CITY OF PANAMA CITY BEACH

110 South Arnold Road
Panama City Beach, FL 32413

COMMERCIAL/RESIDENTIAL SITE/STORMWATER MANAGEMENT/DRAINAGE INFORMATION COMPLETENESS CHECK LIST

Updated April 21, 2016

PROJECT: _____

PROJECT LOCATION OR ADDRESS: _____

ONLY IF IN CITY LIMITS

Construction Plans to Include:

YES	NO	N/A	
☐	☐	☐	In City Limits ➔ if yes, we check water, wastewater, reclaimed water, stormwater and roads. ➔ if, no, we check water, wastewater and reclaimed water.
☐	☐	☐	Proposed Use of Site
☐	☐	☐	Address or Legal Description of Site
☐	☐	☐	Location Map
☐	☐	☐	Name, Address, and Phone of Engineer
☐	☐	☐	Date of Preparation
☐	☐	☐	Scale of Drawing - Not greater than 1" = 50'
☐	☐	☐	North Arrow
☐	☐	☐	Boundary Lines and Dimensions of the Site
☐	☐	☐	Designated Land Use of Site

☐	☐	☐	Designated Land Use of All Adjacent Lots or Parcels
☐	☐	☐	Name(s) of All Adjacent Streets
☐	☐	☐	Alleys, Easements, or Right-Of-Way
☐	☐	☐	25' Min. Radius For Light Commercial Driveway Connection
☐	☐	☐	30'-50' Radius For Commercial/Industrial Driveway Connection
☐	☐	☐	24' Min. Pavement Width for public roads.
☐	☐	☐	Public Road Pavement Structural Requirements
☐	☐	☐	Groundwater Elevations Under Roadway at Sufficient Intervals to Verify Pavement Design Adequacy
☐	☐	☐	60' Min. R.O.W. for public streets.
☐	☐	☐	Design Speed for Residential (Lots 50' wide and greater) 30 mph - posted 25 mph
☐	☐	☐	Design Speed for Multifamily (Apartments, Townhomes etc.) or high density Residential (Lots less than 50' wide) 25 mph - posted 20 mph
☐	☐	☐	Design Speed for Residential Collector 35 mph - posted 30 mph
☐	☐	☐	Pavement Markings & Signage, (i.e. stop signs, speed limit signs, striping, etc) is the responsibility of the Developer. The City provides street name signs only.
☐	☐	☐	Core and Compaction Tests are required on pavement, base and sub-grade in accordance with FDOT standards. Data should be submitted as part of “as built” process prior to acceptance of roads.
☐	☐	☐	Topographic survey including existing utilities on or adjacent to project surveyed by a PLS. Provide Existing Contours a min. of 25' beyond project boundary.

Drainage Report To Include:

☐	☐	☐	Name, address, and telephone number of the applicant.
☐	☐	☐	Location and/or aerial photograph of the development site, which clearly outlines project boundaries.
☐	☐	☐	Boundary and topographic survey, including the location of all easements, rights of way, and Coastal Setback Line or Coastal Construction Control Line.
☐	☐	☐	Methodology and explanation of calculations
☐	☐	☐	Pre-Development Basin and Sub-basin Maps w/ stormwater runoff direction, volume, and flow rates at each point of discharge (Include any offsite drainage basins that discharge towards the site.)
☐	☐	☐	Post-Development Basin and Sub-basin Maps w/ stormwater runoff direction, volume, and flow rates at each point of discharge (Include any offsite drainage basins that discharge towards the site.)
☐	☐	☐	Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map & project boundary overlayed
☐	☐	☐	If Project has 50 lots or 5 acres, whichever is the lesser, and within FEMA Flood Zone A**,** Base Flood Elevations must be established with a hydrologic and hydraulic study by a FL Registered P.E. A FEMA Conditional Letter of Map Revision or Amendment (CLOMR/CLOMA) is required prior to Engineering Approval and a FEMA LOMR/LOMA is required prior to City Acceptance of Project.
☐	☐	☐	If Project is less than 50 lots or 5 acres, and within FEMA Flood Zone A**,** Base Flood Elevations must be established with a hydrologic and hydraulic study by a FL Registered P.E. When

BFE data is not available from any source the lowest floor of the structure shall be elevated at least three (3) feet above the highest adjacent grade.

☐ ☐ ☐ Elevations of any flood zone along the flood hazard boundaries shall be delineated on the drainage plans.

☐ ☐ ☐ Nearby wetlands and other environmentally significant resources clearly labeled and required buffers shown.

☐ ☐ ☐ A description of on-site vegetation and soils.

☐ ☐ ☐ Information on Percolation Rate Used and Derivation. The standard factor of safety applied to percolation rates shall be 2 for DRI tests, 3 for other field testing, and 4 for percolation rates as contained in the Bay County Soil Survey. Maximum design percolation rate shall not exceed twenty-four (24) in/hr.

☐ ☐ ☐ Groundwater Elev. at date of boring (Licensed FL Geotech. Firm)

☐ ☐ ☐ Existing and projected seasonal high groundwater levels beneath and proximate to the proposed stormwater treatment and attenuation system. The pond bottom for all dry ponds shall be a minimum of two (2) feet above the seasonal high groundwater table.

☐ ☐ ☐ Calculations for site Pre & Post C or CN. Coefficient of runoff used shall be as follows: Roofed and paved areas = 0.95. Bodies of water and retention and detention ponds = 1.0. Swale and recharge areas = 0.7. Gravel = 0.6. Compacted base material in vehicular areas = 0.75. All pre-development calculations shall be considered in site's natural state. Natural state meaning without any structure, concrete, asphalt, or other impervious surfaces.

☐ ☐ ☐ Grading and drainage plan to include existing and proposed finished grade contours at one (1) foot elevation intervals.

☐ ☐ ☐ Erosion and Sediment Control Plan

☐ ☐ ☐ If discharging into public easement or right-of-way **with capacity** (calculations must be provided with submittal to show capacity), attenuate 25 yr. frequency, critical duration so post-development peak discharge rate shall NOT BE GREATER than pre-development rate.

☐ ☐ ☐ If discharge is other than above, the storm event of critical duration shall attenuate a 100 yr frequency storm event. Consider the effects of tail water and seasonal high ground water elevation.

☐ ☐ ☐ Location of Retention / Detention Structures. A minimum of six (6) inches or ten percent (10%) of the total volume shall be provided as freeboard, whichever is more restrictive.

☐ ☐ ☐ Proposed stormwater management system features including the pre- and post-development locations and dimensions of inlets, wet and dry swales, wet and dry ponds, conveyance systems, easements, etc. including a grading and drainage plan showing the exact location and dimensions (top of bank, slope of bank and depth) of all ponds, swales, closed and open conveyances.

☐ ☐ ☐ Description and Location of Receiving Drainage Structures Plan

☐ ☐ ☐ and Profile of storm drainage pipes or channels

☐ ☐ ☐ All stormwater discharge facilitiesare to have sediment controls and skimming devices.

☐ ☐ ☐ Offsite discharge flows shall be limited to non-erosion velocities.

☐ ☐ ☐ Hydraulic Analysis of stormwater conveyance structures - provide Hydraulic Grade Line and Seasonal High Groundwater Elevation in profiles.

☐ ☐ ☐ Wet Pond Design: Eliminate Short-Circuit of Pond by NOT PlacingOverflow Weir in Line with the Inflow Pipe

☐ ☐ ☐ Wet Detention Ponds dedicated to the City must be enclosed with

4’ high vinyl coat chain link fence and gate. Fence shall be set back a sufficient distance for maintenance vehicles to have access to all portions of the pond.

☐ ☐ ☐ Any storm drain pipe within City R/W must be RCP

☐ ☐ ☐ Any storm drain pipe dedicated to the City must be videoed after construction completion. Videos must be reviewed and approved by the City.

☐ ☐ ☐ A schedule for continual maintenance of the stormwater management system, erosion and sedimentation control.

☐ ☐ ☐ Private stormwater management system will need to provide evidence of compliance with Section 26-22 “Minimum Dwellings Served” and Section 26-53 “Maintenance By An Acceptable Entity.”

☐ ☐ ☐ Certification by Engineer of Record for construction Completion of Stormwater Management facilities.

☐ ☐ ☐ Certification by Engineer of Record for NPDES Best Management Practices.

☐ ☐ ☐ Provide copies of all required state and federal permits.