



COLLIER COUNTY GOVERNMENT
GROWTH MANAGEMENT DEPARTMENT
www.colliergov.net

2800 NORTH HORSESHOE DRIVE
NAPLES, FLORIDA 34104
(239) 252-2400 FAX: (239) 252-6358

**STATEMENT OF UTILITY PROVISIONS
FOR PUD REZONE REQUEST**

APPLICANT CONTACT INFORMATION

Name of Applicant(s): _____

Address: _____ City: _____ State: _____ ZIP: _____

Telephone: _____ Cell: _____ Fax: _____

E-Mail Address: _____

Address of Subject Property (If available): _____

City: _____ State: _____ ZIP: _____

PROPERTY INFORMATION

Section/Township/Range: ____/____/____

Lot: ____ Block: ____ Subdivision: _____

Metes & Bounds Description: _____

Plat Book: ____ Page #: ____ Property I.D. Number: _____

TYPE OF SEWAGE DISPOSAL TO BE PROVIDED

Check applicable system:

- a. County Utility System ☐
- b. City Utility System ☐
- c. Franchised Utility System ☐
- d. Package Treatment Plant ☐
- e. Septic System ☐

Provide Name: _____
(GPD Capacity): _____

TYPE OF WATER SERVICE TO BE PROVIDED

Check applicable system:

- a. County Utility System ☐
- b. City Utility System ☐
- c. Franchised Utility System ☐
- d. Private System (Well) ☐

Provide Name: _____

Total Population to be Served: _____

Peak and Average Daily Demands:

- A. Water-Peak: _____ Average Daily: _____
- B. Sewer-Peak: _____ Average Daily: _____

If proposing to be connected to Collier County Regional Water System, please provide the date service is expected to be required: _____



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Narrative statement: Provide a brief and concise narrative statement and schematic drawing of sewage treatment process to be used as well as a specific statement regarding the method of affluent and sludge disposal. If percolation ponds are to be used, then percolation data and soil involved shall be provided from tests prepared and certified by a professional engineer.

Collier County Utility Dedication Statement: If the project is located within the service boundaries of Collier County's utility service system, a notarized statement shall be provided agreeing to dedicate the water distribution and sewage collection facilities within the project area to the Collier County Utilities. This shall occur upon completion of the construction of these facilities in accordance with all applicable County ordinances in effect at that time. This statement shall also include an agreement that the applicable system development charges and connection fees will be paid to the County Utilities Division prior to the issuance of building permits by the County. If applicable, the statement shall contain an agreement to dedicate the appropriate utility easements for serving the water and sewer systems.

Statement of Availability Capacity from other Providers: Unless waived or otherwise provided for at the pre-application meeting, if the project is to receive sewer or potable water services from any provider other than the County, a statement from that provider indicating adequate capacity to serve the project shall be provided.

- 400 Dwelling Units
- 140 Room Hotel
- 43 ksf Medical Office
- 125 ksf Shopping Center
- 6 ksf gas station convenience store
- 15 ksf sit down restaurant (high turnover)
- 12 ksf fast food restaurant

Calculate Peak Water Demand from Residential Uses

Residential Average Daily Flow = $\frac{400 \text{ Units}}{1} \times 350 \frac{\text{GPD}}{\text{Unit}}$

Residential Average Daily Flow = 140,000 GPD

Residential Peak Day Demand = $\frac{140,000 \text{ Gal}}{1 \text{ Day}} \times \frac{1 \text{ Day}}{1440 \text{ Minutes}} \times 1.35 \text{ Peak Day Factor}$

Residential Peak Day Demand = 131.3 gpm

Calculate Peak Water Demand from Non-Residential Uses

Hotel Use Flows

Hotel Average Daily Flow = $\frac{140 \text{ Rooms}}{1} \times 100 \frac{\text{GPD}}{\text{Room}} \times 1.4 \frac{\text{GPD Water}}{\text{GPD WW}}$

Hotel Average Daily Flow = 19,600 GPD

Hotel Peak Day Demand = $\frac{19,600 \text{ Gal}}{1 \text{ Day}} \times \frac{1 \text{ Day}}{1440 \text{ Minutes}} \times 1.35 \text{ Peak Day Factor}$

Hotel Peak Day Demand = 18.4 gpm

Medical Office Flows

Estimate number of practitioners and employees

Number of Practitioners =

43,000 sf office area

1 practitioner

3,000 sf

Number of Practitioners =

15

Number of Employees =

15 Practicioners

6 employees

1 practitioner

Number of Employees =

90

Per Practitioner Average Daily Flow =

15 Practicioners

250 GPD Wastewater

1.4 GPD Water

1 Practicioner

GPD WW

Per Practitioner Average Daily Flow =

5,250 GPD

Per Employee Average Daily Flow =

90 Employees

15 GPD Wastewater

1.4 GPD Water

1 Employee

GPD WW

Per Employee Average Daily Flow =

1,890 GPD

Calculate average day potable water demands from medical office use:

Per Practitioner Average Daily Flow =

5,250 GPD

Per Employee Average Daily Flow =

1,890 GPD

Medical Office Average Daily Flow =

7,140 GPD

Medical Office Peak Day Demand =

7,140 Gal

1 Day

1.35 Peak Day Factor

Day

1440 Minutes

Medical Office Peak Day Demand =

6.7 gpm

Shopping Center Flows

Calculate assumed retail floor area and number of restaurant seats:

Assume 15% of shopping center as restaurant use:

Total Commercial Floor Area = 125,000 sf

Assumed Restaurant Area = 15%

Assumed Restaurant Floor Area = 18,750 sf

Assume Restaurant Density = 45 sf / restaurant seat

Assumed Number of Restaurant Seats = 18,750 sf restaurant area

45 sf / restaurant seat

Assumed Number of Restaurant Seats = 417 restaurant seats

Calculate potable water demands from restaurant use:

Restaurant Average Daily Flow = 417 seats

40 GPD Wastewater

1.4 GPD Water

seat

GPD WW

Restaurant Average Daily Flow = 23,333 GPD

Restaurant Peak Day Demand = 23,333 Gal

1 Day

1.35 Peak Day Factor

Day

1440 Minutes

Restaurant Peak Day Demand = 21.9 gpm

Calculate potable water demands from retail use:

Retail Average Daily Flow = 106,250 sf

0.1 GPD Wastewater

1.4 GPD Water

sf

GPD WW

Retail Average Daily Flow = 14,875 GPD

Retail Peak Day Demand =	14,875 Gal	1 Day	1.35 Peak Day Factor
	Day	1440 Minutes	

Retail Peak Day Demand = 13.9 gpm

Calculate average day potable water demands from shopping center use:

Restaurant Average Daily Flow =	23,333 GPD
Retail Average Daily Flow =	14,875 GPD
Shopping Center Average Daily Flow =	38,208 GPD

Calculate peak day potable water demands from shopping center use:

Restaurant Peak Day Demand =	21.9 gpm
Retail Peak Day Demand =	13.9 gpm
Shopping Center Average Daily Flow =	35.8 gpm

Gas Station Flows

Water closet demand for service station open greater than 16 hours per day

Gas Station WC Average Daily Flow =	3 water closets	325 GPD	1.4 GPD Water
		Water Closet	GPD WW

Gas Station WC Average Daily Flow = 1,365 GPD

Gas Station WC Peak Day Demand =	1,365 Gal	1 Day	1.35 Peak Day Factor
	Day	1440 Minutes	

Gas Station WC Peak Day Demand = 1.3 gpm

For carry out food service operations within gas station

Gas Station Store Average Daily Flow =	6,000 sf building area	50 GPD	1.4 GPD Water
		100 sf	GPD WW

Gas Station Store Average Daily Flow = 4,200 GPD

Gas Station Store Peak Day Demand =

4,200 Gal	1 Day	1.35 Peak Day Factor
Day	1440 Minutes	

Gas Station Store Peak Day Demand =

3.9 gpm

Per food service employee within gas station

Per employee Average Daily Flow =

5 employees	15 GPD	1.4 GPD Water
	employee	GPD WW

Per Employee Average Daily Flow =

105 GPD

Per Employee Peak Day Demand =

105 Gal	1 Day	1.35 Peak Day Factor
Day	1440 Minutes	

Per Employee Peak Day Demand =

0.1 gpm

Calculate average day potable water demands from gas station use:

Water Closet Average Daily Flow =	1,365 GPD
Convenience Store Average Daily Flow =	4,200 GPD
Per Employee Average Daily Flow =	105 GPD
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Gas Station Average Daily Flow =	5,670 GPD

Calculate peak day potable water demands from gas station use:

Water Closet Peak Day Demand =	1.3 gpm
Convenience Store Peak Day Demand =	3.9 gpm
Per Employee Peak Day Demand =	0.1 gpm
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Gas Station Peak Day Demand =	5.2 gpm

Sit Down Restaurant Flows

Assume Restaurant Density =

45 sf / restaurant seat

Assumed Number of Restaurant Seats =

15,000 sf restaurant area
45 sf / restaurant seat

Assumed Number of Restaurant Seats = 333 restaurant seats

Calculate potable water demands from restaurant use:

Restaurant Average Daily Flow =

333 seats	40 GPD Wastewater	1.4 GPD Water
	seat	GPD WW

Restaurant Average Daily Flow = 18,667 GPD

Restaurant Peak Day Demand =

18,667 Gal	1 Day	1.35 Peak Day Factor
Day	1440 Minutes	

Restaurant Peak Day Demand = 17.5 gpm

Fast Food Restaurant Flows

Assumed Number of Restaurant Seats =

12,000 sf restaurant area
30 sf / restaurant seat

Assumed Number of Restaurant Seats = 400 restaurant seats

Calculate potable water demands from restaurant use:

Restaurant Average Daily Flow =

400 seats	40 GPD Wastewater	1.4 GPD Water
	seat	GPD WW

Restaurant Average Daily Flow = 22,400 GPD

Restaurant Peak Day Demand =

22,400 Gal	1 Day	1.35 Peak Day Factor
Day	1440 Minutes	

Restaurant Peak Day Demand = 21.0 gpm

Summary

Proposed Land Use	Potable Water		Sanitary Sewer	
	ADF (GPD)	Peak Day (gpm)	ADF* (GPD)	Peak Day (gpm)
Residential	140,000	131.3	100,000	93.8
Hotel	19,600	18.4	14,000	13.1
Medical Office	7,140	6.7	5,100	4.8
Shopping Center	38,208	35.8	27,292	25.6
Gas Station w/ Convenience Store	5,670	5.2	4,050	3.8
Sit Down Restaurant	18,667	17.5	13,333	12.5
Fast Food Restaurant	22,400	21.0	16,000	15.0
Total for Scenario	251,685	235.9	179,775	168.5

* Sanitary sewer ADF calculated as Water ADF divided by 1.4