

**COUNTY OF KAUAI
DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION
SUBDIVISION PLAN CHECKLIST**

Applicants shall complete and submit the following checklist with their request for plan review and approval. Please retain a copy for your records. Information provided shall be indicated with an "X". The individual divisions of the Department of Public Works (DPW) and/or the Department of Water (DOW) may return the plans to the applicant without further review if all required information is not provided.

Project Title: _____ **TMK:** _____

Name of Owner/Developer: _____ **E-mail:** _____

Address of Owner/Developer: _____

All Subdivision Plans shall conform to the Subdivision Ordinance, Chapter 9, of the Kauai County Code, 1987, as amended.

Section 1. BASE INFORMATION

ALL PLANS SHALL INCLUDE THE FOLLOWING:

- A transmittal letter listing the items being submitted, title of the project, all DPW file numbers that are associated with the plans and contact person with telephone number and E-mail address included. Indicate whether the project is federal, state, county or private and whether it is being developed under the Subdivision Ordinance (Chapter 9).
- Title Sheet containing Title of Project, Owner's name and mailing address, County Subdivision Number, Tax Map Keys, Project Location map, Vicinity map, Company preparing plans, and applicable Approval Blocks.
- Index of drawings.
- Legend, abbreviations and symbols (sheet specific if necessary).
- All applicable construction notes.
- Scale (Engineering scale required for plans and profiles).
- North arrow.
- Existing and new property lines, with azimuths and distances. Include all setbacks, SMA & flood zone designations and base flood limits, where applicable.
- Street names and jurisdictional limits between County, State and private street right-of-ways, where applicable. Specify ownership or intended ownership and maintenance of streets.
- Easements, stating whether existing or new, width, purpose and to whom it is in favor of, where applicable.
- Bench mark (boxed).
- Base Lines, including azimuths, stations and coordinates.

- Licensed Professional Engineer's seal(s) or stamp(s), signature(s), authentication statements as provided in Section 16-115-9 of the Hawaii Administrative Rules, Title 16, Chapter 115 (preparation or supervision of design and observation of construction) and expiration date of the licensee(s) on every sheet in a set of design drawings. All signatures shall be original.
- All applicable approval blocks.
- Existing and proposed roadway topography, where applicable.
- Existing and proposed utilities (with sizes noted) and appurtenant structures, where applicable. Specify minimum horizontal and vertical clearances between proposed and existing utilities.
- Existing traffic signs, including specific sign messages, where applicable.
- Existing pavement markings, where applicable.
- Existing street light and traffic signal facilities, where applicable.

Section 2. SUBDIVISION PLANS

2.1 Typical Roadway Sections

- Applicable baseline stationing.
- Right-of-way, travelway, shoulder, curb, gutter and sidewalk widths.
- Typical cross-slopes.
- Pavement structure and subgrade details.

2.2 General Site Plan

- Adjacent existing or proposed subdivisions.
- Adjacent existing or proposed roadways and access points.
- Lot lines.
- Exterior boundary of subdivision.

2.3 General Utility Plan

- Same information as General Plan.
- Proposed major utilities, such as wastewater, water, and drainage.
- Existing utilities that will be connected to.

2.4 General Grading Plan

- Same information as General Plan.
- Existing contours.
- Lot and roadway grading incorporating proposed finish contours.
- Limits of grading.

2.5 Demolition Plan (if necessary)

- Extent of removal of existing site infrastructure, including structures, pavements, sidewalk, curbs, gutters, utilities, landscaping, etc.
- Special details and provisions for temporary service, such as access, and utility service.

2.6 Roadway Plan and Profiles (scale: 1"=40')

Roadway geometric design shall follow "County Road Standards," of the Department of Public Works, County of Kaua'i, December 1972, the "Subdivision Ordinance," "Standard Details for Public Works Construction, September 1984" and the American Association of State Highway and Transportation Officials' (AASHTO) "A Policy on Geometric Design of Highways and Streets, 2005," as amended. Plans shall include:

- Right-of-way and adjacent lot lines.
- Baseline data, including horizontal curve data, central angle, radius, tangent length, chord length, curve length, chord azimuth, PC and PT stationing.
- Horizontal control.
- Vertical curve data, including slopes, PIVC, BVC, EVC, and change in grades.
- Roadway pavement, travelway lane, shoulder, curb, gutter, sidewalk, curb ramps and pedestrian ways, including width and material type, i.e. concrete, asphaltic concrete, etc. Accessible routes such as curb ramps, sidewalks and pedestrian ways within the County road right-of-way shall be reviewed and approved by the Disabilities and Communications Access Board (DCAB).
- Proposed wastewater, water, drainage, electrical, telephone, CATV, irrigation and gas utilities, including type, size, baseline stationing and offset for manholes, cleanouts, valves, vaults, inlets, bends, tees, crosses, fire hydrant connections and other appurtenances.
- Proposed utility service laterals and meter boxes, including water, sewer, electrical, telephone, CATV and gas.
- Street Monuments and/or centerline monuments with northing and easting coordinates and elevation.
- Existing utilities that will be connected to.
- Adjacent existing or future roadways or subdivisions.
- Utility easements including widths and use.
- Roadway and utility profiles at same horizontal scale as plan (1"=40' typical), and exaggerated vertical scale at reasonable scale (e.g. 1"=8'). Utility profiles shall include type, size, lengths, baseline stationing and top and invert elevations for utility lines, manholes, cleanouts, valves, vaults, inlets, bends, tees, crosses, fire hydrant connections and other appurtenances. Also include clearances, pipe cover, elevation at grade changes, slopes and hydraulic grade lines.
- Existing grade and proposed grades at baseline of roadway, including percentage slope of proposed grades.
- Location, type and use of geotextiles for subbase treatment, slope protection, shoulder stabilization.

2.7 Grading and Drainage Plan (scale: 1"=40')

- Existing topography including contours, spot elevations, existing features.
- Lot and roadway grading incorporating proposed finish contours and spot elevations.
- Proposed drainage facilities including drainage collection system, inlets, culverts, pipelines, basins, swales, channels, energy dissipators, etc.
- Proposed drainage pattern and flood limits in major gulches, streams, and drainageways.
- Limits of grading, and cut and fill lines.
- Benchmark for vertical control.

2.8 Signage and Pavement Marking Plan (scale: 1"=40')

- Design shall be in accordance with the Manual on Uniform Traffic Control Devices (MUTCD), as amended.
- Right-of-way and adjacent lot lines.
- Edge of travelway and pavement shoulder.
- Dimensions and details for pavement markings including striping, pavement words, crosswalks, raised pavement markers, arrows, symbols, etc.
- Signage including location, type and size.
- Standard details of all applicable traffic related work, including sign installation, pavement markings, traffic signal and street lighting work, etc.
- Traffic Control Plan showing direction of traffic flow in each lane, location of driveways, curb ramps, traffic signals, etc., provisions for pedestrian accessible path, and temporary detours and road closures if necessary, with supporting written justification.

2.9 Erosion Control Plan

- Limits of Clearing and Grubbing or Grading.
- Temporary Erosion Control.
- Permanent Erosion Control.
- Best Management Practices.
- Erosion Control Details and Notes.
- Flood limits in major gulches, streams, and drainageways.

2.10 Roadway Cross Sections

- Existing and Proposed Grades.
- Location of Baseline and Right-of-Way lines.
- Pavement, shoulders, curb, gutter and sidewalk.
- Excavation and Embankment quantities.

2.11 Details

- Curb Ramp Details.
- Return Details.
- Typical Trench Sections.
- Site Improvement Details, e.g. Curb, gutter, sidewalk, pavement details.
- Drainage System Details.
- Water System Details.
- Sewer System Details.
- Retaining Wall or other Structural Details.
- Guardrail Details.
- Grading Details.

2.12 Electrical Plans

Obtain approvals from Kaua'i Island Utility Cooperative (KIUC), Hawaiian Telcom, and Oceanic Time Warner Cable, prior to obtaining approvals from the County.

- General Site Plan.
- Equipment Schedule, Notes and Legend.
- Roadway Electrical, Telephone, and CATV plans.
- Street Light Plans.
- Typical Duct Sections and Conduit Schedule.
- Typical Electrical, Telephone and CATV details, including but not limited to meters, handholes, transformer pads, pullboxes, equipment enclosures, manholes, street lights and utility poles.

Section 3. GRADING PERMIT REVIEW

If a Grading Permit is required, prepare a Grading Plan providing all applicable information listed below, in accordance with the "Sediment and Erosion Control Ordinance," Ordinance No. 808, amending Chapter 22, Article 7 of the Kaua'i County Code 1987, Relating to Grading, Grubbing, and Stockpiling:

- Vicinity Map and North arrow, property lot lines, easements, setback lines
- Location of any building, structure, and improvements on the property where the work is to be performed and the location of any building structure on adjacent land which is within fifteen (15) feet of the property to be graded.
- Existing topography and elevations showing the existing ground by contours or other means and extending fifteen (15) feet into the adjacent property, including existing drainage patterns.
- Elevations, dimensions, location, extent and slopes of the proposed grading, including grading limits, shown by contours or other means.
- Roadway and site cross-sections, indicating the total area in square feet of the land to be disturbed, quantities of excavation and embankment involved and the method of calculation.
- Location of any known historic properties or burial sites on the project site.

- Best Management Practices to be used to control dust emissions, sedimentation, and erosion to the maximum extent practicable by watering with trucks or sprinklers, erection of dust and silt fences, limiting the area of disturbance, and timely grassing of disturbed areas.
- Description of imported fill material, and the borrow site source and location. Note that the borrow site will be required to have a separate grading permit in accordance with the Sediment and Erosion Control Ordinance.
- Location and elevation of benches for cut or fill slopes in excess of 15-feet in height.
- The following additional requirements apply for areas more than one (1) acre, grading in excess of 500 cubic yards total, or where the average land slope is greater than twenty (20) percent:
 - Contour maps shall be stamped by a Professional Land Surveyor or Professional Civil Engineer currently licensed in the State of Hawaii.
 - Grading and Sediment and Erosion Control plans shall be stamped by a Professional Civil Engineer currently licensed in the State of Hawaii.
 - Where an area is to be graded in increments, plans for the future development of the area.
 - If the land is to be subdivided, the Applicant shall obtain tentative subdivision approval from the Kaua'i County Planning Commission.
 - Drainage and Erosion Control Plan showing the scheme for controlling erosion and disposal of runoff water.
 - A schedule of construction operations to accomplish temporary and permanent erosion control work.
 - A Geotechnical Engineer's soils report as required by the provisions of the ordinance, including pavement and grading recommendations.
 - A letter from the Geotechnical Engineer, certifying that the Grading Plans and Specifications, conform to the recommendations contained in the soils report.

If a Grubbing Permit is required, provide:

- Plot plan, showing the existing topography, limits of grubbing and area of grubbing.
- Sediment and Erosion Control Plan.
- Statement indicating the disposition of material.

If a Stockpiling Permit is required, provide:

- Erosion Control Plan.
- Plot plan, showing the existing topography and the location of the proposed stockpile, quantities, height of stockpile and life of stockpile.
- If the stockpile is for the purpose of surcharging to stabilize or consolidate an area, submit a Geotechnical Report (two copies), with Soils Engineer's Conformance Letter (one copy).

If grading, grubbing, stockpiling and/or trenching occur over adjacent properties/easements, submit a letter of authorization to perform the work from the adjacent property owner/easement holder.

Section 4. DRAINAGE REVIEW

All subdivision drainage systems shall be designed in accordance with the County of Kaua'i, Department of Public Works' "Storm Water Runoff System Manual," dated July 2001. Subdivision plan submittal shall include:

- Plans showing the proposed drainage facilities including drainage collection system, culverts, inlets, pipelines, basins, etc. Also, see Section 2.6, 2.7 and 2.9 above.
- Proposed drainage pattern.
- Flood Information, such as FEMA designated flood zones, floodways, elevations, and building setback lines.
- Plan and Profiles of Major Drainage Structures, such as roadway culvert crossings, detention basins, special structures. Include drainage hydrological and hydraulic data, Flow rates and areas (Q's and A's), and Hydraulic grade line (HGL), with supporting information for starting HGL.
- Where drainage system structural details are required, provide stamped and signed plans and calculations by a licensed Professional Structural Engineer.
- If a project or proposed work may affect the drainage in terms of quantity, direction, drainage connection and/or discharge point, submit a Drainage Report, (2 copies stamped and signed by Hawaii licensed engineer) which shall include description of existing and proposed drainage conditions, hydrologic map and data, calculations and supporting information following the "Storm Water Runoff System Manual."
- If a project or proposed work may affect the hydraulics of a stream (i.e., changing the limits and/or water surface of the stream), provide a Stream Study.
- If a project or proposed work is located in a floodway and is not above the floodway elevation, provide "No Rise" Documents.
- If a habitable structure(s) will be constructed in a flood zone, provide the minimum floor elevation(s).

Section 5. STRUCTURAL REVIEW

Prepare structural calculations, details, basis of design and design notes and obtain Building Division approval for:

- Special manholes, catch basins, inlets, outlets, headwalls, open channels and box culverts that will be dedicated to or maintained by the County.
- Retaining walls that:
 - are needed for grading work in new subdivisions.
 - retain a public road or easement or are adjacent to public roads or easements.
 - retain a private road that is used by the public.
 - retain private property next to a public road.
- Bridges that will be dedicated to the County.
- Alterations to existing County owned or maintained structures.

Section 6. WASTEWATER REVIEW

All subdivision sewer systems shall be designed in accordance with the County of Kaua'i, Department of Public Works' "Sewer Design Standards," dated June 1973. Subdivision plan submittal shall include:

- All existing sewer construction in plan and profile. See Section 2.6 above.
- Proper horizontal and vertical clearances between sewer lines and all water lines, other utilities and conduits, and their appurtenances, and County approved protective measures, as required.
- Sewer manhole adjustments and / or reconstructions as required by project, and in compliance with County Standard Details for Public Works Construction.
- Include electrical and street tree planting plans showing minimum horizontal clearance from sewer lines, and County approved protective measures as required.
- Preliminary Engineering Report or Master Plan (if required) in accordance with "Sewer Design Standards," including but not limited to demand calculations, hydraulics, and pump station design.
- Standard sewer notes.

DECLARATION:

To the best of my knowledge, all information marked with an "x" is shown on the plans. I understand that a) these plans may be returned to me without further review by the individual divisions of the Department of Public Works and/or the Department of Water until such time that I provide all required information and b) the owner/developer will be notified of the action taken.

Affix Licensed Professional Engineer's Stamp and Sign Date

TYPICAL APPROVAL BLOCKS

Director, Department of Planning Date
County of Kaua'i

County Engineer, Department of Public Works Date
County of Kaua'i

Manager and Chief Engineer, Department of Water Date
County of Kaua'i

Chief, Environmental Management Division Date
Department of Health, State of Hawai'i

Administrator, Highways Division Date
State Department of Transportation (Approval Granted for Work
Within State Right-of-Way Only, I.D. No. _____
Letter of Approval No. Hwy T _____ Dated _____)