers are designed with slopes to give mean velocities, when flowing full, of not less than 2.0 feet per second, based on Manning's formula using an "n" value of 0.013; or if it is not practicable to maintain these minimum slopes and the depth of flow will be 0.3 of the diameter or greater for design average flow, the owner of the system has been notified that additional sewer maintenance will be required. The pipe diameter and slope are selected to obtain the greatest practical velocities to minimize solids deposition problems. Oversized sewers are not specified to justify flatter slopes. [RSWF 33.41, 33.42, and 33.43]
	10	Sewers are designed with uniform slope between manholes. [RWSF 33.44]
NA	11	Where velocities greater than 10 fps are designed, provisions to protect against displacement by erosion and impact are specified. [RSWF 33.45]
NA	12	Sewers on 20% slopes or greater are designed to be anchored securely with concrete, or equal, anchors spaced as follows: not over 36 feet center to center on grades 20% and up to 35%; not over 24 feet center to center on grades 35% and up to 50%; and not over 16 feet center to center on grades 50% and over. [RSWF 33.46]
	13	Sewers 24 inches or less are designed with straight alignment between manholes. Where curvilinear sewers are proposed for sewers greater than 24 inches, the design specifies compression joints; ASTM or specific pipe manufacturer's maximum allowable pipe joint deflection limits are not exceeded; and curvilinear sewers are limited to simple curves which start and end at manholes. [RSWF 33.5]
?	14	Suitable couplings complying with ASTM specifications are required for joining dissimilar materials. [RSWF 33.7]
	15	Sewers are designed to prevent damage from superimposed loads. [RSWF 33.7]
	16	Appropriate specifications for the pipe and methods of bedding and backfilling are provided so as not to damage the pipe or its joints, impede cleaning operations and future tapping, nor create excessive side fill pressures and ovalation of the pipe, nor seriously impair flow capacity. [RSWF 33.81]
	17	Appropriate deflection tests are specified for all flexible pipe including PVC. Testing is

Initials (or “NA” or “NC”)	Item Number	Requirement
		required after the final backfill has been in place at least 30 days to permit stabilization of the soil-pipe system. Testing requirements specify: 1) no pipe shall exceed a deflection of 5%; 2) using a rigid ball or mandrel for the deflection test with a diameter not less than 95% of the base inside diameter or average inside diameter of the pipe, depending on which is specified in the ASTM specification, including the appendix, to which the pipe is manufactured; and 3) performing the test without mechanical pulling devices. [RSWF 33.85]
	18	Leakage tests are specified requiring that: 1) the leakage exfiltration or infiltration does not exceed 100 gallons per inch of pipe diameter per mile per day for any section of the system; 2) exfiltration or infiltration tests be performed with a minimum positive head of 2 feet; and 3) air tests, as a minimum, conform to the test procedure described in ASTM C-828 for clay pipe, ASTM C 924 for concrete pipe, ASTM F-1417 for plastic pipe, and for other materials appropriate test procedures. [RSWF 33.93, 33.94, and 33.95]
NA	19	If an inverted siphon is proposed, documentation of its need is provided in Part II.(5)B. Inverted siphons are designed with: 1) at least two barrels; 2) a minimum pipe size of 6 inches; 3) necessary appurtenances for maintenance, convenient flushing, and cleaning equipment; and 4) inlet and discharge structures having adequate clearances for cleaning equipment, inspection, and flushing. Design provides sufficient head and appropriate pipe sizes to secure velocities of at least 3.0 fps for design average flows. The inlet and outlet are designed so that the design average flow may be diverted to one barrel, and that either barrel may be cut out of service for cleaning. [RSWF 35]

Manholes

Initials (or “NA” or “NC”)	Item Number	Requirement
	20	The project is designed with manholes at the end of each line; at all changes in grade, size, or alignment; at all intersections; and at distances not greater than 400 feet for sewers 15 inches or less and 500 feet for sewers 18 inches to 30 inches, except in the case where adequate modern cleaning equipment is available at distances not greater than 600 feet. [RSWF 34.1]
	21	Design requires drop pipes to be provided for sewers entering manholes at elevations of 24 inches or more above the manhole invert. Where the difference in elevation between the incoming sewer and the manhole invert is less than 24 inches, the invert is designed with a fillet to prevent solids deposition. Inside drop connections (when necessary) are designed to be secured to the interior wall of the manhole and provide access for cleaning. Design requires the entire outside drop connection be encased in concrete. [RSWF 34.2]
	22	Manholes are designed with a minimum diameter of 48 inches and a minimum access diameter of 24 inches. [RSWF 34.3]
	23	Design requires that a bench be provided on each side of any manhole channel when the pipe diameter(s) are less than the manhole diameter and that no lateral sewer, service connection, or drop manhole pipe discharges onto the surface of the bench. [RSWF 34.5]
	24	Design requires: 1) manhole lift holes and grade adjustment rings be sealed with non-shrinking mortar or other appropriate material; 2) inlet and outlet pipes be joined to the manhole with a gasketed flexible watertight connection or another watertight connection arrangement that allows differential settlement of the pipe and manhole wall; and 3) watertight manhole covers be used wherever the manhole tops may be flooded by street runoff or high water. [RSWF 34.6]
	25	Manhole inspection and testing for water-tightness or damage prior to placing into service are specified. Air testing, if specified for concrete sewer manholes, conforms to the test procedures described in ASTM C-1244. [RSWF 34.7]
NA	26	Electrical equipment specified for use in manholes is consistent with Item 46 of this checklist. [RSWF 34.9]

Stream Crossings

Initials (or "NA" or "NC")	Item Number	Requirement
?	27	Sewers and force mains entering or crossing streams are designed to be constructed of ductile iron pipe with mechanical joints or so they will remain watertight and free from changes in alignment or grade or constructed of HDPE with fused joints for directional drilling. Appropriate materials which will not readily erode, cause siltation, damage pipe during placement, or corrode the pipe are specified to backfill the trench. [RSWF 36.21]
?	28	Stream crossings are designed to incorporate valves or other flow regulating devices (which may include pump stations) on the shoreline or at such distances from the shoreline to prevent discharge in the event the line is damaged. [62- 604.400(2)(j)5., F.A.C.]
?	29	Sewers and force mains entering or crossing streams are designed at a sufficient depth below the natural bottom of the stream bed to protect the line. At a minimum, the project is designed with subaqueous lines to be buried at least three feet below the design or actual bottom, whichever is deeper, of a canal and other dredged waterway or the natural bottom of streams, rivers, estuaries, bays, and other natural water bodies; or if it is not practicable to design the project with less than three-foot minimum cover, alternative construction features (e.g. a concrete cap, sleeve, or some other properly engineered device to insure adequate protection of the line) are described in Part II.C. [62-604.400(2)(j)1., F.A.C., and RSWF 36.11]
?	30	Specifications require permanent warning signs be placed on the banks of canals, streams, and rivers clearly identifying the nature and location (including depths below design or natural bottom) of subaqueous crossings and suitably fixed signs be placed at the shore, for subaqueous crossings of lakes, bays, and other large bodies of water, and in any area where anchoring is normally expected. [62-604.400(2)(j)2., F.A.C.]
?	31	Provisions for testing the integrity of subaqueous lines are specified. [62-604.400(2)(j)4., F.A.C.]
?	32	Supports are designed for all joints in pipes utilized for aerial crossings and to prevent overturning andsettlement. Expansion jointing is specified between above ground and below ground sewers and force mains. The design considers the impact of floodwaters and debris. [RSWF 37]
?	33	Aerial crossings are designed to maintain existing or required navigational capabilities within the waterway and to reserve riparian rights of adjacent property owners. [62-604.400(2)(j)3., F.A.C.]

Pump Stations

Initials (or "NA" or "NC")	Item Number	Requirement
	34	In areas with high water tables, pump stations are designed to withstand flotation forces when empty. When siting the pump station, the design considers the potential for damage or interruption of operation because of flooding. Pump station structures and electrical and mechanical equipment are designed to be protected from physical damage by the 100-year flood. Pump stations are designed to remain fully operational and accessible during the 25-year flood unless lesser flood levels are appropriate based on local considerations, but not less than the 10-year flood. [62-604.400(2)(e), F.A.C.]
	35	Pump stations are designed to be readily accessible by maintenance vehicles during all weather conditions. [RSWF41.2]
	36	Wet well and pump station piping is designed to avoid operational problems from the accumulation of grit. [RSWF 41.3]
NA	37	Dry wells, including their superstructure, are designed to be completely separated from the wet well. Common walls are designed to be gas tight. [RSWF 42.21]
	38	The design includes provisions to facilitate removing pumps, motors, and other mechanical and electrical equipment. [RSWF 42.22]
NA	39	The design includes provisions for: 1) suitable and safe means of access for persons wearing self-

Initials (or "NA" or "NC")	Item Number	Requirement
		contained breathing apparatus are provided to dry wells, and to wet wells; 2) stairway access to wet wells more than 4 feet deep containing either bar screens or mechanical equipment requiring inspection or maintenance; 3) for built-in-place pump stations, a stairway to the dry well with rest landings at vertical intervals not to exceed 12 feet; 4) for factory-built pump stations over 15 feet deep, a rigidly fixed landing at vertical intervals not to exceed 10 feet unless a manlift or elevator is provided; and 5) where a landing is used, a suitable and rigidly fixed barrier to prevent an individual from falling past the intermediate landing to a lower level. If a manlift or elevator is provided, emergency access is included in the design. [RSWF 42.23]
	40	Specified construction materials are appropriate under conditions of exposure to hydrogen sulfide and other corrosive gases, greases, oils, and other constituents frequently present in wastewater. [RSWF 42.25]
	41	Multiple pumps are specified, and each pump has an individual intake. Where only two units are specified, they are of the same size. Specified units have capacity such that, with any unit out of service, the remaining units will have capacity to handle the design peak hourly flow. [RSWF 42.31 and 42.36]
NA	42	Bar racks are specified for pumps handling wastewater from 30 inch or larger diameter sewers. Where a bar rack is specified, a mechanical hoist is also provided. The design includes provisions for appropriate protection from clogging for small pump stations. [RSWF 42.322]
	43	Pumps handling raw wastewater are designed to pass spheres of at least 3 inches in diameter. Pump suction and discharge openings are designed to be at least 4 inches in diameter. Note, this provision is not applicable to grinder pumps. [RSWF 42.33]
	44	The design requires pumps be placed such that under normal operating conditions they will operate under a positive suction head, unless pumps are suction-lift pumps. [RSWF 42.34]
	45	The design requires: 1) pump stations be protected from lightning and transient voltage surges; and 2) pump stations be equipped with lightning arrestors, surge capacitors, or other similar protection devices and phase protection. Note, small pump stations serving a single building are not required to provide surge protection devices if not necessary because the pump station is protected by the surge protection device of the single building. [62-604.400(2)(b), F.A.C.]
	46	The design requires 1) electrical systems and components (e.g., motors, lights, cables, conduits, switch boxes, control circuits, etc.) in raw wastewater wet wells, or in enclosed or partially enclosed spaces where hazardous concentrations of flammable gases or vapors may be present, comply with the National Electrical Code requirements; 2) electrical equipment located in wet wells be suitable for use under corrosive conditions; 3) each flexible cable be provided with a watertight seal and separate strain relief; 4) a fused disconnect switch located above ground be provided for the main power feed for all pump stations; 5) electrical equipment exposed to weather to meet the requirements of weatherproof equipment NEMA 3R or 4; 6) a 110 volt power receptacle to facilitate maintenance be provided inside the control panel for pump stations that have control panels outdoors; and 7) ground fault interruption protection be provided for all outdoor outlets. [RSWF 42.35]
NA	47	The design requires a sump pump equipped with dual check valves be provided in dry wells to remove leakage or drainage with discharge above the maximum high water level of the wet well. [RSWF 42.37]
?	48	Pump/pump station design capacities are based on the peak hourly flow and are adequate to maintain a minimum velocity of 2 feet per second in the force main. [RSWF 42.38]
	49	The design includes provisions to automatically alternate the pumps in use. [RSWF 42.4]
	50	The design requires: 1) suitable shutoff valves be placed on the suction line of pumps/dry pit pumps; 2) suitable shutoff and check valves be placed on the discharge line of each pump (except on screw pumps); 3) a check valve be located between the shutoff valve and the pump; 4) check valves be suitable for the material being handled; 5) check valves be placed on the horizontal portion of discharge piping (except for ball checks, which may be placed in the vertical run); 6) all valves be capable of withstanding normal pressure and

Initials (or “NA” or “NC”)	Item Number	Requirement
		water hammer; and 7) all shutoff and check valves be operable from the floor level and accessible for maintenance. [RSWF 42.5]
	51	The effective volume of wet wells is based on design average flows and a filling time not to exceed 30 minutes unless the facility is designed to provide flow equalization. The pump manufacturer's duty cycle recommendations were utilized in selecting the minimum cycle time. [RSWF 42.62]
	52	The design requires wet well floors have a minimum slope of 1 to 1 to the hopper bottom and the horizontal area of hopper bottoms be no greater than necessary for proper installation and function of the inlet. [RSWF 42.63]
	53	For covered wet wells, the design provides for air displacement to the atmosphere, such as an inverted "j" tube or other means. [RSWF 42.64]
	54	The design provides for adequate ventilation at all pump stations. Mechanical ventilation shall be provided where the dry well is below the ground surface. Permanently installed ventilation shall be provided if screens or mechanical equipment requiring maintenance or inspection are located in the wet well. Pump stations are designed with no interconnection between the wet well and dry well ventilation systems. [RSWF 42.71]
NA	55	The design requires all intermittently operated ventilation equipment to be interconnected with the respective pit lighting system and the manual lighting/ventilation switch to override the automatic controls. [RSWF 42.73]
NA	56	The design requires the fan wheels of ventilation systems be fabricated from non-sparking material and automatic heating and dehumidification equipment be provided in all dry wells. [RSWF 42.74]
NA	57	If wet well ventilation is continuous, design provides for at least 12 complete 100% fresh air changes per hour; if wet well ventilation is intermittent, design provides for at least 30 complete 100% fresh air changes per hour; and design requires air to be forced into wet wells by mechanical means rather than solely exhausted from the wet well. [RSWF 42.75]
NA	58	If dry well ventilation is continuous, design provides at least 12 complete 100% fresh air changes per hour; and dry well ventilation is intermittent, design provides for at least 30 complete 100% fresh air changes per hour, unless a system of two speed ventilation with an initial ventilation rate of 30 changes per hour for 10 minutes and automatic switch over to 6 changes per hour is used to conserve heat. [RSWF 42.76]
	59	Pump stations are designed and located on the site to minimize adverse effects from odors, noise, and lighting. [62- 604.400(2)(c), F.A.C.]
	60	The design requires pump stations be enclosed with a fence or otherwise designed with appropriate features to discourage the entry of animals and unauthorized persons. Posting of an unobstructed sign made of durable weather resistant material at a location visible to the public with a telephone number for a point of contact in case of emergency is specified. [62-604.400(2)(d), F.A.C.]
	61	The design requires suitable devices for measuring wastewater flow at all pump stations. Indicating, totalizing, and recording flow measurement are specified for pump stations with a 350 gpm or greater design peak flow. [RSWF 42.8]
	62	The project is designed with no physical connections between any potable water supplies and pump stations. If a potable water supply is brought to a station, reduced-pressure principle backflow-prevention assemblies are specified. [RSWF 42.9 and 62-555.30(4), F.A.C.]

Additional Items to be Completed for Suction-Lift Pump Stations

Initials (or “NA” or “NC”)	Item Number	Requirement
NA	63	The design requires all suction-lift pumps to be either self-priming or vacuum-priming and the combined total of dynamic suction-lift at the "pump off" elevation and required net positive suction head at design operating conditions not to exceed 22 feet. For self-priming

Initials (or “NA” or “NC”)	Item Number	Requirement
		pumps, the design requires: 1) pumps be capable of rapid priming and repriming at the "lead pump on" elevation with self-priming and repriming accomplished automatically under design operating conditions; 2) suction piping not to exceed the size of the pump suction or 25 feet in total length; and 3) priming lift at the "lead pump on" elevation to include a safety factor of at least 4 feet from the maximum allowable priming lift for the specific equipment at design operating conditions. For vacuum-priming pump stations, the design requires dual vacuum pumps capable of automatically and completely removing air from the suction-lift pumps and the vacuum pumps be adequately protected from damage due to wastewater. [RSWF 43.1]
NA	64	The design requires: 1) suction-lift pump equipment compartments to be above grade or offset and to be effectively isolated from the wet well to prevent a hazardous and corrosive sewer atmosphere from entering the equipment compartment; 2) wet well access not to be through the equipment compartment and to be at least 24 inches in diameter; 3) gasketed replacement plates be provided to cover the opening to the wet well for pump units to be remove for service; and 4) no valving be located in the wet well. [RSWF 43.2]

Additional Items to be Completed for Submersible Pump Stations

Initials (or “NA” or “NC”)	Item Number	Requirement
	65	Submersible pumps and motors are designed specifically for raw wastewater use, including totally submerged operation during a portion of each pump cycle and to meet the requirements of the National Electrical Code for such units. Provisions for detecting shaft seal failure or potential seal failure are included in the design. [RSWF 44.1]
	66	The design requires submersible pumps be readily removable and replaceable without dewatering the wet well or disconnecting any piping in the wet well. [RSWF 44.2]
	67	In submersible pump stations, electrical supply, control, and alarm circuits are designed to provide strain relief; to allow disconnection from outside the wet well; and to protect terminals and connectors from corrosion by location outside the wet well or through use of watertight seals. [RSWF 44.31]
	68	In submersible pump stations, the design requires the motor control center to be located outside the wet well, readily accessible, and protected by a conduit seal or other appropriate measures meeting the requirements of the National Electrical Code, to prevent the atmosphere of the wet well from gaining access to the control center. If a seal is specified, the motor can be removed and electrically disconnected without disturbing the seal. The design requires control equipment exposed to weather to meet the requirements of weatherproof equipment NEMA 3R or 4. [RSWF 44.32]
	69	In submersible pump stations, the design requires: 1) pump motor power cords be flexible and serviceable under conditions of extra hard usage and to meet the requirements of the National Electrical Code standards for flexible cords in wastewater pump stations; 2) ground fault interruption protection be used to de-energize the circuit in the event of any failure in the electrical integrity of the cable; and 3) power cord terminal fittings be corrosion-resistant and constructed in a manner to prevent the entry of moisture into the cable, provided with strain relief appurtenances, and designed to facilitate field connecting. [RSWF 44.33]
NC	70	In submersible pump stations, the design requires all shut-off and check valves be located in a separate valve pit. Provisions to remove or drain accumulated water from the valve pit are included in the design. [RSWF 44.4]

Emergency Operations for Pump Stations

Initials (or "NA" or "NC")	Item Number	Requirement
?	71	Pump stations are designed with an alarm system which activates in cases of power failure, sump pump failure, pump failure, unauthorized entry, or any cause of pump station malfunction. Pump station alarms are designed to be telemetered to a facility that is manned 24 hours a day. If such a facility is not available and a 24-hour holding capacity is not provided, the alarm is designed to be telemetered to utility offices during normal working hours and to the home of the responsible person(s) in charge of the lift station during off-duty hours. Note, if an audio-visual alarm system with a self-contained power supply is provided in lieu of a telemetered system, documentation is provided in Part II.(5)B. showing an equivalent level of reliability and public health protection. [RSWF 46]
?	72	The design requires emergency pumping capability be provided for all pump stations. For pump stations that receive flow from one or more pump stations through a force main or pump stations discharging through pipes 12 inches or larger, the design requires uninterrupted pumping capability be provided, including an in-place emergency generator. Where portable pumping and/or generating equipment or manual transfer is used, the design includes sufficient storage capacity with an alarm system to allow time for detection of pump station failure and transportation and connection of emergency equipment. [62-604.400(2)(a)1. and 2., F.A.C., and RSWF 47.423 and 47.433]
?	73	The design requires: 1) emergency standby systems to have sufficient capacity to start up and maintain the total rated running capacity of the station, including lighting, ventilation, and other auxiliary equipment necessary for safety and proper operation; 2) special sequencing controls be provided to start pump motors unless the generating equipment has capacity to start all pumps simultaneously with auxiliary equipment operating; 3) a riser from the force main with rapid connection capabilities and appropriate valving be provided for all pump stations to hook up portable pumps; and 4) all pump station reliability design features be compatible with the available temporary service power generating and pumping equipment of the authority responsible for operation and maintenance of the collection/transmission system. [62-604.400(2)(a)3., F.A.C., and RSWF 47.431]
?	74	The design provides for emergency equipment to be protected from operation conditions that would result in damage to the equipment and from damage at the restoration of regular electrical power. [RSWF 47.411, 47.417, and 47.432]
NA	75	Where independent substations are used for emergency power, each separate substation and its associated transmission lines is designed to be capable of starting and operating the pump station at its rated capacity. [RSWF 47.44]

Force Mains

Initials (or "NA" or "NC")	Item Number	Requirement
?	76	Force mains are designed to maintain, at design pumping rates, a cleansing velocity of at least 2 feet per second. The minimum force main diameter specified for raw wastewater is not less than 4 inches. (Not applicable to low pressure sewer systems) [RSWF 49.1]
?	77	The design requires: 1) branches of intersecting force mains be provided with appropriate valves such that one branch may be shut down for maintenance and repair without interrupting the flow of other branches; and 2) stub-outs on force mains, placed in anticipation of future connections, be equipped with a valve to allow such connection without interruption of service. [62-604.400(2)(f), F.A.C.]
?	78	The design requires air relief valves be placed at high points in the force main to prevent air locking. [RSWF 49.2]
	79	Specified force main pipe and joints are equal to water main strength materials suitable for design conditions. The force main, reaction blocking, and station piping are designed to withstand water hammer pressures and stresses associated with the cycling of wastewater

Initials (or “NA” or “NC”)	Item Number	Requirement
		pump stations. [RSWF 49.4]
	80	When the Hazen and Williams formula is used to calculate friction losses through force mains, the value for "C" is 100 for unlined iron or steel pipe for design. For other smooth pipe materials, such as PVC, polyethylene, lined ductile iron, the value for C does not exceed 120 (130 for PVC and HDPE) for design. (Not applicable to low pressure sewer systems) [RSWF 49.61]
	81	Where force mains are constructed of material, which might cause the force main to be confused with potable water mains, specifications require the force main to be clearly identified. [RSWF 49.7]
	82	Leakage tests for force mains are specified including testing methods and leakage limits. [RSWF 49.8]

Note, if this project is an alternative collection system (i.e. a low pressure sewer system or a vacuum sewer system), complete the checklist items on Attachment I for low pressure sewer systems or Attachment II for vacuum sewer systems. Include the attachment with the submittal. For any items marked “NA” or “NC,” provide an explanation in section 5(B).

B. Explanation for Requirements or Standards Marked "NA" or "NC" in II(5)A above, which includes Attachments I and II (attach additional sheets if necessary):

PART III - Certifications

(1) Collection/Transmission System Permittee

I, the undersigned owner or authorized representative* of ______________________________
am fully aware that the statements made in this application for a construction permit are true, correct and complete to the best of my knowledge and belief. I agree to retain the design engineer or another professional engineer registered in Florida, to conduct on-site observation of construction, to prepare a certification of completion of construction, and to review record drawings for adequacy. Further, I agree to provide an appropriate operation and maintenance manual for the facilities pursuant to Rule 62-604.500(4), F.A.C., and to retain a professional engineer registered in Florida to examine (or to prepare if desired) the manual. I am fully aware that Department approval must be obtained before this project is placed into service for any purpose other than testing for leaks and testing equipment operation.

Signed ______________________ Date ______________________

Name ______________________ Title ______________________

Attach a letter of authorization.

(2) Owner of Collection/Transmission System

I, the undersigned owner or authorized representative* of COLLIER COUNTY WATER-SEWER DISTRICT certify that we will be the Owner of this project after it is placed into service. I agree that we will operate and maintain this project** in a manner that will comply with applicable Department rules. Also, I agree that we will promptly notify the Department if we sell or legally transfer ownership of this project.

Signed ______________________ Date ______________________

Name Craig Pajer Title Director of Sub-Regional Utilities

Company Name Collier County Public Utilities Department, Engineering & Project Management Division

Address 3339 Tamiami Trail E, Suite 303

City Naples State Florida Zip 34112

Telephone 239-252-2554 Cell ______________ Fax 239-252-5378

Email Craig.Pajer@colliercountyfl.gov

* *Attach a letter of authorization*

**Description of the owner's portion if split ______________________

Second Owner of Collection/Transmission System (if system is divided with different owners

I, the undersigned owner or authorized representative* of ______________________ certify that we will be the Owner of this project after it is placed into service. I agree that we will operate and maintain this project in a manner that will comply with applicable Department rules. Also, I agree that we will promptly notify the Department if we sell or legally transfer ownership of this project.

Signed ______________________ Date ______________________

Name ______________________ Title ______________________

Company Name ______________________

Address ______________________

City ______________________ State ______________ Zip ______________

Telephone ______________ Cell ______________ Fax ______________

Email ______________________

* *Attach a letter of authorization*

**Description of the second owner portion if split ______________________

(3) Wastewater Facility Serving Collection/Transmission System**

If this is a Notice of Intent to use a general permit, check here:

☒ The undersigned owner or authorized representative* of the Northeast County Water Reclamation Facility wastewater facility hereby certifies that the above referenced facility has the capacity to receive the wastewater generated by the proposed collection system; is in compliance with the capacity analysis report requirements of Rule 62-600.405, F.A.C.; is not under a Department order associated with effluent violations or the ability to treat wastewater adequately; and will provide the necessary treatment and disposal as required by Chapter 403, F.S., and applicable Department rules.

If this is an application for an individual permit, check one:

☐ The undersigned owner or authorized representative* of the ______________________ wastewater facility hereby certifies that the above referenced facility has and will have adequate reserve capacity to accept the flow from this project and will provide the necessary treatment and disposal as required by Chapter 403, F.S., and applicable Department rules.

☐ The undersigned owner or authorized representative* of the ______________________ wastewater facility hereby certifies that the above referenced facility currently does not have, but will have prior to placing the proposed project into operation, adequate reserve capacity to accept the flow from this project and will provide the necessary treatment and disposal as required by Chapter 403, F.S., and applicable Department rules.

Name of Treatment Plant Serving Project Northeast County Water Reclamation Facility

County Collier County City Naples

DEP Facility ID: FL FLAB07029-001-DW1P

Maximum monthly average daily flow over the last 12 month period New Construction MGD Month(s) used New Construction

Maximum three-month average daily flow over the last 12 month period New Construction MGD Month(s) used New Construction

Current permitted capacity 1.5 MGD ☒ AADF ☐ MADF ☐ TMADF

Current outstanding flow commitments (including this project) against treatment plant capacity ______________ MGD

Signed ______________ Date ______________

Name Craig Pajer Title Director of Sub-Regional Utilities

Company Name Collier County Public Utilities Department, Engineering & Project Management Division

Address 3339 Tamiami Trail E, Suite 303

City Naples State Florida Zip 34112

Telephone 239-252-2554 Cell ______________ Fax 239-252-5378

Email Craig.Pajer@colliercountyfl.gov

** Attach a letter of authorization*

*** If there is an intermediate satellite collection system between the project and the final receiving facility collection system, a letter shall be attached certifying that the intermediate downstream satellite collection system has adequate reserve capacity to accept the flow from this project.*

(4) Professional Engineer Registered in Florida

I, the undersigned professional engineer registered in Florida, certify that I am in responsible charge of the preparation and production of engineering documents for this project; that plans and specifications for this project have been completed; that I have expertise in the design of wastewater collection/transmission systems; and that, to the best of my knowledge and belief, the engineering design for this project complies with the requirements of Chapter 62-604, F.A.C.

(Affix Seal)

Signed ______________________________

Date ______________________________

Name ______________________________ Florida Registration No. ______________________________

Company Name ______________________________

Address ______________________________

City ______________________________ State ______________ Zip ______________

Telephone ______________ Cell ______________ Fax ______________

Email ______________________________

Portion of the project for which responsible: ______________________________

Second Engineer (if applicable)

(Affix Seal)

Signed ______________________________

Date ______________________________

Name ______________________________ Florida Registration No. ______________________________

Company Name ______________________________

Address ______________________________

City ______________________________ State ______________ Zip ______________

Telephone ______________ Cell ______________ Fax ______________

Email ______________________________

Portion of the Project for Which Responsible: ______________________________

Third Engineer (if applicable)

(Affix Seal)

Signed ______________________________

Date ______________________________

Name ______________________________ Florida Registration No. ______________________________

Company Name ______________________________

Address ______________________________

City ______________________________ State ______________ Zip ______________

Telephone ______________ Cell ______________ Fax ______________

Email ______________________________

Portion of the Project for Which Responsible: ______________________________

Fourth Engineer (if applicable)

(Affix Seal)

Signed ______________________________

Date ______________________________

Name ______________________________ Florida Registration No. ______________________________

Company Name ______________________________

Address ______________________________

City ______________________________ State ______________ Zip ______________

Telephone ______________ Cell ______________ Fax ______________

Email ______________________________

Portion of the Project for Which Responsible: ______________________________