

PUBLIC FACILITIES ELEMENT GOALS, OBJECTIVES & POLICIES

Background

One of the fundamental tasks of planning is to ensure that communities have appropriate public services and infrastructure systems to meet the needs of their current and future populations. The Public Facilities Element addresses the provision of public services that the community members receive from the city in coordination and partnership with its local, regional, and state service partners. Through this planning framework, the city has established its priorities for providing basic public facilities that meet the needs of its residents, businesses, and visitors and address concerns related to local standards, infrastructure capacity, and health for potable water, sanitary sewer, solid waste, and stormwater.

The Public Facilities Element sets the framework through which the City of West Melbourne supports an effective, productive, and cost efficient public facility and infrastructure system. The framework ensures 1) the city has the appropriate facilities and infrastructure resources to provide essential public services and 2) the development community addresses their impacts to the system. Additionally, this element establishes development standards for publicly owned facilities in order to ensure they promote community character, enhance the City's built environment, and protect the natural environment.

Planning Framework

The objectives and policies established in the Public Facilities Element provide the foundation for a planning framework which:

- Ensure the city's service standard meet the needs and demands of a diverse community.
- Manages growth in correlation with facility and infrastructure capacity.
- Provides for the safety, health, and well-being of the community.
- Delivers highly valued, well managed, and fiscally responsible local government services.
- Achieves the community planning vision established through the Horizon 2030 EAR and 2010 Comprehensive Plan.
- Addresses the guiding issues and community concerns identified in the 2009 EAR.
- Provides for local, regional, and state planning priorities, principles, and practices.

The Public Facilities Element accomplishes its goal to *"ensure the provision of adequate public facilities to all residents within its jurisdiction in a timely and efficient manner"* through the following planning directives:

- The city shall coordinate its delivery of public facilities and development services to endeavor public services – sanitary sewer, solid waste, stormwater management, and potable water – are available at the time a site plan, building permit, or subdivision plat are approved.
- Provide well-designed and economically efficient potable water, sanitary sewer, and solid waste services that maximize existing facilities, meet the needs of current and future populations, and protect the natural environment.
- Adequate stormwater drainage will be provided to afford reasonable protection from flooding and to prevent degradation of quality of receiving waters.

By addressing these issues, the public facilities will promote development that better links land use and development planning.

Public Facilities Goal

Provide needed public facilities in a manner that ensures protection of investments in existing facilities, supports the community planning vision, promotes sustainable development, and provides for the community’s needs. Public Facilities include potable water, reclaimed water, sanitary sewer, stormwater management, and solid waste.

Objective 1: Public Facilities and Development Coordination.

The city shall coordinate its delivery of public facilities and development services to ensure that the public services – sanitary sewer, solid waste, stormwater management, and potable water (facilities and water supply) – needed to meet the needs of the development are available at the time a site plan or subdivision plat are approved.

Policies

1.1 Level of Service Standard

The following level of service standards are hereby adopted and shall be used for determining the availability of facility capacity:

- a. Potable Water:
 - i. Average daily flow of 210 gallons per equal residential unit (ERU).
 - ii. Maximum daily flow of 575 gallons per ERU.
- b. Sanitary Sewer:
 - i. Average daily flow of 210 gallons ERU.
 - ii. Maximum daily flow of 575 gallons per ERU.
- c. Solid Waste:
 - i. 8.32 pounds per capita per day.
- d. Stormwater Management:
 - i. 1-inch retention, 24-hour, 25-year storm event.
 - ii. The peak rate of post-development runoff shall not exceed the peak rate of pre-development runoff.

Table 1 – Summary Table of LOS Standards

Roadway	Potable Water	Sanitary Sewer	Solid Waste	Stormwater Management
City roads – “E”	Average Daily Flow –210 gallons per ERU	Average Daily Flow – 210 gallons per ERU	8.32 pounds per capita per day	1” retention
County roads in the city limits – “E” State roads in the city limits – “E”	Maximum Daily Flow – 575 gallons per ER	Maximum Daily Flow – 575 gallons per ERU		24-hour, 25 year storm event

1.2 Timing of Facilities

Ensure all existing infrastructure systems are maintained, improved, or expanded in coordination with the development of properties and capital improvements schedule.

1.3 Adequate Public Facilities

In order to prevent sprawl, the city shall maximize the area's development envelope by prohibiting future growth and development in areas which lack adequate public facilities and services.

1.4 Development Expansion

Require development to connect to city public utility services as part of the site and development review process in accordance with the following criteria:

- a. Size of development, types of structures, and land uses
- b. Proximity to existing infrastructure.
- c. Available capacity.
- d. Demand of future development projects.
- e. Growth management controls.

1.5 Private Service Providers Coordination

Coordinate new development practices with private utility services such as cable, power, and telecommunication utilities.

1.6 Shared Development Improvements

The City shall work with developers to create shared development agreements for the extension of utility lines and expansion of utility services.

1.7 Infrastructure Utilization

Maximize existing public utility infrastructure systems by encouraging infill development and redevelopment of established service areas.

1.8 Annexation Utility Connection

Newly annexed properties shall connect to the City of West Melbourne utility systems within 365 days of the date of annexation unless service is not available. If service is not available, properties must connect as soon as it becomes available.

1.9 Best Management Practices

Utilize best management practices for infrastructure to improve the West Melbourne's:

- a. Utility operations and service management.
- b. Public safety.
- c. System effectiveness.
- d. Environmental Protection.
- e. Financial feasibility.

1.10 Existing System Improvements

Utilize the site and development process to ensure new development addresses the impact and deficiencies of existing infrastructure systems by improving the systems':

- a. Effectiveness through a more compact and better-utilized utility system.
- b. Efficiency and safety by looping the system.
- c. Economic sustainability by evaluating its financial feasibility and charging appropriate rates.
- d. Improve infrastructure operational effectiveness, system functionality, and cost expenditures in coastal high hazard areas.

1.11 Project Coordination

Project scopes of works, schedules, and workplans should be coordinated with other infrastructure improvements that are needed in the same area. Examples of such coordinated enhancements include:

- a. Street projects that include utility, stormwater, sidewalk, and streetscape.
- b. Utility projects that include community park, sidewalk, stormwater, or roads.
- c. Stormwater projects that include roads, utility, and sidewalks.

1.12 Facility Coordination

Utilize the site and development process to facilitate the coordination, extension, and co-location of shared essential infrastructure systems and services in order to promote neighborhood interconnectivity. Such systems include:

- a. Stormwater management.
- b. Roads and driveways.
- c. Utility easements.
- d. Parks.
- e. Sidewalks and trails.
- f. Lift stations and gravity collection systems.
- g. Utility infrastructure systems.

1.13 Public Facilities Master Plans

Update the city utility master plans to ensure consistency with partner agency plans and reflect best industry practices.

1.14 Public Facilities Inventory

In conjunction with the development of the public facilities master plans, develop and maintain stormwater, reclaimed water, potable water, and sanitary sewer service inventories to identify and address potential deficiencies in capacity. The inventory shall include:

- a. Current plant capacity.
- b. Existing use—number and types of hook-ups.
- c. All future committed capacity based upon approved site and development plans—number and type of hook-ups.
- d. All future committed capacity based upon maximum density allowed if no site and development plan has been approved.
- e. Potential service area needs.

1.15 Capital Improvement Project Criteria

Proposed capital improvement projects will be evaluated according to the following the level criteria:

- a. Level I: To protect public health and safety, to fulfill the city's commitment to provide facilities, or to preserve full use of existing facilities.
- b. Level II: To increase efficiency and reduce operation costs and maintenance.
- c. Level III: To extend facilities within the service area.

1.16 Water Planning Coordination

Potable Water Capital Improvements shall be consistent with the findings in the Water Supply Work Plan and shall be included in the City's 5-year Capital Improvement Plan.

1.17 Environmental Considerations

Protect human and natural communities by providing public utility services that:

- a. Maximize existing facilities prior to developing new infrastructure systems.
- b. Contain sanitary sewer facilities during a storm event.
- c. Minimize stormwater system overflow during storm events and reduce water quality impacts to receiving waters.
- d. Identify and protect natural water sources and environmentally sensitive land areas from the impacts of development.
- e. Coordinate water quality monitoring, waste disposal, and stormwater management practices with partner entities.
- f. Minimize the impact of water and sanitary sewer facilities on the environment.

Objective 2: Potable Water Facilities.

Provide well-designed and economically efficient potable water services that maximize existing facilities, meet the needs of current and future populations, and protect the natural environment.

Policies

2.1 Level of Service Standard

Adopt and enforce the following minimum LOS standard for potable water as the basis for determining the availability of facility capacity and planning for the demand generated by a development:

- a. An average daily flow of 210 gallons per ERU.
- b. A maximum daily flow of 575 gallons per ERU.

2.2 Potable Water Service Area

The city shall work to prevent sprawl by defining the potable water service area as the corporate limits of the City and a specified area adjacent to the city limits as agreed upon contractually with adjacent municipal water suppliers.

2.3 Potable Water Supply Safety

The City shall protect the safety of its potable water supply by:

- a. Visually inspecting every well site for damage and vandalism.
- b. Utilizing a radio telemetry system to monitor pump failures, loss of flow and other indications of security problems.
- c. Having a redundant, off site, manual shut down system for well operations.
- d. Reporting any suspicious activities to the Florida State Warning Point.

2.4 Private Septic Systems

The city will not permit new private septic systems within environmentally sensitive areas or areas currently served by sanitary sewer systems.

2.5 Water Conservation

Throughout the 10-year planning time frame, the city shall require everyone within its planning area to conserve water by:

- a. Informing the public about effective conservation efforts.
- b. Encouraging the use of reclaimed water where available.

2.6 Water Irrigation

Promote water conservation and discourage waste of clean water resources by minimizing the use of potable water for irrigation purposes by:

- a. Informing the public about sustainable irrigation practices and alternative water supplies.
- b. Utilizing the site and development process to encourage the use of reclaimed water for irrigation of new developments where available.
- c. Requiring connection to reclaimed water for irrigation purposes when reclaimed water resources are available and authorized by the Florida Department of Environmental Protection and/or SJRWMD pursuant to Florida Statutes.
- d. Implementing the SJRWMD's landscape irrigation restrictions and keeping the public informed of these restrictions.

2.7 Water Conservation Fixtures

Promote water conservation by requiring that all new construction and all remodeling activities utilize fixtures conforming to the Florida Building Code standards for water efficiency and conservation. The City shall continue to require that new construction feature the following water conserving fixtures:

- a. Low volume water closets.
- b. Low volume urinals.
- c. Water efficient showerheads.
- d. Water efficient faucets.

2.8 Leak Detection Program

Maintain and execute the city's leak detection program in order to discover and eliminate wasteful losses of potable water from the city's central water supply and distribution system.

2.9 Fire Protection Capabilities

Monitor, evaluate, repair, and replace the existing water delivery and distribution system to ensure the potable water system can meet fire protection demands, provide for the community's safety, and protect property from fire emergency events. The following fire protection actions shall be executed by the city:

- a. Fire flow levels for all development shall be based upon delivery pressures consistent with the Florida Fire Code.
- b. Maintenance of an active water system and fire hydrant mapping and numbering program.
- c. Establishment and maintenance of a hydraulic model of the City's water distribution network such that the City's water distribution system can be routinely analyzed with respect to fire flow delivery capabilities.
- d. Extension of water distribution mains to areas within the City's service area and provision of adequate fire protection service to residents and non-residential establishments located within the service area.
- e. Developments and property owners shall be responsible for the public safety facility impacts they cause to fire protection systems that rely on potable water.

2.10 Ground Water Resource Coordination

Coordinate with SJRWMD and other water related agencies and organizations on the identification and protection of artesian aquifers and other natural ground water recharge areas.

2.11 Regional Water Supply System

Continue to cooperate with partner entities including Brevard County, SJRWMD, and the Cities of Melbourne and Palm Bay regarding an interconnected potable water supply system, regional water planning, and coordination of supply system lines.

2.12 Building Permit Coordination

Prior to approval of a building permit, the City shall consult with the applicable water supplier, as provided in the Intergovernmental Coordination Element, to determine whether adequate water supplies to serve the new development will be available no later than the anticipated date of issuance of a certificate of occupancy or its functional equivalent.

2.13 Inverted Rate Structure

The City shall maintain its current inverted water rate structure to ensure conservation of potable water, but shall periodically assess the water rate structures and connection fees.

Objective 3: Alternate Water Supply Sources

The City shall analyze SJRWMD identified and approved alternate water supply sources and shall amend its Water Supply Work Plan to include these identified alternate sources.

Policies

3.1 Reclaimed Water Storage Tank

The City shall construct an above ground reclaimed water storage tank as the SJRWMD identified and approved as an alternative water supply development project prior to the year 2012.

3.2 Alternate Supply Coordination

The City shall annually coordinate with SJRWMD for any proposed water supply development plans that serve as an alternative to the current sources of potable water in the City.

Objective 4: Sanitary Sewer Facilities

Provide well-designed and economically efficient sanitary sewer services that maximize existing facilities, meet the needs of current and future populations, and protect the natural environment.

Policies

4.1 Public Health and Environment

Encourage the provision, operation and maintenance of sanitary sewer systems that protect the health of the public and the resource values of the natural environment as a high priority.

4.2 New Development Approval Standards

New developments shall meet or exceed adopted LOS standards. The city will provide evidence that sanitary sewer facilities and services will maximize the use of existing facilities, correct

facility deficiencies, and have the ability to increase capacity of facilities in order to meet or exceed adopted LOS standards.

4.3 Level of Service Standard

Adopt and enforce the following minimum LOS standard for sanitary sewer as the basis for determining the availability of facility capacity and planning for the demand generated by a development:

- a. An average daily flow of 210 gallons ERU.
- b. A maximum daily flow of 575 gallons per ERU.

4.4 Capacity Improvements

When the city's sanitary sewer facility reaches 80 percent of regulatory permitted and/or plant capacity, the city shall develop capital improvement plans, initiate FDEP permit modification, or renewal procedures to provide reasonable assurances that plans have been initiated to increase permitted and/or plant capacity to meet sanitary sewer demands and that adopted LOS standards will be maintained.

4.5 Sanitary Sewer Treatment Permits

The city shall obtain all necessary sanitary sewer FDEP Sanitary Sewer Treatment Permits and/or develop relevant reports evaluating opportunities for expansion, replacement and/or siting of new facilities to ensure that the provision of sanitary sewer facilities and services will be sufficient to accommodate projected growth and development through build-out.

4.6 Future Land Use Coordination

Sanitary sewer programs and facilities shall be designed to service the densities and intensities of development projected in the city's Future Land Use Element and identified by the city's zoning districts.

4.7 System Connections

Properties shall be required to connect to public sanitary sewer systems when these services are available in reasonable proximity to the property and when septic tank systems experience documented operational problems

4.8 Untreated Waste Discharge

The discharge of untreated sanitary sewer into drainage ditches, surface waters, aquifers or wetlands shall be prohibited.

4.9 Sanitary Sewer Planning Coordination

The city shall coordinate sanitary sewer criteria, requirements, and practices with FDEP and the sewer National Pollution Discharge Elimination System (NPDES) permits.

4.10 Federal and State Regulation Compliance

All current and future sanitary sewer facilities shall meet any applicable Federal and State regulations and shall, at a minimum, be operated consistent with all State and Federal standards and in full compliance with respective permits as issued by regulatory agencies.

Objective5: Solid Waste Services

Provide well-designed and economically efficient solid waste services that maximize existing facilities, meet the needs of current and future populations, and protect the natural environment.

Policies

5.1 Level of Service Standard

Adopt and enforce the following minimum LOS standard for solid waste as the basis for determining the availability of facility capacity and planning for the demand generated by a development: Solid Waste: 8.32 pounds per capita per day.

5.2 Solid Waste Volumes

The volume of solid waste disposed of in landfills shall be reduced through effective and efficient resource recovery programs that:

- a. Requires recycling of solid waste.
- b. Requires its contract hauler to accommodate a recycling program.

5.3 Solid Waste Regulation Compliance

The disposal, collection, and treatment of waste shall be consistent with best practices and state and federal regulations.

5.4 Hazardous Waste

Protect the public and natural communities against the harmful impacts of hazardous waste by:

- a. Monitoring the sources of waste within the city.
- b. Coordinating with county, regional, state, and federal agencies on the execution of hazardous waste regulations and restrictions.
- c. Educating the public about proper waste disposal practices.

5.5 Waste Recycling

The City will continue to improve recycling efforts in order to protect natural resources and extend the life of landfill by:

- a. Encouraging the public to learn about recyclable materials from Brevard County's solid waste programs.
- b. Promoting the disposal residential household hazardous waste with Brevard County's solid waste division.
- c. Participating in county programs that allow businesses to dispose of small quantities of hazardous waste, computers, and rechargeable batteries.
- d. Promoting Brevard County programs that assist businesses to be environmentally responsible.

5.6 Solid Waste Coordination

Ensure that waste disposal and treatment practices minimize negative impacts on natural resources by coordinating the disposal of solid waste with Brevard County through the following practices:

- a. Continuing to implement solid waste interlocal agreements.
- b. Monitoring the capacity levels at the county's disposal facilities.
- c. Requiring developers to provide solid waste concurrency evaluations.

Objective 6: Stormwater Drainage

Adequate stormwater drainage will be provided to afford reasonable protection from flooding and to prevent degradation of quality of receiving waters.

Policies

6.1 Level of Service Standard

Adopt and enforce the following minimum LOS standard for stormwater drainage as the basis for determining the availability of facility capacity and planning for the demand generated by a development:

- a. 1-inch retention, 24-hour, 25-year storm event.
- b. The peak rate of post-development runoff shall not exceed the peak rate of pre-development runoff.

6.2 Stormwater Drainage Regulations

Protect natural drainage features by implementing stormwater drainage land development regulations that require future developments to utilize stormwater management systems.

- a. The city will ensure best management practices are followed by maintaining the stormwater drainage provisions of West Melbourne's Land Development Regulations.
- b. The city will ensure compliance with the Land Development Regulations when reviewing site plans or subdivision plats.

6.3 Drainage Systems Inspections

The Public Works and Engineering Departments will ensure that city drainage systems are inspected and receive required maintenance on at least an annual basis.

6.4 Stormwater Quality Standards

Establish additional stormwater quality standards for stormwater discharge consistent with the standards established through the Florida Administrative Code.

6.5 Stormwater Quality System Evaluation

The city shall continually evaluate and, if appropriate, enact alternative stormwater quality standards for the design, construction, and maintenance of water infrastructure systems. This evaluation shall review the following:

- a. Non-structural stormwater management system designs.
- b. Littoral zone vegetation requirements.
- c. Vegetation removal and management standards.
- d. System designs that conserve uplands and populations of listed species.

6.6 Best Management Practices

During construction, best management practices shall be utilized for erosion and sedimentation controls.

6.7 Erosion and Sedimentation Controls

During construction the city will help insure that developer complies with Stormwater Pollution Prevention Plan, which was used to acquire the stormwater NPDES Permit for the project.

Projects which are too small to be required to obtain an NPDES Permit, will be required to provide an Erosion and Sedimentation Plan which includes similar practices to those which are required to obtain an NPDES Permit.

6.8 Countywide Drainage Summits

Participate in countywide drainage summits to share information, ideas, and concerns and to participate in reaching conclusions to future drainage problems.

6.9 FEMA Coordination

Reduce property damage and flooding loss by reviewing and amending as necessary the city's land development regulations to ensure that they are consistent with the latest Federal Emergency Management Agency (FEMA) regulations.

6.10 Stormwater Master Plan

Within five years of the plan's adoption, the city shall develop and adopt a stormwater master plan that shall identify facility deficiencies and recommend capital improvement projects to correct the deficiencies.