

Concur date: _____ Concur by: _____ Approval date: _____ Approved by: _____
Conditional Approval: _____

STORMWATER MANAGEMENT DEVELOPMENT REVIEW COMMENTS

Reviewer: _____ Phone: 595-3492 Engineering Project ID # [engineering #]
Date Received: [date received] Date Reviewed: [date reviewed] Encompass ID #: [planning id#]
Project Name: [project name]
Project Address: [project address] (NOTE: See attached fee calculations.)
Applicant's Name & Phone: [applicant]
Type Submittal: Commercial Site Plan (SP)

PLEASE ADDRESS THE FOLLOWING COMMENTS:

Part A-Aerial Photo:

1. Submit an aerial photo with contours.
2. Clearly outline property boundaries of the site.

Part B-Stormwater Narrative:

1. Provide a general description of drainage for on site, abutting property and adjacent roadway, the project objectives and conclusions, pertinent information critical to the project, etc.
2. Explain any pertinent information from analyses of aerial topo, such as upland acreage, natural drainage patterns, and downgradient impacts associated with this project.
3. Include a brief summary of impacts to adjacent properties, receiving drainage system, and area-wide drainage systems for post development conditions. The stormwater design must provide reasonable assurance to protect adjacent properties and their associated structures, including but not limited to septic tanks, swimming pools, building foundations, etc.
4. Provide a general description of upland acreage, watercourses, waterbodies, and wetlands on or adjacent to the site or into which stormwater flows.
5. If design considers more than one sub-basin area or contributing upland acreage, then provide a brief description and acreages for sub-basins and upland acreage.
6. Include a brief summary of how environmentally sensitive areas, wetlands, and water bodies are to be protected.

Part C- Soil Reports:

1. A geotechnical soil analyses report is required for projects >10,000 total sq ft of impervious area.
2. The retention/detention design appears to be inconsistent with geotechnical report.
3. For projects <10,000 total square feet of impervious area, the Engineer of Record may use soil data obtained from the SCS Soil Survey map (USDA Soil Classification System). A statement of field verification of the soil and the anticipated wet season water table, and a copy of the applicable SCS soil map with the site location identified is required.
4. Typically a minimum of one (1) soil test per acre is required, depending upon extent of environmental/physical conditions of the site. Suggest soil data obtained from the SCS Soil Survey map and natural topography be used to determine suitable soil boring locations.
5. The water table elevation appears to be inconsistent with the design approach specified in the Stormwater management plan. Please clarify.

6. Identify the location, depth and extent of all soils defined as unsuitable/non-rated for development where development is proposed to encroach into areas containing such soils. For example, soils classified Fresh Water Swamp (Fs) may require additional construction measures and other applicable agency permits. Areas with high water table may require moisture resistant road base and should be included on the road cross section detail.
7. Ponding areas must be in suitable locations as indicated by the geotechnical engineer's soils report.
8. The stormwater design appears to be inconsistent with the geotechnical recommendations.

Part D- Other Agency Approvals:

1. An approved FDOT drainage connection permit or proof of exemption is required. However, a copy of the FDOT permit application, as submitted to FDOT, will suffice to initiate site work only while the FDOT permit is processing. An approved permit is required prior to issuance of a building permit for this site.
2. An approved Florida Department of Environmental Protection (FDEP) drainage permit (or proof of exemption) is required prior to Escambia County approval.
- 2a. [FYI] Escambia County is in receipt of Florida Department of Environmental Protection (FDEP) drainage permit number 17- for this development.
3. An Army Corp of Engineers (C.O.E.) or FDEP dredge and fill permit appears applicable for this project.
4. Santa Rosa Island Authority (SRIA) approval is required for development activities proposed at Pensacola Beach.
5. The Health Department approval for individual sewage disposal facilities (septic tanks) is requested prior to stormwater approval, in order to reduce design revisions.

Part E- Lot Coverage:

1. Label all areas with the type material coverage considered impervious, pervious, and semi-impervious.
2. Specify total net acreage within property boundaries.
3. Show dimensions for all existing and new/proposed impervious and semi-impervious areas.
4. Specify the total square footage of impervious area for
 - the existing impervious area for predevelopment conditions,
 - the new/proposed impervious area,
 - the impervious area for post development conditions.
5. Be specific with the material specifications for proposed parking areas consistent with design calculations, such as pervious # 4 gravel limerock or graystone or specify restrictions to not using concrete "washout" or compacted crushed limestone.
6. Include a brief description, detail and/or construction specification for proposed surface materials considered impervious or semi-impervious.
- 6b. If design considers gravel area to be pervious specify restrictions for not using concrete "washout" or compacted crushed limestone.
7. Specify lot coverage totals for existing and proposed impervious areas on plans.
8. Total lot coverage areas on plans, application, and calculations appear to be inconsistent.
9. Specify the total vegetative area to be cleared such that it may increase stormwater runoff rates.

Part F- Stormwater Exempt, Regional Exemption, or De Minimus Construction:

1. Demonstrate on plans how stormwater runoff is conveyed to receiving drainage system.

2. Show receiving drainage system has adequate capacity for post development conditions.
3. For projects within a regional area drainage system, a brief summary of the regional system including the lot coverage estimation/runoff coefficient, design capacity estimation/analyses of regional system, and post development impacts of the project is required to determine if the project is can be considered stormwater exempt. County record may be available for review.
4. For projects located in the Ellyson Field regional SW system, an approval letter from Daisy Steed, Industrial Park Mgr., (595-3421) is required to qualify for FDEP blanket permit/ SW exemption.
5. A certified statement from the engineer of record of no significant impact to adjacent properties or area-wide drainage system is required.
6. Based upon information submitted, this project does not appear to qualify for SW exemption.

Part G- FDEP Swale Exemption Criteria:

1. Provide calculations showing the proposed swale will percolate 80% of the runoff for a 3-year, 1-hour design storm in < 72 hours and function a “dry” system as per FAC 62-25.02 and 62-25.025.
2. Include a statement on plans and narrative, "this project qualifies for swale exemption."
3. Swale side slopes shall be equal to or greater than 3:1 or 6:1 width to depth cross-section ratio.
4. Include proper vegetative stabilization notes for side slopes; sod may be applicable.
5. Manmade inflow or outfall structures do not qualify for swale exemption criteria per FDEP policy.
6. This project does not appear to qualify for FDEP swale exemption; more information is required to provide reasonable assurance of compliance with FDEP regulations.
7. [Request] Since water quality is under FDEP jurisdiction, please provide notice to FDEP. The County will forward a copy of calculations and plans to FDEP, if necessary.

Part H- Stormwater Management Plan & Calculations:

1. Include design assumptions, statements, and conclusions to clarify variables and results.
2. Provide weighted runoff coefficient calculations, consistent with lot coverage totals.
3. Provide time of concentration calculations.
4. Provide drainage calculations for retention/detention facilities, at minimum, must satisfy one of the following:
 - a. For a positive drainage outfall system, $Q_{post} < Q_{pre}$ for a 25-year frequency of critical duration, up to and including a 24-hour duration storm event, with metered positive discharge into an approved functioning drainage system.
 - b. For retention facilities designed with no positive outfall, the retention volume must be adequate to collect and percolate runoff from a 24-hour, 100-year design storm frequency including upland acreage runoff.
- 4a. [Suggestion] While total on site retention may appear to be satisfactory to collect and percolate runoff from a 24-hour, 100-year design storm frequency, a reasonable attempt to provide a positive drainage outfall design is suggested/encouraged. The County may assist in obtaining acquisition of easements for disposition of surface waters if such easements are prepared and planned by the applicant. In addition, a minimum of 1' freeboard should be provided in the pond.
- 4c. Submit revised calculations as applicable to meet FDOT requirements.
- 4d. Drainage calculations appear to be incomplete or inconsistent.
5. Provide a complete stormwater management plan with applicable stormwater calculations. Calculations must demonstrate compliance with Land Development Code 5.10.02A & 7.15.06.
6. Show total retention/detention storage volume calculations at the outfall elevation(s) of the discharge pipe,

at the weir elevation or overflow structure(s),
at the top of pond elevation.

Note: Outline the computer generated volumes as specified.

7. Provide the retention storage volume at the outfall elevation.
8. Clearly identify 100-year pond stage elevations in calculations and suggest a minimum 1 foot “freeboard” for the top of pond elevation. Suggest applicable notes and details be added to plans to ensure adjacent properties and adjacent lots, will not flood in a 100-year storm.
9. Provide emergency overflow capability for a 25-year design storm for the detention pond.
10. Clarify $Q_{pre} > Q_{post}$ within computer generated calculations up to an including a 24 hour event and identify the peak flowrate and maximum stage elevation.
11. Drainage construction of major channels or road crossings under Arterial or Collector roads must be designed not to flood in a 100-year storm.
12. Provide pond recharge calculations and FDEP required treatment volume calculation.
13. Provide drawdown calculations for sand chimney, subdrain, under drains, subsoil drains, side bank drains or trench drain structure(s)
14. Pond recharge calculations appear to be inconsistent with percolation rates of soil. [Concern] The geotechnical data for this site indicates ____
15. Design calculations appear to be inconsistent with percolation rates for sand chimney, subdrain, under drains, subsoil drains, side bank drains or trench drain structure(s).
16. Provide velocity calculations (based upon a 25-year design storm) for swales/open ditches consistent with stabilization method.
17. Typically, velocity of water shall not exceed 3 ft/sec in grassed ditches and 6ft/sec in paved ditches. Any ditch with grades steeper than 5% shall be paved or improved to eliminate erosion and sedimentation buildup in the lower elevations of the ditch.
18. Provide velocity calculations for all offsite flows consistent with energy dissipator design.
19. Calculations must be signed, sealed and dated by a registered Florida Professional Engineer.
20. Provide a drainage area map, indicating sub-basins, upland acreage, and off-site flows.size, etc.
21. Include a schematic diagram of proposed stormwater collection system indicating inlets, pipe sizes, lengths and slope, contributing drainage areas, capacity calculations, etc.
22. Wet detention design concept appears to be applicable to this project.; provide applicable calculations if applicable.
23. Include a drainage study for
24. Include gutter spread calculations, based upon a 25-year storm.

Part I- Development in Areas of High Water Table or Flood Zones:

1. Clearly identify on the plans all jurisdictional wetlands, isolated wetlands, water bodies, natural water courses, and receiving waters on or abutting the site.
2. Specify on plans the 100-year flood zone elevation data as indicated on the FIRM or FHBM prepared by FEMA. If applicable specify on plans CCCL, CHHA, and Shoreline Protection Zones.
3. [FYI] Refer to LDC Article 10 for development in flood zones or areas of high water table.
4. The bottom ditch/swale elevation must be a minimum 2 inches above the water table and function as a “dry” system.
5. If special flood hazard areas, shallow flooding areas, or coastal high flood hazard areas are applicable then clearly show and label these areas on the plans.
6. [FYI] A special engineering report certified by a registered professional engineer or architect for

flood-proofed structures may be required for proposed structures by the Building Safety Division in accordance with LDC article 10.

7. Where the permanent water table is < two (2) feet below the existing grade, a soil boring maybe required for septic tank design and foundation design.
8. Establish minimum finished floor elevations in relation to mean sea level for the lowest floor of all proposed structures relative to the applicable flood zone; specify on plans.
9. Include a “certificate of survey” from a Florida Registered Surveyor which clearly establishes a benchmarks for the minimum finish floor elevation for the applicable flood zone.
10. Describe the extent of any watercourse alterations or relocations resulting from development.

Part J- Wet-detention Design:

1. Provide calculations to show the SW facilities are designed in compliance with the Florida Development Manual (refer to pg. 6-60 and FAC 62-25.042) as it pertains to volume, residence time, treatment depth, littoral shelf, aquatic vegetation, and other applicable performance criteria.
2. Provide all applicable details specific to wet detention design.
3. Consider in design the minimum orifice diameter is three (3) inches. Provide applicable details which comply with this requirement for “bleeddown” devices.
4. Canals or lakes must be designed to have bank slopes steeper than 6:1, but flatter than 2:1, the entire banks slope from the design water surface to a point three (3) feet beyond the berm line must be grassed in a manner to guarantee a healthy growth of Pangola, Bahia or Bermuda, Centipede and/or other suitable grass.
5. Wet detention is applicable in site specific cases where the natural water table is high; wet detention is not applicable for perched water tables.

Part K- Stormwater Objectives and Performance Criteria:

1. Routing run off from upland/off-site acreage appears to be applicable to this design. Drainage should be routed through or around the development without impeding natural flow.
2. Show drainage conditions downstream of the project are not exacerbated due to this development.
3. Demonstrate site and designated offsite outfall has a positive outfall.
4. Revise design to facilitate groundwater recharge.
5. Show the new development will not degrade the functioning ability of the area-wide drainage system to adequately control stormwater runoff due to existing capacity, erosion or sedimentation.
6. Design requires the implementation of a stormwater management plan; refer to LDC Article 7.15.
7. Provide measures to prevent damage to wetlands and prevent untreated stormwater runoff from adversely impact receiving water bodies.
8. The design for this project does not appear to satisfy the stormwater objectives of the LDC 4.15.02
9. The owner’s permission recorded in writing is required for direct stormwater discharge onto private property. Provide an hold harmless/drainage easement.

Part L- General Items to Include on Plans:

1. Include a vicinity map of the area including site location with reference to principal roads.
2. Include a complete boundary/land survey including a legal description and the total acreage of the site. The survey should be certified by a registered surveyor.
- 2b. Include a complete legal description with the total acreage and specify the origin of land survey and legal description.
3. Add the project name, date, scale (preferably 1"= 20' if overall site scales to one sheet), north

arrow, and property tax/reference number(s) to the plans.

4. Add the owner's and/or developer's name(s), address(es) and phone number(s) to the plans.
5. Specify the rights-of-way widths and surface material of County or State roads along with their designated numbers (if applicable) which front the property or tract.
6. Add general dimensions for retention/detention area construction; primary length and width.
7. Add all applicable lot coverage dimensions for proposed improvements and layout for construction.
8. Specify the direction of flow for all surface drainage relevant to the project including on site, abutting properties, and adjacent streets.
9. Identify existing drainage system abutting the site or relevant to the proposed storm system. If none exists, then explain where the stormwater flows to or from the site.
10. Show the proposed drainage structures associated with the development with pipe sizes, lengths, invert elevations, flow direction, and descriptions.
11. Include the plan and profiles for all proposed streets and easements including centerline % slope of profiled roads, stormwater and sanitary sewer pipes with existing and proposed pipe length, slopes, inverts, and grades. If necessary based upon terrain, show right and left grading requirements.
12. Show culverts for all proposed drives when crossing existing or proposed roadside swales/ditches, unless other innovative measures can be applied such as a dip in the drive.
13. Each sheet signed, sealed and dated by a registered Florida Professional Engineer.

Part M- Vertical Control and Topographical Changes:

1. Show existing (pre-development) 1' contours on the plan referenced to either assumed or NGVD datum. For relatively flat sites provide adequate existing spot elevations.
2. Provide a benchmark (suggest 2) for vertical control, either assumed or based on NGVD Datum, with the description, location, and elevation.
3. Add additional spot elevations to clarify drainage as needed to demonstrate drainage patterns on site, abutting properties, adjacent roadways, and outfall areas.
4. Provide a complete grading/drainage plan by
 - showing how existing contours tie into proposed contours for proposed right-of-ways, swales, and ponds,
 - showing directional flow arrows to clarify drainage across proposed development
5. Show elevations of roadways in area(s) of connection(s) and ensure ponding or standing water in R/W is not apparent for post development conditions. When applicable provide measures to route standing or ponding water into onsite drainage system or County system.
6. Specify finished ground floor elevations for all structures.

Part N- Utility, Water, and Sewer Requirements:

1. Show all existing and proposed utilities (if any) within all abutting rights-of-way.
2. Show proposed water and sanitary sewer connection to proposed structures which do not conflict with existing or proposed stormwater system(s)
3. [FYI] A separate construction in right-of-way permit is required for the proposed installation of the..., to be pulled by a contractor bonded with the County.
4. Show all proposed utility crossings under existing county roadways to be bored, not open cut. Except under conditions of existing roadway degradation or reasonable justification, County roadways are bored under and not open cut.
5. If justification for open cutting of a County road is warranted and boring cannot be accomplished, then include County standard patch detail on plans. See attachment.

6. If sanitary sewage disposal is accommodated by septic tank and drain field lines, then show the location(s) on the plans; Septic tank drain field lines should be a minimum 15' from retention areas.
7. Show existing or proposed fire hydrant located within 500 feet from the furthest remote point of the building.

Part O- Stabilization, Erosion, and Sediment Control Measures:

1. Stabilized earth berms and/or swales should be constructed along property lines where developed run off to adjoining properties is possible. Provide detail with side slopes, elevations, dimensions, soil specifications, compaction, stabilization, construction specifications and etc. Side slopes steeper than 3:1 requires sod.
2. Include on plans measure to control erosion and sedimentation consistent with velocity calculation and in accordance with FDEP standards.
3. Include applicable details for erosion and sediment control device, timing for installation, and provision for their maintenance.
4. Show applicable locations of erosion/sediment control measures and label on plans.
5. Include on the pond details proper side slope stabilization notes. The entire bank slope shall be grassed in a manner to guarantees healthy growth grass (free from noxious weeds) such as Pangala, Argentine Bahia, Bermuda, Centipede or other suitable grass.
6. Side slopes or embankments steeper than 3:1 should be sodded and pinned, unless other effective measures can be applied such as geotextile materials. Specify method of stabilization on plans consistent with slope stabilization analyses.
7. Proposed open ditches or swales should be 6:1 of flatter, unless permanent stabilization is provided.
8. Work proposed within or next to the R/W with existing swales systems may require additional provisions to repair/restore existing drainage swales as needed to ensure adequate drainage. R/W shoulder stabilization should be in accordance with FDOT Standard Specifications for Road and Bridge Construction latest edition. Please note on plans.
9. Concrete MES are required for culverts; provide applicable detail.
10. Include on plans energy dissipators at discharge points of all pipes and flumes based upon applicable design velocities. Rip-rap dissipator detail(s) should include minimum stone weight (suggest 50 #), spread and depth dimensions. Splash pad dissipator detail(s) should include construction specifications, dimensions, material etc.
11. Topography or design layout appears conducive to erosion.
12. [Request] Preservation of natural vegetative buffer zones and existing trees will reduce impacts of erosion. Please note on plans provisions to reflect such preservation.
13. On sites > 1 acre, if > 1 contiguous acre is cleared, a ground cover sufficient to prevent erosion should be planted or otherwise stabilized within 10 working days on that portion of the site upon which further active construction will not be undertaken within 90 days; please note on plans.
14. For shoreline structures an anti-erosion impact statement should be included with a descriptive features of the site plan and proposed measures to be undertaken in order to prevent or minimize erosion of adjacent and down drift properties. This statement shall include any anticipated adverse impacts of the proposed structure.

Part P- County Standards and Details Applicable to Plans:

1. Include cross-section detail(s) of proposed pond(s) including side slopes, the top and bottom elevations, pond embankment stabilization notes, associated inflow/outflow structures, etc.

2. All retention areas shall be located a minimum 20' from any natural watercourse, river or stream
3. As per LDC 4.04.13 A 4, "Detention/retention areas should be fenced or restricted from public access or contain side slopes that are no steeper than 4:1, out to a depth of 2 feet below control elevation (approximately 8' horizontal feet from control elevation), *unless pond normal water elevation is less than 24" deep.*" As per Chapter 2-7-1 Escambia County Code of Ordinance (1968 act of State Legislature), "Enclosure of clay pits, caves, or other depressions *is required if so* located at such a depth that a child might conceivably drown ... to enclose the depression with a fence or other device of a height of 4 feet. The enclosure shall be of construction as to not be penetrable without the aid of tools or other devices." [Concern] Liability for the owner and/or engineer of record from a child drowning.
4. Sand chimney, subdrain, subsoil drains, or trench drain structure(s) details(s) should include the length, size, dimensions, elevations, specifications and materials for the perforated pipe, filter media, trench and etc.
5. Include a complete construction detail for sand chimney, underdrain, or side bank drain.
6. Weir/outlet (emergency overflow or "pop off") details should include dimensions, elevations, material specifications, reinforcement and stabilization specifications.
7. Include a complete construction detail for outlet structure.
8. All orifices should be less than a 3" diameter. All standpipes larger than a 15" diameter should be protected by a trash rack or grate; include details, materials and construction specs as applicable.
9. A minimum one (1) foot ground cover is required for all underground pipes; note on plans.
10. Stormwater pipes must be a minimum 18 inch diameter with concrete MES, if within County R/W or maintained by the County and be designed to accommodate a 25-year storm.
11. The driveway culvert size and slope should be designed to accommodate a 25-year storm and have 1' of ground cover. Indicate the other culverts size within the ditch system relevant to the culvert.
12. Indicate concrete mitered end sections along with their flow line elevations on all driveway pipes in County R/W or D/E. Include detail and construction specifications per FDOT standards.
13. Show culverts for all proposed drives when crossing existing or proposed roadside swales/ditches, unless other measures can be applied such as a dip in the drive or routing drainage on-site.
14. Include the type driveway connection as applicable with appropriate details and consideration to existing or proposed roadside drainage; see attached standards.
15. Provide standard concrete MES detail in plans. Refer to FDOT standards.
16. Minimum slope of all proposed conveyance swales, roads, and gutters must be 0.3%. Identify all slopes and/or elevations on plans and show directional flow arrows to clarify drainage.
17. Drainage easements (D/E) shall contain underground piping and must have sufficient width to accommodate pipe size; minimum 15 feet width. If the D/E is located with the S/D boundaries, then D/E is to be platted. If the D/E is outside boundary limits, then D/E is to be granted by separate instrument.
18. Drainage rights of ways (D/R/W) are required for open ditches and drainage swales as public dedicated or deeded R/W; minimum 15' feet width or as necessary for adequate maintenance access. D/E's are not acceptable for swales.
19. Include a cross section of all proposed swales/open ditches including side slopes, and the proper stabilization notes. Plan view should include % slope, elevations, contours, and grading requirements as necessary for construction purposes.
20. The maximum allowable design depth for swales/open ditches located in road right-of-way is three (3) feet. Edges of ditches shall be a minimum of six (6) feet from the outside edge of pavement.
21. If applicable include associated details and notes to control erosion or sedimentation within

- proposed swale system(s), based upon velocity calculations.
22. Road side swales or open ditches should not exceed 3 feet in depth and the edge of the ditch must be a minimum 4-6 foot from to the edge of the pavement.
 23. Show concrete valleys and associated details in areas of roadways in which stormwater runoff crosses the crown of a road.
 24. Show concrete flume detail(s) including dimensions, elevations, material specifications, reinforcement and stabilization specifications.
 25. County maintained ponds must be designed with side slopes which are no steeper than 3:1.
 26. The storm pipe material is not amenable or an approved material for construction within County R/W. Suggest HDPE or concrete pipe. Request not to use corrugated metal pipe due the poor durability and strength characteristics. If corrugated metal pipe is used it must be fully bituminous coated to allow an inside smooth surface.
 27. Local streets require 50' R/W when curb & gutter is utilized or 66' R/W if roadside swales are utilized.
 28. Standard County inlets are required; FDOT inlets are not acceptable unless ditch bottom inlets.
 29. High back curbs or raised shoulders appear to be applicable at ____.
 30. Ribbon curb or layback type curb should be used within County R/W. FDOT Type 'F' curbs are only applicable for medians within County R/W.

Part Q- Applicable Notes to Include on Plans:

1. "The project engineer (engineer of record) shall provide to Escambia County "as-built" record drawings for verification and approval by Escambia County one week prior to requesting a final inspection and certificate of occupancy, or provide "as-built" certification that the project construction adheres to the permitted plans and specifications. The "as-built" certification or the "as-built" record drawings must be signed, sealed and dated by a registered Florida Professional Engineer."
2. "The contractor shall install prior to the start of construction and maintain during construction all sediment control measures as required to retain all sediments on the site. Improper sediment control measures may result in Code Enforcement Violation. "
3. "Retention/detention areas shall be substantially complete prior to any construction activities that may increase stormwater runoff rates. The contractor shall control stormwater during all phases of construction and take adequate measures to prevent the excavated pond from blinding due to sediments."
4. "All disturbed areas which are not paved shall be stabilized with seeding, fertilizer and mulch, hydroseed and/or sod."
5. "All new building roof drains, down spouts, or gutters shall be routed to carry all stormwater to retention/detention areas."
6. "Developer/Contractor shall reshape per plan specifications, clean out accumulated silt, and stabilize retention/detention pond(s) at the end of construction when all disturbed areas have been stabilized and prior to request for inspection."
7. "Contractor shall maintain record drawings during construction which show "as-built" conditions of all work including piping, drainage structures, topo of pond(s), outlet structures, dimensions, elevations, grading etc. Record drawings shall be provided to the Engineer of Record prior to requesting final inspection."
8. "The owner or his agent shall arrange/schedule with the County a final inspection of the development upon completion and any intermediate inspections at (850) 595-3434. As-built

certification is required prior to request for final inspection/approval.”

9. “Notify Sunshine utilities 48 hours in advance prior to digging within R/W; 1-800-432-4770.”
10. “All aspects of the stormwater/drainage components and/or transportation components shall be completed prior to issuance of a final certificate of occupancy.”
11. “No deviations or revisions from these plans by the contractor shall be allowed without prior approval from both the design engineer and the Escambia County. Any deviations may result in delays in obtaining a certificate of occupancy”
12. “The contractor shall notify FDOT 48 hours in advance prior to initiating any work in the state rights-of way.”

Part R- Maintenance Requirements:

1. Provide a copy of a Maintenance Plan to both the County and the entity/owner responsible for maintenance which includes a listing setting forth scheduled maintenance needs and operation/maintenance instructions for the stormwater facilities and erosion repairs.
2. [Suggestion] Shallow ponds within the landscaped areas, minimization of steep pond side slopes, and equalization pipes between the detention areas would provide a safer detention pond and would not require a fence to restrict public access. In addition, 2:1 pond side slopes are difficult to maintain and are conducive to erosion.
3. Provide adequate access to stormwater facilities for maintenance purposes.
4. Due to limited design life and additional maintenance requirements, the use of underdrains is accepted, although discouraged. Request a reasonable explanation why natural percolation or the use of sand chimneys will not accommodate treatment and recharge requirements.
5. All areas and/or structures to be maintained by the County must be dedicated to the County by plat or separate instrument and accepted by the BCC.
6. Include on plans the location, width, purpose and maintenance responsibility for all proposed easements, facilities, or R/W’s other than streets. (Private or Public?)

Part S-Comments For Your Information:

1. A Land Disturbing Permit is required prior to clearing land, disturbing land, or changing the land’s topography, unless final approval of plans has been issued.
2. An “as-built” certification is required prior to final inspection.
3. The inspection fee covers 2 inspections; subsequent inspections due to negligence of the contractor or engineer of record will result in a \$75 additional inspection fee.

Part T- Additional Comments and Concerns:

Part U-Comments Based Initial Site Visit:

Note: All comments are based upon the Land Development Code ordinance 96-3 (LDC). Refer to Articles 3, 4, 7, and 10 of the LDC and Chapter 62-25 F.A.C. Please respond in writing if you wish to dispute any comment regarding this document.

file: h: \wpdocs\cac\ siteplan\ [planning id#] . SP

Escambia County As-Built Certification Form

Upon completion of construction and prior to final inspection the engineer of record or another professional engineer registered in Florida must certify that the project construction adheres to the approved plans. A final certificate of occupancy or final acceptance will not be granted until the project has been certified.

Part 1: Project Information

| | | | |
|---------------------------------------------|-------------------------------------------|-------|-----|
| <u>[project name]</u> Project Name | Planning/Building # <u>[planning id#]</u> | | |
| <u>[project address]</u> Project Address | Engineering # <u>[engineering #]</u> | | |
| <hr/> | | | |
| Name and Title of Owner | Owner's Phone | | |
| <hr/> | | | |
| Owner's Address | City | State | Zip |

Part 2: Statement By Entity Responsibility For Maintenance (if other than County)

The undersigned agrees to maintain and operate the Stormwater facilities to comply with Ordinance 96-3 Article 7.15.12. Responsibility for maintenance and operation may be transferred to another entity upon written notification to Escambia County Public Works Department.

| | | | |
|-------------------------|------------------------|-------|-----|
| <hr/> Signature | <hr/> Date | | |
| <hr/> Name and Title | <hr/> Owner's Phone | | |
| <hr/> | | | |
| Address | City | State | Zip |

Part 3: Statement By Registered Professional Engineer (required by Ordinance 96-3 Article 7.15.11) This is to certify that project construction substantially adheres to the approved plans. The engineering features of the project have been designed/examined by me. I also state the applicant has been furnished a maintenance and operation schedule for the Stormwater facilities (if applicable).

| | | | |
|---------------------------|------------------|--------------------------------|---------------|
| <hr/> Name of Engineer | Florida Reg. No. | <hr/> Signature of Engineer | <hr/> Date |
|---------------------------|------------------|--------------------------------|---------------|

Company Name

Company Address

City State Zip

(Affix Seal)

Attach As-built Drawings if applicable

Note: While not preferred, an as-built certification letter may be substituted for this form.

Certificate of Occupancy Status - Site Inspection Form

Project Name: [project name]

Building/Planning # [planning id#]

Project Address: [project address]

Engineering # [engineering #]

Inspection report covers: Planning & Zoning Only Engineering Only Both Depts.

A certificate of occupancy was requested on _____ (date) for this project by _____, phone number _____. The results and status date of the site inspection for the requirements pertaining to the Land Development Code are as follows:

NOT REQUIRED _____ FAILED INSPECTION _____ TEMPORARY _____ FINAL _____

Inspector

Date

Inspector

Date

Inspector

Date

General comments or notes regarding the Inspection:

General Criteria:

| | YES | NO | NA |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|
| 1. As-Built Drawing/Certification Received (Date: _____): <small>Note: As-Built Certification is required by the engineer of record prior to final CO.</small> | ___ | ___ | ___ |
| 2. County Records indicate other agency permits & issues are satisfied. FDEP ___ FDOT ___ COE ___ Other _____ | ___ | ___ | ___ |
| 3. All complaints (if any) concerning off-site impacts resolved; erosion, screening, etc. | ___ | ___ | ___ |

Stormwater Management Criteria:

| | | | |
|--------------------------------------------------------------------------------------|-----|-----|-----|
| 4. Design requirements for retention/detention area satisfied. | ___ | ___ | ___ |
| 5. Requirements for underdrain system/sand chimney satisfied. | ___ | ___ | ___ |
| 6. Site grading requirements satisfied; swale construction, grading direction, etc. | ___ | ___ | ___ |
| 7. All work in right-of-way is satisfactory; stabilization, ditches, sediments, etc. | ___ | ___ | ___ |
| 8. All drainage structures built and appear to installed per plans. | ___ | ___ | ___ |
| 9. Energy dissipators & "rip rap" installed at the end of pipes, flumes, etc. | ___ | ___ | ___ |
| 10. Accumulated silts removed from pond. | ___ | ___ | ___ |

Access Management Criteria:

| | | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|
| 11. Driveway connection(s) width, radii, flared dimensions, urban flared turnouts, 3' transition @ curb & gutter satisfied, aprons, turning lanes. | ___ | ___ | ___ |
| 12. Color, location, size, pavement markings, traffic signs satisfied (parking stripes-white, handicap signs, etc) | ___ | ___ | ___ |
| 13. Sidewalks are constructed and located per plans | ___ | ___ | ___ |

Planning & Zoning Criteria:

| | | | |
|-----------------------------------------------------------------------------------------|-----|-----|-----|
| 14. All disturbed areas are stabilized with grass, seed/mulch, or landscaped per plans. | ___ | ___ | ___ |
| 15. Parking areas are satisfied; appropriate number of spaces, islands, medians, etc. | ___ | ___ | ___ |
| 16. Screening areas are satisfied; dumpster screening, privacy fences and veg. buffers | ___ | ___ | ___ |
| 17. Building Setbacks are satisfied. | ___ | ___ | ___ |

Additional requirements:

18.

Disclaimer: This project has been inspected by Escambia County for compliance with the requirements of the Land Development Code. This inspection report is based on a visual inspection and does not in any way relieve the professional engineer, contractor, owner, developer or responsible party from the design requirements of the permitted plans.