

FORM #102 INSTRUCTIONS

POTTAWATTAMIE COUNTY, IOWA COMBINED APPLICATION COMMERCIAL CONSTRUCTION PERMIT INSTRUCTIONS

Office of Planning and Development (712) 328-5792

PERMITS BEING APPLIED FOR

THIS PERMIT PACKET CONTAINS APPLICATIONS FOR ALL OF THE PERMITS THAT ARE REQUIRED TO CONSTRUCT IN POTTAWATTAMIE COUNTY, IOWA. YOU WILL NEED TO CONTACT THE COUNTY ENGINEER (712-328-5608) FOR A COUNTY ROAD ENTRANCE PERMIT OR THE IOWA DEPT OF TRANSPORTATION (712-323-6125) FOR A STATE ENTRANCE PERMIT. **The property owner, building contractor, septic installer and well driller must sign the “signature page” of this application. Please be sure that you want to proceed with this project when you submit your application. The fees that you submit are not refundable once the application is submitted.**

SECTION A - GENERAL INFORMATION

WHEN PERMITS ARE READY? Check the appropriate box to indicate how you would like to know when your permits are ready.

PROPERTY OWNER: Name, current mailing address, current email address and current telephone number (**telephone number where the property owner can be reached between 8:00 A.M. & 4:30 P.M.**) of the owner of the property. Please check the appropriate box to tell us the best way to contact the property owner during the day.

APPLICANT: Name, current mailing address, current email address and current telephone number (**telephone number where the applicant can be reached between 8:00 A.M. & 4:30 P.M.**) of the individual completing the application, if other than the property owner. Please check the appropriate box to tell us the best way to contact the applicant during the day.

PROPERTY INFORMATION

JOB SITE ADDRESS: Address of the property where the proposed work is going to take place. If this address is the same as the current mailing address, check the box *Same As Above*. If the proposed construction is for a new house or business, check the box *To be assigned by the Planning Dept.*. *The address for a new structure is assigned based on where your driveway intersects the public road. Therefore, you will need to provide us with the distance of the centerline of your driveway from a side lot line.*

CIVIL TOWNSHIP: Name of the township where the subject property is located. Example: Lake, Lewis, York, Center, etc.

LEGAL DESCRIPTION: Legal description of the subject property, which can be taken from your tax statement or the deed for the property. Check the box *Per Attachment* and include a copy of the deed with the application if the legal description is lengthy.

PARCEL NUMBER: The Parcel Number for your property can be taken off of your tax statement.

AIRPORT HAZARD ZONE: This data can be furnished to you by the Planning Dept. If your property is located in an Airport Hazard Zone, this permit will be subject to the provisions of the Airport Hazard Zone regulations.

ZONING DISTRICT: This data can be furnished to you by the Planning Dept.

PERMITS BEING APPLIED FOR This application packet is for several different permits that in some cases are required to be applied for together, for example a new house in the floodplain would be required to fill out all Sections. Please review each Section and check the *that is appropriate for your particular situation.*

SECTION B – BUILDING PERMIT

BUILDER: Name, current mailing address, current email address and current telephone number of the builder. Please check the appropriate box to tell us the best way to contact the builder during the day.

LICENSED IOWA CONTRACTORS: Name and Iowa State License # is required for the electrical, plumbing and mechanical contractors. If they are not known at the time of application, as soon as you have selected the respective professional, contact the Building Division with this information (712-328-5847). If you have two different contractors that you are considering, put both names in the blanks provided. If you put a contractor's name on the form and you decide to change after the permit has been issued, contact the Building Division with the modified information.

IMPROVEMENTS DESCRIPTION

VALUATION ESTIMATE: Complete Valuation Calculation Form included in this packet and enter estimated construction value in this line.

USE OF STRUCTURE: Check the appropriate box.

WORK CLASSIFICATION: Check the appropriate box.

DESCRIPTION OF WORK: Check the appropriate box(es).

BULK ZONING STANDARDS: The information required in the “minimum” and “maximum” spaces will be furnished by the Planning Dept. You will need to complete the “Proposed” column. **NOTE:** To calculate the required front yard setback or street side yard setback you begin measuring from the road right-of-way line, **not** the center of the road and **not** the edge of the road surface.

SECTION C - SEPTIC PERMIT

ONLY if the septic system is classified as an “Onsite Wastewater Treatment and Disposal System” can you proceed with Section C for a Septic Permit. An Onsite Wastewater Treatment and Disposal System is defined as “all equipment and devices necessary for proper conduction, collection, storage, treatment and disposal of wastewater from four or fewer dwelling units or other facility serving the equivalent of 15 persons (1,500 gallons per day) or less. This includes domestic waste whether residential or nonresidential but does not include industrial waste of any flow rate. Included within the scope of this definition are building sewers, septic tanks, subsurface

absorption systems, mound systems, sand filters, constructed wetlands and individual mechanical/aerobic wastewater treatment systems.

SEPTIC INSTALLER, MAILING ADDRESS, E-MAIL ADDRESS, TELEPHONE AND BEST WAY TO CONTACT AND INSTALLER'S

REGISTRATION #: Name, telephone number and mailing address of the commercial installer. The installer can give you his County registration number or you can get it from a list available at the Planning Office. If you as the homeowner are not installing this system, a County registered commercial septic installer must install the septic system.

SYSTEM TO SERVE: Check the appropriate box.

STRUCTURE TYPE: Specify structure type and estimated flow rates.

WATER SUPPLY: Complete as indicated.

Note that a "Public Water Well" is defined as "A system for the provisions to the public of piped water for human consumption, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year." If your property is next to a restaurant, bar, church or other similar public place it is your responsibility to confirm if the well is public. You can contact the Iowa Department of Natural Resources for information at (712) 243-1934.

PERCOLATION TEST: This test must be performed by Pottawattamie County Planning or a licensed professional engineer.

SEPTIC SYSTEM DESIGN:

Septic Tank: The minimum standard for a septic tank is 2 compartments. Septic tank capacity will be determined by the attached "Appendix A, Estimates of Nonhousehold Domestic Sewage Flow Rates".

250 gallons of capacity shall be added to the tank volumes if a kitchen garbage disposal unit, water softener or high volume water use fixture such as a whirlpool bath is in the structure or planned for the structure.

Absorption System: Check the appropriate box for the type of system that you propose to construct. In order to determine the "gallons per day" for secondary treatment and septic tank refer to the attached "Appendix A, Estimates of Nonhousehold Domestic Sewage Flow Rates".

SOIL ABSORPTION SYSTEM SIZING CHART (Lineal Feet of Absorption Trench)

Minutes Per Inch	300 gallons/day ⁽¹⁾	450 gallons/day	600 gallons/day	750 gallons/day	900 gallons/day
1-5 ⁽²⁾	160'	200'	260'	340'	400'
6-15	200'	300'	400'	500'	600'
16-30	300'	400'	500'	600'	700'
31-45	400'	500'	600'	800'	900'
46-60	500'	600'	700'	900'	1,100'

⁽¹⁾ For domestic, nonhousehold wastewater flow rates, refer to Appendix A.

⁽²⁾ For soils having more than 50% of very fine sand by weight, plus fine sand having a particle size range of 0.05 millimeters (sieve size 270) to 0.25 millimeters (sieve size 60), the 16 to 30 minutes per inch values shall be used when gravelless pipe is installed.

The values shown above shall be increased by 20% for 8" gravelless pipe and decreased by 25% for chambers greater than 33" in width.

HOW FAR AWAY DOES MY SEPTIC TANK AND LATERALS NEED TO BE FROM VARIOUS PHYSICAL FEATURES ON MY PROPERTY AND THE PROPERTIES NEAR MINE?

	From Septic Tank To	From Laterals To
Private Water Well	50'	100'
Public Water Well	200'	200'
Ground Water Heat Pump Boring	50'	100'
Lake/Reservoir	50'	100'
Stream/Pond	25'	25'
Dwelling/Structure	10'	10'
Property Lines	10'	10'
Other Type Subsurface Treatment System	5'	10'
Water Lines Continually Under Pressure	10'	10'
Suction Water Line	50'	100'
Foundation Drain or Subsurface Tile	10'	10'

SECTION D - WELL PERMIT

ONLY if the well is classified as a private water well can you proceed with Section D. If the well is classified as a public water well, which is defined as "a system for the provision to the public of piped water for human consumption, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. The term includes (1) any collection, treatment, storage and distribution facilities under control of the supplier of water and used primarily in connection with the system and (2) any collection (including wells) or pretreatment storage facilities not under the control which are used primarily in connection with the system." If the well is classified as a public water well you MUST obtain and have documentation that a Public Water Well Permit has been issued through the Iowa Department of Natural Resources.

DRILLER, MAILING ADDRESS, E-MAIL ADDRESS, TELEPHONE AND BEST WAY TO CONTACT AND DRILLER'S STATE

REGISTRATION #: Name, mailing address, telephone number and registration number of the driller. The driller can give you his State registration number or you can get it from a list available in the Planning Office. An Iowa State certified driller must drill the well.

PROPOSED WELL:

Use: Select the appropriate code using Table A, Section D on the permit application.

Status: Select appropriate code using Table B, Section D on the permit application.

Estimated Depth: Denote estimated depth of the well. The well driller should be able to give you this information.

EXISTING WELL:

Use: Select the appropriate code using Table A, Section D on the permit application.

Status: Select appropriate code using Table B, Section D on the permit application.

Estimated Depth: Denote depth of the well, if known, or if not known, the estimated depth.

Date of Construction: Denote, to the best of your knowledge, what date (month/year) the existing well was constructed.

HOW FAR AWAY FROM POTENTIALS OF SOURCES OF CONTAMINATION MUST MY WELL BE?	Minimum Lateral Distance (Feet) Shallow Well	Minimum Lateral Distance (Feet) Deep Well
Sources of Contamination		
Formed manure storage structure, confinement building, feedlot solids settling facility, open feed lot	200'	100'
Public Water Supply Well	400'	200'
Earthen manure storage basin, runoff control basins and an aerobic lagoons	1,000'	1,000'
Domestic wastewater lagoons	400'	400'
Sanitary landfills	1,000'	1,000'
Preparation or storage areas for spray materials, commercial fertilizers or chemicals that may result in groundwater contamination	100'	100'
Drainage wells	1,000'	1,000'
Conforming wells	10'	10'
Nonconforming wells	100'	100'
Soil absorption field, any sewage treatment system with an open discharge, pit privy or septic tank discharge line	100'	100'
Septic Tank, concrete vault privy, sewer of tightly joined tile or equivalent material, sewer-connected foundation drain or sewers under pressure	50'	50'
Sewer of cast iron with leaded or mechanical joints, sewer of plastic pipe with glued or compression joints, independent clear water drains, cisterns, well pits, or pump house floor drains	10'	10'
Hydrants	10'	10'
Property lines	4'	4'
Liquid hydrocarbon storage tanks	100'	100'
Ditches, streams, ponds or lakes	25'	25'

IF YOU PROPOSE TO INSTALL A GEOTHERMAL WELL SYSTEM AND IT IS NOT INCLUDED WITH THIS PERMIT APPLICATION PACKET, A SEPARATE PERMIT AND FILING FEE (\$235) WILL BE REQUIRED. SEE APPLICATION #5 AND COMPLETE AND INCLUDE WITH THIS APPLICATION PACKET AND DIAGRAM WHERE THE GEOTHERMAL WELLS WILL BE LOCATED ON THE SITE.

SECTION E – FLOODPLAIN DEVELOPMENT PERMIT

TYPE OF DEVELOPMENT: Check the appropriate box.

DETAILED DESCRIPTION OF DEVELOPMENT: Describe in detail the work that is proposed to be completed; however, if you cannot do so in the space provided, attached a separate sheet with all of the information.

EXISTING STRUCTURE NON-CONFORMING: Consult with the Planning Director (328-5792) about this issue and then check the appropriate box.

EXISTING STRUCTURE SIZE: Indicate the square footage of the existing structure being altered, if applicable.

EXISTING STRUCTURE VALUE/SOURCE OF VALUE: The value of the structure shall be given at it's pre-altered or pre-damaged value as given by the Assessor or a current appraisal.

ESTIMATED COST OF IMPROVEMENTS: Include the cost of all labor and materials that will be used to improve an existing structure. You must include the cost that a contractor would change to do the work (even if you are not using a contractor) and the cost of new materials (even if you are using used materials).

IS PROPERTY LOCATED IN A DESIGNATED FLOODWAY? Consult the current FEMA Flood Insurance Rating Maps to obtain this information.

IS PROPERTY LOCATED IN A DESIGNATED FLOODWAY FRINGE? Consult the current FEMA Flood Insurance Rating Maps to obtain this information.

ELEVATION INFORMATION: This information can be taken from the Elevation Certificate that you obtain from your surveyor.

OTHER PERMITS REQUIRED? Consult with the Planning Director (328-5792) about this issue and you will be advised of the other permits required.

SECTION F – ENERGY CODE WORKSHEET

Design Conditions: Climate Zone 5
International Energy Conservation Code (IECC), 2012

The International Energy Conservation Code, 2012, is adopted by reference as the required energy code of the State of Iowa, applicable to new commercial or high-rise residential buildings, additions, and alterations throughout the State of Iowa on or after June 1, 2014.

Select one of the options for compliance. COMcheck™ report can be found at www.energycodes.gov/comcheck.

You should note that it will be the builders/designers responsibility to insure that the construction of this project is compliant with the improvements that will make the structure compliant with the 2012 IECC. Failure to supply the County with the documentation will result in the County withholding the issuance of the Certificate of Occupancy.

SECTION G - ATTACHMENTS

- A. Plan Submittal Requirement for Building Permit: See attached.
- B. Site Plan: See Example. You will need to draw, on a separate sheet of paper, a site plan, to scale. The scale should be either 1"=10', 1"=20', 1"=30', 1"=40', 1"=50' or 1"=60'.
- C. Site Plan Check List: Complete the attached site plan check list and make sure that the information requested is shown on your site plan, unless you have marked the "None Exist on Site" box.
- D. Percolation Test Results: The percolation test report must be signed.
- E. Entrance Permit: If a new entrance is required you must contact the appropriate authorities. For entrance permits along a county road, contact the County Engineer (328-5608). For entrance permits along a state highway contact the Iowa Department of Transportation (323-6125).
- F. Filing Fees: Checks are made payable to the County Treasurer. Estimated fees will be collected at the time of application per the Valuation Calculation Form. Additional fees may need to be paid after the Plans have been reviewed by the Chief Building Official. Those fees must be paid before your permits will be release to you. **Please make certain that you want to proceed with this project when you submit your application. The fees that you submit are not refundable once the application is submitted.**
- G. Floodplain Elevation Certificate: You will obtain this document from a registered Iowa land surveyor.
- H. Commercial Energy Code Worksheet
- I. Grading Permit Applicaton

SIGNATURES

BUILDING CONTRACTOR'S CERTIFICATION OF SITE EVALUATION: Each major contractor (building contractor, commercial septic installer, and well driller) is required to conduct a site evaluation of this property prior to the applications being submitted. Those contractors must sign and acknowledge that they have viewed the site and agree with the proposed site development plan. If in the development of the site, contractors are changed, you will need to notify this Office and that contractor will need to likewise acknowledge that they agree with the proposed site development plan. Any and all changes to the site development plan after permits are issued shall be given in writing to this Office. In conducting a site evaluation for a zoning permit, *consideration shall be given to, but not limited to, the impact of the following: topography; location of property lines; location of easements; buried utilities; existing and proposed septic systems; existing, proposed and abandoned water wells.* **YOUR BUILDING CONTRACTOR MUST SIGN THIS SECTION.**

COMMERCIAL SEPTIC INSTALLER'S CERTIFICATION OF SITE EVALUATION: Each major contractor (building contractor, commercial septic installer, and well driller) is required to conduct a site evaluation of this property prior to the applications being submitted. Those contractors must sign and acknowledge that they have viewed the site and agree with the proposed site development plan. If in the development of the site, contractors are changed, you will need to notify this Office and that contractor will need to likewise acknowledge that they agree with the proposed site development plan. Any and all changes to the site development plan after permits are issued shall be given in writing to this Office. In conducting a site evaluation for a septic permit, *consideration shall be given, but not be limited, to the impact of the following: topography; drainage ways; terraces; floodplain; percent of land slope; location of property lines; location of easements; buried utilities; existing and proposed tile lines; existing, proposed and abandoned water wells; amount of available area for the installation of the system; evidence of unstable soils; ground alteration (cutting, filling, compacting) of existing soil profile; and soil factors determined from a soil analysis, percolation tests and soil survey maps if available.* **YOUR COMMERCIAL SEPTIC INSTALLER MUST SIGN THIS SECTION.**

IOWA CERTIFIED WELL DRILLER'S CERTIFICATION OF SITE EVALUATION: Each major contractor (building contractor, commercial septic installer, and well driller) is required to conduct a site evaluation of this property prior to the applications being submitted. Those contractors must sign and acknowledge that they have viewed the site and agree with the proposed site development plan. If in the development of the site, contractors are changed, you will need to notify this Office and that contractor will need to likewise acknowledge that they agree with the proposed site development plan. Any and all changes to the site development plan after permits are issued shall be given in writing to this Office. In conducting a site evaluation for a well permit, *consideration shall be given, but not be limited, to the impact of the following: topography; drainage ways; terraces; floodplain; location of property lines; location of easements; buried utilities; existing and proposed tile lines; existing, proposed and abandoned water wells.* **YOUR IOWA CERTIFIED WELL DRILLER MUST SIGN THIS SECTION.**

PROPERTY OWNER'S CERTIFICATION: Property owner must sign and date the application.

WHAT DO I NEED TO DO TO MAKE SURE MY APPLICATIONS ARE PROCESSED AS QUICKLY AS POSSIBLE?

There are several factors that can substantially delay the issuance of permits. Items that cause a delays are: incomplete applications, the property not being transferred into the person(s) name listed as property owner on the application, no scaled drawing or inaccurate drawings, lack of percolation test results, inaccurate percolation test map, unlicensed contractors, proposed improvements not being physically staked out at the construction site, incorrect filing fees, changing contractors after the applications are filed, changing the site plan after the applications are filed and/or not having all required signatures on the applications included. Please carefully review all of the required submittals and it will help us to expedite processing your application.

WHEN CAN I EXPECT TO RECEIVE MY PERMIT?

Once the application has been *properly* filed with the Office of Planning and Development, 223 South 6th Street, Council Bluffs, Iowa, it will be reviewed by the Planning Director and the Chief Building Official. If everything is found to be in order and to comply with regulations of the appropriate ordinances, a site evaluation will be done by the Zoning and Health Inspector and a permit will be issued within approximately ten (10) working days.

INCOMPLETE APPLICATIONS WILL NOT BE PROCESSED

DO NOT START CONSTRUCTION UNTIL PERMITS ARE RECEIVED IN THE MAIL AND PLACARDS ARE POSTED.

FAILURE TO WAIT FOR PERMITS AND POST PLACARDS WILL CAUSE YOU TO HAVE TO PAY AN INVESTIGATION FEE, WHICH IS DOUBLE THAT OF ANY PERMIT FEES YOU PAY. ADDITIONALLY, FAILURE TO OBTAIN PERMITS PRIOR TO STARTING CONSTRUCTION COULD RESULT IN THE ISSUANCE OF A CITATION OF COUNTY INFRACTION. OUR GOAL IS TO HAVE PERMITS OBTAINED PRIOR TO CONSTRUCTION STARTING. PLEASE HELP US ATTAIN THIS GOAL BY APPLYING FOR AND OBTAINING YOUR PERMITS BEFORE STARTING CONSTRUCTION.

NOTE: *The data contained in this document is for reference purposes only. For the specific regulations, you should refer to the Pottawattamie County, Iowa, Code. Data contained in this document is subject to change without further notice to recipients of this document.*

**APPENDIX A
ESTIMATES OF NON-HOUSEHOLD DOMESTIC SEWAGE FLOW RATES**

SOURCE OF USE FOR SEWAGE UNIT	UNITS	AVERAGE (SECONDARY TREATMENT UNIT SIZING)	MAXIMUM (SEPTIC TANK)
DWELLING UNITS			
Hotels or luxury motels	Each guest	50	60
	Add per employee	11	13
Or	Per Square Foot	0.26	0.30
Discount motels	Each guest	30	40
	Add per employee	11	13
Or	Per Square Foot	0.22	0.46
Rooming house	Each resident	40	50
	Add per nonresident meal	2.5	4.0
COMMERCIAL/INDUSTRIAL			
Retail stores	Per square foot of sales area	0.1	0.15
Or	Each customer	2.5	5
	Plus each employee	11	15
Or	Each toilet room	530	630
Office	Each employee	15	18
Or	Per square foot	0.1	0.25
Medical offices	Per square foot	0.6	1.6
Industrial buildings	Each employee (Does not include process water or cafeteria)	15	20
Construction camp	Each employee	15	20
Visitor center	Each visitor	5	20
Laundromat	Each machine	580	690
Or	Each load	50	50
Or	Per square foot	2.2	2.9
Barber shops	Per chair	55	80
Beauty shops	Per station	270	300
Car washes	Per inside square foot (Does not include car wash water)	5	10
EATING AND DRINKING ESTABLISHMENTS			
Restaurant	Per meal (Does not include bar or lounge)	2.5	4.0
Or	Each seat	24	40
	Plus add for each employee	11	13
Dining hall	Per meal	2.5	4.0
Coffee shop	Each customer	2.0	2.5
	Add per employee	11	13
Cafeteria	Each customer	2.0	2.5
	Add per employee	11	13
Drive-in	Per car stall	110	145
Bar or lounge	Each customer	2.0	5.5
	Add per employee	13	16
Or	Per seat	32	40
Country club (no meals)	Per member	22	22
Or	Per member-meals and showers	105	130
Or	Per member in residence	75	100

RESORTS			
Housekeeping cabin	Per person	42	50
Lodge	Per person	53	74
Parks/swimming pools	Per guest	10	13
Picnic parks with toilets only	Per guest	5	10
Movie theaters	Per guest	2.5	4
Drive-in theaters	Per space	3	5
Skating rink/dance hall	Per customer	7	10
Bowling lanes	Per lane	133	200
TRANSPORTATION			
Airport, bus or rail depot	Per passenger	2.5	4.0
Or	Per square foot	3.33	6.5
Or	Per public restroom	500	630
Auto service station	Each vehicle served	11	13
	Add per employee	13	16
Or	Per inside square foot	0.25	0.60
Or	Per public restroom	500	630
INSTITUTIONAL			
Hospitals	Each medical bed	175	250
	Add per employee	10	16
Mental institution	Each bed	105	175
	Add per employee	10	16
Prison or jail	Per inmate	120	160
	Add per employee	10	16
Nursing home	Each resident	93	145
	Add per employee	10	16
SCHOOLS AND CHURCHES			
School	Per student-no gym, cafeteria or showers	10	17
	Per student-cafeteria only	16	17
	Per student-cafeteria, gym & showers	20	30
Board school	Per student	75	115
Churches	Per member	0.14	0.86
	Add for each kitchen meal	1.0	1.0
	Add per Sunday School students	0.14	0.86
RECREATIONAL			
Campground with hookups	Per person	32	40
Or	Per site with central bath	100	100
	Per site	50	75
	Add for dump station with hookup	13	16
Day camp (no meals)	Per person	13	16
Weekly overnight camp	Per member	33	33

PLAN SUBMITTAL REQUIREMENT FOR COMMERCIAL & INDUSTRIAL BUILDINGS

This Includes Tenant Improvements, Additions, Remodels and Accessory Structures

General Information for Submittal

- Submit two (02) complete sets of plans in blueprint or photocopy form, with a Plan Review Fee.
 - Provide two (02) additional plot (site) plans if parcel is on septic along with a completed septic permit application
 - Pencil drawings or original drawings are not acceptable
- Plans prepared by an Iowa Registered Professional must be wet stamped, signed and dated on all sheets.
- For commercial and industrial building permits, the Building Official will require applications applicable to the adopted Codes to have plans, computations and specifications prepared, designed, and sealed by an architect and/or professional engineer licensed by the State of Iowa. The professional engineer shall be classified for the branch of engineering he was examined in, granted a current certificate, and practice in that discipline. Submittals shall be in compliance with the State of Iowa Administrative Code and the Pottawattamie County, Iowa, Code.
 - Exception:** For commercial and industrial building permits, the Building Official may waive the requirement of sealed plans if he finds that the nature of the work applied for is such that there is a very minor amount of work (less than \$9,000.00 valuation) and does not impact the life-safety functions of the building.
- Provide Title Block on each sheet of plans with the following information;
 - Address, Assessor's Parcel Number of proposed construction site
 - Name and Address of design professional, contractor or owner/builder
- The cover sheet for the plans must indicate the square footage break-down, providing all areas separately.
- Plans must be drawn to an approved scale and fully dimensioned: Plot (site) plan approved scales; 1"=10', 1"=20' & 1"=30'/Construction plans (other than details) approved scales; 1/4"=1'-0" & 1/8"=1'-0" can be used if pre-approved by County Staff.
- Minimum paper size for all plan sets; 11"X 17" paper.
- Revisions to plans must be made on the original drawings and new blueprints or photocopies submitted. No pencil drawing or marks will be accepted on plans at submittal.
- Additions, Remodels, and Tenant Improvements, plans must have complete existing layout (floor) plan, showing what was/is existing prior to remodel or addition. Indicate and label the use of each existing room within the structure along with the door and window locations and sizes.
- Provide two (2) copies of the State Energy Code report for compliance using the approved Comcheck™ report at www.energycodes.gov/comcheck or provide construction documents regulated code design with the current State adopted International Energy Conservation Code (IECC).

Plans and specifications must be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of the technical codes and all relevant laws, ordinances, rules and regulations. The following information is standard requirement for construction documents:

Building Plan Review Requirements

In order to perform a thorough Building Plan Review, the following specifications, drawings and details should be submitted:

1. Complete architectural plans, structural plans and material specifications of all work.
2. A site plan including the following information:
 - a. Size and location of all new construction and all existing structures on the site.
 - b. Distances from lot lines.
 - c. Established street grades and proposed finish grades.
3. Architectural plans and specifications to include:
 - a. Description of uses and the proposed use group(s) for all portions of the building. The design approach for mixed-uses (as applicable).
 - b. Proposed type of construction of the building.
 - c. Full dimensioned drawings to determine areas and building height.
 - d. Adequate details and dimensions to evaluate means of egress, including occupant loads for each floor, exit arrangement and sizes, corridors, doors, stairs, etc.
 - e. Exit signs/means of egress lighting, including power supply.
 - f. Accessibility scoping provisions.
 - g. Description & details of proposed special occupancies such as a covered mall, high-rise, mezzanine, atrium, public garage, etc.
 - h. Adequate details to evaluate fire resistive construction requirements, including data substantiating required ratings.
 - i. Details of plastic, insulation, and safety glazing installation.
 - j. Details of required fire protection systems.
4. Structural plans, specifications, and engineering details to include:
 - a. Soils report indicating the soil type and recommended allowable bearing pressure and foundation type.
 - b. Signed and sealed structural design calculations which support the member sizes on the drawings.
 - c. Details of foundations and superstructure.
 - d. Provisions for required special inspections.
 - e. Applicable construction standards and material specifications (i.e., masonry, concrete, wood, steel, etc.)

f. Design Criteria:	
Ground Snow Load:	30 pounds per square foot
Wind Speed:	90 mph for a 3 second gust with Exposure C
Seismic Design Category:	B
Weathering Probability for Concrete:	Severe
Frost Line Depth:	42 inches below finished grade
Termites:	Moderate to Heavy
Decay:	Slight to Moderate
Winter Design Temperature	-5 degrees
Flood Hazards	Map revised date of April 16, 2013.

Mechanical Plan Review Requirements

1. Complete plans and specifications of all heating, ventilating and air-conditioning work.
2. Complete information on all the mechanical equipment and materials including listing, labeling, installation and compliance with specified quality control standards
3. Details on the HVAC equipment including the equipment capacity (Btu/h input), controls, equipment location, access and clearances.
4. A ventilation schedule indicating the outdoor air rates, the estimated occupant load/1,000 ft², the floor area of the space and the amount of outdoor air supplied to each space.
5. The location of all outdoor air intakes with respect to sources of combustibles.
6. Duct construction and installation methods, flame spread/smoke development ratings of materials, flexible air duct and connector listing and duct support spacing.
7. Condensate disposal, routing of piping and auxiliary and secondary drain systems.
8. Required exhaust systems, routing of piping and auxiliary and secondary drain systems.
9. Complete details of all Type I and II kitchen hoods, grease duct construction and velocity, clearance to combustibles and fire suppression system. (If applicable).
10. Details of all duct penetrations through fire resistance rated assemblies including shaft, fire dampers and smoke damper locations.
11. Method of supplying combustion air to all fuel fired appliances, the location and size of openings and criteria used to size the openings.
12. Details on the vents used to vent the products of combustion from all fuel burning appliances including the type of venting system, the sizing criteria required for the type of vent and routing of the vent.
13. Boiler and water heater equipment and piping details including safety controls and distribution piping layout.
14. Details on the type of refrigerant, calculations indicating the quantity of refrigerant and refrigerant piping material and the type of connections.
15. Complete details on the gas piping system including materials, installation, valve locations, sizing criteria and Calculations (i.e., the longest run of piping, the pressure and pressure drop).

Plumbing Plan Review Requirements

1. Complete plans and specifications of all plumbing work.
2. Plumbing fixture specifications including identification of the applicable referenced quality control standards and the maximum flow rates for the plumbing fixtures.
3. The basis for the number of plumbing fixtures provided including the occupant load used, the use group and fixtures rate from the plumbing code.
4. Complete dimensions for bathrooms, the location of plumbing fixtures and the wall and floor surface materials.
5. Site plan which indicates the routing of the sanitary, storm and water service with the burial depths for all sewers and water service.
6. Water distribution system sizing criteria and calculations.
7. Water supply and distribution piping plan showing the incoming water supply, distribution piping, and pipe size, the location of the water hammer arrestors and the location of the valves.
8. The location of all backflow preventers, the type of backflow preventers provided for each piece of equipment or outlet and the specified quality control standards referenced in the code.
9. Drainage system piping plan showing the layout of all piping, of plumbing fixtures and the location of cleanouts.
10. Riser diagram(s) of the drain, waste and vent piping including the building drain, all horizontal branches and the connections and layout of all fixtures. Pipe sizes, directions of flow, grade of horizontal piping, drainage fixture loads and the method of venting all plumbing fixtures.
11. The location of all indirect waste connections, standpipes, grease traps and separators. (and sizing if applicable).
12. Complete details of the water heater, the method of supplying tempered water to accessible fixtures and the temperature and pressure relief valve discharge.
13. Complete details of the method of draining storm water from the roof including calculations to verify pipe and /or gutter size, the location of all roof drains and the roof area that each group of roof drains is intended to serve and an independent secondary roof drainage system.
14. Piping material specifications to verify compliance with the specified quality control standards for all sanitary, storm and potable water piping (e.g., ASTM B88 for cooper pipe), the type of joints and connections for all piping, the pipe hanger support spacing and details of anchorage and bracing.

Electrical Plan Review Requirements

1. Complete plans and specifications of all electrical work.
2. Labeling criteria of all electrical equipment.
3. Lighting floor plan including electrical circuits indicating conduit and wiring sizes.
4. Power floor plans including electrical circuits indicating conduit and wiring sizes, equipment and disconnect switches.
5. Exit sign/means of egress lighting location and power supply.
6. Single line diagram including the available fault current and bus bracing.
7. Panel board schedule.
8. Lighting fixtures schedule.
9. Symbol schedule and diagrams.
10. Provide all service and loads calculations.
11. Specifications to include requirements for:
 - a. Raceway and conduit with fittings.
 - b. Wire and cable.
 - c. Electrical boxes, fittings and installation.
 - d. Electrical connections.
 - e. Electrical wiring devices.
 - f. Circuit and motor disconnects.
 - g. Hangers and supporting devices.
 - h. Electrical identification.
 - i. Service entrance and details.
 - j. Overcurrent protection.
 - k. Switchboards.
 - l. Grounding.
 - m. Transformers.
 - n. Panelboards.
 - o. Motor control centers.
 - p. Lighting fixtures.

Energy Plan Review Requirements

Commercial Energy Plan Reviews are based on Chapter 7 of the IECC or the referenced edition of *ASHRAE/IES 90.1-1989*, Energy Code for Commercial and High-Rise Residential Buildings as applicable. In order to perform a thorough Energy Plan Review, the following specifications, drawings and details should be submitted:

Envelope

1. Architectural plans and specifications to include:
 - a. Description of uses and the proposed use group(s) for all portions of the building.
 - b. Thermal performance of envelope components
 - c. Fenestration performance details (U-factor, SC, SHGC, VLT, air leakage rates, etc.).
 - d. Fully dimensioned drawings to determine gross and net areas of all envelope components.
 - e. Details of vapor barrier and insulation installation, caulking, gasketing, weatherstripping and other means of sealing joints, cracks, holes and penetrations in the building envelope.
 - f. ENVSTD output (where applicable).^a
2. Design conditions (interior and exterior) consistent with local climate.

Electrical Power & Lighting^b

1. Complete plans and specifications of all electrical work.
2. Riser diagrams(s) of the distribution system indicating:
 - a. Check metering provisions for individual dwelling units.
 - b. Subdivision of feeders by end use: 1) Lighting, 2) HVAC, 3) SWH and systems over 20 kW.^a
3. Lighting fixture schedule(s) depicting location, fixture lamps, ballasts, ballast specifications, fixture input watts, fixture wiring methods power factor, etc.
4. Lighting plans(s) for building exterior including total exterior Connected Lighting Power (CLP).
5. Lighting and power floor plans for building interiors including total interior CLP.
6. LTGSTD output (where applicable).
7. Interior and exterior means of lighting control.
8. Electric motor schedule including type, HP and efficiencies.^a

Mechanical System & Equipment

1. Mechanical equipment data, plans and specifications of all mechanical work including:
 - a. Equipment type, capacity (Btuh) and efficiency (peak and part-load).
 - b. System design air flow rates (cfm).
 - c. Details of equipment/system sizing.
 - d. System and/or zone control capabilities including terminal device schedule, provisions for humidity control where applicable) and the corresponding testing of system controls.^a
 - e. Provisions for automatic setback/shutdown.

- f. Indicate supply and exhaust systems to have automatic shutoff or volume reduction dampers.
- g. Energy consumed by fans in the form of an Air Transport Factor (ATF) and pumps.^a
- 2. Economizers (air or water) including provisions for integrated control.^a
- 3. Duct construction and system static pressure(s), including provisions for sealing.
- 4. Duct and/or hydronic-piping lining and insulation materials.
- 5. Provisions for air and/or hydronic system balancing.
- 6. Boiler and water heater equipment and piping details including safety controls and distribution piping layout.

Service Water Heating (SWH)

- 1. SWH equipment data including type, capacity and efficiency.
- 2. SWH pipe insulation, thickness, conductivity and vapor retarder (where appropriate).
- 3. Water conservation requirements.
- 4. Energy conservation measures for swimming pools (where applicable).

Footnotes:

- ^a Commercial buildings and residential buildings greater than three stories in height only.
- ^b Multifamily residential buildings three stories or less in height, the non-dwelling-unit portions only.

Accessibility Plan Review Requirements

Accessibility Plan Reviews are based on the specified edition of the ICC/ANSI A117.1 standard as referenced by the building code. In order to perform a thorough Accessibility Plan Review, the following specifications, drawings and details should be submitted.

- 1. Complete architectural plans and material specifications of all work. Details and plans drawn to scale with sufficient clarity, details and dimensions to show the nature and extent of the work proposed.
- 2. A site plan including the following information:
 - a. Size and location of all new construction and all existing structures on the site.
 - b. Location of any recreational facilities (i.e., pool, tennis courts, etc.)
 - c. Established street grades and proposed finished grade.
 - d. Accessible parking, other locations of public access to the facility, accessible exterior routes and locations of accessible entrances.
- 3. Architectural plans and specifications to include:
 - a. Description of uses and the proposed use group(s) for all portions of the building. The design approach for mixed-uses (as applicable).
 - b. Fully dimensioned drawings to determine areas and building height.
 - c. Adequate details and dimensions to evaluate accessible means of egress, including occupant loads for each floor, exit arrangement and sizes, corridors, doors, stairs, areas of refuge, etc.
 - d. Adequate details and dimensions to evaluate the accessible route to areas required to be accessible, including corridors, doors, protruding objects, maneuvering clearances, clear floor space at fixtures and controls, etc.
 - e. Accessibility provisions including but not limited to access to services, seating, listening systems, accessible fixtures, elevators, work surfaces, etc.
 - f. Accessible plumbing facilities and details.
 - g. Tactile signage provided.
 - h. Details of required fire protection systems.

Note: The ICC Accessibility Review will cover the scoping requirements in Chapter 11 of the IBC and other accessibility related requirements mainstreamed throughout the applicable building code. Technical requirements covered will be based on the applicable edition of ICC/ANSI A117.1.

Fire Sprinkler Plan Review Requirements

Sprinkler Plan Reviews are based on the specified edition of the applicable NFPA 13 standard as referenced by the building code. In order to perform a thorough Sprinkler Plan Review, the following items should be submitted:

- 1. Complete plans and specifications for the sprinkler system and related equipment.
- 2. Description and locations of uses within the building.
- 3. Design details in accordance with the appropriate reference standard (i.e. NFPA 13, 13D, 13R) as referenced by the building code.
- 4. Design calculations indicating the discharge requirements of the system with evaluation of the arrangement and source of the water supply.
- 5. Results of a current flow test indicating the location and date of the test.
- 6. Working drawings indicating all pipe sizes and the spacing between branch lines and sprinklers on the branch line.
- 7. Material specifications and equipment specifications. All material used should be verified that they are installed in accordance with their listing.

INCOMPLETE PLANS WILL NOT BE ACCEPTED