ENGINEERING DEPARTMENT CHECKLIST

Date_____ Project Name / Site Location_____Permit #_____

1. ____ **FEES;** *Review Fee* < 250 SF site area no charge, $50 for first 25,000 sf plus $1.00 for every 1000 sf additional. *Permit fee* will be determined after review is completed; non-structural BMP's = $150 and structural measures $250 this will be applied to permit and paid accordingly to lots over 5,000 SF.
2. ____ Stormwater Management Application with engineering conditions signed by Owner/Agent and applicant. (See attached)
3. ____ Copy of Building Permit Application Form and Approval Routing Check List
4. ____ Four (4) copies of Site plans plus one (1) copy of Building Plans which include the following:
   - Topographic information of existing and proposed grades spot elevation and drainage direction
   - Limit of grading/disturbance; direction and drainage to BMP
   - All impervious surfaces shown and tabulated such as building, sidewalks, driveways, sheds, utilities etc. Impervious surface is area where water does not drain into the ground below

     Total Site Area _____

	Existing	Proposed
o House/building	_____SF	_____SF
o Shed	_____SF	_____SF
o Driveway/parking	_____SF	_____SF
o Water Meter/Utilities	_____SF	_____SF
o Pool	_____SF	_____SF
o Sidewalk	_____SF	_____SF
o Misc._____	_____SF	_____SF
o **Total**	**_____SF**	**_____SF**
Percent Impervious	**_____%**	**_____%**

   - Proposed landscaping with adequate planting area to meet 15% of site square footage minimum.

	Number	Total
o Large Tree 200sf ($)	X _____	_____
o Small Tree 100 sf ($)	X _____	_____
o Large Shrub 75 sf ($)	X_____	_____
o Small Shrub 50 sf ($)	X_____	_____
o Plant 2 sf ($)	X_____	_____
o **Total Plant sf Or ($) Material**		**_____**

   - Containment measure along property line. Ex. wall, berm or swale, as well as along street to contain stone and mulch from sidewalk. See Detail
   - Location of existing and proposed structures and utilities including any easements or ROW's;
   - All necessary structural and construction details and specifications for BMP Construction and all components of the proposed drainage system or systems including downspout location, and storm water management facilities to include: Dimensions, elevations/inverts, volume and cross-section of each structure; Drainage area must support storage.
   - A sequence of construction including any phasing. Note Stormwater may not be built and compromised by construction activities
   - Storm water facility vegetation must be coordinated with landscaping plan and Maintenance Schedule
   - All soil boring locations and elevation of boring location depth or elevation to groundwater specified.
   - Critical features (drainage ways, ditches, wetlands, wetland buffers, critical area and buffer, forest conservation areas, etc);
   - Legend, scale, north arrow, vicinity map;
   - An as-built certification signature block to be executed after project completion**;** and
   - Professional Engineer, Surveyor or a Landscape Architect's seal required on new construction or substantial renovations. (Substantial Renovations is over 50% of the appraised structure value.)

5. ____ A 10% Rule worksheet or Residential Water Quality Management Plan if in Critical Area. See attached rule and forms
   - 10% Rule Worksheet
   - Water Quality Plan for Pervious Deck
   - Water Quality Plan for Single family < 5,000 SF
   - Water Quality Plan for Additions / alterations < 50% appraised value > 250 sf disturbance
   - Water Quality Plan for Single family > 5,000 SF

   (Fee may apply if 10% reduction is not obtained per worksheet at $20,000 per pound)

6. ____ Water Quality Volume per unified sizing criteria volume computations according to Design Manual for sites over 5,000sf:
   - Redevelopment is 20% reduction of impervious surface or treat 20% of existing and 100% of proposed, unless;
   - Quantity control is required. (North of 33rd and east of Coastal Highway) 1' of rain from entire proposed impervious square footage.

   Ex: Lot size 10,000 SF
   Existing impervious 4,000 SF
   Proposed Impervious 8,500 SF
   Water Quality Volume
   (4,000 X .95 /12) X .2 = 316 X .2 = 63 (20% of Existing Storm volume) Plus
   (8,500 – 4,000 X .95 / 12) = 356.25
   356 + 63 = **419 CF**
   North of 33rd Street east of Highway
   8,500 X .95 / 12 = **672 CF**

7. ____ Background information such as:
   - Geotechnical investigations including soil borings, infiltration test, site-specific recommendations and any additional information necessary for the proposed stormwater management design. Made land will have soil boring to three feet minimum. Land use and zoning information existing and proposed. Cost estimate of stormwater management designs.

Stormwater Computations: