



Development Application Construction Plan Review

Project Name: _____

Description of Project: _____

Applicant's Name: _____

Address: _____

Telephone Number: () _____ Fax Number() _____

E-mail Address: _____

Owner's Name: _____

Address: _____

Telephone Number: () _____ Fax Number() _____

E-mail Address: _____

Developer's Name: _____

Address: _____

Telephone Number: () _____ Fax Number() _____

E-mail Address: _____

Engineering Firm: _____

Address: _____

Telephone Number: () _____ Fax Number() _____

E-mail Address: _____

The roads within the subdivision will be Public _____ Private _____

The subdivision will have Central Water _____ Central Sewer _____
Private Well _____ Septic System _____

Items required for Construction Plan submittal:

- a. Seven (7) sets of the construction plans signed and sealed by the engineer of record
- b. Two (2) copies of stormwater calculations, environmental assessments, permits, and other required documentation (if applicable).
- c. Construction plan review fee, which is one (1) check made payable to the Lake County Board of County Commissioners totaling the following fees:
 - Department of Public Works Review:
20 lots or less = \$3,350.00
Over 20 lots = \$4,390.00
 - Department of Public Works Construction Inspection:
20 lots or less = \$2,500.00
Over 20 lots = \$7,840.00
 - Department of Public Works Stormwater Review:
20 lots or less = \$310.00
Over 20 lots = \$460.00
 - Building Services Division/Fire Review:
\$450.00
 - Planning & Development Review:
\$250.00 + \$2.00 per lot
 - Health Department Review:
\$75.00

If revisions of the construction plans are required, there will be a \$405.00 resubmittal fee beginning with the third review. No application is required for resubmittals.

The completed application shall be delivered or mailed to Deb Marchese, Subdivision Coordinator, at the Lake County Department of Public Works, 437 Ardice Avenue, Eustis, Florida 32726. For additional information please contact Ms. Marchese by phone (352)483-9007, fax (352)483-9025, or email at dmarchese@lakecountyfl.gov

Please visit us on the web at www.lakecountyfl.gov. Go to County Departments, then Public Works for the latest forms and information on the **Construction Plan and Final Plat Review Processes**.

Lake County Code, Appendix E, Land Development Regulations
Chapter XIV Administration
Section 14.07.00 Subdivisions

14.07.03 General Submittal Requirements.

- A. Format Requirements for all Submittals. All plans shall include the following submittal format requirements:
1. All plans shall be drawn to an appropriate scale to depict the necessary details required for review, unless the County Manager or designee determines that a different scale is sufficient or necessary for proper review of the proposal, or another provision of these regulations requires a different scale.
 2. The plans shall be a maximum of thirty (30) inches by forty-two (42) inches in size. A three-quarter ($\frac{3}{4}$) inch margin shall be provided on all sides except for the left binding side where a two (2) inch margin shall be provided unless the County Manager or designee determines that a different size is sufficient or necessary for proper review of the proposal.
 3. If multiple sheets are used, the sheet number and total number of sheets must be clearly indicated on each.
 4. All plans shall set aside a space five (5) inches by six (6) inches on the front page of each set of submittals to be used for County approval stamps.
- B. General Requirements for all Submittals. The front cover sheet of each plan shall include:
1. A general vicinity or location map drawn to scale (both stated and graphic) showing the position of the proposed site in the Section(s), Township and Range, together with the principal roads, city limits, and/or other pertinent orientation information.
 2. A complete legal description of the property.
 3. The name, address and telephone number of the owner(s) of the property. Where a corporation or company is the owner of the property, the name and address of the president and secretary of the entity shall be shown.
 4. Name, business address, and telephone number of those individuals responsible for the preparation of the drawing(s).
 5. Each sheet shall contain a title block with the name of the site, stated and graphic scale, a north arrow, and date.
 6. The plan shall show the boundaries of the property with a metes and bounds description reference to Section, Township and Range, tied to a Section or Quarter-Section or subdivision name and lot number(s).
 7. The area of the property shown in square feet and acres.
 8. A recent aerial photograph encompassing the project area and identifying the project area and total land areas with site improvements overlain. The aerial photograph shall be no older than the most recent aerials available from the County Manager or designee. Newer aerial photographs may be required for projects in

areas of major activity. The scale shall be no smaller than one (1) inch equals four hundred (400) feet.

14.07.05 Construction Requirements.

- A. Construction Plan Submittal Requirements. Construction plans shall be approved by the County Manager or designee before an applicant submits for final plat approval. Construction plans shall include the information required as a result of preliminary plat approval, plus the following detailed information:
1. Existing Conditions.
 - a. A soils map of the site overlain on the construction plan. Existing U.S.D.A. Soil Conservation Service maps are acceptable.
 - b. A map of vegetative cover based on the Florida Land Use and Classification System (FLUCS).
 - c. A detailed overall project area map showing existing hydrography and runoff patterns, and the size, location, topography, and land use of any off-site areas that drain onto, through, or from the project area.
 - d. Existing surface water bodies, wetlands, streams and canals within the proposed development site, including seasonal high water-table elevations and attendant drainage areas for each within the proposed development and within five hundred (500) feet of the boundaries of the proposed development .
 - e. Location, names and widths of existing roads, highways, easements, building lines, adjacent driveways, alleys, parks, sidewalks and other public spaces and similar facts regarding adjacent property within five hundred (500) feet of the boundaries of the proposed development.
 - f. The 100-year flood elevations.
 - g. Drainage basin or watershed boundaries identifying locations of the routes of off-site waters onto, through, or around the project.
 - h. Existing and proposed on-site wells.
 2. Proposed Subdivision Activities and Design.
 - a. Generally.
 - (1) Area and percentage of total site area to be covered by an impervious surface.
 - (2) Construction phase lines.
 - b. Potable Water and Wastewater Systems.
 - (1) Exact location and availability of capacity for potable water and wastewater facilities to serve the proposed site, including a description of required improvements or extensions of existing off-

site facilities.

- (2) Exact location of the nearest available public water supply and wastewater disposal system and the proposed tie-in points, or an explanation of alternative systems to be used.
- (3) The plans and profiles of proposed water distribution systems and sanitary sewers shall be at a horizontal scale equal to the scale shown on the subdivision plan with grades and sizes indicated. If piped systems of water supply and/or sewers are not proposed, then size and location of wells and drain fields shall meet the requirements of these regulations and the regulations of the Lake County Health Department. Easements, setbacks, and rights-of-way to provide future centralized services shall be shown.
- (4) The applicant shall provide the following information should the development require a central wastewater treatment.
 - (a) The applicant shall submit a signed and sealed copy of a complete Florida Department of Environmental Protection (FDEP) application for a wastewater treatment construction permit to the County Manager or designee for staff review and comments.
 - (b) The permit application shall be submitted with all construction plans, reports, details, and narratives as required by FDEP, and the County wastewater design standards. An engineering report shall be submitted with applications for new reuse or land application projects. The engineering report shall include the following:
 - (i) Exact boundaries of the land application area with setback distances on a one (1) foot topographical survey map.
 - (ii) Land uses within one (1) mile of the property.
 - (iii) Inventory of potable and nonpotable water supply wells and monitoring wells within one-half (0.5) mile radius of the land application site.
 - (iv) If expansion of the site is anticipated, the proposed future expansion-site location.
 - (v) Inventory of surface waters within one (1) mile of the land application site with their classifications, their approximate distances, and their uses identified.
 - (vi) A soil report on the proposed land application area to include the following information:
 1. A U.S.D.A. Soil Conservation Service soil map.

2. Site specific soil borings to indicate the physical characteristics of the various subsurface soil layers. The borings should be made to a depth of at least ten (10) feet below the average ground water table or to depth of at least twenty (20) feet below the lowest proposed grade of the land application area if groundwater is not encountered. Representative soil profiles shall be submitted and shall indicate physical and chemical characteristics of the subsurface soils pertinent to the design of the effluent disposal system such as the texture, the vertical and horizontal permeability values, the available water capacity, ph, organic content, etc. The locations of the soil borings and the locations and depths of the pertinent tests should be shown on the submitted plans.

(vii) A hydrogeologic survey to include the following information:

1. A proposed ground water monitoring plan, if applicable.
2. The direction and rate of existing ground water movement and the points of discharge; and the anticipated direction and rate of the ground water movement, and points of discharge after land application.
3. Flood prone areas within one-half (0.5) mile of the site. The frequencies and magnitude of the flooding shall also be indicated.
4. For rapid-rate and absorption field projects, a ground water mounding analysis based on development specific information shall be included.

(viii) For projects involving expansion of existing sites, Type III facilities, and slow-rate land application systems in public access areas, an abbreviated engineering report may be accepted if the applicant demonstrates that the facility has not or will not be a problem. However, for rapid-rate and absorption field systems, all engineering reports shall include a ground water mounding analysis.

- (5) Written documentation as to the legal entity responsible for maintaining the water and wastewater system. If the entity is a governmental unit, other than Lake County, the applicant must supply written proof in the appropriate form, by either a letter or resolution, that the governmental entity will accept the operation and maintenance of the stormwater management system, including lakes, easements, etc..

c. Streets and Driveways

- (1) The layout of all streets, sidewalks and driveways with paving and drainage plans showing existing and proposed elevations and grades of all public and private paved areas.
- (2) Typical cross sections and specifications of all proposed pavement.
- (3) Typical and special roadway and drainage sections.
- (4) Location of all temporary construction access.

d. Stormwater Management.

- (1) It is the responsibility of the applicant to include sufficient information for the County Manager or designee to evaluate the following:
 - (a) The environmental and hydraulic characteristics of the affected areas.
 - (b) The potential and predicted impacts of the proposed activity on community waters.
 - (c) The effectiveness and acceptability of those measures proposed by the applicant for eliminating or reducing adverse impacts.
 - (d) The ability of an entity to properly maintain the system.
- (2) At a minimum, the following information is required:
 - (a) Type of facility, e.g., detention, retention, swales.
 - (b) Method of conveyance of stormwater runoff, e.g., swales, curb and gutter, sheet flow.
 - (c) Location of stormwater retention/detention facilities.
 - (d) Pre-site and post-site drainage basin divides.
 - (e) Stormwater calculations, sealed by a professional engineer for all stormwater works, including design high water elevations for all applicable storm events.

- (f) Pre-site and post-site stormwater flows and stages for the site and retention/detention ponds including, but not limited to, the following:
 - (i) Pre-site hydrograph, post-site runoff hydrograph to the stormwater pond, and the routed post-site hydrograph discharged from the stormwater pond. Hydrographs shall be in accordance with the standards set forth by the St. Johns River Water Management District or the Southwest Florida Water Management District.
 - (ii) Pre-site and post-site runoff volumes.
 - (iii) Stage-area storage calculations for the stormwater pond.
 - (iv) Stage-discharge calculations for the outfall control structure, including tailwater assumptions.
 - (v) Treatment volume and recovery calculations for the stormwater pond and associated swales or works.
 - (vi) Soil storage or curve number calculations per sub-basin, including impervious calculations.
 - (vii) Time of concentration calculations per sub-basin.
 - (viii) 100-year floodplain compensating calculations, if applicable.
 - (ix) Recharge demonstration where required for Natural Resources Conservation Service (NRCS) Hydrologic Group A Soils.
- (g) Storm sewer, culvert and open channel tabulations including, but not limited to, the following:
 - (i) Location and type of drainage works.
 - (ii) Length of facility and dimensions including diameter, height, and/or width for pipes, and cross-sections for open channels.
 - (iii) Sub-basin areas tributary to each drainage work.
 - (iv) Runoff coefficient or curve number per sub-basin.
 - (v) Time of concentration to the inlet of each drainage work
 - (vi) Each stormwater flow to and from the stormwater work or junction point.

- (vii) Hydraulic gradient for the applicable storm event, including losses through works with friction and local loss coefficients.
 - (viii) Estimated receiving water elevation with sources of information, if available.
 - (ix) Velocities for all facilities and details for provisions to control erosion.
- (h) Geotechnical engineering shall be provided for the following:
- (i) Subsoil Report. A subsoil report shall be prepared by a geotechnical engineer, professional geologist or professional engineer experienced in the preparation of this type of report. The contents of the subsoil report shall include at a minimum, but not be limited to, soil borings which indicate American Association of State Highway and Transportation Officials (AASHTO) soil classifications, gradation, determination of existing (24-hour test) and wet season groundwater table, field determined vertical and horizontal soils permeability rates, soils porosity values, and the depth of the relative impermeable soil layer for determining the duration of the vertical infiltration. A minimum of two (2) borings will be taken per retention/detention area for each pond equal to or larger than ten thousand (10,000) square feet. A single boring may be acceptable for ponds less than ten thousand (10,000) square feet depending on existing site conditions and suitability of existing soil. Soil boring locations, date of borings, and reference elevations shall be included in the report.
 - (ii) Earthwork quantities.
 - (iii) Subdivision grading plan at a one (1) foot contour interval including roads, lots, detention basins and any excavation and fill.
 - (iv) Typical lot grading schemes.
 - (v) Density of the project.
- (i) Any other information that may be required by the County Manager or designee based upon size and type of proposed development.
- (j) Projects requiring a Management and Storage of Surface Waters Permit (MSSW), pursuant to Chapter 40C-4, Florida

Administrative Code, from the St. Johns River Water Management District or from the Southwest Florida Water Management District shall submit copies of all completed applications, and support documentation submitted for the MSSW permit.

- e. Environmentally Sensitive Lands.
 - (1) Detailed statement or other materials showing the percentage of the land surface of the site that is covered with natural vegetation and the percentage of natural vegetation that will be removed by development.
 - (2) The manner in which habitats of designated species are protected or mitigated.
 - (3) Location and description of proposed conservation easements.
 - (4) Evidence that the applicant has contacted all other state or local agencies having jurisdiction over environmentally sensitive lands.
- f. Signs. The location of all existing and proposed street and directional signs shall be shown.
- g. Land Use and Dedications.
 - (1) Location of all land to be dedicated or reserved for all public and private uses including rights-of-way, easements, special reservations, and the like.
 - (2) Amount of area devoted to all existing and proposed land uses, including schools, open space, churches, residential and commercial, as well as the location thereof.
 - (3) The total number and type of residential units categorized according to the number of bedrooms. The total number of residential units per acre (gross density) shall be given.
 - (4) Location of proposed site in relation to any established urban service areas.
- h. Wellfield Protection. Location of on-site wells, and wells within one thousand (1,000) feet of any property line requiring a consumptive use permit from the St. Johns River Water Management District or Southwest Florida Water Management District. Public supply wellfield protection shall be in accordance with section 6.03.00, Land Development Regulations. Wellfield protection areas and wellhead exclusion zones shall be indicated on all plans and drawings.
- i. Wildlife.
 - (1) Mitigation plan for impacts to designated species.
 - (2) Mitigation plan for loss of scrub habitat.