

AN ORDINANCE OF THE CITY OF KIRKLAND REPEALING AND REENACTING KIRKLAND MUNICIPAL CODE TITLE 21, RELATING TO BUILDING AND CONSTRUCTION, TO COMPLY WITH NEW STATE STANDARDS, PROVIDE OTHER NEEDED AMENDMENTS AND CREATING A NEW CHAPTER 74 REGARDING DEVELOPMENT FEES.

The City Council of the City of Kirkland do ordain as follows:

Section 1. Kirkland Municipal Code Title 21 is hereby repealed and reenacted to read as follows:

Title 21

BUILDINGS AND CONSTRUCTION

Chapter 21.04 GENERAL PROVISIONS*

* For the statutory provision regarding the adoption of technical codes by reference, see RCW 35A.13.180.

21.04.010 Copies of codes on file.

(a) Pursuant to state law (RCW Chapters 19.27 and 19.27A) the Kirkland Building Code is the Washington State Building Code as modified in this title. The Washington State Building Code is composed of the following elements, and the city shall at all times keep on file with the city clerk, for reference by the general public, not less than three copies of the codes and resolutions, or parts thereof, as herein adopted by reference, together with the amendments and supplements thereto herein made a part of this title:

(1) International Building Code, issued by the International Code Council, Inc., 2003 Edition;

(2) International Residential Code, issued by the International Code Council, Inc., 2003 Edition;

(3) International Mechanical Code, issued by the International Code Council, Inc., 2003 Edition;

(4) International Fire Code, issued by the International Code Council, Inc., 2003 Edition;

(5) Uniform Plumbing Code, issued by the International Association of Plumbing and Mechanical Officials, 2003 Edition;

(6) National Fuel Gas Code (NFPA 54), issued by the National Fire Protection Association, 2002 Edition;

(7) Liquefied Petroleum Gas Code (NFPA 58), issued by the National Fire Protection Association, 2001 Edition;

(8) International Fuel Gas Code, issued by the International Code Council, Inc., 2003 Edition

(9) Uniform Housing Code, issued by the International Conference of Building Officials, 1997 Edition;

(10) Uniform Code for the Abatement of Dangerous Buildings, issued by the International Conference of Building Officials, 1997 Edition;

(11) National Electrical Code, issued by the National Fire Protection Association, 2002 Edition;

(12) All amendments, supplements, modifications, exclusions, exemptions and additions to the codes identified in subparagraphs (1) through (8) above adopted by the Washington State Building Code Council and published in Title 51, Washington Administrative Code, including, but not by way of limitation, WAC Chapters 51-11, 51-13, 51-50, 51-51, 51-52, 51-54, 51-56 and 51-57.

(b) The copies of codes on file may be placed by the city clerk in the custody of the office of the building official in order to make them more readily available to inspection and use by the general public.

21.04.015 Purpose.

The purpose of these codes as adopted in Title 21 is to provide for, and promote the health, safety and welfare of the general public, and not to create or to otherwise establish or designate any particular class or group of persons who will or should be especially protected or benefited by the terms of these codes.

21.04.020 Interpretation.

(a) Whenever the following words appear in the codes adopted by reference in this title, they are to be interpreted as follows:

- (1) "Administrative authority" as "building official";
- (2) "Chief or director of fire services" as "fire chief";
- (3) "Corporation counsel" as "city attorney or designee";
- (4) "Local zoning code" as the "City of Kirkland Zoning Code, Title 23 of the Kirkland Municipal Code;
- (5) "Municipality, and the jurisdiction" as "the city of Kirkland."

(b) Whenever reference is made to local authority, codes, jurisdiction and similar concepts, within the codes adopted by reference in this title, interpretations rendered by such reference shall apply to the city jurisdiction and authority.

21.04.025 Penalty for violation.

(a) In addition to the administrative remedies provided for in this title, any person found by a court of competent jurisdiction to be in violation of or to have violated any mandatory provision of this title shall be guilty of a misdemeanor. Each day that a violation is found to exist shall be deemed a separate offense.

(b) A person who has previously been convicted of a crime for violation of this title shall be guilty of a gross misdemeanor for any subsequent violation.

Chapter 21.06

CONSTRUCTION ADMINISTRATIVE CODE

Section 101

21.06.010 Title.

These regulations shall be known as the *Construction Administrative Code* of the City of Kirkland, hereinafter referred to as "this code."

21.06.015 Purpose.

The purpose of this chapter is to provide for the administration, organization and enforcement of the technical codes adopted by the city.

21.06.020 Scope.

(a) This code establishes the administrative, organizational and enforcement rules and regulations for the technical codes which regulate site preparation and construction, alteration, moving, demolition, repair, use and occupancy of buildings, structures and building service equipment within the corporate limits of the city. The provisions of this code shall apply to the administration of the technical codes as adopted by the State of Washington and as listed:

- 2003 International Building Code – WAC 51-50
- 2003 International Residential Code – WAC 51-51
- 2003 International Mechanical Code – WAC 51-52
- 2002 National Fuel Gas Code (NFPA 54) – WAC 51-52
- 2002 National Electrical Code
- 2001 Liquefied Petroleum Gas Code (NFPA 58) –WAC 51-52
- 2003 International Fuel Gas Code - WAC 51-52
- 2003 Uniform Plumbing Code – WAC 51 –56 and WAC 51-57

(b) The provisions of this code shall not apply to work located primarily in a public way, public utility towers and poles and hydraulic flood control structures however, this shall not apply to electrical work.

(c) The provisions of this code shall not apply to the installation, alteration or repair of electrical wiring, apparatus or equipment or the generation, transmission, distribution or metering of electrical energy or in the operation of signals or the transmission of intelligence by a public or private utility in the exercise of its function as a serving utility.

21.06.025 Definitions.

For the purpose of this chapter, certain terms, phrases, words and their derivatives shall have the meanings set forth in this section. Where terms are not defined, they shall have their ordinary accepted meanings within the context with which they are used. Webster's Third International Dictionary of the English Language, Unabridged latest edition, shall be considered as providing ordinary accepted meanings. Words used in the singular include the plural and the plural the singular. Words used in the masculine gender include the feminine and the feminine the masculine.

(a) "Action" means a specific response complying fully with a specific request by the jurisdiction.

(b) "Existing building" means a building erected prior to the adoption of this code, or one for which a legal building permit has been issued and approved.

(c) "Building service equipment" means and refers to the plumbing, mechanical and electrical equipment including piping, wiring, fixtures, and other accessories which provide sanitation, lighting, heating, ventilation, cooling, refrigeration, firefighting, and transportation facilities essential to the occupancy of the building or structure for its designated use.

(d) "Complete response" means an adequate response to all requests from city staff in sufficient detail to allow the application to be processed.

(e) "Dangerous Building Code" means the 1997 Uniform Code for the Abatement of Dangerous Buildings promulgated by the International Council of Building Officials as adopted by the jurisdiction.

(f) "Energy code" means the Washington State Energy Code promulgated by the Washington State Building Code Council as adopted by the city.

(g) "Housing code" means the 1997 Uniform Housing Code promulgated by the International Council of Building Officials as adopted by the city.

(h) "IBC" means the latest edition of the International Building Code promulgated by the International Code Council as adopted by the city.

(i) "IMC" means the latest edition of the International Mechanical Code promulgated by the International Code Council as adopted by the city.

(j) "IRC" means the latest edition of the International Residential Code promulgated by the International Code Council as adopted by the city.

(k) "NEC" means the latest edition of the National Electrical Code promulgated by the National Fire Protection Association as adopted by the city.

(l) "Occupancy" means the purpose for which a building, or part thereof, is used or intended to be used.

(m) "Shall" as used in this chapter, is mandatory.

(n) Technical codes are the codes, appendices and referenced code standards adopted by the jurisdiction.

(o) "UPC" means the latest edition of the Uniform Plumbing Code promulgated by the International Conference of Building Officials as adopted by this jurisdiction.

(p) "Valuation" or "value" as applied to a building or building service equipment, means and shall be the estimated cost to replace the building and its building service equipment in kind, based on current replacement costs. It shall also include the contractor's overhead and profit.

(q) "VIAQ" means the Washington State Ventilation and Indoor Air Quality Code promulgated by the Washington State Building Code Council, as adopted by the jurisdiction.

21.06.030 Appendices.

Provisions in the appendices of the technical codes shall not apply unless specifically adopted.

21.06.035 Intent.

The purpose of this chapter and the technical codes is to establish the minimum requirements to safeguard the public health, safety and general welfare through structural strength, means of egress facilities, stability, sanitation, adequate light and ventilation, energy conservation, and safety to life and property from fire and other hazards attributed to the built environment and to provide safety to fire fighters and emergency responders during emergency operations.

21.06.040 Referenced codes.

The codes listed in Sections 21.06.045 through 21.06.085 and referenced elsewhere in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference.

21.06.045 International Building Code.

The provisions of the *International Building Code* shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures.

Exceptions:

(1) Detached one and two family dwellings and multiple single-family dwellings (townhouses) not more than three stories above grade in height with separate means of egress and their accessory structures shall comply with the International Residential Code.

21.06.050 International Residential Code.

The provisions of the *International Residential Code For One And Two-Family Dwellings* shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of detached one and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories in height with separate means of egress and their accessory structures.

21.06.055 Mechanical.

These provisions of the *International Mechanical Code* shall apply to the installation, alterations, repairs and replacement of mechanical systems, including equipment, appliances, fixtures, fittings and/or appurtenances, including ventilating, heating, cooling, air-conditioning and refrigeration systems, incinerators and other energy-related systems.

Exceptions:

(1) The International Fuel Gas Code – for all installations utilizing natural gas except those regulated by the IRC and those utilizing LPG.

(2) International Residential Code – for all structures regulated by the IRC except LPG installations.

(3) NFPA 54 & 58 - for all LPG installations.

21.06.060 Liquid propane gas.

The provisions of the *National Fuel Gas Code and Liquid Petroleum Gas Code (NFPA 54 and 58)* shall apply to the installation of all materials and equipment utilizing liquid propane gas.

21.06.065 Natural gas.

The provisions of the *International Fuel Gas Code* shall apply to the installation of all materials and equipment utilizing natural gas except those regulated by the International Residential Code.

21.06.070 Plumbing.

The provisions of the *2003 Uniform Plumbing Code* shall apply to the installation, alteration, repair and replacement of plumbing systems, including equipment, appliances, fixtures, fittings and appurtenances, and where connected to a water or sewage system and all aspects of a medical gas system.

21.06.075 Energy.

The provisions of the *Washington State Energy Code* shall apply to all matters governing the design and construction of buildings for energy efficiency.

21.06.080 Ventilation and Indoor Air Quality.

The provisions of the *Washington State Ventilation and Indoor Air Quality Code* shall apply to all matters governing the design and construction of buildings for ventilation and indoor air quality.

21.06.085 Electrical.

The provisions of the 2002 *National Electrical Code (NEC)* shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances thereto.

SECTION 102**21.06.090 General.**

Where, in any specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern except that the hierarchy of the codes named in RCW 19.27 shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.

21.06.095 Other laws.

The provisions of this code shall not be deemed to nullify any provisions of local, state or federal law.

21.06.100 Application of references.

References to chapter or section numbers, or to provisions not specifically identified by number, shall be construed to refer to such chapter, section or provision of this code.

21.06.105 Referenced codes and standards.

The codes and standards referenced in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between provisions of this code and referenced codes and standards, the provisions of this code shall apply.

21.06.110 Partial invalidity.

In the event that any part or provision of this code is held to be illegal or void, this shall not have the effect of making void or illegal any of the other parts or provisions.

21.06.115 Existing structures.

The legal occupancy of any structure existing on the date of adoption of this code shall be permitted to continue without change, except as is specifically covered in this code, the *International Fire Code*, or as is deemed necessary by the building official or fire official for the general safety and welfare of the occupants and the public.

SECTION 103**21.06.120 Creation of enforcement agency.**

The Building Department is hereby created and the official in charge thereof shall be known as the building official.

21.06.125 Appointment.

The building official shall be appointed by the chief appointing authority of the jurisdiction.

21.06.130 Deputies.

In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the building official shall have the authority to appoint a deputy building official, the related technical officers, inspectors, plan examiners and other employees. Such employees shall have powers as delegated by the building official.

SECTION 104**21.06.135 General.**

The building official is hereby authorized and directed to enforce the provisions of this chapter and the technical codes. The building official shall have the authority to render interpretations of this chapter and the technical codes and to adopt policies and procedures in order to clarify the application of their provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this chapter and the technical codes. Such policies and procedures shall not have the effect of waiving requirements specifically provided.

21.06.140 Applications and permits.

The building official shall receive applications, review construction documents and issue permits for the erection, alteration, demolition and moving of buildings, structures and building service equipment, inspect the premises for which such permits have been issued and enforce compliance with the provisions of chapter and the technical codes

21.06.145 Notices and orders.

The building official shall issue all necessary notices or orders to ensure compliance with this chapter and the technical codes.

21.06.150 Inspections.

The building official shall make all of the required inspections, or the building official shall have the authority to accept reports of inspection by approved agencies or individuals. Reports of such inspections shall be in writing and be certified by a responsible officer of such approved agency or by the responsible individual. The building official is authorized to engage such expert opinion as deemed necessary to report upon unusual technical issues that arise at the applicant's expense.

21.06.155 Identification.

The building official shall carry proper identification when inspecting structures or premises in the performance of duties under this chapter and the technical codes.

21.06.160 Right of entry.

Where it is necessary to make an inspection to enforce the provisions of this chapter and the technical codes, or where the building official has reasonable cause to believe that there exists in a structure or upon a premises a condition which is contrary to or in violation of this chapter and the technical codes which makes the structure or premises unsafe, dangerous or hazardous, the building official is authorized to enter the structure or premises at reasonable times to inspect or to perform the duties imposed by this chapter and the technical codes, provided that if such structure or premises be occupied that credentials be presented to the occupant and entry requested. If such structure or

premises is unoccupied, the building official shall first make a reasonable effort to locate the owner or other person having charge or control of the structure or premises and request entry. If entry is refused, the building official shall have recourse to the remedies provided by law to secure entry.

21.06.165 Department records.

The building official shall keep official records of applications received, permits and certificates issued, fees collected, reports of inspections, and notices and orders issued. Such records shall be retained in the official records for the period required for retention of public records.

21.06.170 Liability.

The building official, member of the board of appeals or employee charged with the enforcement of this chapter and the technical codes, while acting for the jurisdiction in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be rendered liable personally and is hereby relieved from personal liability for any damage accruing to persons or property as a result of any act or by reason of an act or omission in the discharge of official duties. Any suit instituted against an officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this code shall be defended by legal representative of the jurisdiction until the final termination of the proceedings. The building official or any subordinate shall not be liable for cost in any action, suit or proceeding that is instituted in pursuance of the provisions of this code.

21.06.175 Approved materials and equipment.

Materials, equipment and devices approved by the building official shall be constructed and installed in accordance with such approval.

21.06.180 Used materials and equipment.

The use of used materials and building service equipment is permitted when approved by the building official.

21.06.185 Modifications.

Wherever there are practical difficulties involved in carrying out the provisions of this chapter and the technical codes, the building official shall have the authority to grant modifications for individual cases, upon application of the owner or owner's representative, provided the building official shall first find that special individual reason makes the strict letter of this code impractical and the modification is in compliance with the intent and purpose of this chapter and the technical codes and that such modification does not lessen health, accessibility, life and fire safety, or structural requirements. The details of action granting modifications shall be recorded and entered in the files of the department. The building official is authorized to charge an additional fee to evaluate any proposed modification under the provisions of this section.

21.06.190 Alternative materials, design and methods of construction and equipment.

The provisions of this chapter and the technical codes are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this chapter and the technical codes, provided that any such alternative has been approved. An alternative material, design or method of construction

shall be approved where the building official finds that the proposed design is satisfactory and complies with the intent of the provisions of this chapter and the technical codes, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in the technical codes in quality, strength, effectiveness, fire resistance, durability and safety. The building official is authorized to charge an additional fee to evaluate any proposed alternate under the provisions of this section.

21.06.195 Research reports.

Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in technical codes, shall consist of valid research reports from approved sources.

21.06.200 Tests.

Whenever there is insufficient evidence of compliance with the provisions of this chapter and the technical codes, or evidence that a material or method does not conform to the requirements of the technical codes, or in order to substantiate claims for alternative materials or methods, the building official shall have the authority to require tests as evidence of compliance to be made at no expense to the jurisdiction. Test methods shall be as specified in technical codes or by other recognized test standards. In the absence of recognized and accepted test methods, the building official shall approve the testing procedures. Tests shall be performed by an approved agency. Reports of such tests shall be retained by the building official for the period required for retention of public records.

SECTION 105

21.06.205 Required.

Any owner or authorized agent who intends to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by this code, or to cause any such work to be done, shall first make application to the building official and obtain the required permit a separate permit is required for each building or structure.

21.06.210 Electrical permit required.

In accordance with Chapter 19.28 RCW, an electrical permit is required for the following installations:

(1) The installation, alteration, repair, replacement, modification or maintenance of all electrical systems, wire and electrical equipment regardless of voltage.

(2) The installation and/or alteration of low voltage systems defined as:

(A) NEC, Class 1 power limited circuits at 30 volts maximum.

(B) NEC, Class 2 circuits powered by a Class 2 power supply as defined in NEC 725.41(A).

(C) NEC, Class 3 circuits powered by a Class 3 power supply as defined in NEC 725.41(A).

(3) Telecommunications Systems.

(A) All installations of telecommunications systems on the customer side of the network demarcation point for projects greater than ten telecommunications outlets.

(B) All backbone installations regardless of size and all telecommunications cable or equipment installations involving penetrations of fire barriers or passing through hazardous locations require permits and inspections.

(C) The installation of greater than ten outlets and the associated cables along any horizontal pathway from a telecommunications closet to work areas during any continuous ninety-day period requires a permit and inspection.

(D) In R1 and R2 occupancies as defined in the building code, permits and inspections are required for all backbone installations, all penetrations of fire resistive walls, ceilings and floors; and installations of greater than ten outlets in common areas.

(E) Definitions of telecommunications technical terms will come from Chapter 19.28 RCW, the currently adopted WAC rules, EIA/TIA standards, and the National Electrical Code.

21.06.215 Work exempt from permit.

Exemptions from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. Permits shall not be required for the following:

Building:

(1) One-story detached accessory structures used as tool and storage sheds, tree supported play structures, playhouse and similar uses, provided the floor area does not exceed 200 square feet (11.15 m²).

(2) Fences not over 6 feet (1829 mm) high.

(3) Oil derricks.

(4) Retaining walls which are not over 4 feet (1219 mm) in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge or impounding Class I, II or III-A liquids.

(5) Water tanks supported directly on grade if the capacity does not exceed 5,000 gallons (18 925 L) and the ratio of height to diameter or width does not exceed 2 to 1.

(6) Sidewalks, decks and driveways not more than 30 inches (762 mm) above grade and not over any basement or story below and which are not part of an accessible route or means of egress.

(7) In-kind re-roofing of One- and Two-Family Dwellings provided the roof sheathing is not removed or replaced.

(8) Painting, non-structural wood or vinyl siding, papering, tiling, carpeting, cabinets, counter tops and similar finish work.

(9) Temporary motion picture, television and theater stage sets and scenery.

(10) Prefabricated swimming pools accessory to a One- and Two-Family Dwelling, which are less than 24 inches (610 mm) deep, do not exceed 5,000 gallons (18 925 L) and are installed entirely above ground.

(11) Shade cloth structures constructed for nursery or agricultural purposes and not including service systems.

(12) Swings, slides and other similar playground equipment.

(13) Window awnings supported by an exterior wall of One- and Two-Family Dwellings which do not project more than 54 inches (1372 mm) from the exterior wall and do not require additional support.

(14) Movable cases, counters and partitions not over 5 feet 9 inches (1753 mm) in height.

(15) Satellite earth station antennas 6-1/2 feet (2 m) or less in diameter or diagonal in zones other than residential zones.

(16) Satellite earth station antennas 3-1/4 feet (1m) or less in diameter in residential zones.

(17) Video programming service antennas 3-1/4 feet (1 m) or less in diameter or diagonal dimension, regardless of zone.

Electrical:

(1) Portable motors or other portable appliances energized by means of a cord or cable having an attachment plug end to be connected to an approved receptacle when that cord or cable is permitted by the National Electrical Code;

(2) Repair or replacement of fixed motors, transformers or fixed approved appliances or devices rated fifty amps or less which are like-in-kind in the same location;

(3) Temporary decorative lighting; when used for a period not to exceed ninety days and removed at the conclusion of the ninety day period;

(4) Repair or replacement of current-carrying parts of any switch, conductor or control device which are like-in-kind in the same location;

(5) Repair or replacement of attachment plug(s) and associated receptacle(s) rated fifty amperes or less which are like-in-kind in the same location;

(6) Repair or replacement of any over current device which is like-in-kind in the same location;

(7) Repair or replacement of electrodes or transformers of the same size and capacity for signs or gas tube systems;

(8) Removal of electrical wiring;

(9) Telecommunications Systems.

(A) Telecommunications outlet installations within the individual dwelling units of group R1 and R2 occupancies as defined by the building code;

(B) All telecommunications installations within R3 and R4 occupancies as defined in the building code;

(C) The installation or replacement of cord and plug connected telecommunications equipment or for patch cord and jumper cross-connected equipment;

(10) Listed wireless security systems where power is supplied by a listed Class 2 plug in transformer installed in R3 and R4 occupancies;

(11) A permit shall not be required for the installation, alteration or repair of electrical wiring, apparatus or equipment or the generation, transmission, distribution or metering of electrical energy or in the operation of signals or the transmission of intelligence by a public or private utility in the exercise of its function as a serving utility.

Mechanical:

(1) Portable heating, cooking, or clothes drying appliances.

(2) Portable ventilation equipment.

(3) Portable cooling unit.

(4) Steam, hot or chilled water piping within any heating or cooling equipment regulated by this code.

(5) Replacement of any part which does not alter its approval or make it unsafe.

(6) Portable evaporative cooler.

(7) Self-contained refrigeration system containing 10 pounds (4.54 kg) or less of refrigerant and actuated by motors of 1 horsepower (746 W) or less.

(8) Portable fuel cell appliances that are not connected to a fixed piping system and are not interconnected.

Plumbing:

(1) The stopping and/or repairing of leaks in drains, water, soil, waste or vent pipe provided, however, that should any concealed trap, drain pipe, water, soil, waste or vent

pipe become defective and it becomes necessary to remove and replace the same with new material, the same shall be considered as new work and a permit shall be procured and inspection made as provided in this code.

(2) The clearing of stoppages.

(3) Reinstallation or replacement of pre-fabricated fixtures that do not involve or require the replacement or rearrangement of valves or pipes.

21.06.220 Emergency repairs.

Where equipment replacements and equipment repairs must be performed in an emergency situation, the permit application shall be submitted within the next working business day to the building official.

21.06.225 Repairs.

Application or notice to the building official is not required for ordinary repairs to structures. Such repairs shall not include the cutting away of any wall, partition or portion thereof, the removal or cutting of any structural beam or load-bearing support, or the removal or change of any required means of egress, or rearrangement of parts of a structure affecting the egress requirements; nor shall ordinary repairs include addition to, alteration of, replacement or relocation of any standpipe, water supply, sewer, drainage, drain leader, gas, soil, waste, vent or similar piping, electric wiring or mechanical or other work affecting public health or general safety.

21.06.230 Application for permit.

To obtain a permit, the applicant shall first file an application therefore in writing on a form furnished by the building department for that purpose. Such application shall:

(1) Identify and describe the work to be covered by the permit for which application is made.

(2) Describe the land on which the proposed work is to be done by legal description, street address or similar description that will readily identify and definitely locate the proposed building or work.

(3) Indicate the use and occupancy for which the proposed work is intended.

(4) Be accompanied by construction documents and other information as required in Sections 21.06.270 through 21.06.355.

(5) State the valuation of the proposed work.

(6) Be signed by the applicant, or the applicant's authorized agent.

(7) As much information as required to provide an accurate environmental disclosure pursuant to KMC Title 24

(8) Give such other data and information as required by the building official.

21.06.235 Complete Application.

(a) No application for building permit relating to any construction, including land fill or pier and piling to support same upon privately owned shorelands submerged by the water of Lake Washington, shall be accepted for filing with the Building Department, unless there is attached to such application certified copies of the approval of such project by such state and federal agencies as may have jurisdiction or regulatory authority over such proposed project.

(b) The requirements for a fully complete building permit application include compliance with Section 21.06.230 and RCW 19.27.097 (which relates to water supply); provided that, for any construction project costing more than \$5,000 the following shall also be required:

(1) The legal description, or the tax parcel number assigned pursuant to RCW 84.40.160, and the street address if available, and may include any other identification of the construction site by the prime contractor;

(2) The property owner's name, address, and phone number;

(3) The prime contractor's business name, address, phone number, current state contractor registration number; and

(4) Either:

(A) The name, address and phone number of the office of the lender administering the interim construction financing, if any; or

(B) The name and address of the firm that has issued a payment bond, if any, on behalf of the prime contractor for the protection of the owner, if the bond is for an amount not less than fifty percent of the total amount of the construction project; provided that if any of this information is not available at the time the application is submitted, the applicant shall so state and the lack of said information shall not cause the application to be deemed incomplete for the purposes of this section. However, the applicant shall provide the remaining information as soon as the applicant can reasonably obtain such information.

(C) The requirements for a fully complete building permit application include a consent statement of the property owner to confirm dedication of rights-of-way which abut the subject property, if any are shown as such on City, County or plat maps, and to verify the designation of public road easements as right-of-way.

21.06.240 Action on application.

The building official shall examine or cause to be examined applications for permits and amendments thereto within a reasonable time after filing. If the application or the construction documents do not conform to the requirements of pertinent laws, the building official shall reject such application in writing, stating the reasons therefore. If the building official is satisfied that the proposed work conforms to the requirements of this code and laws and ordinances applicable thereto, the building official shall issue a permit therefore as soon as practicable.

21.06.245 Time limitation of application.

(a) Applications for which no permit is issued within one year following the date of application shall expire by limitation and plans and other data submitted for review may thereafter be returned to the applicant or destroyed in accordance with state law by the building official. The building official may extend the time for action by the applicant for period not exceeding 180 days.

(b) Applications may be canceled for inactivity, if an applicant fails to respond to the department's written request for revisions, corrections, actions or additional information within 90 days of the date of request. The building official may extend the response period beyond 90 days if within the original 90 day time period the applicant provides and subsequently adheres to an approved schedule with specific target dates for submitting the full revisions, corrections or other information needed by the department.

(c) The building official may extend the life of an application if any of the following conditions exist:

(1) Compliance with the State Environmental Policy Act is in progress; or

(2) Any other city review is in progress; provided the applicant has submitted a complete response to city requests or the building official determines that unique or unusual circumstances exist that warrant additional time for such response, and the building official determines that the review is proceeding in a timely manner toward final city decision; or

(3) Litigation against the city or applicant is in progress, the outcome of which may affect the validity or the provisions of any permit issued pursuant to such application.

21.06.250 Validity of permit.

The issuance or granting of a permit shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this code or of any other ordinance of the jurisdiction. Permits presuming to give authority to violate or cancel the provisions of this code or other ordinances of the jurisdiction shall not be valid. The issuance of a permit based on construction documents and other data shall not prevent the building official from requiring the correction of errors in the construction documents and other data. The building official is also authorized to prevent occupancy or use of a structure where in violation of this code or of any other ordinances of this jurisdiction.

21.06.255 Expiration.

(a) Every permit issued shall expire one year from the date of issuance. The building official is authorized to approve a request for an extended expiration date where a construction schedule is provided by the applicant and approved prior to permit issuance.

(b) Every permit which has been expired for less than one year may be renewed for a period of one year for an additional fee as long as no changes have been made to the originally approved plans. For permits that have been expired for longer than one year, a new permit must be obtained and full new fees paid. No permit shall be renewed more than once.

(c) Electrical, mechanical and plumbing permits shall expire at the same time as the associated building permit except that if no associated building permit is issued, the mechanical and or plumbing permit shall expire 180 days from issuance

21.06.260 Suspension or revocation.

The building official is authorized to suspend or revoke a permit issued under the provisions of this code wherever the permit is issued in error or on the basis of incorrect, inaccurate or incomplete information, or in violation of any ordinance or regulation or any of the provisions of this code.

21.06.265 Placement of permit.

The building permit or copy shall be kept on the site of the work until the completion of the project.

SECTION 106

21.06.270 Submittal documents.

Construction documents, special inspection and structural observation programs, and other data shall be submitted in one or more sets with each application for a permit. The construction documents shall be prepared by a registered design professional where required by the State of Washington. Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by a registered design professional.

Exception: The building official is authorized to waive the submission of construction documents and other data not required to be prepared by a registered design professional if it is found that the nature of the work applied for is such that

review of construction documents is not necessary to obtain compliance with this code.

21.06.275 Information on construction documents.

Construction documents shall be dimensioned and drawn upon suitable material. Electronic media documents are permitted to be submitted when approved by the building official. Construction documents shall 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 this code and relevant laws, ordinances, rules and regulations, as determined by the building official.

21.06.280 Fire protection system shop drawings.

Shop drawings for the fire protection system(s) shall be submitted to indicate conformance with this code and the construction documents and shall be approved prior to the start of system installation. Shop drawings shall contain all information as required by the referenced installation standards in Chapter 9 of the IBC. Shop drawings shall be prepared by a certified individual as required by the State of Washington.

21.06.285 Means of egress.

The construction documents shall show in sufficient detail the location, construction, size and character of all portions of the means of egress in compliance with the provisions of this code. In occupancies within the scope of the International Building Code, the construction documents shall designate the number of occupants to be accommodated on every floor, and in all rooms and spaces.

21.06.290 Exterior wall envelope.

Construction documents for all buildings shall describe the exterior wall envelope in sufficient detail to determine compliance with this code. The construction documents shall provide details of the exterior wall envelope as required, including flashing, intersections with dissimilar materials, corners, end details, control joints, intersections at roof, eaves or parapets, means of drainage, water-resistive membrane and details around openings. The construction documents shall include manufacturer's installation instructions that provide supporting documentation that the proposed penetration and opening details described in the construction documents maintain the weather resistance of the exterior wall envelope. The supporting documentation shall fully describe the exterior wall system which was tested, where applicable, as well as the test procedure used.

Exception: Subject to the approval of the building official, One- and Two-Family Dwellings, and private garages may be exempt from the detailing requirements of this section.

21.06.295 Site plan.

The construction documents submitted with the application for permit shall be accompanied by a site plan showing to scale the size and location of new construction and existing structures on the site, distances from lot lines, the established street grades and the proposed finished grades and, as applicable, flood hazard areas, floodways, and design flood elevations; and it shall be drawn in accordance with an accurate boundary line survey. In the case of demolition, the site plan shall show construction to be demolished and the location and size of existing structures and construction that are to remain on the site or plot. The building official is authorized to waive or modify the

requirement for a site plan when the application for permit is for alteration or repair or when otherwise warranted.

21.06.300 Electrical Plans and specifications.

Plan review is a part of the electrical inspection process; its primary purpose is to determine that electrical loads, conductors, and equipment are calculated and sized according to the proper NEC article or section, the classification of hazardous locations, and proper design of emergency and legally required standby systems. Two sets of plans and specifications shall be submitted with each application for an electrical permit for the following installations:

- (1) Installations of services or feeders rated four hundred amperes or over.

Exception: Plans and specifications shall not be required for one- and two-family dwellings.

- (2) Installations of switches or circuit breakers rated four hundred amperes or over.

Exception: Plans and specifications shall not be required for one- and two-family dwellings.

- (3) Any proposed installation which cannot be adequately described in the application form.

- (4) Installation of emergency generators.

Exception: Plans and specifications shall not be required for one- and two-family dwellings.

- (5) All educational, institutional, and health care or personal care occupancies classified or defined in WAC 296-46B-010(14).

- (A) All commercial generator installations.

- (B) All electrical installations in hazardous areas as defined by the currently adopted National Electrical Code.

21.06.305 Classification and definition.

Classification and definition of educational, institutional, health or personal care and licensed day care occupancies shall be as defined in WAC 296-46B-010(14) and is hereby adopted as part of this code.

21.06.310 Electrical engineer.

All electrical plans for the following installations shall be prepared by, or under the direction of, a consulting electrical engineer registered under Chapter 18.43 RCW, and Chapters 180-29, 246B-320, and 388-97 WAC. All electrical plans must bear the engineer's stamp and signature.

- (1) All educational facilities, hospitals and nursing homes;
- (2) All services or feeders rated one thousand six hundred amperes or larger;
- (3) All installations identified in the National Electrical Code requiring engineering supervision;
- (4) As required by the building official for installations which by their nature are complex, hazardous or pose unique design problems.

21.06.315 General.

Plans shall be drawn to a clearly indicated and commonly accepted scale of not less than one-eighth inch to one foot upon substantial paper such as blueprint quality or standard drafting paper. Plans shall indicate the nature and extent of the work proposed and shall show in detail that the installation will conform to the provisions of this code. All electrical work shall be readily distinguishable from other mechanical work. If plans are

incomplete, unintelligible or indefinite, the building official may reject or refuse to examine such plans or may require the plans to be prepared by a licensed electrical engineer, even though a plan examination fee has been paid.

21.06.320 Required information.

Plans and specifications shall include the following information:

- (1) The proposed use or occupancy of the various portions of the building or rooms in which the installation is to be made;
- (2) A complete riser diagram;
- (3) The calculated load schedule and demand factor selected for each branch circuit, feeder, sub-feeder, main feeder and service;
- (4) Panel and branch circuit schedules showing individual branch circuit loads, total demand load and connected load;
- (5) Fault current calculations and listed interrupting rating for each service and/or feeder;
- (6) A key to all symbols used;
- (7) Letters and numbers designating mains, feeders, branch circuits and distribution panels;
- (8) Wattage, number of sockets and type of lighting fixture;
- (9) Wattage and purpose of all other outlets;
- (10) Voltage at which the equipment will operate;
- (11) Identification of wire sizes, insulation type, conduit type and sizes;
- (12) Other information as may be required by the plans examiner.

21.06.325 Examination of documents.

The building official shall examine or cause to be examined the accompanying construction documents and shall ascertain by such examinations whether the construction indicated and described is in accordance with the requirements of this code and other pertinent laws or ordinances.

21.06.330 Use of Consultants.

Whenever review of a building permit application requires retention by the jurisdiction for professional consulting services, the applicant shall reimburse the jurisdiction, the cost of such professional consulting services. This fee shall be in addition to the normal plan review and building permit fees. The jurisdiction may require the applicant to deposit an amount with the jurisdiction estimated in the discretion of the building official to be sufficient to cover anticipated costs to retaining professional consultant services and to ensure reimbursement for such costs.

21.06.335 Approval of construction documents.

When the building official issues a permit, the construction documents shall be approved, in writing or by stamp, as "Approved, Subject To Field Inspection." One set of construction documents so reviewed shall be retained by the building official. The other set shall be returned to the applicant, shall be kept at the site of work and shall be open to inspection by the building official or a duly authorized representative.

21.06.340 Phased approval.

The building official is authorized to issue a permit for the construction of foundations or any other part of a building or structure before the construction documents for the whole building or structure have been submitted, provided that adequate information and detailed

statements have been filed complying with pertinent requirements of this code. The holder of such permit for the foundation or other parts of a building or structure shall proceed at the holder's own risk with the building operation and without assurance that a permit for the entire structure will be granted.

21.06.345 Design professional in responsible charge- General.

When it is required that documents be prepared by a qualified registered design professional, the building official shall be authorized to require the owner to engage and designate on the building permit application a registered design professional who shall act as the registered design professional in responsible charge. If the circumstances require, the owner shall designate a substitute registered design professional in responsible charge who shall perform the duties required of the original registered design professional in responsible charge. The building official shall be notified in writing by the owner if the registered design professional in responsible charge is changed or is unable to continue to perform the duties. The registered design professional in responsible charge shall be responsible for reviewing and coordinating submittal documents prepared by others, including phased and deferred submittal items, for compatibility with the design of the building. Where structural observation is required by Section 1709 of the IBC, the inspection program shall name the individual or firms who are to perform structural observation and describe the stages of construction at which structural observation is to occur (see also duties specified in Section 1704 of the IBC).

21.06.350 Deferred submittals.

For the purposes of this section, deferred submittals are defined as those portions of the design that are not submitted at the time of the application and that are to be submitted to the building official within a specified period. Deferral of any submittal items shall have the prior approval of the building official. The registered design professional in responsible charge shall list the deferred submittals on the construction documents for review by the building official. Documents for deferred submittal items shall be submitted to the registered design professional in responsible charge who shall review them and forward them to the building official with a notation indicating that the deferred submittal documents have been reviewed and been found to be in general conformance to the design of the building. The deferred submittal items shall not be installed until the design and submittal documents have been approved by the building official. The building official is authorized to charge an additional plan review fee to evaluate deferred submittals under the provisions of this section.

21.06.355 Amended construction documents.

Work shall be installed in accordance with the approved construction documents, and any changes made during construction that are not in compliance with the approved construction documents shall be resubmitted for approval as an amended set of construction documents. The building official may authorize minor field changes subject to the approval of the field inspector.

21.06.360 Retention of construction documents.

One set of approved construction documents shall be retained by the building official for a period of not less than 180 days from date of completion of the permitted work, or as required by state or local laws.

21.06.365 General.

The building official is authorized to issue a permit for temporary structures and temporary uses. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The building official is authorized to grant extensions for demonstrated cause.

21.06.370 Electrical.

(a) If the building official finds that the safety of life and property will not be jeopardized, permits may be issued for temporary electrical installations for use during the construction of buildings or for carnivals, conventions, festivals, fairs, the holding of religious services, temporary lighting of streets, or other approved uses. Permission to use such temporary installation shall not be granted for a greater length of time than forty-five days, except that a permit for a temporary installation to be used for constructing of a building may be issued for the period of construction. Should such temporary lighting be over the street area, the proper authorization for such use of the street must first be obtained.

(b) All such temporary installations shall be made in accordance with the requirements of this code; provided, that the building official may permit deviations which will not permit hazards to life or property; and further provided, that whenever such hazards are deemed by the building official to exist, the building official may at once rescind or cancel the permit covering such installation and disconnect, or order the disconnection of all energy to such equipment.

21.06.375 Conformance.

Temporary structures and uses shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of this code as necessary to ensure the public health, safety and general welfare.

21.06.380 Termination of approval.

The building official is authorized to terminate such permit for a temporary structure or use and to order the temporary structure or use to be discontinued.

SECTION 108**21.06.385 Payment of fees.**

The fee for each permit shall be as set forth in Chapter 21.74, as now or hereafter amended. A permit shall not be valid until the fees have been paid, nor shall an amendment to a permit be released until the additional fee, if any, has been paid.

21.06.390 Schedule of permit fees.

On buildings, grading, structures, signs, electrical, gas, mechanical, and plumbing systems or alterations requiring a permit, a fee for each permit shall be paid as required, in accordance with the schedule as established by Kirkland City Council.

21.06.395 Plan Review Fees.

When submittal documents are required by section 106 of this code, a plan review fee shall be paid at the time of submitting the submittal documents for plan review. The building official may have the option to charge deposit, in lieu of the full plan review fee if the full amount is not known at the time. Any plan review deposit shall be applied toward the total plan review fee owed. The actual permit fees and related plan review fee shall be

determined upon completion of the plan review and the balance owing shall be paid at the time of permit issuance. The plan review fee shall be a separate fee from the permit fees specified in this section and are in addition to the permit fees. When submittal documents are incomplete or changed so as to require additional plan review or when the project involves deferred submittal items as defined in section 106, an additional plan review fee shall be charged at the rate shown in Chapter 21.74 established by Kirkland City Council.

21.06.400 Building permit valuations.

The applicant for a permit shall provide an estimated permit value at time of application. The determination of value or valuation under any of the provisions of this code shall be made by the building official.

21.06.405 Work commencing before permit issuance.

Any person who commences any work on a building, structure, gas, mechanical or plumbing system before obtaining the necessary permits shall be subject to a special investigation fee established by the building official that shall be in addition to the required permit fees.

21.06.410 Related fees.

The payment of the fee for the construction, alteration, removal or demolition for work done in connection to or concurrently with the work authorized by a building permit shall not relieve the applicant or holder of the permit from the payment of other fees that are prescribed by law.

21.06.415 Refunds.

The building official may authorize refunding of not more than 80 percent of the inspection fee paid when no work has been done under a permit issued in accordance with this code. The building official may authorize refunding of not more than 80 percent of the plan review fee paid when an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan reviewing is done. The building official shall not authorize refunding of any fee paid except on written application filed by the original permittee not later than 180 days after the date of application.

SECTION 109

21.06.420 General.

Construction or work for which a permit is required shall be subject to inspection by the building official and such construction or work shall remain accessible and exposed for inspection purposes until approved. Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction. Inspections presuming to give authority to violate or cancel the provisions of this code or of other ordinances of the jurisdiction shall not be valid. It shall be the duty of the permit applicant to cause the work to remain accessible and exposed for inspection purposes. Neither the building official nor the jurisdiction shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.

21.06.425 Preliminary inspections.

Before issuing a permit, the building official is authorized to examine or cause to be examined buildings, structures and sites for which an application has been filed.

21.06.430 Manufacturer's installation instructions.

Manufacturer's installation instructions, as required by this code, shall be available on the job site at the time of inspection.

21.06.435 Required inspections.

The building official, upon notification, shall make the inspections set forth in Sections 21.06.440 through 21.06.495.

21.06.440 Footing and foundation inspection.

Footing and foundation inspections shall be made after excavations for footings are complete and any required reinforcing steel is in place. For concrete foundations, any required forms shall be in place prior to inspection. Materials for the foundation shall be on the job, except where concrete is ready mixed in accordance with ASTM C 94, the concrete need not be on the job.

21.06.445 Concrete slab and under-floor inspection.

Concrete slab and under-floor inspections shall be made after in-slab or under-floor reinforcing steel and building service equipment, conduit, slab insulation, piping accessories and other ancillary equipment items are in place, but before any concrete is placed or floor sheathing installed, including the sub floor.

21.06.450 Lowest floor elevation.

In flood hazard areas, upon placement of the lowest floor, including the basement, and prior to further vertical construction, the elevation certification required in IBC Section 1612.5 or IRC Section R323 shall be submitted to the building official.

21.06.455 Exterior wall sheathing inspection.

Exterior wall sheathing shall be inspected after all wall framing is complete, strapping and nailing is properly installed but prior to being covered.

21.06.460 Roof sheathing inspection.

The roof sheathing shall be inspected after all roof framing is complete. No roof coverings shall be installed until inspections are made and approved.

21.06.465 IMC/UPC/GAS/NEC rough in inspection.

Rough in mechanical, gas piping, plumbing and electrical shall be inspected when the rough in work is complete and if required, under test. No connections to primary utilities shall be made until the rough in work is inspected and approved.

21.06.470 Frame inspection.

Framing inspections shall be made after the roof deck or sheathing, all framing, fire blocking and bracing are in place and pipes, chimneys and vents to be concealed are complete and the rough electrical, plumbing, fire suppression piping, heating wires, pipes and ducts are approved.

21.06.475 Flashing and exterior weather barrier inspection.

Flashing and exterior weather barrier inspections shall be made after flashing and weather barrier materials have been installed, but prior to any of the work being covered.

Subject to the approval of the building official, periodic inspections may be made during the course of construction.

21.06.480 Lath inspection and gypsum board inspection.

Lath and gypsum board inspections shall be made after lathing and gypsum board, interior and exterior, is in place, but before any plastering is applied or gypsum board joints and fasteners are taped and finished.

Exception: Gypsum board that is not part of a fire-resistance rated assembly or a shear assembly.

21.06.485 Fire-resistant penetrations.

Protection of joints and penetrations in fire-resistance-rated assemblies shall not be concealed from view until inspected and approved.

21.06.490 Energy efficiency inspection.

(1) Envelope

(a) Wall Insulation Inspection: To be made after all wall insulation and air vapor retarder sheet or film materials are in place, but before any wall covering is placed.

(b) Glazing Inspection: To be made after glazing materials are installed in the building.

(c) Exterior Roofing Insulation: To be made after the installation of the roof insulation, but before concealment.

(d) Slab/Floor Insulation: To be made after the installation of the slab/floor insulation, but before concealment.

(2) Mechanical

(a) Mechanical Equipment Efficiency and Economizer: To be made after all equipment and controls required by this Code are installed and prior to the concealment of such equipment or controls.

(b) Mechanical Pipe and Duct Insulation: Mechanical Pipe and Duct Insulation: To be made after all pipe, fire suppression piping and duct insulation is in place, but before concealment.

(3) Lighting and Motors

(a) Lighting Equipment and Controls: To be made after the installation of all lighting equipment and controls required by this Code, but before concealment of the lighting equipment.

(b) Motor Inspections: To be made after installation of all equipment covered by this Code, but before concealment.

21.06.495 Electrical.

(a) The installation, alteration or extension of any electrical system, fixtures or components for which a permit is required by this code shall be subject to inspection by the building official and such electrical systems, fixtures and components shall remain accessible and exposed for inspection purposes until approved by the building official. It shall be the duty of the permit applicant to cause the electrical systems to remain accessible and exposed for inspection purposes. The city shall not be liable for expense entailed in the removal or replacement of material required to permit inspection. When the installation of an electrical system is complete, an additional and final inspection shall be made. Electrical systems and equipment regulated by the National Electrical Code shall not be connected to the energy source until authorized by the building official.

(b) The building official may require special inspection of equipment or wiring methods where the installation requires special training, equipment, expertise, or knowledge. Where

such special inspection is required, it shall be performed by an independent third party acceptable to the building official. The special inspection person/agency shall be designated and approved prior to beginning the installation of wiring or equipment. A written report from the designated special inspection agency indicating that the installation conforms to the appropriate codes and standards shall be received by the building official prior to that installation being approved. All costs for such testing and reporting shall be the responsibility of the permit holder.

(c) Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of the National Electrical Code or of other ordinances of the city. Inspections presuming to give authority to violate or cancel the provisions of the National Electrical Code or other ordinances of the city shall not be valid.

21.06.500 Re-inspection.

The building official may require a structure or portions of work to be re-inspected. A re-inspection fee may be assessed for each inspection or re-inspection when such portion of work for which the inspection was requested is not complete; or when previous corrections called for are not made; or when the approved plans and permit are not on site in a conspicuous or pre-approved location; or when the building is not accessible. In instances where re-inspection fees have been assessed, no additional inspection of the work shall be provided by the city until the required fees are paid.

21.06.505 Other inspections.

In addition to the inspections specified above, the building official is authorized to make or require other inspections of any construction work to ascertain compliance with the provisions of this code and other laws that are enforced by the department of building safety.

21.06.510 Special inspections.

In addition to the inspections specified above, the building official is authorized to make or require special inspections for any type of work related to the technical codes by an approved agency at no cost to the jurisdiction.

21.06.515 Final inspection.

The final inspection shall be made after all work required by the building permit is completed.

21.06.520 Inspection agencies.

The building official is authorized to accept reports of approved inspection agencies, provided such agencies satisfy the requirements as to qualifications and reliability.

21.06.525 Inspection requests.

It shall be the duty of the permit holder or their duly authorized agent to notify the building official when work is ready for inspection. It shall be the duty of the permit holder to provide access to and means for inspections of such work that are required by this code.

21.06.530 Approval required.

Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the building official. The building official, upon notification, shall make the requested inspections and shall either indicate the portion of

the construction that is satisfactory as completed, or notify the permit holder or his or her agent wherein the same fails to comply with this code. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the building official.

SECTION 110

21.06.535 Use and occupancy.

No building or structure shall be used or occupied, and no change in the existing occupancy classification of a building or structure or portion thereof shall be made until the building official has issued a certificate of occupancy therefore as provided herein. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction.

21.06.540 Certificate issued.

After the building official inspects the building or structure and finds no violations of the provisions of this code or other laws that are enforced by the department of building safety, the building official shall issue a certificate of occupancy that contains the following:

- (1) The building permit number.
- (2) The address of the structure.
- (3) The name and address of the owner.
- (4) A description of that portion of the structure for which the certificate is issued.
- (5) A statement that the described portion of the structure has been inspected for compliance with the requirements of this code for the occupancy and division of occupancy and the use for which the proposed occupancy is classified.
- (6) The name of the building official.
- (7) The edition of the code under which the permit was issued.
- (8) The use and occupancy, in accordance with the provisions of Chapter 3.
- (9) The type of construction as defined in Chapter 6.
- (10) The design occupant load.
- (11) If an automatic sprinkler system is provided, whether the sprinkler system is required and for what reason.
- (12) Any special stipulations and conditions of the building permit.

21.06.545 Phased occupancy.

The building official is authorized to issue a phased certificate of occupancy before the completion of the entire work covered by the permit, provided that such portion or portions shall be occupied safely. The building official is authorized to require in addition to the completion of life safety building components, any or all accessibility components.

21.05.550 Revocation.

The building official is authorized to, in writing, suspend or revoke a certificate of occupancy or completion issued under the provisions of this code wherever the certificate is issued in error, or on the basis of incorrect information supplied, or where it is determined that the building or structure or portion thereof is in violation of any ordinance or regulation or any of the provisions of this code.

SECTION 111

21.06.555 Connection of service utilities.

No person shall make connections from a utility, source of energy, fuel or power to any building or system that is regulated by this code for which a permit is required, until released by the building official.

21.06.560 Temporary connection.

The building official shall have the authority to authorize the temporary connection of the building or system to the utility source of energy, fuel or power.

21.06.565 Authority to disconnect service utilities.

The building official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the codes referenced in case of emergency where necessary to eliminate an immediate hazard to life or property, or when such utility connection has been made without the required approval. The building official shall notify the serving utility, and wherever possible the owner and occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner or occupant of the building, structure or service system shall be notified in writing, as soon as practical thereafter.

SECTION 112

21.06.570 General.

In order to hear and decide appeals of orders, decisions, or determinations made by the Building Official relative to the application and interpretation of this code, there is hereby created a board of appeals consisting of five members who are qualified by experience and training to pass upon matters pertaining to building construction. The Building Official shall be an ex officio member and shall act as Secretary of the board but shall have no vote on any matter before the board. The other Board of Appeals members shall be appointed by the City Manager, and shall serve for not more than two four-year terms or until their successor is appointed and qualified. The Board shall adopt reasonable rules of procedure for conducting its business, and shall render all decisions and findings in writing to the appellant with a duplicate copy to the Building Official.

21.06.575 Reconsideration.

Within 7 days after the issuance of the Board's decision, a party to the appeal may request reconsideration by the Board. The request for reconsideration shall identify the specific reasons in fact or law why the Board should grant reconsideration. The board secretary and all parties must be served with the request for reconsideration not later than 7 days after the date of the Board's written decision on the appeal.

21.06.580 Corrections.

The board, on its own initiative, may issue a revised written decision at any time within the time limits applicable to court review.

21.06.585 Court Review.

The decision of the Board shall be final, subject to review by a court of competent jurisdiction. Unless otherwise specifically provided by law, a court action for judicial review must be filed within 10 days after the date of the Board's written decision, or within 10 days after the date of the Board's decision on reconsideration, if applicable.

SECTION 113

21.06.590 Unlawful acts.

It shall be unlawful for any person, firm or corporation to erect, construct, alter, extend, repair, move, remove, demolish or occupy any building, structure or equipment regulated by this code, or cause same to be done, in conflict with or in violation of any of the provisions of this chapter or the technical codes.

21.06.595 Notice of violation.

The building official is authorized to serve a notice of violation or order on the person responsible for the erection, construction, alteration, extension, repair, moving, removal, demolition or occupancy of a building or structure in violation of the provisions of this chapter or the technical codes, or in violation of a permit or certificate issued under the provisions of this code. Such order shall direct the discontinuance of the illegal action or condition and the abatement of the violation.

21.06.600 Prosecution of violation.

If the notice of violation is not complied with in the time prescribed by such notice, the building official is authorized to request the legal counsel of the jurisdiction to institute the appropriate proceeding at law or in equity to restrain, correct or abate such violation, or to require the removal or termination of the unlawful occupancy of the building or structure in violation of the provisions of this chapter or the technical codes or of the order or direction made pursuant thereto.

21.06.605 Violation penalties.

Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who erects, constructs, alters or repairs a building or structure in violation of the approved construction documents or directive of the building official, or of a permit or certificate issued under the provisions of this chapter or the technical codes, shall be subject to penalties as prescribed by law.

SECTION 114

21.06.610 Authority.

Whenever the building official finds any work being performed in a manner either contrary to the provisions of this code or other pertinent laws or ordinances implemented through the enforcement of this code, the building official is authorized to issue a stop work order.

21.06.615 Issuance.

The stop work order shall be in writing and shall be given to the owner of the property involved, or to the owner's agent, or to the person doing the work. Upon issuance of a stop work order, the cited work shall immediately cease. The stop work order shall state the reason for the order, and the conditions under which the cited work will be permitted to resume.

21.06.620 Investigation Fee.

The building official is authorized to assess a special investigation fee for the issuance of a stop work order.

21.06.625 Unlawful continuance.

Any person who shall continue any work in or about the structure after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to penalties as prescribed by law.

SECTION 115**21.06.630 Unsafe Structures and Equipment.**

Structures or existing equipment that are or hereafter become unsafe, unsanitary or deficient because of inadequate means of egress facilities, inadequate light and ventilation, or which constitute a fire hazard, or are otherwise dangerous to human life or the public welfare, or that involve illegal or improper occupancy or inadequate maintenance, shall be deemed an unsafe condition. Unsafe structures shall be taken down and removed or made safe, as the building official deems necessary and as provided for in the 1997 edition of the *Uniform Code For The Abatement Of Dangerous Buildings* or the 1997 edition of the *Uniform Housing Code*. A vacant structure that is not secured against entry shall be deemed unsafe.

Chapter 21.08**International Building Code****21.08.010 International Building Code Adopted.**

The 2003 edition of the International Building Code, as adopted by the State Building Code Council in Chapter 51-50 WAC, as published by the International Code Council, excluding chapter 1 "Administration", is adopted, together with the following amendments. Further, the following Appendix chapters are specifically adopted as part of the Kirkland Building Code: Appendix Chapter Nos. H, (Signs), and J (Grading).

21.08.015 IBC Section 403.9 amended.

Section 403.9 of the IBC is amended to read:

403.9 Elevators: Elevator operation and installation shall be in accordance with Chapter 30 and WAC 51-50-3001, 3002, 3003, 3004, 3005, and 3006. Elevators on all floors shall open into elevator lobbies that are separated from the remainder of the building, including corridors and other means of egress, by walls extending from the floor to the underside of the fire-resistance-rated floor or roof above. Such walls shall not be of less than one-hour fire-resistance-rated construction as required for a fire partition in accordance with Section 708. Openings through such walls shall conform to Section 715.

Exceptions:

1. In office buildings, separations are not required from a street-floor elevator lobby provided the entire street floor is equipped with an automatic sprinkler system in accordance with Section 903.3.1.1.
2. Elevators not required to be located in a shaft in accordance with Section 707.2.
3. Elevator lobbies are not required when elevators are located within an atrium complying with the provisions of Section 404.
4. In fully sprinklered office buildings, corridors may lead through enclosed elevator lobbies if all areas of the building have access to at least one required means of egress without passing through the elevator lobby.

5. In fully sprinklered buildings where elevator and stair shafts are pressurized in accordance with Section 909, elevator lobbies need not be provided. The pressurized stair shafts shall comply with the standards for elevator shaft pressurization in WAC 51-50-0909 Section 909.6.3.

21.08.020 IBC Section 403.10.2 amended.

Section 403.10.2 of the IBC is amended to read:

403.10.2 Standby power loads. The following are classified as standby power loads:

1. Power and lighting for the fire command center required by Section 403.8;
2. Electrically powered fire pumps;
3. Ventilation and automatic fire detection equipment for smokeproof enclosures;
4. Smoke control systems

Standby power shall be provided for elevators in accordance with Section 3003.

Fuel-fired emergency generator sets and associated fuel storage, including optional generator sets, located more than 75 feet above the lowest level of Fire Department vehicle access requires the approval of the Fire Code Official.

21.08.025 IBC Section 403.15 amended.

Section 403.15 of the IBC is amended and supplemented by the addition of a new section to read:

403.15 Smoke control. Smoke control. A smoke control system meeting the requirements of Section 909 shall be provided in buildings that exceed ten stories, or contain a use requiring defend-in-place firefighting operations in which occupants of some area cannot readily evacuate that area. This includes portions of facilities housing functions essential to continuity of public safety operations, and Group I and LC Occupancies where in the judgment of the Building Official and Fire Code Official, occupants having limited capacity for self-preservation are located on floors more than 75' above the lowest level of Fire Department vehicle access. A smoke control system for a defend-in-place use may be a performance-based design to protect that use without providing smoke control throughout the entire building, but shall otherwise comply with Section 909.

Exception: Smoke control may be omitted when approved by the Building Official and Fire Code Official.

21.08.030 IBC Section 405.9.1 amended.

Section 405.9.1 of the IBC is amended to read:

405.9.1 Standby Power. A standby power system complying with Section 2702 shall be provide standby power loads specified in Section 405.9.1.

Fuel-fired emergency generator sets and associated fuel storage, including optional generator sets, located more than 30 feet below the lowest level of exit discharge requires the approval of the Fire Code Official.

21.08.035 IBC Section 501.2 amended.

Section 501.2 of the International Building Code is hereby amended to read:

501.2 Premises Identification. Approved numbers or addresses shall be provided for new buildings in such a position as to be clearly visible and legible from the street or roadway fronting the property. Letters or numbers shall be a minimum 4 inches (76 mm) in height and stroke of minimum 0.5 inch (12.7 mm) of a contrasting color to the background itself. Section 1704.12 of the International Building Code is hereby amended to read:

21.08.040 IBC Section 707.2 Exception 2.1 amended.

Section 707.2 Exception 2.1 of the International Building Code is hereby amended to read:

2.1. Where the area of the floor opening between stories does not exceed twice the horizontal projected area of the escalator or stairway and the opening is protected by a draft curtain and closely spaced sprinklers in accordance with NFPA 13. This application is limited to openings that do not connect more than four stories in buildings not required to have smoke control systems. In buildings that are required to have smoke control systems, escalators are limited to openings that do not connect more than four stories and non-egress stairs are limited to openings that do not atmospherically connect more than two stories.

21.08.045 IBC Section 707.14.1 amended.

Section 707.14.1 of the International Building Code is hereby amended to read:

707.14.1 Elevator Lobby. Elevators opening into a fire-resistance-rated corridor as required by Section 1016.1 shall be provided with an elevator lobby at each floor containing such a corridor. The lobby shall separate the elevators from the corridor by fire partitions and the required opening protection. Elevator lobbies shall have at least one means of egress complying with Chapter 10 and other provisions within this code.

Exceptions:

1. In office buildings, separations are not required from a street-floor elevator lobby provided the entire street floor is equipped with an automatic sprinkler system in accordance with Section 903.3.1.1.
2. Elevators not required to be located in a shaft in accordance with Section 707.2.
3. Where additional doors are provided in accordance with Section 3002.6. Such doors shall be tested in accordance with UL 1784 without an artificial bottom seal.
4. In other than Group I-3, and buildings more than four stories above the lowest level of fire department vehicle access, lobby separation is not required where the building, including the lobby and corridors leading to the lobby, is protected by an automatic sprinkler system installed throughout in accordance with Section 903.3.1.1 or 903.3.1.2
5. See Section 403.9 for high rise elevator lobbies.

21.08.050 IBC Section 1605.3.1.1 amended.

Section 1605.3.1.1 of the International Building Code is hereby amended to read:

1605.3.1.1 Load Reduction. It is permitted to multiply the combined effect of two or more variable loads by 0.75 and add to the effect of dead load. The combined load used in design shall not be less than the sum of the effects of dead load and any one of the variable loads.

Increases in allowable stresses specified in the appropriate materials section of this code or referenced standard shall not be used with the load combinations of Section 1605.3.1 except that a duration of load increase shall be permitted in accordance with Chapter 23.

21.08.055 IBC Section 1608.1 amended.

Section 1608.1 of the International Building Code is hereby amended to read:

1608.1 General. Design snow loads shall not be less than 25 psf, but the design roof loads shall not be less than that determined by Section 1607.

21.08.060 IBC Section 1704.12 amended.

Section 1704.12 of the International Building Code is hereby amended to read:

1704.12 Exterior insulation and finish system (EIFS). All exterior insulation finish systems (EIFS) shall be certified by the manufacturer as having been installed per the manufacturer's installation recommendations or other agency approved by the building official.

Exception: Special inspections shall not be required for EIFS application installed over masonry or concrete walls.

21.08.065 IBC Section Table 2306.4.1 amended.

Footnote "I" to Table 2306.4.1 of the International Building Code is hereby amended to read:

In Seismic Design Category D, E or F, where shear design values exceed 490 pounds per lineal foot (LRFD) or 350 pounds per lineal foot (ASD) all framing members receiving edge nailing from abutting panels shall not be less than a single 3-inch nominal member or thicker or two 2-inch nominal members fastened together in accordance with Section 2307.1 (LRFD) or Section 2306.1 (ASD) to transfer the design shear value between the framing members. Plywood joint and sill plate nailing shall be staggered in all cases. See Section 2305.3.10 for sill plate side and anchorage requirements.

21.08.070 IBC Section 3102.2 amended.

Section 3102.2 of the IBC is amended and supplemented to read as follows:

OVERWATER STRUCTURES. For the purpose of this Chapter, overwater structures shall include all structures which have twenty percent (20%) or more of their area over water, or a structure which has 8,000 square feet over water.

DOCK. A dock is a natural open or artificially closed basin in which vessels may remain afloat when berthed at a wharf or pier.

PIER. A pier is a structure, usually of greater length than width, of timber, stone, concrete or other material having a deck, and projecting from the shore into navigable waters so that vessels may be moored alongside for loading and unloading or for storage or repairs.

SUBSTRUCTURE. The substructure is that portion of the construction below and including the deck.

SUPERSTRUCTURE. The superstructure is that portion of the construction above the deck.

WHARF OR QUAY. A wharf or quay is a structure of timber, stone, concrete or other material having a platform built along and parallel to navigable waters so that vessels may be moored alongside for loading and unloading, or for storage or repair.

21.08.075 IBC Chapter 31 amended.

Chapter 31 of the IBC is amended and supplemented with the addition of a new section 3110 to read as follows:

Section 3110 OVERWATER STRUCTURES, PIERS, WHARVES, AND BUILDINGS

IBC Section 3110.3 Structures over water.

No portion of any building or other structure supported by piers or piling and extending over water shall be more than two hundred fifty feet from an improved public street or alley giving access thereto for fire engines and other firefighting equipment; provided, however, that the foregoing limitation shall not apply to any one-story structure used solely for the moorage of boats and:

- (1) Of type 1 construction; or
- (2) Of type 2 construction; or
- (3) Having installed throughout the structure an approved automatic sprinkler system.

IBC Section 3110.4 Substructure.

1. Draft Stops. Draft stops shall be installed in all substructures constructed of combustible materials, exclusive of piling and pile bracing. They shall be placed not over one hundred feet (100') apart measured along the main axis of the pier or wharf. They shall fit tightly around all joists, beams, etc. and extend from the underside of the deck to low water with a maximum required depth of 6 feet.

EXCEPTION: Private docks which serve a single family dwelling unit.

Substructure draft stops shall be constructed of not less than two (2) thicknesses of 2" nominal thickness lumber laid with broken joints or materials of equal fire resistance.

2. Automatic Sprinklers. Automatic sprinklers shall be installed under the substructure of every overwater structure in accordance with the requirements of Chapter 9.

EXCEPTIONS: Automatic sprinklers are not required under the following categories of substructure:

- a. Combustible substructures having superstructures of 120 square feet or less in area.
- b. Noncombustible substructures with or without superstructures.

c. Substructures resulting from walkways or finger piers when width does not exceed 10 feet.

3. Dry Standpipes. When a distance of travel to fire apparatus access exceeds two hundred fifty (250) feet, an approved minimum four (4) inch dry standpipe with two and one half (2-1/2) inch outlets at a maximum of one hundred (100) feet on center shall be provided. There shall be a Siamese connection at the shore end and direct access for Fire Department pumping apparatus shall be provided. Standards for installation to be set by the Director of Fire Services.

21.08.080 Conflict with the Kirkland Zoning Code.

If any provision of the IBC Appendix Chapter H is in conflict with any provision of the Kirkland Zoning Code, the applicable provisions of the Kirkland Zoning Code shall govern

21.08.085 Permit required amended.

Section H101 of the IBC is amended and supplemented to read:

H101 Permit Required. A sign shall not hereafter be erected, reerected, constructed, altered or maintained, except as provided by this code and after a permit has been issued by the building official. A separate permit shall be required for a sign or signs for each business entity, and a separate permit shall be required for each group of signs on a single supporting structure.

21.08.090 Exemptions.

Section H101.2 of the IBC is amended and supplemented to read:

H101.2 Signs exempt from permits. A permit is not required for the following signs. These exemptions shall not be construed as relieving the owner of the sign from the responsibility for its erection, maintenance and compliance with the provisions of this code or other laws or ordinances regulating signs.

(1) Changing of the advertising copy or message on a painted or printed sign only. Except for theater marquees and similar signs specifically designed for the use of replaceable copy, electric signs shall not be included in this exception; and

(2) Painting, repainting or cleaning of an advertising structure or changing the copy or message thereon shall not be considered an erection or alteration which requires a sign permit unless a structural change is made.

21.08.095 International Building Code Section H102 amended.

Section H102 of the International Building Code is amended to establish the following definition for "blade sign":

BLADE SIGN is a sign located below a marquee or awning and attached to a wall, marquee, or awning with the exposed face of the sign in a plane perpendicular to the plane of the building wall and with a total surface area of less than 4 feet.

21.08.100 International Building Code Appendix Section H116 amended.

Appendix Chapter H of the International Building Code is amended by the addition of a new section:

Section H116—BLADE SIGNS

Section H116.1—General

Section H116.1 General. Blade signs shall be constructed of noncombustible materials, except as specified in Section H107.

Section H116.2—Design

Section H116.2 Design. Blade signs shall be designed in accordance with the requirements specified in Section H105, except where modified by Section H116.

Section H116.3—Protection and Clearance

Section H116.3.1 Protection. Blade signs may project over public property not further than the projection of the marquee or awning, but not closer than 2 feet from the curb line.

Section H116.3.2 Clearance. Blade signs shall maintain a minimum clearance of 7 feet above the level of the sidewalk or grade immediately below, provided that any blade sign with a clearance of less than 8 feet shall be suspended from a support above 8 feet of clearance in a manner that allows the blade sign to swing freely if struck. Further, blade signs with a clearance of less than 8 feet shall not exceed a weight of 25 pounds.

21.08.105 IBC Section J102 amended.

Section J102 of the International Building Code is amended and supplemented by the addition of the following definition:

LAND SURFACE MODIFICATION shall include clearing or removal of trees, shrubs, ground cover and other vegetation, and all grading, excavation and filling of materials. The removal of overhanging vegetation and fire hazards as specified in Chapter 9.12 of the Kirkland Municipal Code and the removal of dead, dangerous, or diseased trees or blackberry vines when authorized by the Building Official shall not be deemed to be Land Surface Modification.

21.08.110 IBC Section J103 amended.

Section J103 of the Uniform Building Code is amended and supplemented to read:

Section J103. PERMITS REQUIRED. Except as exempted in Section J103.2, no land surface modification shall be performed without first having obtained a permit from the building official. A land surface modification permit does not include the construction of retaining walls or other structures.

Section J103.2. Exemptions. A land surface modification permit shall not be required for the following:

1. Land surface modification performed in the normal course of maintaining existing landscaping on a lot associated with an existing building or buildings, provided such work does not modify any drainage course.

2. Any excavation below finished grade for basements and footings of a building, retaining wall or other structure authorized by a valid Building Permit. This shall not exempt any fill made with the material from such excavation when the material is removed from the lot or any fill material which is placed on the lot.

3. Cemetery graves.

4. Fill deposited on previously approved disposal sites under the control of other City Administrative Departments.

5. Excavations for wells or tunnels, or utilities or other work supervised by the City of Kirkland.

6. Mining, quarrying, excavating, processing, stockpiling of rock, sand, gravel, aggregate or clay where a permit has been issued by the State of Washington, Department of Natural Resources.

7. Exploratory excavations under the direction of soil engineers or engineering geologists.

8. Normal maintenance and repair of the facilities of a common carrier by rail in interstate commerce within its existing right-of-way.

9. Excavations for utility service connections to serve existing and/or new structures.

10. Correction of drainage problems when supervised by the Department of Public Works; and the installation of approved preliminary plat and short plat improvements as permitted by Section J103.3.

Exemption from the permit requirements of this Chapter shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this chapter or any other laws or ordinances of this jurisdiction.

21.08.115 IBC Appendix Section J103.3 added.

Appendix Section J103.3 of the International Building Code is amended by the addition of a new subsection:

Section J103.3. Permit Issuance. No land surface modification or grading permit shall be issued in the following circumstances:

1. Prior to the approval of a preliminary plat or short plat.

Exception: After the approval of a preliminary plat or short plat, a land surface modification or grading permit may be issued for land surface modification or grading work to be done within rights-of-way, utility easements or access easements as designated on the approved preliminary plat drawings. A limited amount of grading may be permitted and stockpiling of materials on individual lots with the concurrence of the departments that normally review development permit applications. Permits to be issued for activities covered by this subparagraph shall be issued by the department of

public works who shall with respect to such activities, have full authority to administer and enforce the provisions of Appendix Chapter J of the International Building Code as herein amended and supplemented.

2. Prior to the issuance of a building permit.

Exception: After the receipt of a complete application for a building permit, a land surface modification or grading permit may be issued only for the minimum land surface modification or grading necessary to locate structures or other associated improvements designated on the submitted building permit plans.

3. In areas served by inadequate water, sewer, storm drainage or transportation systems as determined by the Public Works Department.

Exception: When such action proposes the improvement of any deficient system to minimum city standards and at the expense of the private sponsor and such improvements are associated with the issuance of a valid building permit.

4. Prior to the approval specified in Section 115.75, Kirkland Zoning Code, where no Building Permit is required.
5. Prior to the approval of a preliminary Planned Unit Development.

Exception: After the approval of a preliminary Planned Unit Development, a Land Surface Modification or Grading Permit may be issued for land surface modification or grading work to be done within rights-of-way, utility easements, access easements or other major components of the internal vehicular circulation system so designated in the approved Preliminary Planned Unit Development.

Chapter 21.10

International Residential Code

21.10.010 International Residential Code adopted.

The 2003 edition of the International Residential Code, as adopted by the State Building Code Council in Chapter 51-51 WAC, as published by the International Code Council, excluding chapter 1 "Administration" is adopted.

Chapter 21.12

Uniform Housing Code

21.12.010 Housing code adopted.

The Uniform Housing Code issued by the International Conference of Building Officials, 1997 Edition, together with amendments and/or additions thereto, is adopted in its entirety by this reference as the housing code for the city except that references to the Uniform Codes shall be replaced with the appropriate technical codes and sections as adopted by this jurisdiction.

Chapter 21.16

International Mechanical Code

21.16.010 International Mechanical Code adopted.

The 2003 edition of the International Residential Code, as adopted by the State Building Code Council in Chapter 51-42 WAC, as published by the International Code Council, excluding chapter 1 "Administration" is adopted.

Chapter 21.20

International Fire Code

21.20.010 International Fire Code adopted.

The 2003 edition of the International Fire Code, as adopted by the State Building Code Council in Chapter 51-54 WAC as published by the International Code Council, is adopted together with the following amendments. Further, the following Appendix chapters are specifically adopted as part of the Kirkland Fire Code: Appendix Chapter Nos. B (Fire-Flow requirements for Buildings) and Appendix Chapter C (Fire Hydrant Locations and Distribution).

FPN: WAC 51-44-0500 identifies that fire apparatus access roads shall be provided and maintained in accordance with locally adopted street, road and access standards and further sections 501.1.1 through 503.4 are not adopted. The City of Kirkland has established criteria for fire apparatus access roads in Operating Policy #6 which is available on the Internet and at City Hall.

21.20.015 IFC Section 102.6 amended.

Section 102.6 of the International Fire Code is amended to read as follows:

102.6 Referenced codes and standards. The codes and standards referenced in this code shall be those that are listed in Chapter 45. Such codes and standards shall be considered part of the requirements of this code to the prescribed extent of each such reference as determined or modified by the fire code official.

21.20.020 IFC Section 104.10.1 amended.

Section 104.10.1 of the International Fire Code is amended to read as follows:

104.10.1 Assistance from other agencies. Police and other enforcement agencies shall have authority to render necessary assistance in the investigation of fires or the enforcement of this code as requested by the fire code official.

21.20.025 IFC Section 104.11.2 amended.

Section 104.10.1 of the International Fire Code is amended to read as follows:

104.11.2 Obstructing operations. No person shall obstruct the operations of the fire department in connection with extinguishment, investigation, or control of any fire, or actions relative to other emergencies, or disobey any lawful command of the fire chief or officer of the fire department in charge of the emergency, or any part thereof, or any lawful order of a police officer assisting the fire department.

21.20.030 IFC Section 105.7.5 amended.

Section 105.7.5 of the International Fire Code is amended to read as follows:

105.7.5 Permit Required. Underground Combustible Liquid Tank.

A permit is not required for the abandonment or removal of underground storage tanks previously used to store fuel oil for residential heating. It is the property owner's responsibility to make the decision on how to proceed with abatement.

21.20.035 IFC Section 108 amended.

Section 108 of the International Fire Code is amended to read as follows:

Section 108. Appeals. Whenever the Fire Chief disapproves an application or refuses to grant a permit, or when it is claimed that the provisions of the International Fire Code do not apply or that the true intent and meaning of the Code have been misconstrued or wrongly interpreted, the applicant may appeal the decision of the Fire Chief to the Building Code Board of Appeals, within thirty days from the date of the decision appealed.

21.20.040 IFC Section 202 amended.

Section 202 of the International Fire Code is amended by the addition of a new definition to read as follows:

ICC *Electrical Code*. Means the National Electrical Code 2002 edition as adopted and amended by the City of Kirkland.

21.20.045 IFC Section 308.3.1.2 added.

Section 308.3.1.2 of the International Fire Code is added to read as follows:

308.3.1.2. Flaming Food and Beverages Preparation:

308.3.1.2.1. General. The preparation of flaming foods or beverages in places of assembly and drinking establishments shall be in accordance with Section 308.3.1.2

308.3.1.2.2. Dispensing. Flammable or combustible liquids used in the preparation of flaming foods or beverages shall be dispensed from one of the following:

1. A 1-ounce (29.6 ml) container, or
2. A container not exceeding 1 quart (946.5 ml) capacity with a controlled-pouring device that will limit the flow to a 1-ounce (29.6 ml) serving.

308.3.1.2.3. Containers not in use. Containers shall be secured to prevent spillage when not in use.

308.3.1.2.4. Serving of flaming food. The serving of flaming foods or beverages shall be done in a safe manner and shall not create high flames. The pouring, ladling or spooning of liquids is restricted to a maximum height of 8 inches (203 mm) above the receiving receptacle.

308.3.1.2.5. Location. Flaming foods or beverages shall be prepared only in the immediate vicinity of the table being served. They shall not be transported or carried while burning.

308.3.1.2.6. Fire protection. The person preparing the flaming foods or beverages shall have a wet cloth immediately available for use in smothering the flames in the event of an emergency.

21.20.050 IFC Section 308.3.7 amended.

Section 308.3.7 of the International Fire Code is amended to read as follows:

Section 308.3.7. Group A occupancies. Open-flame devices shall not be used in a Group A occupancy.

Exceptions:

1. Open-flame devices are allowed to be used in the following situations, provided approved precautions are taken to prevent ignition of a combustible material or injury to occupants:

- 1.1. Where necessary for ceremonial or religious purposes in accordance with Section 308.3.5.
- 1.2. On stages and platforms as a necessary part of a performance in accordance with Section 308.3.6.
- 1.3. Where candles on tables are securely supported on substantial noncombustible bases and the candle flames are protected.
2. Heat-producing equipment complying with Chapter 6 and the International Mechanical Code.
3. Gas lights are allowed to be used provided adequate precautions satisfactory to the fire code official are taken to prevent ignition of combustible materials.
4. Except where approved by the fire code official (see also 308.3.1.2)

21.20.055 IFC Section 314.4 amended.

Section 314.4 of the International Fire Code is amended to read as follows:

Section 314.4. Vehicles. Liquid- or gas-fueled vehicles, fueled equipment, boats or other motorcraft shall not be located indoors except as follows:

1. Batteries are disconnected.
2. Fuel in fuel tanks does not exceed one-quarter tank or 5 gallons (19 L) (whichever is least).
3. Fuel tanks and fill openings are closed and sealed to prevent tampering.
4. Vehicles, boats or other motorcraft equipment are not fueled or defueled within the building.

21.20.060 IFC Section 508.5 amended.

Section 508.5 of the International Fire Code is amended to read as follows:

Section 508.5. Fire hydrant systems. Fire hydrant systems shall comply with Sections 508.5.1 through 508.5.6.

508.5.1. Where required. Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 150 feet from a hydrant

on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, onsite fire hydrants and mains shall be provided where required by the fire code official.

Exceptions:

1. For Group R-3 and Group U occupancies, the distance requirement shall be 300 feet.
2. For Group R-3 and Group U occupancies equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, the distance requirements shall be 600 feet.

21.20.065 IFC Section 511 added.

A new Section 511 of the International Fire Code is added to read as follows:

Section 511. Emergency Radio Coverage in Buildings

511.1 Building Radio Coverage. Except as otherwise provided no person shall maintain, own, erect, or construct, any building or structure or any part thereof, or cause the same to be done which fails to support adequate radio coverage for City emergency services workers, including but not limited to firefighters and police officers.

Exceptions:

1. This section shall not apply to single family residential buildings; any building constructed of wood frame; any building thirty-five (35) feet high or less; as long as none of the aforementioned buildings make primary use of metal or concrete construction or contain below grade storage or parking areas. For purposes of this section, parking structures are included in the definition of building, and stair shafts are included in the definition of all parts of a building, but elevators may be excluded.
2. Buildings constructed prior to the implementation of this section shall not be required to comply with public safety radio coverage provisions of this section. However, should exempted structures undergo renovation, restoration, or significant modification to the original structure, exemption from the provisions of this Ordinance shall not apply.

511.1.1 Adequate Radio Coverage. A minimum signal strength of three (3) micro volts available in all areas of the building when transmitted from the Regional 800 MHz. Radio System. For purposes of this section 90% building coverage is considered to be all areas of the building.

511.1.2 Minimum Signal Strength. A minimum signal strength of one-half (.5) micro volts received by the Regional 800 MHz. Radio System when transmitted from any area of the building.

511.1.3 Frequency Range. The frequency range which must be supported shall be 806 MHz to 824 MHz and 851 MHz. to 869 MHz. in all areas of the building. Measurements in-buildings for the purpose of this ordinance shall be to a portable radio with a half-wave antenna, worn on the belt. The City's Radio System Manager may designate alternate methods of measuring the signal level, which satisfy appropriate levels of public safety grade coverage.

511.1.4 Testing and Proof of Compliance. Each owner shall submit at least one field test:

1. Prior to occupancy of any newly constructed building.
2. Whenever structural changes occur including additions to buildings that would materially change the original field performance tests
3. Annually
4. When repairs or alterations are made to amplification systems

The performance test shall demonstrate that adequate radio coverage is available in all required areas of the building. At the conclusion of the testing a report shall be submitted to the Fire Code Official which shall verify compliance with Section 511.1 and must include a floor plan identifying the signal strength at various locations of the building. The testing shall be conducted by a consultant approved by the Fire Code Official and shall be done without expense to the City of Kirkland.

511.2 Annual Test. Each owner shall submit on an annual basis to the Fire Code Official required test data demonstrating that adequate radio coverage level is available and maintained in all required areas of the building, or that the installed amplification system functions properly. The annual submittal shall insure that no structural changes have occurred to the building that would materially change the original field tests.

511.3 Amplification Systems Allowed. Buildings and structures which cannot support the required level of radio coverage shall be equipped with a radiating cable system and/or an internal multiple antenna system with FCC type accepted bi-directional 800 MHz amplifiers, or systems otherwise approved by the City Radio System Manager in order to achieve the required adequate radio coverage. The installed system or systems shall be capable of operating on an independent battery system for a period of at least twelve (12) hours without external power input. The battery system shall automatically charge in the presence of external power input.

511.3.1 Approval Prior to Installation. No amplification system capable of operating on frequencies used by the Regional 800 MHz. Radio System shall be installed without prior coordination and approval of the radio system licensee (The Eastside Public Safety Communications Agency) and any such system must comply any standards adopted by the King County Regional Communications Board.

511.4 Field Testing. Police and Fire Personnel shall at any time have the right to enter onto the property to conduct its own field-testing to be certain that the required level of radio coverage is present

21.20.070 IFC Section 602 amended.

Section 602 of the International Fire Code is amended to read as follows:

Section 602. Power Tap. A listed device for indoor use consisting of an attachment plug on one end of a flexible cord and two or more receptacles on the opposite end, and has overcurrent protection.

21.20.075 IFC Section 803.1 amended.

Section 803.1 of the International Fire Code is amended to read as follows:

Section 803.1. General requirements. The provisions of Sections 803.1.1 through 803.1.3 shall be applicable to all occupancies covered by Sections 803.2 through 803.7.

803.1.1 Explosive and highly flammable materials. Furnishings or decorations of an explosive or highly flammable character shall not be used.

803.1.2 Fire-retardant coatings. Fire-retardant coatings shall be maintained so as to retain the effectiveness of the treatment under service conditions encountered in actual use.

803.1.3 Obstructions. Furnishings or other objects shall not be placed to obstruct exits, access thereto, egress there-from or visibility thereof.

803.1.4 Atrium Furnishings

803.1.4.1 Potential heat. Potential heat of combustible furnishings and decorative materials within atria shall not exceed 8,000 btu per pound (20,934 J/g) when located with an area that is more than 20 feet (6096 mm) below ceiling-level sprinklers.

803.1.4.2. Decorative materials. Decorative material in atria shall be noncombustible, flame resistive or treated with a flame retardant.

21.20.080 IFC Section 901.7 amended.

Section 901.7 of the International Fire Code is amended to read as follows:

Section 901.7. Systems out of service. Where a fire protection system is out of service, the fire department and the fire code official shall be notified immediately and, where required by the fire code official, the building shall either be evacuated or an approved fire watch shall be provided for all occupants left unprotected by the shut down until the fire protection system has been returned to service. Where utilized, fire watches shall be provided with at least one approved means for notification of the fire department and their only duty shall be to perform constant patrols of the protected premises and keep watch for fires.

21.20.085 IFC Section 903.2.1.2 amended.

Section 903.2.1.2 of the International Fire Code is amended to read as follows:

Section 903.2.1.2. Group A-2. An automatic sprinkler system shall be provided for Group A-2 occupancies where one of the following conditions exists:

1. The fire area exceeds 5,000 square feet (464.5 m²);
2. The fire area has an occupant load of 100 or more; or
3. The fire area is located on a floor other than the level of exit discharge.

21.20.090 IFC Section 903.4 amended.

Section 903.4 of the International Fire Code is amended to read as follows:

Section 903.4.2. Alarms. Approved audible and visible alarm notification appliances shall be provided for every automatic sprinkler system in accordance with Section 907 and throughout areas designated by the Fire Code Official. Sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Alarm devices shall be provided on the exterior of the building in an approved location. Where a fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system.

Exception: With approval of the Fire Code Official, interior audible and visible alarm notification appliances may be omitted for approved residential sprinkler systems in 1 or 2 dwelling units if not otherwise specifically required.

Section 903.4.3. Floor control valves. Approved supervised indicating control valves shall be provided at the point of connection to the riser on each floor.

Exception: When approved by the Fire Code Official in NFPA 13D and NFPA 13 R systems.

21.20.095 IFC Section 905.3 amended.

Section 905.3 of the International Fire Code is amended by the addition of a new section to read as follows:

Section 905.3.7. High Rise Building Standpipes. Standpipe risers shall be combination standpipe/sprinkler risers using a minimum pipe size of 6 inches. Two 2 1/2 inch hose connections shall be provided on every intermediate floor level landing in every required stairway. Where pressure reduction valves (prv) are required, each hose connection shall be provided with its own prv. The system shall be designed to provide a minimum flow of 300 gpm at a minimum pressure of 150 psi (maximum 200 psi) at each standpipe connection, in addition to the flow and pressure requirements contained in NFPA 14.

21.20.100 IFC Section 905.8 amended.

Section 905.8 of the International Fire Code is amended to read as follows:

Section 905.8. Dry Standpipes. When approved by the Fire Code Official, dry standpipes may be installed in other than high rise buildings.

21.20.105 IFC Section 906.1 amended.

Section 906.1 of the International Fire Code is amended to read as follows:

Section 906.1. Where required. Portable fire extinguishers shall be installed in the following locations.

1. In all Group A, B, E, F, H, I, M, R-1, R-2, R-4 and S occupancies.
2. Within 30 feet (9144 mm) of commercial cooking equipment.
3. In areas where flammable or combustible liquids are stored, used or dispensed.
4. On each floor of structures under construction, except Group R-3 occupancies, in accordance with Section 1415.1.
5. Where required by the sections indicated in Table 906.1.

6. Special-hazard areas, including but not limited to laboratories, computer rooms and generator rooms, where required by the fire code official.

21.20.110 IFC Section 907.15 amended.

Section 907.15 of the International Fire Code is amended to read as follows:

Section 907.15. Monitoring. All required fire alarm systems in new and existing buildings shall be monitored and supervised by a local central station, acceptable to the fire chief, or a proprietary or remote station and shall have a local alarm which will give an audible signal. As of July 1, 1997, all buildings with existing systems must meet the standards of this section, if not specifically required to do so earlier.

Exception: Supervisory service is not required for:

1. Single- and multiple-station smoke alarms required by Section 907.2.10
2. Automatic sprinkler systems in one- and two-family dwellings.

21.20.115 IFC Section 1404.5 amended.

Section 1405.5 of the International Fire Code is amended to read as follows:

Section 1404.5. Fire watch. When required by the fire code official for building construction or demolition that is hazardous in nature, qualified personnel shall be provided to serve as an on-site fire watch. Fire watch personnel shall be provided with at least one approved means for notification of the fire department and their sole duty shall be to perform constant patrols and watch for the occurrence of fire.

Chapter 24

Uniform Plumbing Code

21.24.010 Uniform Plumbing Code adopted.

The 2003 edition of the Uniform Plumbing Code, as adopted by the State Building Code Council in Chapter 51-56 and 51-57 WAC, as published by the International Code Council, excluding chapter 1 "Administration" is adopted, together with Appendix Chapters A "Recommended Rules for Sizing the Water Supply System", B "Explanatory Notes on Combination Waste and Vent Systems", I "Installation Standards", H "Grease Interceptors", and L "Alternate Plumbing Systems" excluding sections L5 through L7 of Appendix L and "Private Lawn Sprinkler Head" from table 6-4.

Chapter 28

National Fuel Gas Code

21.28.010 National Fuel Gas Code (NFPA 54) adopted.

The 2002 edition of the National Fuel Gas Code, as adopted by the State Building Code Council in Chapter 51-52 WAC, as published by NFPA is adopted.

Chapter 32

Liquefied Petroleum Gas Code

21.32.010 Liquefied Petroleum Gas Code (NFPA 58) adopted.

The 2001 edition of the Liquefied Petroleum Gas Code, as adopted by the State Building Code Council in Chapter 51-52 WAC, as published by NFPA is adopted.

CHAPTER 21.33 FIRE EXTINGUISHING SYSTEMS

21.33.010 Purpose.

The purpose of this chapter is to promote the general public health, safety and welfare by establishing the maximum fire compartment area within unsprinklered buildings and regulating the installation of automatic fire-extinguishing systems. This chapter is not intended to create or otherwise establish or designate any particular class or group of persons who will or should be especially protected or benefitted by the terms of this chapter.

21.33.020 Intent.

It is the intent of this chapter to require installation of fire-extinguishing systems so as to protect against safety hazards. These requirements are reasonably related to the hazard posed. Notwithstanding any chapter, ordinance, legislation or other provisions concerning local requirements for fire-extinguishing systems, this chapter shall determine the requirements for fire-extinguishing systems within the city.

21.33.030 Scope.**(a) General.**

(1) The provisions of this chapter shall apply to new buildings and to existing buildings that are expanded beyond the limits set forth in this chapter. All fire-extinguishing systems required by this chapter shall be installed in accordance with the requirements of this chapter.

(2) Fire hose threads used for connection to fire-extinguishing systems by the fire department shall be National Standard Hose Threads (NST).

(3) In buildings used for high-piled combustible storage, fire protection shall be in accordance with Article 81, Uniform Fire Code, 1997 Edition.

(4) The occupancy classifications used in this chapter are the same as those used in the building code adopted by reference in this title.

(b) Approvals. All fire-extinguishing systems including automatic sprinkler systems, combined systems, and special automatic extinguishing systems shall be approved and shall be subject to such periodic tests as may be required by the fire chief. The location of all fire department hose connections shall be approved by the fire chief. The connection to a public water supply and cross-connection control shall be approved by the appropriate water purveyor.

21.33.035 Appeals.

Appeals from any ruling made under this chapter may be made to the building code board of appeal. Procedural rules concerning appeals shall be as provided in the building code.

21.33.040 Definitions.

For the purpose of this chapter certain terms are defined as follows:

(1) "Automatic fire-extinguishing system" is an approved system of devices and equipment which automatically detects a fire and discharges an approved fire-extinguishing agent onto or in the area of a fire.

(2) "Combined system" is a system of water piping which serves two-and-one-half-inch hose outlets for use by the fire department and also supplies water for fire sprinklers.

(3) "Fire department hose connection" is a connection through which the fire department can pump water.

21.33.050 Standards.

Fire extinguishing systems shall comply with UBC Standards Nos. 9-1, 9-2 and 9-3 as adopted by the building code for the city.

EXCEPTIONS:

(1) Automatic fire-extinguishing systems not covered by UBC Standard No. 9-1, 9-2 or 9-3 shall be approved and installed in accordance with the fire code.

(2) Automatic sprinkler systems may be connected to the domestic water supply main when approved by the fire chief; provided the domestic water supply system is of adequate pressure, capacity and sizing for the combined domestic and sprinkler requirements. In such case the connection shall be made between the public water main or meter and the building shutoff valve, and there shall not be intervening valves or connections.

(3) The fire department connection may be omitted when approved by the fire chief.

(4) Automatic sprinkler systems in Group R occupancies, four stories or less may comply with UBC Standard 9-3. When residential sprinkler systems as set forth in UBC Standard 9-3 are provided, exceptions to or reductions in code requirements based on the installation of an automatic fire-extinguishing system are not allowed.

21.33.060 Automatic fire-extinguishing systems.

(a) Where Required. An automatic fire-extinguishing system shall be installed in all structures as set forth in this section and Section 1003.2.1 through Section 1003.2.8 of the 1997 Uniform Fire Code and 1997 Uniform Building Code Sections 904.2.1 through 904.2.8 as amended and adopted by the state of Washington. For the purposes of this section an area separation or occupancy separation wall shall not constitute a separation between two structures.

EXCEPTIONS:

(1) One area separation wall without openings therein may be utilized in duplexes, apartment houses and condominiums; provided, that the total area of the combined structures does not exceed twelve thousand square feet.

(2) One area separation wall may be utilized in office buildings; provided, that openings are limited to one fire-rated, side-hinged, automatic closing door per floor, and one duct equipped with a combination fire/smoke damper; and further provided, that the total area of the combined structures does not exceed twelve thousand square feet. If openings are provided, they must be located within a corridor. No other openings are permitted in the area separation wall.

(b) All Occupancies. An automatic sprinkler system shall be installed in the following buildings or structures:

(1) In all buildings where the aggregate area of all floor and basements is greater than six thousand square feet except as otherwise specified in this chapter. See Section 21.33.060 Exception No. 2 for allowable increases in office buildings.

EXCEPTION: Open-air grandstands and bleachers without combustible members and which include no used space beneath;

(2) In all buildings four or more stories in height. For the purpose of this section, a story shall be defined as that portion of a building included between the upper surface of any floor and the surface of the next floor or roof above;

(3) When it is determined by the fire chief that access for fire department or fire flow is not adequate;

(4) Throughout every residential building where the aggregate area of all floors and basements is greater than seven thousand square feet. See Section 21.33.060 Exception No. 1 for allowable increases;

(5) In Group E-1 occupancies as required by WAC 51-40-0904.2.4.1;

(6) All buildings or structures supported by piers or piling which extend over water.

EXCEPTION: Any one-story structure used solely for the moorage of boats or having Type I F.R. or II F.R. construction throughout need not have a sprinkler system installed unless otherwise required by other provisions of this chapter;

(7) Structures utilized exclusively as agricultural buildings of Type I or II construction where the aggregate area of all floors and basements is greater than twelve thousand square feet which shall include the following uses:

- a. Storage of livestock and poultry,
- b. Riding arenas without viewing stands,
- c. Horticultural structures such as greenhouses;

(8) Other buildings and/or structures as specified in rules promulgated by the fire chief.

21.33.065 Permit fees.

I. New Fire Sprinkler System

Sprinkler
Heads

1 to 100	\$330.00
101 to 200	\$410.00
201 to 300	\$500.00
301 and up	\$500.00

for the first 300 and \$50.00 per 100 devices or fraction thereof

II. NFPA 13 D systems (SFR)

Sprinkler
Heads

1 to 40	\$180.00
41 and up	\$240.00

III. Risers or Supplies

Per riser¹ \$25.00

Per supply (post/wall indicator valve, double \$25.00
detector check valve, connection)²

¹ One "supply" shall consist of a post or wall indicator valve, a double detector check valve assembly, and a fire department connection (one each).

² One "riser" shall consist of an interior zone supply with all accompanying trim with flow switch or pressure switch. It may be either a stand alone vertical riser, one vertical riser of a manifold system, or where zones are controlled at floors, one floor control valve and all accompanying trim and flow switch.

IV. Tenant Improvement or Modification of Fire Sprinkler Systems

Sprinkler Heads

1 to 5	\$110.00
6 to 10	\$150.00
11 to 20	\$200.00
21 to 40	\$260.00
41 to 100	\$330.00
101 to 200	\$410.00
201 to 300	\$500.00
301 and up	\$500.00

for the first 300 plus \$50.00 per 100 devices or fraction thereof.

V. Fire Suppression System Other than Sprinklers (e.g., Hood and Duct, FM200 etc.)

New System Per Device or Nozzle

1 to 20	\$160.00
21 to 40	\$200.00
41 and up	\$200.00

for the first 40 plus \$40.00 per each 40 additional devices or portion thereof.

Tenant Improvement of System Modification

1 to 5	\$100.00
6 to 10	\$120.00
11 to 20	\$160.00
21 and up	\$160.00

for the first 20 and \$40.00 per each 20 additional devices or fraction thereof

Other Inspections and Fees:

1. Inspections outside of normal business hours (minimum charge —two hours) \$118.50 per hour
2. Reinspection fees, per inspection when such portion of work for which inspection is called is not complete or when corrections called for are not made \$79.00
3. Inspection for which no fee is specifically indicated, per hour (minimum charge—one-half hour) \$79.00 per hour

4. Additional plan review required by changes, additions or revisions to plans or to plans for which an initial review has been completed (minimum charge—one-half hour) \$79.00 per hour
5. Fees shall be doubled for work begun without a valid permit.

21.33.070 Sprinkler system supervision.

All automatic sprinkler systems shall be monitored by U.L. listed central station, with a local audible alarm. Nonresidential occupancies shall also be equipped with an exterior alarm strobe in a location approved by the fire department.

21.33.080 Permissible sprinkler omissions.

Subject to the approval of the fire chief, sprinklers may be omitted in rooms or areas as indicated in Section 1003.4 of the Uniform Fire Code, 1997 Edition.

21.33.085 Existing buildings.

Existing buildings that would be required to install an automatic sprinkler system, if new, shall comply with this section when an addition is made to the building, or when the value of all alterations or repairs within any twenty-four-month period exceeds fifty percent of either the assessed valuation of such existing building, based on King County assessed valuation, or the value of the existing building as determined by the most current building standards as published by the International Conference of Building Officials, whichever is greater.

For the purpose of this subsection, existing buildings which utilize Section 21.33.060 Exception Nos. 1 or 2 shall not be considered as additions.

For the purposes of this subsection, the cost of such alteration or repair shall be as determined by the building official.

Any existing building required to install an automatic sprinkler system under the provisions of this section shall install such system throughout the entire building.

EXCEPTION:

Areas of existing buildings may be increased by up to twenty-five percent, not to exceed the areas permitted in Section 21.33.060(b)(1), (4), or (7) in additional square feet.

Existing buildings with a total area less than that specified in Section 21.33.060(b)(1), (4), or (7) may be increased up to the areas specified in Section 21.33.060(b)(1), (4), or (7) and twenty-five percent in additional area.

This exception shall be used one time only and acknowledgment of its use shall be recorded to run with the property title prior to permit issuance.

21.33.090 Operating policies.

The fire chief shall develop and publish operating policies for the installation of automatic fire-extinguishing systems. The operating policies shall indicate the type and configuration of systems based on, but not limited to, occupancy type, location and water availability. The operating policies shall be developed from nationally recognized standards and local conditions. No less than three copies shall be available for public inspection and review in the fire department office. The fire chief may offer the operating policies for sale at a reasonable cost to cover printing and handling.

Fire Lanes

21.34.010 Definition — Fire lane.

"Fire lane" means a parcel of land designated and maintained by the owner to provide access to a building from an improved public street, for firefighting and other emergency equipment and personnel.

21.34.015 Duty to establish.

It shall be the duty of the owner, or designated agent, of any commercial property to designate and maintain at all times any required fire lanes appurtenant to structures. Designation and maintenance shall include the installation and maintenance of signs identifying the fire lane. The signs shall be in a format approved by the fire chief.

(1) Designated fire lanes serving single-family residences shall be maintained at all times.

(2) Any duties imposed upon "owner" within this chapter shall be imposed upon each owner, in reference to single-family residences serviced by a designated fire lane. Likewise, any charge or lien authorized against an owner in this chapter shall be authorized against each such owner on an apportioned basis.

21.34.020 Duty of fire department.

Whenever it may come to the attention of the fire chief, any employee, or officer of the fire department, that a required fire lane has either not been designated or is not being maintained as required, the fire chief shall:

(1) Cause notice to be given to the owner of said property or designated agent that failure to designate and maintain a fire lane is a violation of this chapter, and that such violation shall be corrected within thirty days of the date of such notice, and in the event the violation continues beyond the thirty-day period, that the fire department may commence enforcement proceedings by issuing a citation or coming on to the property of the violator and designate and sign the required fire lane.

(2) Whenever notice of violation is given to a property owner, under the provisions of this section, such notice shall be in writing and shall be served upon the property owner by mailing to the owner at the address as it appears on the property tax rolls maintained in the office of the King County assessor and by posting a copy of said notice in a conspicuous place on the premises where the violation is occurring.

21.34.025 Failure to comply—Lien on property.

Any expense reasonably incurred by the city, as a result of the fire department carrying out its duty imposed by Section 21.34.020, shall become a charge against the owner of the property and a lien against the property.

21.34.030 Notice of lien—Form—Enforcement.

The notice of lien hereinbefore provided shall be substantially the same form as provided by law for liens for labor and material in the state, shall be filed with the same officer within the same time and manner and enforced and foreclosed as is provided by state law for liens of labor and material.

21.34.035 Duty to honor designated fire lanes.

It is unlawful for any person to cause or allow any vehicle or other impeding object to remain in a designated fire lane. Any person who fails to meet the duty imposed by this

section is guilty of a misdemeanor, provided that if the object violating this section is a motor vehicle licensed or registered under RCW Title 46, the violation is a traffic infraction.

21.34.040 Enforcement.

(a) The police department is authorized to impound any motor vehicle or impeding object remaining in a designated fire lane.

(b) The cost of impoundment shall be charged to the registered owner of any motor vehicle in violation of Section 21.34.035 of this chapter.

(c) The cost of impounding an impeding object other than a motor vehicle, left in a designated fire lane in violation of Section 21.34.035 shall be charged to the person found, through investigation by the police department, to be responsible for such violation.

21.34.045 Duty of owner to report violations.

It shall be the duty of the owner of real property or such owner's designated agent to immediately report any known violations of Section 21.34.035. A violation of this section shall constitute a misdemeanor.

Chapter 21.35A

Electronic Security Devices

21.35A.010 Automatic linkage to police department prohibited.

The installation or use of any electric, electronic or mechanical security device which gives automatic notice to the communications center of the Kirkland police department is prohibited, except by federal, state or local government agencies acting with the permission of the chief of police. This provision specifically includes devices utilizing the public telephone system.

21.35A.015 Violation—Penalty.

Violators of Section 21.35A.010 shall be subject to the enforcement provisions of this title.

21.35A.020 False alarms—Corrective action.

It is the intent of Sections 21.35A.020 through 21.35A.045 to reduce the number of false alarms occurring within the city and to encourage the proper operation and maintenance of burglary and/or robbery alarms. These sections provide for corrective administrative action, including fees and potential disconnection for repeated false alarms.

21.35A.025 Definitions.

The following, as used in this chapter shall be defined as set forth in this section:

(1) "False alarm" includes the activation of a burglary and/or robbery alarm by other than a forced entry, attempted forced entry, unlawful entry or actual robbery or attempted robbery on the premises and at a time when no robbery, burglary or crime involving a foreseeable risk of grievous bodily harm is being committed or attempted on the premises.

(2) "Person" includes any natural person, partnership, joint stock company, unincorporated association or society, or a corporation of any character whatsoever.

21.35A.030 Emergency contact card.

(a) It is unlawful to have or maintain on any premises a burglary and/or robbery alarm unless there is:

(1) On file with the police department an emergency-contact card containing the name and phone number of person(s) authorized to enter such premises and turn off any alarm; and

(2) For business premises, a list of phone number(s) of person(s) authorized to enter such premises to turn off any alarm posted prominently at the front entrance of the premises. This requirement is in addition to the card required in subdivision (1) of this subsection.

(b) Any alarm audible upon abutting property for a period in excess of one hour is declared to be a public nuisance and may be summarily abated by the police department.

21.35A.035 False alarm—Unlawful.

It is unlawful for anyone to activate any robbery or burglary alarm for the purpose of summoning police except in the event of an actual or attempted burglary or robbery, or for anyone notifying the police of an activated alarm, and having knowledge that such activation was apparently caused by an electrical or other malfunction of the alarm system, to fail at the same time to notify the police of such apparent malfunction.

21.35A.040 False alarm—Fees.

For police response to any false alarm, the city may charge and collect, from the person having or maintaining such burglary and/or robbery alarm on premises owned or occupied by him, fees as follows:

(1) For a response to premises at which no other false alarm has occurred within the preceding six-month period, hereinafter referred to as a "first response," no fee shall be charged. Upon first response, notice of conditions and requirements of this chapter shall be given to the owner or occupant of the premises on which the false alarm occurred and upon which the burglary and/or robbery alarm is located.

(2) For a second response to premises within six months after the first response, a fee of twenty-five dollars may be charged. The person having or maintaining such burglary and/or robbery alarm shall, within five working days after notice to do so, make a written report to the chief of police on prescribed forms setting forth the cause of such false alarm, the corrective action taken, whether and when such alarm has been inspected by authorized service personnel, and such other information as the chief of police may reasonably require to determine the cause of such false alarm, any mitigating circumstances and corrective action necessary. The chief of police shall be authorized to inspect or cause to be inspected the alarm system at such premises, prescribe necessary corrective action, and shall give notice to the person having or maintaining such alarm system of the conditions and requirements of this section. All costs of inspection and corrective action shall be borne by the individual having or maintaining the alarm on the premises.

(3) For such a third response to premises within six months after such a second response and for all succeeding responses within six months of the last response, a fee of fifty dollars may be charged, and if such third false alarm or any such succeeding false alarm occurs as a result of failure to take necessary corrective action prescribed, the chief of police may order the person having or maintaining the burglary and/or robbery alarm to disconnect such alarm until the prescribed corrective action is taken and certification of such corrective action is provided to the police department; provided, that no disconnection shall be ordered relative to any premises required by law to have an alarm system in operation.

(4) The chief of police is authorized to adopt reasonable rules and regulations for administration of the provisions of this chapter.

21.35A.045 Administrative decisions—Notice.

Notice of imposition of any administrative decision or sanction, including without limitation the imposition of a fee or order of disconnection, under the provisions of this chapter shall be given to the person having or maintaining a burglary and/or robbery alarm on premises owned or occupied by him; provided, that with respect to business premises, the owner, manager or chief administrative agent regularly assigned and employed on the premises at the time of the occurrence of a false alarm shall be presumed to be the person having or maintaining the alarm on the business premises and to whom notice shall be given.

Chapter 21.35B

Fire Alarm Devices

21.35B.010 Automatic linkage to fire department prohibited.

The installation or use of any electric, electronic or mechanical alarm device which gives automatic notice to the communications center of the Kirkland fire department on emergency or business telephone numbers is prohibited. Individuals, agencies or companies may use the special telephone line for automatic notification when approved by the director of fire services. This provision specifically includes devices utilizing the public telephone system.

21.35B.015 Violation—Penalty.

Violators of Section 21.35B.010 shall be subject to the enforcement provisions of this title.

Chapter 21.36

International Fuel Gas Code

21.36.010 International Fuel Gas Code adopted.

The 2003 edition of the International Fuel Gas Code, as adopted by the State Building Code Council in Chapter 51-52 WAC, as published by the International Code Council, excluding chapter 1 "Administration" is adopted.

Chapter 37

Washington State Energy Code

21.37.010 Washington State Energy Code adopted.

The Washington State Energy Code, as adopted by the State Building Code Council in Chapter 51-11 WAC, is adopted.

Chapter 21.38

Washington State Ventilation and Indoor Air Quality Code

21.38.010 Washington State Ventilation and Indoor Air Quality Code adopted.

The Washington State Ventilation and Indoor Air Quality Code, as adopted by the State Building Code Council in Chapter 51-13 WAC, is adopted.

Chapter 21.39

Uniform Code for the Abatement of Dangerous Buildings

21.39.010 Uniform Code for the Abatement of Dangerous Buildings adopted.

The Uniform Code for the Abatement of Dangerous Buildings issued by the International Conference of Building Officials, 1997 Edition, together with amendments and/or additions thereto, is adopted in its entirety by this reference as the dangerous buildings code for the city except that references to the Uniform Codes shall be replaced with the appropriate technical codes and sections as adopted by this jurisdiction.

21.39.015 Service of notice and order.

Section 401.3 of the Uniform Code for the Abatement of Dangerous Buildings is amended to read as follows:

The notice and order and any amended or supplemental notice and/or order shall be served upon the record owner and posted on the property.

The record owner for the purposes of the procedures of this chapter shall be the person listed in the records of the King County Department of Finance for the purposes of mailing real property tax statements. The Building Official shall also serve one copy on each of the following, if known to the Building Official or disclosed from the records of the King County Department of Finance, including the records maintained in relation to the 1% estate excise sales tax: the holder of any mortgage, deed of trust, leasehold, contract purchaser, or contract seller.

The failure of the Building Official to serve any person required herein to be served shall not invalidate any proceedings hereunder as to any other person duly served or relieve any such person from any duty or obligation imposed on him by the provisions of this section.

21.39.020 Report on costs and expenses.

Section 901 of the Uniform Code for the Abatement of Dangerous Buildings is amended to read as follows:

Section 901. The Building Official shall keep an itemized account of the expenses incurred by the City in the repair or demolition of any building done pursuant to the provisions of Section 701.3.3 of this Code. Upon the completion of the work of repair or demolition the Building Official shall prepare and file with the Director of Administrative Services a report specifying the work done, the itemized and total cost of the work, including an administration and collection fee in the amount of two hundred (200) dollars to cover the cost of publication, recording, and service of all notices and the cost incurred by the City in the collection of the assessment or obligation as determined by Section 905 of this Code, a description of the real property upon which the building or structure is or was located, and the names and addresses of the persons entitled to notice pursuant to Section 401.3.

21.39.025 Collection of assessment.

Section 909 of the Uniform Code for the Abatement of Dangerous Buildings is amended to read as follows:

A copy of the ordinance confirming the special assessment shall be filed with the City Clerk. A certified copy of said ordinance shall be recorded with the King County Department of Elections and Records. The Director of Finance upon receipt of said ordinance shall proceed to collect the special assessment in the same manner as local improvement district assessments, including installments thereof, are collected; provided however, that the thirty days' prepayments notice need not be published but shall be mailed to the owner of record.

Sections 910 and 911 of the Uniform Code for the Abatement of Dangerous Buildings hereinabove adopted by reference, being inconsistent with the procedure for collection of assessments herein established, are repealed.

Chapter 21.40**Swimming Pools****21.40.010 Swimming pool defined.**

"Swimming pool" means any structure intended for swimming or recreational bathing that contains water over eighteen inches deep. This includes in-ground, aboveground and on-ground swimming pools, hot tubs, portable and nonportable spas, and fixed-in-place wading pools.

21.40.015 Fences and gates required.

Every person whether as owner, purchaser, under contract, lessee, tenant or licensee in possession of land within the city upon which is situated a swimming pool in excess of eighteen inches in depth, including portable pools, shall at all times maintain on the lot or premises upon which such pool is located and completely surrounding such pool, lot or premises, a fence or other solid structure designed to prevent shall children from inadvertently wandering into the pool. Such fence or other solid structure shall be not less than five feet in height with no opening (other than doors or gates) except as follows:

(1) For a fence or other solid structure whose chief covering members are constructed in a vertical direction, there shall be no openings in a horizontal direction of more than four inches. For a fence of this type there shall be no more than three horizontal members;

(2) For a fence or other solid structure whose chief covering members are constructed in a horizontal direction there shall be no openings in a vertical direction;

(3) All gates or doors opening through such enclosure shall be equipped with a self-closing and self-latching device designated to keep and capable of keeping such door or gate securely closed at all times when not in actual use and to prevent a small child from opening such door or gate; provided, however, that the door of any dwelling occupied by human beings and forming any part of the enclosure hereinabove required need not be so equipped.

All latches or locking devices on doors or gates as required by this section shall be installed not less than four feet six inches above the adjoining walks, steps or ground level. No self-closing gate required by this section shall have a width in excess of four feet unless the design is specifically approved by the city building official. In no event shall a gate which services a driveway qualify as a self-closing gate for the protection of swimming pools under the requirements of this section.

21.40.020 Fence exceptions—Inaccessibility.

The requirements of this chapter relating to a fence or other solid structure surrounding a swimming pool on all sides may be waived when:

(1) Topographical features of the land upon which the pool is constructed or is proposed to be constructed are such as to make the land inaccessible and unapproachable from any portion thereof which is unfenced and unenclosed.

(2) Hot tubs or spas are provided with a solid lockable cover when serving a single-family residence or an individual unit of a multifamily residence.

21.40.025 Fence exceptions—Covered pools.

All permanent swimming pool covers shall be considered as adequate enclosure protection required in this chapter provided that:

(1) All exterior openings are constructed as herein required for gates;

(2) Exterior walls are solid and impenetrable.

21.40.030 Excavation walls—Distance from slope—Walkway.

Swimming pool excavations and swimming pools partially completed shall be protected and guarded against danger to life and property. Such excavations shall have walls of masonry or concrete of sufficient strength to retain the embankment together with any surcharged loads. No swimming pool or swimming pool excavation shall extend within one foot of the angle of repose or natural slope of the soil under any footing or foundation unless:

(1) Such footings or foundations are first properly pinned or protected against settlement; or

(2) The swimming pool wall is designed, through rational engineering analysis, to support the surcharge created by the building or structure resting on such footing or foundation.

Notwithstanding the proximity of a swimming pool to a foundation or footing allowed by the angle of repose, there shall be permanently maintained walkway between buildings and a swimming pool not less than three feet in width. Diving boards and other permanently attached swimming pool accessories constructed along the perimeter of the pool shall in the aggregate not exceed five percent of the perimeter distance of the pool.

21.40.035 Plans—Compliance required.

All plans hereafter submitted to the city for swimming pools to be constructed shall show compliance with the requirements of this chapter, and final inspection and approval of all pools hereafter constructed shall be withheld until all requirements of this chapter have been complied with.

21.40.040 Requirements—Satisfactory alternate.

Notwithstanding any precise requirements of this chapter, the building official may approve alternate methods of protection and construction and maintenance of swimming pools, provided such alternate methods meet the same essential safety requirements of this chapter, and it can be demonstrated that such alternate methods are better suited because of peculiar or unusual circumstances and that it is not practical to meet the precise requirements of this chapter. Any person who seeks to obtain approval of any such alternate and who is denied approval by the building official may appeal his decision to the building code board of appeals by filing a notice of appeal with the city clerk stating the grounds for the appeal and requesting a hearing to review the decision by the building official.

21.40.045 Requirements—Retroactive effect.

Swimming pools of a type subject to the provisions of this chapter which were in existence prior to the effective date of the ordinance codified herein and where not provided with the safety requirement then in effect shall, within six months from the effective date of the ordinance codified herein be brought into conformity with the provisions and requirements of this chapter. Swimming pools not brought into conformity within the period of time herein specified are hereby declared to be a public nuisance and public hazard, and the owner of the premises upon which such pool exists shall be subject to the penalties prescribed herein.

21.40.050 Chapter enforcement.

The building official is herewith charged with the duty of enforcing this chapter and determining whether or not the provisions and requirements of this chapter have been complied with.

Chapter 21.44**Moving Buildings****21.44.010 Purpose and scope of chapter.**

It is the purpose of this chapter to establish standards, including minimum requirements for the moving of all buildings and other structures within the corporate limits of the city, and to provide for the issuance of a permit, collection of various fees, and inspectional services for all such movements.

21.44.015 Definitions.

Definitions as used in this chapter, unless the context otherwise indicates, shall be as follows:

(1) "Building" means and includes every building, house, structure or other like object which exceed one or more of the following dimensional combinations when placed on a trailer or other moving platform:

- (A) Eight feet, six inches in width;
- (B) Fourteen feet in height;
- (C) Fifty-three feet in length;
- (D) Twenty thousand pounds on a single axle;
- (E) Thirty-four thousand pounds on a double axle;
- (2) Classification of Movements.

(A) "Class I" move is the movement of any building from an origin outside the city to a destination within the city,

(B) "Class II" move is the movement of any building from one point within the city to another point within the city,

(C) "Class III" move is the movement of a building from a point within the city to a destination outside the city,

(D) "Class IV" move is the movement of any building through the city with both an origin and destination outside the city;

(3) "Housemover" means any person, firm or corporation engaged in the business of moving houses, buildings, structures or other like object;

(4) "Person" means and includes any person, firm, partnership, association, corporation, company or organization of any kind.

21.44.020 Permit required.

No person shall move any building over, upon, along or across any public street without a written permit therefor from the city for all such moves as classified and defined in Section 21.44.015.

21.44.025 Permit—Application information.

Application for a permit shall be furnished by the city. The application for permit shall contain or have attached thereto the following information:

- (1) Name and address of applicant;
- (2) Location of building to be moved (present address if assigned);
- (3) Location of proposed site to which building is to be moved (include legal description);
- (4) Date and time requested for movement;
- (5) Map or description of requested route to be taken;
- (6) Height, width and length of building to be moved and truck or equipment to be used for moving the building;
- (7) Classification of movement (as defined in Section 21.44.015).

21.44.030 Permit—Application—Deposits and fees.

(a) Every applicant before being granted a permit shall pay an application filing fee of one hundred dollars for Class I and II moves and seventy-five dollars for Class III and IV moves.

(b) In addition to the fee set forth in subsection (a) of this section, there shall be charged and collected a right-of-way inspection fee:

Dimensional Combinations	Normal Business Hours	After Hours
1	\$55.20	\$81.05
2	\$110.40	\$162.08
3 or more	\$55.20/hour	\$81.05/hour

(c) For any application for a Class I or II move herein provided for there shall be charged and collected an inspection fee in the amount of one hundred thirty dollars if the building is situated between zero to ten miles of the city and if the building is situated at a distance in excess of ten miles from the city, an additional one dollar for each additional mile.

(d) An application hereunder shall be accompanied by the following:

(1) A cash deposit or corporate surety bond in the sum of ten thousand dollars or such greater amount as the building official determines necessary as indemnity for any damage which the city may sustain by reason of damage or injury to any highway, street or alley, sidewalk or other property of the city, which may be caused by or be incidental to the removal of any building over, along or across any street in the city and to indemnify the city against any claim of damages to persons or private property;

Exception: Not required for moves where dimensional combinations do not exceed two;

(2) A commercial/general liability insurance policy providing one million dollars or such greater amount as the building official determines necessary to satisfy any claim by private individuals, firms, or corporations arising out of, caused by, or incidental to the moving of any building over, along, or across any street in the city. This policy must identify the city of Kirkland as an additional insured; and

(3) A cash deposit or a corporate surety performance bond in the sum of five thousand dollars or such greater amount as the building official determines necessary conditioned upon the permittee, within six months from the date of the issuance of such permit (A) completing the construction, painting and finishing of the exterior of the building, and (B)

faithfully complying with all requirements of this chapter, the building code, the zoning ordinance, the other ordinances then in effect within the city including but not limited to permittee completing such work within six months to the date of the issuance of such permit. In the event the provisions of this subsection are not complied with within the time specified, the sum of five thousand dollars shall be forfeited to the city as a penalty for the default, and this shall be in addition to any other penalties provided for failure to comply within the terms of this chapter.

21.44.035 Permit—Conditions for granting.

As a condition of securing the permit for a Class I or II move:

(1) The permittee shall furnish the city with a set of plans and specifications for the completed building to include a plot plan prepared by a registered engineer or land surveyor from the state of Washington showing in detail the placement of the proposed structure upon the lot within the city; and

(2) The permittee shall, prior to making application for such permit or within ten days after making such application cause all of the interior or exterior walls, ceiling or flooring to be removed to such extent as may be necessary to permit the building official to examine the materials and type of construction of such building to ascertain whether it will comply with the existing building code and other applicable ordinances in the city.

21.44.040 Special requirements.

(a) Escort. For Class I, II, III and IV moves, the housemover shall provide at least two off-duty police officers or other appropriate agency employees which provide an escort service for the purpose of regulating traffic along the route such building is being moved; provided, that any such police or special agency escort shall be at the expense of the housemover in addition to any other fees or deposits heretofore required. No variances of the provisions of the permit shall be permitted by the escort.

(b) Time. Time of the movement shall be designated by the city. Every such permit shall become and be void unless such removal shall be completed and the building removed from the public right-of-way within the time specified in the application for such permit; provided, however, that the city may extend such time when the moving of any building is rendered impractical by reason of inclemency of the weather, strikes, or other causes not within the control of the housemover.

(c) Lights. No person moving any building over, upon, along or across any public street shall fail, neglect or refuse to keep a red light (or such other devices as the city may require) at all times at each corner of such building and at the end of any projection thereon while the same is located in or upon any public street.

(d) Notice to Utilities. Before any building shall be moved the housemover shall give written notice to the public utilities or agencies designated in the application not less than three days in advance of the proposed move.

(e) Condition of Lot. After the completion of any Class II or III move the area or lot upon which the structure was formerly located shall be cleaned up and satisfactorily graded; the sanitary sewer connection, if one exists, shall be plugged and marked; the water meter shall be removed and the line satisfactorily capped and marked; the electrical and telephone lines removed; and all trash removed therefrom to the satisfaction of the building official.

(f) Waterfront Restrictions. No building shall be moved over, upon, along or across any public right-of-way or other public lands fronting on or directly adjacent to the waterfront of Lake Washington within the corporate limits of the city.

Chapter 21.56

Flood Damage Prevention

21.56.010 Statement of purpose.

It is the purpose of this chapter to meet the requirements of the Federal Flood Administration for federal flood insurance availability and to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed:

- (1) To protect human life and health;
- (2) To minimize expenditure of public money and costly flood-control projects;
- (3) To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (4) To minimize prolonged business interruptions;
- (5) To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets, and bridges located in areas of special flood hazard;
- (6) To help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas;
- (7) To ensure that potential buyers are notified that property is in an area of special flood hazard; and
- (8) To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

21.56.015 Methods of reducing flood losses.

In order to accomplish its purposes, this chapter includes methods and provisions for:

- (1) Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
- (2) Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- (3) Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel floodwaters;
- (4) Controlling filling, grading, dredging, and other development which may increase flood damage; and
- (5) Preventing or regulating the construction of flood barriers which will unnaturally divert floodwaters or may increase flood hazards in other areas.

21.56.020 Definitions.

Unless specifically defined below, words or phrases used in this chapter shall be interpreted so as to give them the meaning they have in common usage and to give this chapter its most reasonable application.

- (1) "Appeal" means a request for a review of the building official's interpretation of any provision of this chapter or a request for a variance.
- (2) "Area of shallow flooding" means a designated AO or AH zone on the flood insurance rate map (FIRM). The base flood depths range from one to three feet; a clearly defined channel does not exist; the path of flooding is unpredictable and indeterminate; and, velocity flow may be evident. AO is characterized as sheet flow and AH indicates ponding.

(3) "Area of special flood hazard" means the land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year. Designation on maps always includes the letters A or V.

(4) "Base flood" means the flood having a one percent chance of being equalled or exceeded in any given year. Also referred to as the "one-hundred-year flood." Designation on maps always includes the letters A or V.

(5) "Critical facility" means a facility for which even a slight chance of flooding might be too great. Critical facilities include but are not limited to schools, nursing homes, hospitals, police, fire and emergency response installations and installations which produce, use or store hazardous materials or hazardous waste.

(6) "Development" means any manmade change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations located within the area of special flood hazard.

(7) "Flood" or "flooding" means a general and temporary condition of partial or complete inundation of normally dry land areas from:

(A) The overflow of inland or tidal waters; and/or

(B) The unusual and rapid accumulation of runoff of surface waters from any source.

(8) "Flood insurance rate map (FIRM)" means the official map on which the Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

(9) "Flood insurance study" means the official report provided by the Federal Insurance Administration that includes flood profiles, the flood boundary-floodway map, and the water surface elevation of the base flood.

(10) "Floodway" means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

(11) "Lowest floor" means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access or storage, in an area other than a basement area, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable nonelevation design requirements of this chapter found at Section 21.56.090(1) (B).

(12) "Manufactured home" means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For floodplain management purposes the term "manufactured home" also includes park trailers, travel trailers, and other similar vehicles placed on a site for greater than one hundred eighty consecutive days. For insurance purposes the term "manufactured home" does not include park trailers, travel trailers, and other similar vehicles.

(13) "Manufactured home park or subdivision" means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

(14) "New construction" means structures for which the "start of construction" commenced on or after the effective date of the ordinance codified in this chapter.

(15) "Start of construction" includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement or other improvement was within one hundred eighty days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land

preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundation or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure.

(16) "Structure" means a walled and roofed building including a gas or liquid storage tank that is primarily above ground.

(17) "Substantial improvement" means any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds fifty percent of the market value of the structure either:

(A) Before the improvement or repair is started; or

(B) If the structure has been damaged and is being restored, before the damage occurred. For the purposes of this definition "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure.

The term does not, however, include either:

(i) Any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions; or

(ii) Any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.

(18) "Water dependent" means a structure for commerce or industry which cannot exist in any other location and is dependent on the water by reason of the intrinsic nature of its operations.

(19) "Variance" means a grant of relief from the requirements of this chapter which permits construction in a manner that would otherwise be prohibited by this chapter.

21.56.025 Lands to which this chapter applies.

This chapter shall apply to all areas of special flood hazards within the jurisdiction of the city of Kirkland.

21.56.030 Basis for establishing the areas of special flood hazard.

The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study for the City of Kirkland" dated September 30, 1993, having an effective date of May 16, 1995, with accompanying flood insurance maps is adopted by reference and declared to be a part of this chapter. The flood insurance study is on file at City Hall, 123 Fifth Avenue, Kirkland, WA 98033.

21.56.035 Penalties for noncompliance.

No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this chapter and other applicable regulations. Violation of the provisions of this chapter by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a misdemeanor. Any person who violates this chapter or fails to comply with any of its requirements shall be guilty of a simple crime and subject to the penalties provided therefor in Section 1.04.010(C) of this code. Each day of violation shall constitute a separate offense. Nothing herein contained shall prevent the city from taking such other lawful action as is necessary to prevent or remedy any violation.

21.56.040 Abrogation and greater restrictions.

This chapter is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this chapter and another ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

21.56.045 Interpretation.

In the interpretation and application of this chapter, all provisions shall be:

- (1) Considered as minimum requirements;
- (2) Liberally construed in favor of the governing body; and
- (3) Deemed neither to limit nor repeal any other powers granted under state statutes.

21.56.050 Warning and disclaimer of liability.

The degree of flood protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This chapter does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This chapter shall not create liability on the part of the city of Kirkland, any officer or employee thereof, or the Federal Insurance Administration, for any flood damages or injury that may result from reliance on this chapter or any administrative decision, act or omission made hereunder.

21.56.055 Development permit required.

A development permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 21.56.030. The permit shall be for all structures including manufactured homes, as set forth in the definitions, Section 21.56.020, and for all development including fill and other activities, also as set forth in the definitions.

21.56.060 Application for development permit.

Application for a development permit shall be made on forms furnished by the city and may include but not be limited to: plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the areas in question; existing or proposed structures, fill, storage of materials, drainage facilities, and the location of the foregoing. Specifically, the following information is required:

- (1) Elevation in relation to mean sea level, of the lowest floor (including basement) of all structures;
- (2) Elevation in relation to mean sea level to which any structure has been floodproofed;
- (3) Certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet the floodproofing criteria in Section 21.56.090(2); and
- (4) Description of the extent to which a watercourse will be altered or relocated as a result of the proposed development.

21.56.065 Designation of the building official as administrator.

The building official for the city is appointed to administer and implement this chapter by granting or denying development permit applications in accordance with its provisions.

21.56.070 Duties and responsibilities of the building official.

Duties of the building official shall include, but not be limited to:

(1) Permit Review.

(A) Review all development permits to determine that the permit requirements of this chapter have been satisfied;

(B) Review all development permits to determine that all necessary permits have been obtained from those federal, state, or local governmental agencies from which prior approval is required;

(C) Review all development permits to determine if the proposed development is located in the floodway. If located in the floodway, assure that the encroachment provisions of Section 21.56.095(1) are met.

(2) Use of Other Base Flood Data. When base flood elevation data has not been provided in accordance with Section 21.56.030, the building official shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source, in order to administer Sections 21.56.090 and 21.56.095.

(3) Information to be Obtained and Maintained.

(A) Where base flood elevation data is provided through the flood insurance study or required as in subsection (2) of this section, obtain and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement;

(B) For all new or substantially improved floodproofed structures:

(i) Verify and record the actual elevation (in relation to mean sea level), and

(ii) Maintain the floodproofing certifications required in Section 21.56.060(3);

(C) Maintain for public inspection all records pertaining to the provisions of this chapter.

(4) Alteration of Watercourses.

(A) Notify adjacent communities and the Washington State Department of Ecology prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration;

(B) Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.

(5) Interpretation of FIRM Boundaries. Make interpretations where needed, as to exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in Section 21.56.075.

21.56.075 Appeal and variance procedure—Hearing examiner.

(a) The hearing examiner as established by Chapter 3.34 of this code, shall hear and decide appeals and requests for variances from the requirements of this chapter.

(b) The hearing examiner shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the building official in the enforcement or administration of this chapter.

(c) A final decision of the hearing examiner shall not be subject to judicial review unless request for writ of review therefor is filed with the King County superior court and served upon the city of Kirkland within twenty days of the date of said final decision.

(d) In passing upon such applications, the hearing examiner shall consider all technical evaluations, all relevant factors, standards specified in other sections of this chapter, and:

(1) The danger that materials may be swept onto other lands to the injury of others;

(2) The danger to life and property due to flooding or erosion damage;

(3) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;

- (4) The importance of the services provided the proposed facility to the community;
 - (5) The necessity to the facility of a waterfront location, where applicable;
 - (6) The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
 - (7) The compatibility of the proposed use with existing and anticipated development;
 - (8) The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
 - (9) The safety of access to the property in times of flood for ordinary and emergency vehicles;
 - (10) The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site; and
 - (11) The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.
- (e) Upon construction of the factors of subsection (d) of this section, and the purposes of this chapter, the hearing examiner may attach such conditions to the granting of variances as it deems necessary to further the purposes of this chapter.
- (f) The hearing examiner, in carrying out his duties under this section, shall utilize the quasi-judicial hearing procedures established for Process I appeals, Section 145.60 through Section 145.105, inclusive, Ordinance 2740. To the extent of any conflict between said Process I provisions and this chapter, the provisions of this chapter shall prevail.
- (g) The building official shall maintain the records of all appeal actions and report any variances to the Federal Insurance Administration upon request.

21.56.080 Conditions for variances.

- (a) Generally, the only condition under which a variance from the elevation standard may be issued is for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing items (1) through (11) in Section 21.56.075(d) have been fully considered. As the lot size increases the technical justification required for issuing the variance increases.
- (b) Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places, without regard to the procedures set forth in this section.
- (c) Variances shall not be issued within a designated floodway if any increase in flood levels during the base flood discharge would result.
- (d) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- (e) Variances shall only be issued upon:
- (1) A showing of good and sufficient cause;
 - (2) A determination that failure to grant the variance would result in exceptional hardship to the applicant;
 - (3) A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public as identified in subsection (d) of Section 21.56.075, or conflict with existing local laws or ordinances.
- (f) Variances as interpreted in the National Flood Insurance Program are based on the general zoning law principle that they pertain to a physical piece of property; they are not personal in nature and do not pertain to the structure, its inhabitants, economic or financial

circumstances. They primarily address small lots in densely populated residential neighborhoods. As such, variances from the flood elevations should be quite rare.

(g) Variances may be issued for nonresidential buildings in very limited circumstances to allow a lesser degree of floodproofing than watertight or dry-floodproofing, where it can be determined that such action will have low damage potential, complies with all other variance criteria except subsection A of this section, and otherwise complies with Sections 21.56.085(1) and (2).

(h) Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

21.56.085 Provisions for flood hazard reduction—General standards.

In all areas of special flood hazards, the following standards are required:

(1) Anchoring.

(A) All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.

(B) All manufactured homes must likewise be anchored to prevent flotation, collapse or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors. (Reference FEMA's "Manufactured Home Installation in Flood Hazard Areas" for guidebook for additional techniques.)

(2) Construction Materials and Methods.

(A) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.

(B) All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.

(C) Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

(3) Utilities.

(A) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.

(B) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters.

(C) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

(4) Subdivision Proposals.

(A) All subdivision proposals shall be consistent with the need to minimize flood damage.

(B) All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.

(C) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage.

(D) Where base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision proposals and other proposed developments which contain at least fifty lots or five acres (whichever is less).

(5) Review of Building Permits. Where elevation data is not available either through the flood insurance study or from another authoritative source (Section 21.56.070(2)),

applications for building permits shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two feet above grade in these zones may result in higher insurance rates.

21.56.090 Provisions for flood hazard reduction—Specific standards.

In all areas of special flood hazards where base flood elevation data has been provided as set forth in Sections 21.56.030 or 21.56.070(2), the following provisions are required:

(1) Residential Construction.

(A) New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated one foot or more above base flood elevation.

(B) Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:

(i) A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.

(ii) The bottom of all openings shall be no higher than one foot above grade.

(iii) Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

(2) Nonresidential Construction. New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated one foot or more above the level of the base flood elevation; or, together with attendant utility and sanitary facilities, shall:

(A) Be floodproofed so that below one foot above the base flood level the structure is watertight with walls substantially impermeable to the passage of water;

(B) Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;

(C) Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and/or review of the structural designs, specifications and plans. Such certification shall be provided to the official as set forth in Section 21.56.070(3)(B);

(D) Nonresidential structures that are elevated, not flood proof, must meet the same standards for space below the lowest floor as described in subsection (1)(B) of this section;

(E) Applicants floodproofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the floodproofed level (e.g., a building constructed to one foot above the base flood level will be rated as one foot below that level).

(3) Critical Facility. Construction of new critical facilities shall be, to the extent possible, located outside the limits of the base flood plain. Construction of new critical facilities shall be permissible within the base flood plain if no feasible alternative site is available. Critical facilities constructed within the base flood plain shall have the lowest floor elevated to three feet or more above the level of the base flood elevation at the site. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or

released into floodwaters. Access routes elevated to or above the level of the base flood plain shall be provided to all critical facilities to the extent possible.

(4) **Manufactured Homes.** All manufactured homes to be placed or substantially improved within zones A1 — 30, AH, and AE shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is one foot or more above the base flood elevation; and be securely anchored to an adequately anchored foundation system in accordance with the provisions of Section 21.56.085 (1)(B). This subparagraph applies to manufactured homes to be placed or substantially improved in an expansion to an existing manufactured home park or subdivision. This subparagraph does not apply to manufactured homes to be placed or substantially improved in an existing manufactured home park or subdivision, except where the repair, construction or improvement of the streets, utilities and pads equals or exceeds fifty percent of the value of the streets, utilities and pads before the repair, reconstruction or improvement has commenced.

21.56.095 Floodways.

Located within areas of special flood hazard established in Section 21.56.030 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles, and erosion potential, the following provisions apply:

(1) Prohibit encroachments, including fill, new construction, substantial improvements, and other development unless certification by a registered professional engineer or architect is provided demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.

(2) If subsection (1) of this section is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Sections 21.56.085 through 21.56.105.

(3) Construction or reconstruction of residential structures is prohibited within designated floodways, except for (A) repairs, reconstruction or improvements to a structure which do not increase the ground floor, and (B) repairs, reconstruction or improvements to a structure, the cost of which does not exceed fifty percent of the market value of the structure, either (i) before the repair, reconstruction or improvement is started or (ii) if the structure has been damaged and is being restored before the damage occurred. Work done on structures to comply with existing health, sanitary or safety codes, or to structures identified as historic places, shall not be included in the fifty percent of market value limitation.

21.56.100 Wetlands management.

To the maximum extent possible, the short-term and long-term adverse impacts associated with the destruction or modification of wetlands, especially those activities which limit or disrupt the ability of the wetland to alleviate flooding impacts, shall be avoided. The following process or equivalent have been implemented (see Chapter 90, Ordinance 2740, the zoning ordinance, and Chapter 24.02 of this code):

(1) Review of proposals for development within base flood plains for their possible impacts on wetlands located within the floodplain;

(2) Ensuring that development activities in and around wetlands do not negatively affect public safety, health and welfare by disrupting the wetlands' ability to reduce flood and storm drainage;

(3) Requesting technical assistance from the Department of Ecology in identifying wetland areas. Existing wetland map information from the National Wetlands Inventory

(NWI) may be used in conjunction with the community's FIRM to indicate critical wetland areas deserving special attention.

21.56.105 Standards for shallow flooding areas (AO zones).

Shallow flooding areas appear on FIRM's as AO zones with depth designations. The base flood depths in these zones range from one to three feet where a clearly defined channel does not exist, or where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is usually characterized as sheet flow. In these areas, the following provisions apply:

(1) New construction and substantial improvements of residential structures within AO zones shall have the lowest floor (including basement) elevated above the highest adjacent grade of the building site, to or above the depth number specified on the FIRM (at least two feet if no depth number is specified).

(2) New construction and substantial improvements of nonresidential structures within AO zones shall either:

(A) Have the lowest floor (including basement) elevated above the highest adjacent grade of the building site, to or above the depth number specified on the FIRM (at least two feet if no depth number is specified); or

(B) Together with attendant utility and sanitary facilities, be completely floodproofed to or above that level so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. If this method is used, compliance shall be certified by a registered professional engineer or architect as in Section 21.56.090 (2)(C).

(3) Require adequate drainage paths around structure on slopes to guide floodwaters around and away from proposed structures.

Chapter 21.70

Electrical Code

Article I. Administrative Rules

21.70.010 National Electrical Code—Adopted as amended, added to and excepted.

(a) The following are hereby adopted by reference as part of this chapter, and shall be applicable within the city, as amended, added to or excepted in this chapter: the National Electrical Code (NFPA 70), 2002 Edition including Annex B and C, but excluding Article 80; the most current edition of Centrifugal Fire Pumps (NFPA 20); Health Care Facilities (NFPA 99); Emergency and Standby Power Systems (NFPA 110); and the National Electrical Safety Code (NESC C2-2002 excluding Appendixes A and B).

(b) The requirements of this chapter will be observed where there is any conflict between this chapter and the National Electrical Code (NFPA 70), Centrifugal Fire Pumps (NFPA 20), Health Care Facilities (NFPA 99), and Emergency and Standby Power Systems (NFPA 110).

(c) The National Electrical Code will be followed where there is any conflict between Centrifugal Fire Pumps (NFPA 20), Health Care Facilities (NFPA 99), Emergency and Standby Power Systems (NFPA 110), or the National Electrical Safety Code (NESC C2-2002) and the National Electrical Code (NFPA 70).

21.70.015 Purpose.

(a) The purpose of the city of Kirkland electrical code, as amended and adopted in this chapter, is the practical safeguarding of persons, property and buildings from hazards arising from the use of electricity. The city of Kirkland electrical code contains provisions considered necessary for safety. Compliance therewith and proper maintenance will result in an installation essentially free of hazard, but not necessarily efficient, convenient or adequate for good service or future expansion of electrical service. This chapter is enacted as an exercise of the police power of the city for the benefit of the public at large. It is not intended to create a special relationship with any individual, or individuals, or to identify and protect any particular class of persons.

(b) The city of Kirkland electrical code is not intended as a design specification nor an instruction manual for untrained persons.

21.70.020 Scope.

The city of Kirkland electrical code covers:

(a) Electrical conductors, electrical equipment, and raceways installed within or on public and private buildings, property or other structures.

(b) Signaling and communications conductors and equipment, telecommunications conductors and equipment, fiber optic cables, and raceways installed within or on public and private buildings, property or other structures.

(c) Yards, lots, parking lots, and industrial substations.

(d) Temporary electrical installations for use during the construction of buildings.

(e) Temporary electrical installations for carnivals, conventions, festivals, fairs, traveling shows, the holding of religious services, temporary lighting of streets, or other approved uses.

(f) Installations of conductors and equipment that connect to a supply of electricity.

(g) All other outside electrical conductors on the premises.

(h) Optional standby systems derived from portable generators.

Exception: All wires and equipment that fall within Section 90.2(b)(5) of the National Electrical Code, 1981 Edition, are exempt from the requirements of this chapter.

21.70.025 Application.

(a) New Installations. This code applies to new electrical installations.

Exception: If an electrical permit application is received after this chapter has taken effect, but is associated with a building permit application received prior to the effective date of the ordinance codified in this chapter, all applicable codes adopted and in force at the time of a complete building permit application will apply.

(b) Existing Installations. Lawfully installed existing electrical installations that do not comply with the provisions of this chapter shall be permitted to be continued without change, except as is specifically covered in this code, the International Fire Code or as is deemed necessary by the building official for the general safety and welfare of the occupants and the public. Where changes are required for correction of hazards, a reasonable amount of time shall be given for compliance, depending on the degree of the hazard.

(c) Additions, Alterations, Modifications, or Repairs. Additions, alterations, modifications or repairs to the electrical system of any building, structure, or premises shall conform to the requirements of this code without requiring those portions of the existing building not being altered or modified to comply with all the requirements of this code. Installations, additions, alterations, modifications, or repairs shall not cause an existing building to become unsafe or to adversely affect the performance of the building as determined by the

building official or designated representative. Electrical wiring added to an existing service, feeder, or branch circuit shall not result in an installation that violates the provisions of this chapter in force at the time the additions were made.

(d) Moved Buildings or Structures. Buildings or structures intended to be relocated within or into the city of Kirkland must be inspected by the building official for compliance with the codes and standards adopted in this chapter prior to being relocated or moved. The owner of the building or structure must obtain a building permit and further must agree to correct all deficiencies identified by the inspection prior to moving the building. All deficiencies must be corrected before electric power is connected to the building.

Article II. Amendments to the 2002 National Electrical Code

Article 80. Administration and Enforcement

21.70.030 National Electrical Code Article 80 deleted—Administration and enforcement.

Article 80 of the National Electrical Code is not adopted as part of this code.

Article 100. Definitions

21.70.035 National Electrical Code Article 100 amended—Definitions.

Article 100 of the National Electrical Code is amended and supplemented by the addition of the following definitions to read as follows:

"Certified electrical product" means an electrical product to which a laboratory, accredited by the State of Washington, has the laboratory's certification mark attached.

"Certification mark" is a specified laboratory label, symbol, or other identifying mark that indicates the manufacturer produced the product in compliance with appropriate standards or that the product has been tested for specific end uses.

"City" means the City of Kirkland and/or the City of Kirkland Fire and Building Department.

"Chapter" unless elsewhere specified means this code, which is the City of Kirkland Buildings and Construction Chapter 21.70, unless expressly used for separate reference.

"Electrical equipment" includes electrical conductors, conduit, raceway, apparatus, materials, components, and other electrical equipment not exempted by RCW 19.28.006(8). Any conduit/raceway of a type listed for electrical use is considered to be electrical equipment even if no wiring is installed in the conduit/raceway at the time of the conduit/raceway installation.

"Electrical products certification laboratory" is a laboratory or firm accredited by the state of Washington to perform certification of electrical products.

"Electrical products evaluation laboratory" is a laboratory or firm accredited by the state of Washington to perform on-site field evaluation of electrical products for safety.

"Field evaluated" means an electrical product to which a field evaluation mark is attached. Field evaluation must include job site inspection unless waived by the department, and may include component sampling and/or laboratory testing.

"Field evaluation mark" is a specified laboratory label, symbol, or other identifying mark indicating the manufacturer produced the product in essential compliance with appropriate standards or that the product has been evaluated for specific end uses.

"Fished wiring" is when cable or conduit is installed within the finished surfaces of an existing building or building structure (e.g., wall, floor or ceiling cavity).

"Industrial control panel" means a factory or user wired assembly of industrial control equipment such as motor controllers, switches, relays, power supplies, computers, cathode ray tubes, transducers, and auxiliary devices used in the manufacturing process to control industrial utilization equipment. The panel may include disconnecting means and motor branch circuit protective devices. Industrial control panels include only those used in a manufacturing process in a food processing or industrial plant.

"Installation" includes the act of installing, connecting, repairing, modifying, or otherwise performing work on an electrical system, component, equipment, or wire except as exempted by WAC 296-46B-925.

"Identification plate" is a phenolic or metallic plate or other similar material engraved in block letters at least 1/4" (6mm) high unless specifically required to be larger by this chapter, suitable for the environment and application. The letters and the background must be in contrasting colors. Screws, rivets, or methods specifically described in this chapter must be used to affix an identification plate to the equipment or enclosure.

"Labeled" means an electrical product that bears a certification mark issued by a laboratory accredited by the state of Washington.

"Laboratory" may be either an electrical product(s) certification laboratory or an electrical product(s) evaluation laboratory.

"Like-in-kind" means having similar characteristics such as voltage requirement, current draw, circuit overcurrent and short circuit characteristics, and function within the system. Like-in-kind also includes any equipment component authorized by the manufacturer as a suitable component replacement part.

"Listed" means equipment has been listed and identified by a laboratory approved by the State of Washington for the appropriate equipment standard per this chapter.

"Low voltage" means:

(a) NEC, Class 1 power limited circuits at 30 volts maximum.

(b) NEC, Class 2 circuits powered by a Class 2 power supply as defined in NEC 725.41(A).

(c) NEC, Class 3 circuits powered by a Class 3 power supply as defined in NEC 725.41(A).

(d) Circuits of Telecommunications systems as defined in chapter 19.28 RCW.

"NRTL" means Nationally Recognized Testing Laboratory accredited by the federal Occupational Safety and Health Administration (OSHA) after meeting the requirements of 29 CFR 1910.7.

"Point of contact" for utility work, means the point at which a customer's electrical system connects to the serving utility system.

"Stand-alone amplified sound or public address system" is a system that has distinct wiring and equipment for audio signal generation, recording, processing, amplification, and reproduction. This definition does not apply to telecommunications installations.

"Telecommunications installations" is as defined in RCW 19.28.400 for both regulated carriers and unregulated local service providers.

"Under the control of a utility" for the purposes of RCW 19.28.091 is when electrical equipment is owned by the utility or when electrical equipment is not owned by a utility and:

(a) Is located in a vault, room, closet, or similar enclosure that is secured by a lock or seal so that access is restricted to the utility's personnel; or:

(b) The utility is obligated by contract to maintain the equipment and the contract provides that access to the equipment is restricted to the utility's personnel or other qualified personnel.

"Utility system" means electrical equipment owned by or under the control of a serving utility that is used for the transmission or distribution of electricity from the source of supply to the point of contact.

"Utilization voltage" means the voltage level employed by the utility's customer for connection to lighting fixtures, motors, heaters, or other electrically operated equipment other than power transformers.

"WAC" means Washington Administrative Code.

Article 110. Requirements for Electrical Installations

21.70.040 National Electrical Code Article 110.2 amended—Approval.

Article 110.2 of the National Electrical Code is amended and supplemented by the addition of the following text to the end of Article 110.2:

All materials, devices, appliances, and equipment, not exempted in state law Chapter 19.28 RCW, must conform to applicable standards recognized by the Building Official, be listed, or field evaluated by an accredited electrical products testing laboratory. Equipment must not be energized until such standards are met, unless specific permission has been granted by the Building Official.

FPN: WAC 296-46B-010(9)

21.70.045 National Electrical Code 110.3 amended—Examination, identification, installation, and use of equipment.

Article 110.3 of the National Electrical Code is amended and supplemented by the addition of a new subsection to be known as subsection 110.3(C), to read as follows:

(C) Industrial control panels and utilization equipment. Control panels and utilization equipment installed in industrial plants will be determined to meet the minimum electrical safety standards for installations by one of the following methods:

(a) Listing and Labeling by an accredited electrical products testing laboratory.

(b) Field evaluation by and accredited electrical products testing laboratory;

(i) If the equipment usage is changed to other than industrial utilization equipment or electrical modifications are made to the equipment, the equipment must be successfully listed or field evaluated by a laboratory approved by the department.

(ii) The equipment must be permanently installed at the owner's facility and inspected per the requirements of this Chapter.

(c) Normal inspection as part of the electrical inspection process included with the general wiring inspection of a building, structure, or other electrical installation for compliance with codes and rules adopted under this chapter. Normal inspection will only be made for equipment using listed components and wired to the requirements of the NEC.

Use of industrial control panel(s) or equipment before its evaluation or final inspection, must be authorized by the Building Official or designated representative prior to is being energized.

FPN: WAC 296-46B-030(2)

21.70.050 National Electrical Code 110.12 amended—Mechanical execution of work.

Article 110.12 of the National Electrical Code is amended and supplemented by the addition of new subsections to be known as 110.12(D) and 110.12(E), to read as follows:

(D) Abandoned Conductors and Cables. Electrical conductors or cables shall not be abandoned in place. Unused electrical conductors, or cables, regardless of voltage, and communication cables not in use shall be removed from the building or structure back to the originating panelboard unless otherwise authorized by the Building Official or designated representative.

(E) Old, Used or Damaged Material and Equipment. Old, used or damaged electrical equipment, conductors or materials shall not be reinstalled or used in any new work without prior approval of the Building Official or designated representative.

21.70.055 National Electrical Code Article 110.16 amended—Flash protection.

Article 110.16 of the National Electrical Code is amended and supplemented by the addition of the following text to the end of the first paragraph, to read as follows:

The flash protection marking must be an identification plate or label meeting ANSI Standards Z535.4-1998 or be of a type approved by the Building Official or designated representative. The plate or label may be installed at the factory or in the field. The plate or label may be mounted using adhesive.

FPN: WAC 296-46B-110(4)

21.70.060 National Electrical Code Article 110.22 amended—Identification of disconnecting means.

Article 110.22 of the National Electrical Code is amended and supplemented by the addition of the following text to the end of the first paragraph, to read as follows:

In other than dwelling units, an identification plate or label is required unless the disconnect is a circuit breaker or fused switch installed within a panelboard and its purpose is indicated by the panelboard schedule. The identification plate or label must include the identification designation of the circuit source panelboard that supplies the disconnect.

FPN: WAC 296-46B-110(5)

21.70.065 National Electrical Code Article 110.22 further amended—Identification of disconnecting means.

Article 110.22 of the National Electrical Code is amended and supplemented by the addition of the following text to the end of the second paragraph, to read as follows:

The marking must be in the form of an identification plate or label that is substantially yellow in color. The words "CAUTION - SERIES COMBINATION RATED SYSTEM" must be on the plate or label in letters at least 13 mm (1/2") high.

FPN: WAC 296-46B-110(6)

Article 210. Branch Circuits

21.70.070 National Electrical Code 210.8 amended—Ground fault circuit-interrupter protection for personnel.

Article 210.8(B) of the National Electrical Code is amended and supplemented by the addition of new subsections (4) and (5), to read as follows:

(4) Outdoors.

FPN: WAC 296-46B-210(2)

(5) Crawl spaces - at or below grade.

21.70.075 National Electrical Code 210.8 further amended—Ground fault circuit-interrupter protection for personnel.

Article 210.8 of the National Electrical Code is amended and supplemented by the addition of a new subsection to be known as 210.8(C) to read as follows:

(C) All Occupancies.

(1) All 125-volt, single phase, 15 and 20 ampere receptacles installed within 1.8 m (6 ft) of any sink, fixed water source, or a normally wet or damp location shall be provided with ground fault circuit-interrupter protection for personnel.

Exception: The laundry receptacle when installed within the dedicated wall space occupied by the clothes washer.

FPN: WAC 296-46B-410(1)

(2) All luminaires (lighting fixtures) permitted to be installed within the zone defined in Article 410.4(D) shall be ground-fault circuit-interrupter protected and shall be fully enclosed.

FPN: WAC 296-46B-410(1)

21.70.080 National Electrical Code 210.11 amended—Branch circuits required.

Article 210.11 of the National Electrical Code is amended and supplemented by the addition of a new subsection to be known as subsection 210.11(C)(4), to read as follows:

(4) Unfinished spaces. In addition to the number of branch circuits required by other parts of this section, at least one additional branch circuit shall be provided for unfinished spaces adaptable to future dwelling unit living areas that are not readily accessible to the service or branch circuit panelboard. The circuits must terminate in a suitable box(es). The box must contain an identification of the intended purpose of the circuit(s). The branch circuit panelboard must have adequate space and capacity for the intended load(s).

FPN: WAC 296-46B-210(2)

Article 215. Feeders

21.70.085 National Electrical Code 215.10 amended—Ground-fault protection of equipment.

Article 215.10 of the National Electrical Code is amended and supplemented by the addition of a new paragraph following the first paragraph of Article 215.10 to read as follows:

Equipment ground fault protection systems shall be performance tested prior to being placed into service to verify proper installation and operation of the system as determined by the manufacturer's published instructions. This test or a subsequent test shall include all system feeders. A firm having qualified personnel and proper equipment must perform the tests required. A copy of the manufacturer's performance testing instructions and a written performance acceptance test record signed by the person performing the test must be provided for the inspector's records at the time of inspection. The performance acceptance test record shall include test details including, but not limited to all trip settings and measurements taken during the test. The equipment being tested shall be labeled identifying the date of the test, the firm performing the test, and all settings for the equipment tested.

FPN: WAC 296-46B-215(1)

Article 220. Branch-Circuit, Feeder, and Service Calculations

21.70.090 National Electrical Code 220.35 amended—Optional calculations for determining existing loads.

Article 220.35 of National Electrical Code is amended and supplemented by the addition of the following text to the end of subsection (1), Exception:, to read as follows:

In addition to the 30 day demand data, the following information must be provided:

- (a) The date of the measurements.
- (b) A statement attesting to the validity of the demand data, signed by a professional electrical engineer or the electrical administrator of the electrical contractor performing the measurements.
- (c) A diagram of the electrical system identifying the point(s) of the measurements.

FPN: WAC 296-46B-010(22)

Article 225. Outside Branch Circuits and Feeders

21.70.095 National Electrical Code 225.32 amended—Location.

Article 225.32 of the National Electrical Code is amended and supplemented by the addition of a new paragraph following the first paragraph of Article 225.32 to read as follows:

Feeder disconnects, panelboards, subpanels, and similar electrical equipment must be installed so that they are readily accessible and may not be installed in bathrooms, clothes closets, or shower rooms. All indoor feeder disconnects, panelboards and subpanels and similar electrical equipment must have adequate working space and be adequately illuminated.

FPN: WAC 296-46B-230(11)

21.70.100 National Electrical Code 225.32 further amended—Location.

Article 225.32 of the National Electrical Code is amended and supplemented by the addition of new subsections to be known as subsections 225.32(1) and 225.32(2), to read as follows:

(1) Outside locations: Where the feeder disconnecting means is installed outside of a building or structure it must be on the building or structure supplied. The building disconnecting means may supply only 1 building or structure unless the secondary building(s) or structure(s) has a separate building disconnecting means meeting the requirements of this subsection. The disconnecting means must have an identification plate with at least 1/2" high letters identifying:

- (a) The building or structure served; and
- (b) Its function as the building or structure main disconnect(s).

FPN: WAC 296-46B-230(13)

(2) Inside location: Where the feeder disconnecting means is installed inside the building or structure, it must be located so that the feeder raceway or cable extends no more than 15' inside the building or structure.

Article 230. Services

21.70.105 National Electrical Code Article 230.2 amended—Number of services.

Article 230.2 of the National Electrical Code is amended and supplemented by the addition of a new paragraph following the first paragraph to read as follows:

Each portion of a building or structure separated by one or more Fire Walls that comply with Section 705 of the International Building Code may be considered a separate building. Fire Walls shall not be less than 2 hr fire-resistance rated. The extent and location of such Fire Walls shall provide a complete separation.

FPN: WAC 296-46B-230(2)

21.70.110 National Electrical Code Article 230.2 further amended—Number of services.

Article 230.2 of the National Electrical Code is amended and supplemented by the addition of a new subsection to be known as subsection 230.2(A)(6), to read as follows:

(6) Transient voltage surge suppressor.

FPN: WAC 296-46B-230(4)

21.70.115 National Electrical Code Article 230.28 amended—Service mast as support.

Article 230.28 of the National Electrical Code is amended and supplemented by the addition of the following text to the end of the first paragraph to read as follows:

Where a raceway-type service mast is used as support for service-drop conductors the following conditions must be met:

- (1) Raceway type service mast shall be a minimum of 2 inch rigid metal conduit.
- (2) An approved roof flashing shall be installed on each mast where it passes through a roof. Plastic, non-hardening mastic shall be placed between lead-type flashings and the conduit. Approved neoprene type roof flashings may be permitted.
- (3) Masts shall be braced, secured, and supported in such a manner that no pressure from the attached conductors will be exerted on a roof flashing, meter base, or other enclosures.
- (4) Utilization of couplings for a mast shall not be permitted above the point the mast is braced, secured, or supported.
- (5) Except as otherwise required by the serving utility, service mast support guys shall be installed if the service drop attaches to the mast more than 600 mm (24 in.) above the roof line or if the service drop is greater than 100' in length from the pole or support. Masts for support of other than service drops shall comply with this requirement as well.

(6) Intermediate support masts shall be installed in an approved manner with methods identical or equal to those required for service masts.

(7) For altered services, where it is impractical to install U-bolt mast supports due to interior walls remaining closed, it may be permissible to use other alternate mast support methods such as heavy gauge, galvanized, electrical channel material that is secured to 2 or more wooden studs with 5/16" diameter or larger galvanized lag bolts.

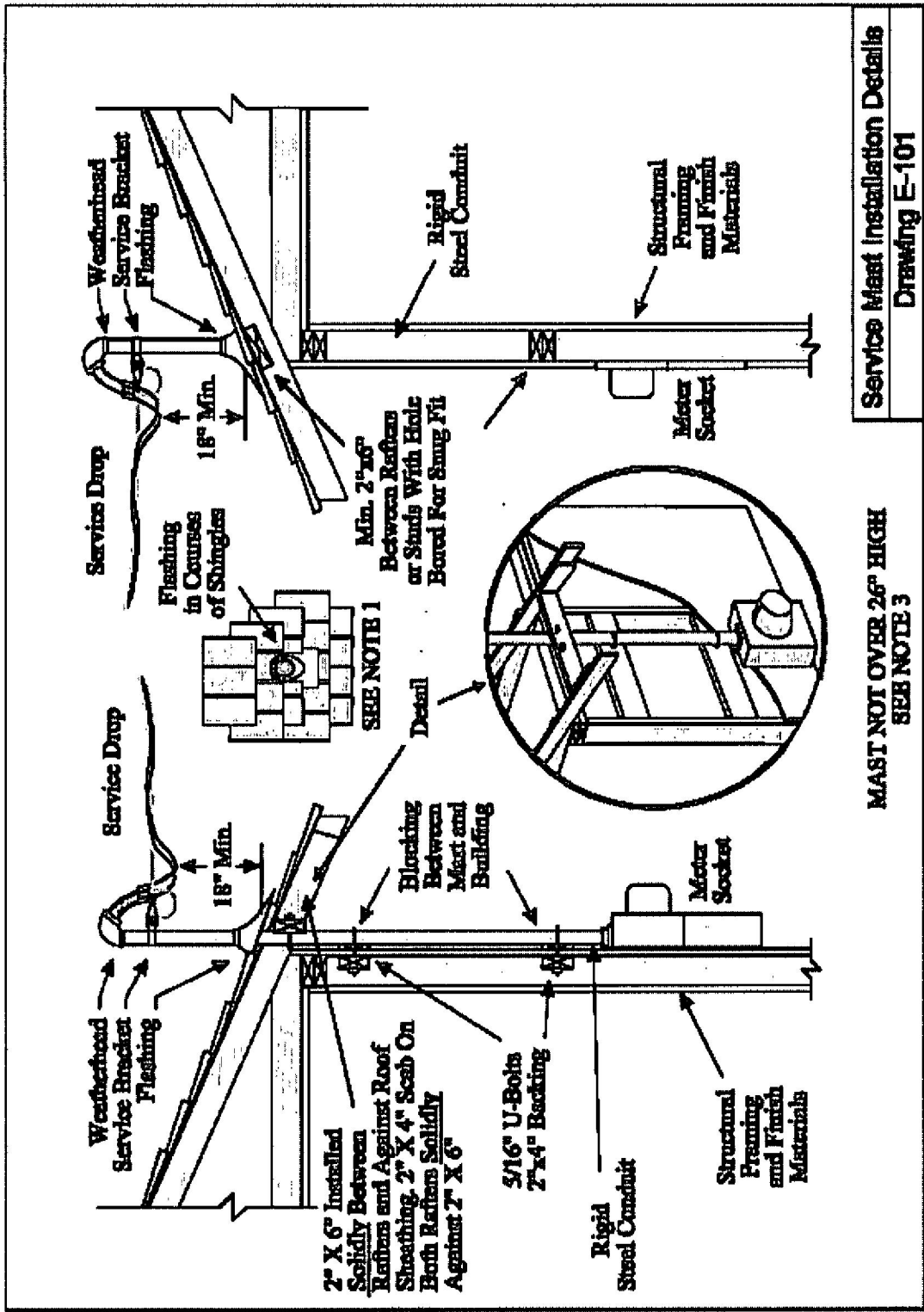
(8) Conductors shall extend a minimum of 450 mm (18 in.) from all mastheads to permit connection to the connecting overhead wiring.

FPN: See WAC 296-46B-230(5) Drawings E-101 through E-103.

FPN: WAC 296-46B-230(5)

FIGURES AND DRAWINGS

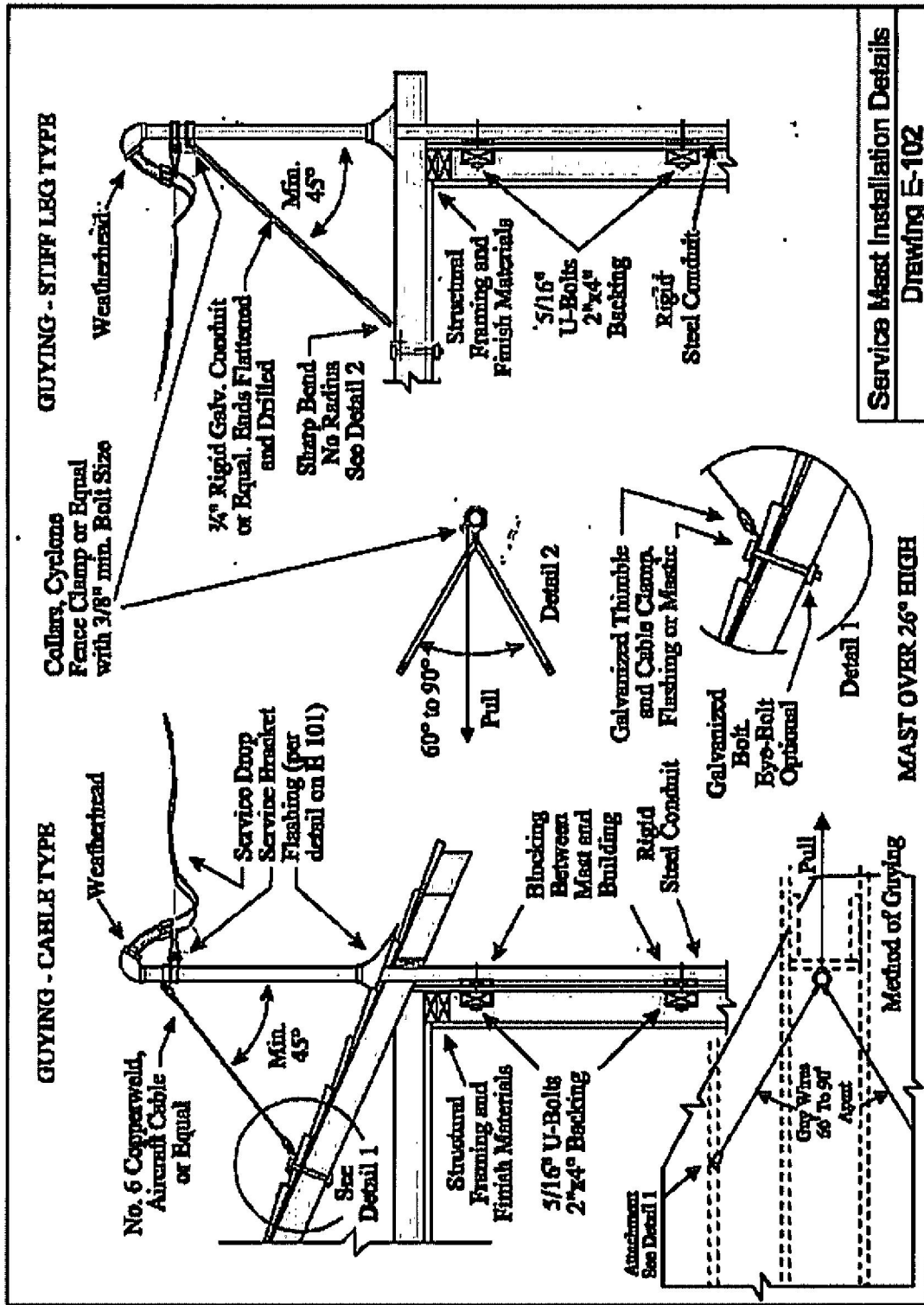
WAC 296-46B-230 Drawing E-101



Service Mast Installation Details
Drawing E-101

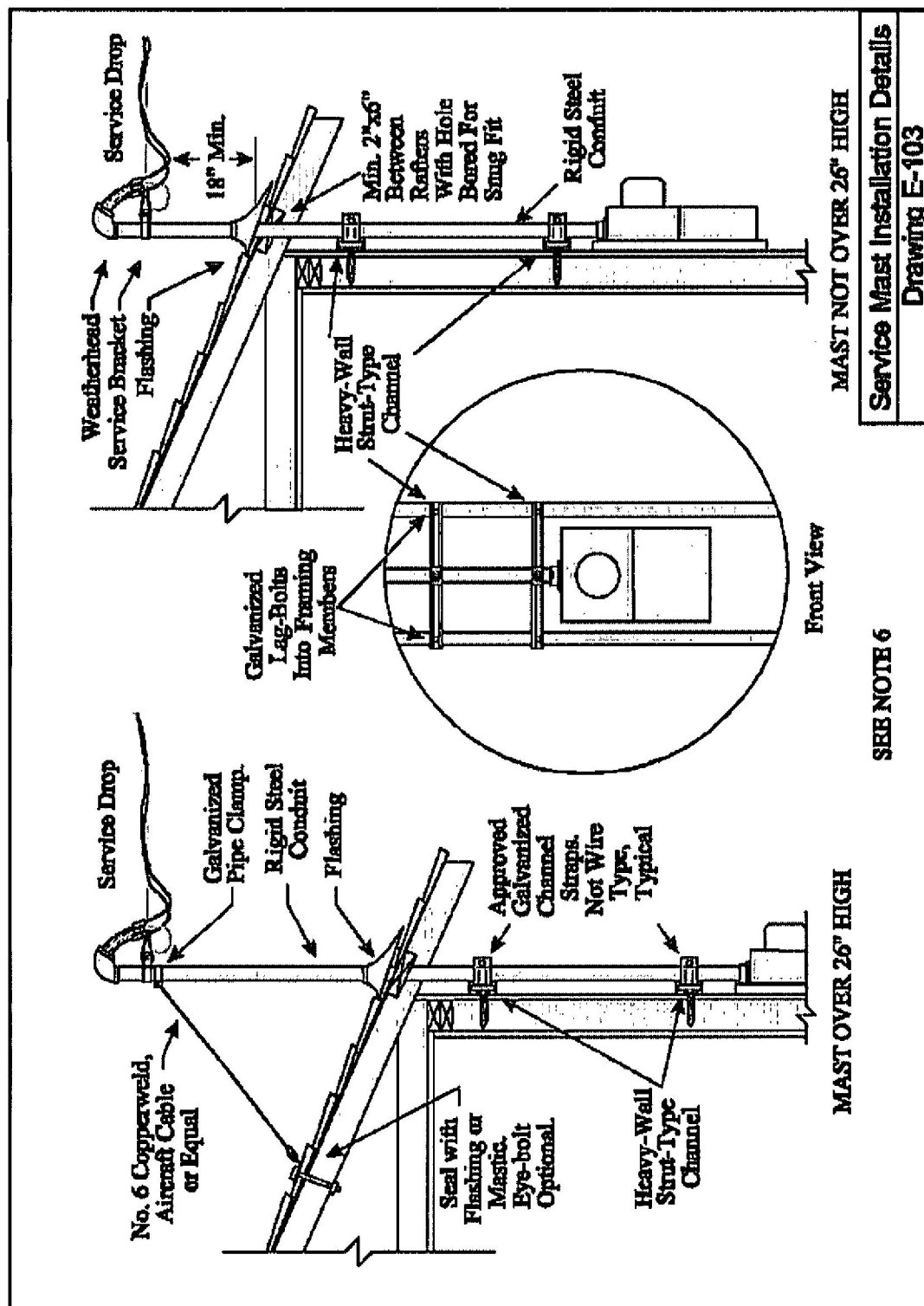
MAST NOT OVER 26" HIGH
SEE NOTE 3

WAC 296-46B-230 Drawing E-102



Service Mast Installation Details
Drawing E-102

WAC 296-46B-230 Drawing E-103



21.70.120 National Electrical Code 230.43 amended—Wiring methods for 600 volts, nominal, or less.

Article 230.43 of the National Electrical Code is amended and supplemented by the addition of the following text to the end of Article 230.43, to read as follows:

Wiring methods for service conductors not exceeding 600 volts, nominal, within a building or structure is limited to the following methods: Rigid metal conduit; Intermediate metal conduit; Wireways; Busways; Auxiliary gutters; Rigid nonmetallic conduit; Cablebus; or Mineral-insulated, metal-sheathed cable (type MI).

FPN: WAC 296-46B-230(8)

Exception: With the approval of the Building Official existing electrical metallic tubing used for service entrance conductors may be permitted to remain, provided it meets all of the following conditions:

- a. It was installed prior to October 1984
- b. It is properly grounded
- c. The conduit is installed in a non-accessible location
- d. It is the proper size for the installed conductors.

FPN: WAC 296-46B-230(9)

21.70.125 National Electrical Code 230.70 amended—General.

Article 230.70 of the National Electrical Code is amended and supplemented by the addition of new subsections to be known as 230.70(A)(1)(a) and 230.70(A)(1)(b), to read as follows:

(a) Outside location: The service disconnect means shall be installed on the building or structure it serves. The service disconnection means shall be labeled with a plate with 1/2 inch letters providing the following information:

- (i) The building or structure served; and
- (ii) Its function as the building or structure main service disconnect(s).

FPN: WAC 296-46B-230(13)

(b) Inside location: Where the service disconnect is installed inside the building or structure, it shall be located so that the service raceway extends no more than 15 feet inside the building or structure served. Service disconnecting means, panelboards, subpanels and similar electrical equipment shall be adequately illuminated.

FPN: WAC 296-46B-230(11)

21.70.130 National Electrical Code 230.70 further amended—General.

Subsection (2) of Article 230.70(A) of the National Electrical Code is amended and supplemented to read as follows:

(2) Bathrooms. Service disconnection means, panelboards, subpanels and similar electrical equipment shall not be installed in bathrooms, clothes closets, or shower rooms.

FPN: WAC 296-46B-230(11)

**21.70.135 National Electrical Code 230.90 amended—Service equipment—
Overcurrent protection.**

Article 230.90 of the National Electrical Code is amended and supplemented by the addition of the following text to the end of Article 230.90(A) Exception No. 3 to read as follows:

Where the service conductors have a lesser ampacity than the overcurrent protection or the equipment rating that they terminate in or on, an identification plate showing the ampacity of the conductors must be installed on the service equipment.

FPN: WAC 296-46B-230(7)

**21.70.140 National Electrical Code 230.95 amended—Ground-fault protection of
equipment.**

Article 230.95 of the National Electrical Code is amended and supplemented by the addition of the following paragraph to follow the first paragraph to read as follows:

Equipment ground fault protection systems shall be performance tested prior to being placed into service to verify proper installation and operation of the system as determined by the manufacturer's published instructions. This test or a subsequent test shall include all system feeders. A firm having qualified personnel and proper equipment must perform the tests required. A copy of the manufacturer's performance testing instructions and a written performance acceptance test record signed by the person performing the test must be provided for the inspector's records at the time of inspection. The performance acceptance test record shall include test details including, but not limited to all trip settings and measurements taken during the test. The equipment being tested shall be labeled identifying the date of the test, the firm performing the test, and all settings for the equipment tested.

FPN: WAC 296-46B-230(14)

**21.70.145 National Electrical Code 230.202 amended—Service-entrance
conductors.**

Article 230.202 of the National Electrical Code is amended and supplemented by the addition of the following text to the end of Article 230.202, subsection (B), to read as follows:

Wiring methods for service conductors exceeding 600 volts, nominal, within a building or structure is limited to the following methods: Rigid metal conduit; Intermediate metal conduit; Busways; Schedule 80 rigid nonmetallic conduit; Cablebus; metal-clad cable that is exposed for its entire length.

FPN: WAC 296-46B-230(15)

Article 250. Grounding

**21.70.150 National Electrical Code 250.32 amended—Two or more buildings or
structures supplied from a common service.**

Subsection 250.32(B)(2) of the National Electrical Code is deleted in its entirety.

FPN: WAC 296-46B-250(1)

21.70.155 National Electrical Code 250.50 amended—Grounding electrode system.

Article 250.50 of the National Electrical Code is amended and supplemented by the addition of a new subsection to be known as subsection 250.50(1), to read as follows:

(1) At each new building or structure served a concrete-encased grounding electrode consisting of at least 6.0 m (20 ft) of bare copper conductor not smaller than #4 AWG meeting the requirements of Article 250.52(A)(3) shall be required as part of the grounding electrode system. Other electrodes of bare or zinc coated steel reinforcing bars or rods meeting the requirements of 250.52(A)(3) may be used if approved by the Building Official prior to installation. All electrodes shall be inspected prior to covering, concealing or the placing of concrete.

Exception: Job site construction trailers, mobile homes and manufactured homes, when not installed on a permanent foundation.

21.70.160 National Electrical Code 250.56 amended—Resistance of rod, pipe and plate electrodes.

Article 250.56 of the National Electrical Code is amended and supplemented by amending the last sentence of Article 250.56 and the addition of a new Exception, to read as follows:

Where multiple rod, pipe, or plate electrodes are installed to meet requirements of this section, they shall not be less than 4.9 m (16 ft) apart.

Exception: Temporary power services of 100 amperes or less.

21.70.165 National Electrical Code 250.104 amended—Bonding of piping systems and exposed structural steel.

Article 250.104 of the National Electrical Code is amended and supplemented by the addition of the following text to the end of the first paragraph of Article 250.104(A), to read as follows:

Hot and cold metal water piping systems are not required to be bonded together if, at the time of inspection, the inspector can determine the metal water piping systems are mechanically and electrically joined by 1 or more metallic mixing valves. Metallic stubs or valves used in nonmetallic plumbing systems are not required to be bonded to the electrical system unless required by the equipment manufacturer's instructions.

FPN: WAC 296-46B-250(5) and WAC 296-46B-250(4)

21.70.170 National Electrical Code 250.184 amended—Solidly grounded neutral systems.

Article 250.184(A) of the National Electrical Code is amended and supplemented by the addition of new subsections to be known as subsection 250.184(A)(1) and subsection 250.184(A)(2), to read as follows:

(1) Existing installations.

a. The use of a concentric shield will be allowed for use as a neutral conductor for extension, replacement, or repair, if all of the following are complied with:

- (i) The existing system uses the concentric shield as a neutral conductor;
- (ii) Each individual conductor contains a separate concentric shield sized to no less than 33 1/2% of the ampacity of the phase conductor for 3-phase systems or 100% of the ampacity of the phase conductor for single-phase systems;
- (iii) The new or replacement cable's concentric shield is enclosed inside an outer insulating jacket; and
- (iv) Existing cable (i.e., existing cable installed directly in the circuit between the work and the circuit's overcurrent device) successfully passes the following tests:
 - (1) A cable maintenance high potential dielectric test. The test must be performed in accordance with the cable manufacturer's instruction or the 2001 NETA maintenance test specifications; and
 - (2) A resistance test of the cable shield. Resistance must be based on the type, size, and length of the conductor used as the cable shield using the conductor properties described in NEC Table 8 Conductor Properties.

An electrical engineer must provide a specific certification to the Building Official or designated representative in writing that the test results of the maintenance high potential dielectric test and the resistance test have been reviewed by the electrical engineer and that the cable shield is appropriate for the installation. The electrical engineer must stamp the certification document with the engineer's stamp and signature. The document may be in the form of a letter or electrical plans.

Testing results are valid for a period of 7 years from the date of testing. Cable will not be required to be tested at a shorter interval.

b. A concentric shield used as a neutral conductor in a multi-grounded system fulfills the requirements of an equipment grounding conductor.

FPN: WAC 296-46B-250(5)

(2) New installations.

(a) New installations shall not include extensions of existing circuits.

(b) The use of the concentric shield will not be allowed for use as a neutral conductor for new installations. A listed separate neutral conductor meeting the requirements of NEC 250.184(A) must be installed.

FPN: WAC 296-46B-250(5)

21.70.175 National Electrical Code 250.184 further amended—Solidly grounded neutral systems.

Article 250.184 of the National Electrical Code is amended and supplemented by the deletion of the text of subsection 250.184(B) and replacing it with the following text to read as follows:

The neutral of a solidly grounded neutral system may be grounded at more than one point.

(1) Multiple grounding is permitted at the following locations:

- (a) Services;
- (b) Underground circuits where the neutral is exposed; and
- (c) Overhead circuits installed outdoors.

(2) Multiple grounding is not allowed:

- (a) For new systems where singlepoint and multigrounded circuits form a single system (e.g., where a singlepoint circuit is derived from a multi-grounded circuit); or
- (b) In new single phase (i.e., single phase to ground) installations.

FPN: WAC 296-46B-250(6)

21.70.180 National Electrical Code 250.184 further amended—Solidly grounded neutral systems.

Article 250.184 of the National Electrical Code is amended and supplemented by the deletion of the text of subsection 250.184(D) and replacing it with the following text to read as follows:

Where a multigrounded neutral system is used, the following will apply for new balanced phase to phase circuits and extensions, additions, replacements; and repairs to all existing systems of 1 kV and over:

(1) For existing systems:

- (a) The cable's concentric shield must be used as the neutral and all the requirements for neutral conductors described in WAC 296-46B-250-6(a) must be met; or
- (b) The cable's concentric shield must be effectively grounded to a separate bare copper neutral conductor at all locations where the shield is exposed to personnel contact.

(2) For new systems:

- (a) A separate copper neutral must be installed and the cable's concentric shield is effectively grounded to the separate neutral at all locations where the shield is exposed to personnel contact.

(3) In addition to (1) and (2) of this subsection, the following is required:

- (a) A minimum of 2 made electrodes, separated by at least 6', must be installed at each existing and new transformer and switching/overcurrent location and connected to the neutral conductor at that location;

(b) At least 1 grounding electrode must be installed and connected to the multigrounded neutral every 400m (1,300 ft.). The maximum distance between adjacent electrodes must not be more than 400m (1,300 ft.);

(c) In a multigrounded shielded cable system, the shielding must be grounded at each cable joint that is exposed to personnel contact;

(d) All exposed noncurrent carrying metal parts (e.g., mounting brackets, manhole covers, equipment enclosures, etc.) must be effectively grounded to the neutral conductor; and

(e) An electrical engineer must provide a specific certification to the electrical plan review supervisor in writing that the design of the multiple grounding installation has been reviewed by the electrical engineer and the design is in accordance with the requirements of chapter 19.28 RCW, this chapter, and normal standards of care. The electrical engineer must stamp the certification document with the engineer's stamp and signature. The document may be in the form of a letter or electrical plans.

FPN: WAC 296-46B-250(7)

Article 300. Wiring Methods

21.70.185 National Electrical Code 300.4 amended—Protection against damage.

Article 300.4 of the National Electrical Code is amended and supplemented by the addition of the following text to the end of subsection (B)(1), to read as follows:

The bushings or grommets used to protect the cable must be of a two piece interlocking type.

21.70.190 National Electrical Code 300.11 amended—Securing and supporting.

Article 300.11 of the National Electrical Code is amended and supplemented by the addition of the following text to the end of Article 300.11(A), to read as follows:

Where permitted by the Building Official raceways, cables, or boxes may be supported by wires independent of the ceiling support system under the following conditions:

(i) The support wires must be independent of the ceiling support systems and be capable of securing and supporting the raceways, cables or boxes without reducing the integrity of the suspended ceiling system;

(ii) The independent support wires shall be a minimum #12 AWG and adequate to carry the weight and are securely fastened to the building structure and to the ceiling grid;

(iii) Raceways and/or cables are not larger than 3/4" trade size;

(iv) No more than 2 raceways or cables may be supported by an independent support wires and are secured to the support wires by fittings designed and manufactured for the purpose;

(v) Where support wires are installed exclusively for telecommunications cables, Class 2, or Class 3 cables the maximum number of cables allowed shall not be more than 1 1/2 inch diameter when bundled together.

FPN: WAC 296-46B-300(5)

Article 310. Conductors of General Wiring**21.70.195 National Electrical Code Article 310.12 amended—Conductor identification.**

Article 310.12 of the National Electrical Code is amended and supplemented by the addition of a new subsection to be known as subsection 310.12(D), to read as follows:

(D) Each cable operating at over 600 volts and installed on customer owned systems must be legibly marked in a permanent manner at each termination point and at each point the cable is accessible. The required marking must use phase designation, operating voltage, and circuit number if applicable.

FPN: WAC 296-46B-110(7)

Article 314. Outlet, Device, Pull, and Junction Boxes; Conduit Bodies; Fittings; and Manholes**21.70.200 National Electrical Code Article 314.15 amended—Damp, wet, or hazardous (classified) locations.**

Article 314.15 of the National Electrical Code is amended and supplemented by the addition of a new subsection to be known as subsection 314.15(C), to read as follows:

(C) Single conductors, cables, taps, or splices installed in open bottom junction boxes or handholes shall be suitable for direct burial. Open bottom junction boxes manufactured specifically for electrical use shall be permitted to be used as an electrical junction box to enclose single conductors, cables, taps, or splices rated for wet locations, under the following conditions:

(1) In vehicular traffic areas the box shall be rated for not less than HS-20 loading required under the latest edition of the American Association of State Highway and Transportation Officials (AASHTO) publication entitled "Standard Specifications for Highway Bridges". Covers shall be provided with a bolted, hinged, or slide-on lid embossed with the identification "ELECTRIC" or "ELECTRICAL."

(2) In incidental vehicular traffic areas (e.g., parks, sports fields, sidewalks, grass lawns, etc.) the box shall be rated for not less than HS-10 loading. Covers shall be provided with a bolted, hinged, or slide-on lid embossed with the identification "ELECTRIC" or "ELECTRICAL."

(3) In non-vehicular traffic areas (e.g., flower beds, patio decks, etc.) the box shall be designed and approved for the purpose. Covers shall be provided with a lid embossed with the identification "ELECTRIC" or "ELECTRICAL."

(4) All conductors must be installed in approved electrical raceways that enter vertically from the open bottom of the enclosure. These raceways must be fitted with a bushing, terminal fitting, or seal incorporating the physical protection characteristics of a bushing, and project not less than 5 cm (2") above the bottom surface material. The bottom surface material must be pea gravel or sand a minimum of 5 cm (2") thick or more if required by the box manufacturer.

FPN: WAC 296-46B-314(1)

21.70.205 National Electrical Code Article 314.29 amended—Boxes and conduit bodies to be accessible.

Article 314.29 of the National Electrical Code is amended and supplemented by the addition of the following text to the end of the first paragraph of Article 314.29, to read as follows:

Boxes and conduit bodies shall not be covered with insulation material and shall remain visible and outside of or above the insulation material.

FPN: WAC 296-46B-314(2)

Article 334. Nonmetallic-Sheathed Cable: Types NM, NMC and NMS**21.70.210 National Electrical Code Article 334.10 amended—Uses permitted.**

Article 334.10 of the National Electrical Code is amended and supplemented by the addition of the following text to the end of subsection (2) of Article 334.10, to read as follows:

Where the building or structure exceeds three floors above grade, type NM, NMC and NMS cables shall be concealed within walls, floors, and ceilings that provide a thermal barrier of material that has at least a 15-minute finish rating as identified in listings of fire-rated assemblies.

21.70.215 National Electrical Code Article 334.12 amended—Uses not permitted.

Article 334.12 of the National Electrical Code is amended and supplemented by the addition of a new subsection to be known as subsection 334.12(A) (11), to read as follows:

(11) In Type I or Type II non-combustible construction as defined by the Building Official.

Article 358. Electrical Metallic Tubing: Type EMT**21.70.220 National Electrical Code Article 358.12 amended—Uses not permitted.**

Article 358.12 of the National Electrical Code is amended and supplemented by the addition of a new subsection to be known as subsection 358.12(7), to read as follows:

(7) Installed in direct contact with the earth or in concrete on or below grade.

FPN: WAC 296-46B-358

Article 394. Concealed Knob-and-Tube Wiring**21.70.225 National Electrical Code Article 394.12 amended—Uses not permitted.**

Article 394.12 of the National Electrical Code is amended and supplemented by the addition of a new Exception to Article 394.12(5), to read as follows:

Exception: In hollow spaces containing existing knob-and-tube wiring may be allowed to remain provided that all of the following conditions are met:

(i) The wiring shall be surveyed by an appropriately licensed electrical contractor who must certify in writing to the Building Official that the wiring is in good condition with no

evidence of improper overcurrent protection, conductor insulation failure or deterioration, and with no improper connections or splices. The electrical inspector must inspect all repairs, alterations, or extensions to the electrical system;

(ii) The insulation shall meet Class I specifications as identified in the Uniform Building Code, with a flame spread factor of 25 or less as tested using ASTM E84-81a. Foam insulation may not be used with knob-and-tube wiring;

(iii) All knob-and-tube circuits shall have overcurrent protection in compliance with NEC Table 310.16, 60 degree centigrade, Column C. Overcurrent protection shall be circuit breakers or Type S fuses.

FPN: WAC 296-46B-394

Article 410. Luminaires (Lighting Fixtures) Lampholders, and Lamps

21.70.230 National Electrical Code Article 410.30 amended—Cord-connected lampholders and luminaires.

Article 410.30 of the National Electrical Code is amended and supplemented by the addition of a new subsection to be known as subsection 410.30(C)(1)(3), to read as follows:

(3) The flexible cord connection must comply with the following:

(1) Connection to a suspended pendant box must utilize an integral threaded hub;

(2) The length of the cord for a suspended pendant drop from a permanently installed junction box to a suitable tension take-up device must not exceed 1.8m (6 ft);

(3) The flexible cord must be supported at each end with an approved cord grip or strain relief connector fitting/device that will eliminate all stress on the conductor connections;

(4) The flexible cord must be a minimum #14 AWG copper;

(5) The flexible cord ampacity must be determined in NEC Table 400.5(A) column A;

(6) The flexible cord must be hard or extra hard usage; and

(7) A vertical flexible cord supplying electric discharge luminaires must be secured to the luminaire support as per NEC 334.30(A).

FPN: WAC 296-46B-410(2)

Article 422. Appliances

21.70.235 National Electrical Code Article 422.10 amended—Branch-circuit rating.

Article 422.10 of the National Electrical Code is amended and supplemented by the addition of the following text to the end of Article 422.10(A), to read as follows:

Water heaters with a rated circuit load in excess of 3,500 watts at 208 or 240 volts shall be provided with branch circuit conductors not smaller than #10 AWG copper or equal. Overcurrent protection shall comply with NEC 422.11(E).

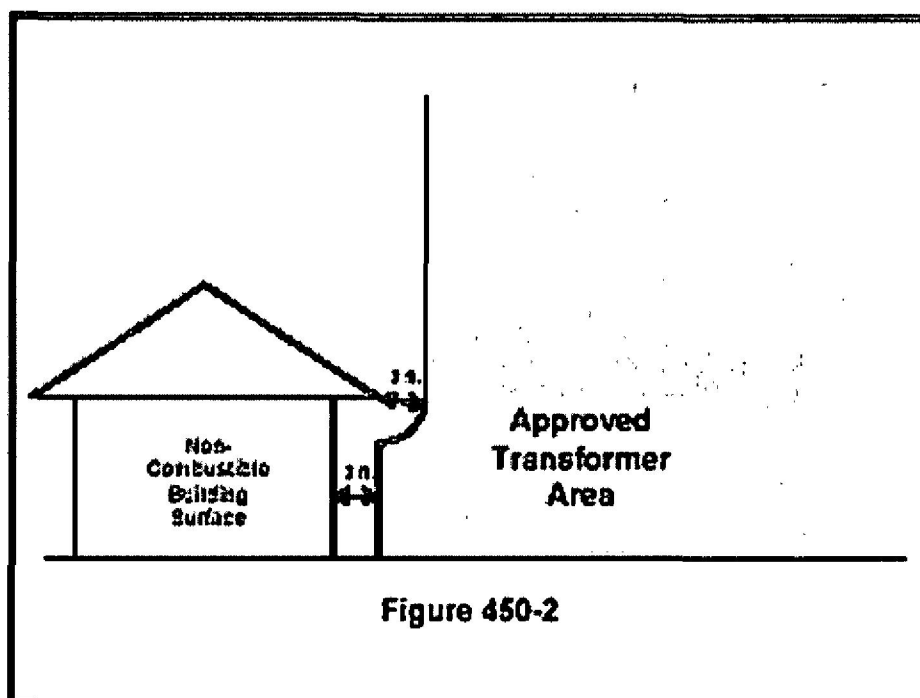
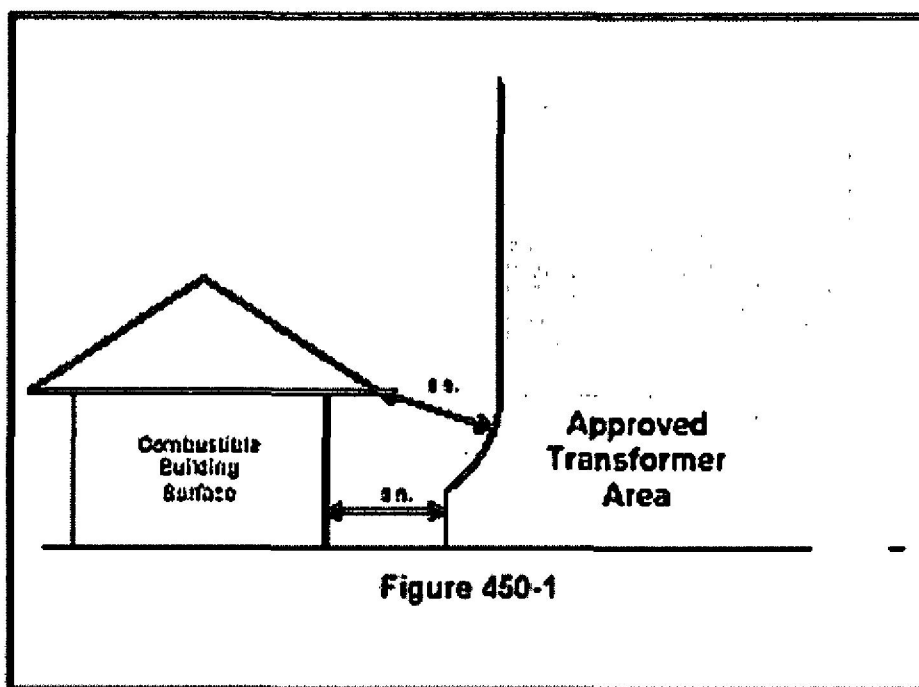
Article 450. Transformers and Transformer Vaults (Including Secondary Ties)**21.70.240 National Electrical Code Article 450.27 amended—Oil-insulated transformers installed outdoors.**

Article 450.27 of the National Electrical Code is amended and supplemented by the addition of the following text to the end of the last paragraph of Article 450.27 to read as follows:

Oil-insulated transformers located adjacent to building(s) or structures shall comply with the following:

- (1) Transformers shall not be located closer than 2.5 m (8 ft) to any part of a building or structure constructed of combustible material including any eaves, overhangs or decks;
- (2) Transformers shall not be located closer than 900 mm (2 ft) to any part of a building or structure constructed of non-combustible material including any eaves, overhangs or decks and must be outside a line extended vertically from the ends of the eaves, overhangs or rooflines of the building or structure;
- (3) Transformers shall not be located closer than 2.5 m (8 ft) to any part of doors, windows, stairways, ventilation openings, other types of openings of all buildings or structures;
- (4) Transformers shall be located such that any oil leaking from the transformer will flow away from the building or structure and will not pool; and
- (5) Transformers located in areas subject to vehicular traffic shall be provided with adequate guarding.
- (6) Enclosures for total underground oil filled transformers shall not be located closer than 2.5 m (8 ft) to any part of a doorway, window, stairway or fire escape. Adequate space must be maintained above the enclosure so that a boom may be used to lift the transformer from the enclosure.

FPN: WAC 296-46B-450(1) see also WAC 296-46B-450 Figures 450-1 and 450-2.



Article 514. Motor Fuel Dispensing Facilities

21.70.245 National Electrical Code Article 514.11 amended—Circuit disconnects.

Article 514.11 of the National Electrical Code is amended and supplemented by the addition of the following text to the last paragraph of Article 514.11(A), to read as follows:

The disconnecting means shall disconnect all conductors of the circuit supplying all station dispensers and or pumps (including the grounded conductor) simultaneously from the source(s) of supply.

FPN: WAC 296-46B-514(2)

For multi-circuit installations, an electrically held normally open contactor operated by a push-button or other suitable device may serve as the disconnecting means. The push button or disconnecting device shall not function as the resetting mechanism for the electrically held contactor. The resetting means shall meet the following:

- (1) Located at least 4.5 m (15 ft) or out of sight of the pushbutton; and
- (2) Protected by a suitable cover or guard; and
- (3) Identified with an approved identification plate that is substantial black in color.

FPN: WAC 296-46B-514(4)

The disconnecting means shall be labeled with an identification plate, with letters at least 1" high, as the emergency disconnecting means.

The disconnecting means or operator must be:

- (1) Substantially red in color; and
- (2) For attended facilities—Must be readily accessible and must be located outdoors and within sight of the pump or dispensing equipment it controls; or
- (3) For unattended facilities—Must be readily accessible and must be located within sight, but at least 20' from the pump or dispensing equipment it controls.

FPN: WAC 296-46B-514(5)

Article 517. Health Care Facilities

21.70.250 National Electrical Code Article 517.31 amended—Emergency systems.

Article 517.31 of the National Electrical Code is amended and supplemented by the addition of the following new text to follow the last paragraph of Article 517.31, to read as follows:

In health care facilities, the following methods must be used to determine adequate capacity and ratings of equipment providing electrical power for the essential electrical systems.

(1) Systems in new facilities:

(a) Emergency system: The emergency branch must consist of 2 branches known as:

(i) Life safety system: The feeder conductors and equipment used to supply electrical power to the life safety branch must be determined by summation of the connected loads as determined by Article 220 NEC and may not be subjected to any reduction due

to the diversity of the loads. Feeder and equipment will be subject to a 125% multiplier for continuous loads in accordance with Article 220 NEC.

(ii) Critical branch system: The feeder conductors and equipment must be calculated in accordance with Article 220 NEC, including a level of diversity as determined by such article.

(b) Equipment branch: The feeder conductors and equipment used to supply electrical power to the equipment branch of the essential electrical system must be calculated in accordance with Article 220 NEC, including a level of diversity as determined by such article.

(c) Generator sizing: The rating of the generator(s) supplying electrical power to the essential system of a health care facility must meet or exceed the summation of the loads determined in (a) and (b) of this subsection with no additional demand factors applied. Momentary X-ray loads may be ignored if the generator is rated at least 300% of the largest momentary X-ray load connected.

FPN: WAC 296-46B-517(1)

(2) Existing essential systems in facilities to which additional load is to be added:

(a) Existing loads: The existing loads of the separate branches of the essential electrical system may be determined by NEC Article 220.35(1).

(b) Added loads: Added loads to the separate branches of the essential electrical system must be determined by subsection (a) of this section.

(c) Generator sizing: The rating of the generator(s) supplying electrical power to the essential electrical system must meet or exceed the summation of the loads determined by (a) and (b) of this subsection with no additional demand factors applied.

FPN: WAC 296-46B-517(2)

Article 520. Theaters, Audience Areas of Motion Picture and Television Studios, Performance Areas, and Similar Locations

21.70.255 National Electrical Code Article 520.44 Table deleted—Ampacity of listed extra-hard-usage cords and cables.

Article 520.44 Table of the National Electrical Code is deleted and all references to Table 520.44 in Article 520 NEC. The ampacity of conductors shall be determined as provided in Article 400 NEC.

FPN: WAC 296-46B-520(2)

Article 527. Temporary Installations

21.70.260 National Electrical Code Article 527.4(G) amended—Splices.

Article 527.4(G) of the National Electrical Code is amended and supplemented by amending the first sentence of Article 527.4(G), to read as follows:

(G) On constructions sites, a box shall be required for splices or junction connections where splices of conductors are less than 2.5 m (8 ft) from grade or floor level or where subject to contact from personnel.

FPN: WAC 296-46B-527(2)

Article 553. Floating Buildings

21.70.265 National Electrical Code Article 553.4 amended—Location of service equipment.

Article 553.4 of the National Electrical Code is amended and supplemented by amending Article 553.4 to read as follows:

The service equipment for floating buildings and similar facilities shall have a readily accessible service rated disconnect located on the shoreline within sight of the shoreline connection of the dock, wharf or similar structure to which the floating building or similar facility is moored.

FPN: WAC 296-46B-553(1)

21.70.270 National Electrical Code Article 553.6 amended—Feeder conductors.

Article 553.6 of the National Electrical Code is amended and supplemented by the addition of new text to follow the first paragraph of Article 553.6, to read as follows:

Floating buildings or similar facilities shall have a disconnecting means located within sight of each floating building or similar facility. The disconnecting means shall be installed adjacent to but not in or on, the floating building or similar facility.

FPN: WAC 296-46B-553(2)

21.70.275 National Electrical Code Article 553.7(B) amended—Wiring methods.

Article 553.7(B) of the National Electrical Code is amended and supplemented by the addition of new text to follow the first paragraph of Article 553.7(B), to read as follows:

Where flexible cables or cords are used they shall comply with Article 555.13(2). Conductors operating in excess of 600 volts, nominal, shall not be installed on floating portions of a floating building or similar facility.

FPN: WAC 296-46B-553(3) and (4)

Article 555. Marinas and Boatyards

21.70.280 National Electrical Code Article 555.1 amended—Scope.

Article 555.1 of the National Electrical Code is amended and supplemented by amending the last paragraph of Article 555.1 to read as follows:

Private, non-commercial docking facilities constructed or occupied for the use of the owner or residence of the associated single family dwelling are covered by this article.

FPN: WAC 296-46B-555(1)

21.70.285 National Electrical Code Article 555.5 amended—Transformers.

Article 555.5 of the National Electrical Code is amended and supplemented by amending the last paragraph of Article 555.5 to read as follows:

Transformers and enclosures shall be specifically approved for the intended location. The bottom of enclosures for transformers shall be located a minimum of 12" above the deck of a dock.

FPN: WAC 296-46B-555(2)

21.70.290 National Electrical Code Article 555.7 amended—Location of service equipment.

Article 555.7 of the National Electrical Code is amended and supplemented by amending the last paragraph of Article 555.7 to read as follows:

The service equipment for floating docks or marinas shall be located adjacent to and within sight but not on or in, the floating structure.

FPN: WAC 296-46B-555(3)

21.70.295 National Electrical Code Article 555.9 amended—Electrical connections.

Article 555.9 of the National Electrical Code is amended and supplemented by the addition of new exception to read as follows:

Exception: Connections approved for wet locations.

FPN: WAC 296-46B-555(4)

21.70.300 National Electrical Code Article 555.10 amended—Electrical equipment enclosures.

Article 555.10 of the National Electrical Code is amended and supplemented by the addition of the following text to follow the first sentence of subsection (B) of Article 555.10 to read as follows:

(B) Location. All enclosures must be corrosion resistant, gasketed enclosures must be arranged with a weep hole to discharge condensation.

FPN: WAC 296-46B-555(6)

21.70.305 National Electrical Code Article 555.13 amended—Wiring methods and installation.

Article 555.13 of the National Electrical Code is amended and supplemented by amending the first paragraph of subsection (B)(1) of Article 555.13 to read as follows:

(1) Overhead Wiring. Overhead wiring shall be installed to avoid possible contact with masts and other parts of boats being moored, stored, service or moved.

FPN: WAC 296-46B-555(7)

21.70.310 National Electrical Code Article 555.19 amended—Receptacles.

Article 555.19 of the National Electrical Code is amended and supplemented by the addition of the following text to follow the first sentence of Article 555.19 to read as follows:

Shore Power Receptacles that provide shore power for boats must be rated not less than 20 amperes and must be single outlet type and must be of the locking and grounding type or pin and sleeve type.

FPN: WAC 296-46B-555(8)

21.70.315 National Electrical Code Article 555.21 amended—Gasoline dispensing stations—Hazardous (classified) locations.

Article 555.21 of the National Electrical Code is amended and supplemented by the addition of new subsections to follow the first sentence of Article 555.21 to be known as Article 555.21(A) and 555.21(B), to read as follows:

(A) Boundary classifications.

(1) Class I, Division 1. The area under the dispensing unit is a Class I, Division 1 location. If a dock has one or more voids, pits, vaults, boxes, depressions, or similar spaces where flammable liquid or vapor can accumulate below the dock surface and within 20' horizontally of the dispensing unit, then the area below the top of the dock and within 20' horizontally of the dispensing unit is a Class I, Division 1 location.

FPN: WAC 296-46B-Figure 555-1

(2) Class I Division 2. The area 18" above the water line and within 20' horizontally of the dispensing unit is a Class I, Division 2 location. If a dock has one or more voids, pits, vaults, boxes depressions, or similar spaces where flammable liquid or vapor can accumulate below the dock surface and within 20' horizontally of the dispensing unit, then the area to 18" above the top and adjacent to the sides of the dock and within 20' horizontally of the dispensing unit is a Class I, Division 2 location.

FPN: WAC 296-46B-Figure 555-2

FPN: WAC 296-46B-555(9)

(B) Portable power cable. Portable power cable will be allowed as a permanent wiring method in Class 1, Division 2 locations when protected from physical damage.

FPN: WAC 296-46B-555(9)(b)

Article 600. Electric Signs and Outline Lighting

21.70.320 National Electrical Code Article 600.3 amended—Listing.

Article 600.3 of the National Electrical Code is amended and supplemented by the addition of the following new text to follow the first paragraph of Article 600.3, to read as follows:

Electric signs within the scope of Underwriters Laboratories Standards for Electric Signs UL 48, shall be listed. Electric signs not covered under the Standards for Electric Signs UL 48 shall be required to be installed in conformance with this Code or be field evaluated by an accredited electrical products testing laboratory.

FPN: WAC 296-46B-600(1) and (7)

21.70.325 National Electrical Code Article 600.10 amended—Portable or mobile signs.

Article 600.10 of the National Electrical Code is amended and supplemented by the addition of a new subsection (C) to Article 600.3, to read as follows:

(C) Wet or Damp Location. Portable or mobile signs in wet or damp locations shall comply with 600.10(C)(1) and (C)(2). Each portable or mobile sign shall have a receptacle outlet, which complies with 406.8(B), installed within 1.8 m (6 ft) of the sign.

FPN: WAC 296-46B-600(5)

21.70.330 National Electrical Code Article 600.10 further amended—Portable or mobile signs.

Article 600.10 of the National Electrical Code is amended and supplemented by the addition of a new subsection (E) to Article 600.10, to read as follows:

(E) Supply. Extension cords shall not be permitted to supply portable or mobile signs.

FPN: WAC 296-46B-600(6)

21.70.335 National Electrical Code Article 600.21 amended—Ballasts, transformers, and electronic power supplies.

Article 600.21 of the National Electrical Code is amended and supplemented by the addition of a new subsection (G) to Article 600.21, to read as follows:

(G) Outside Awnings. Luminaires installed in outdoor awnings shall be of a type that is suitable for wet locations and be connected by a wiring method suitable for wet locations. Fluorescent luminaires shall be installed so that no part of the luminaire is located closer than 6" to the awning fabric. Incandescent luminaires shall be installed so that no part of the luminaire is located closer than 18" to the awning fabric. Luminaires installed in outside awnings shall be controlled by a disconnect installed in conformance with 600.6.

FPN: WAC 296-46B-600(2) and (3)

21.70.340 National Electrical Code Article 600.30 amended—Applicability.

Article 600.30 of the National Electrical Code is amended and supplemented by amending Article 600.30 to read as follows:

Applicability. Part II of this article shall apply to all field-installed skeleton tubing and neon circuit conductors. These requirements are in addition to the requirements in Part I.

FPN: WAC 296-46B-600(8)

Article 680. Swimming Pools, Fountains, and Similar Installations

21.70.345 National Electrical Code Article 680.4 amended—Approval of equipment.

Article 680.4 of the National Electrical Code is amended and supplemented by the addition of the following new text to follow the first paragraph of Article 680.4, to read as follows:

Electrical components which have failed and require replacement shall be replaced with identical products unless the replacement part is no longer available; in which case, a like-in-kind product may be substituted provided the mechanical and grounding integrity of the equipment is maintained.

FPN: WAC 296-46B-680(8)

21.70.350 National Electrical Code Article 680.12 amended—Maintenance disconnecting means.

Article 680.12 of the National Electrical Code is amended and supplemented by the addition of a new subsection (A) to Article 680.12, to read as follows:

(A) Location. The maintenance disconnect for a swimming pool, hot tub, spa, or swim spa shall not be located closer than 5' from the inside wall of the pool, hot tub, spa, or swim spa.

FPN: WAC 296-46B-680(4)

21.70.355 National Electrical Code Article 680.13 new—Field installed equipment.

Article 680 of the National Electrical Code is amended and supplemented by the addition of new Section to be known as Section 680.13 to read as follows:

680.13 Field Installed Equipment. Field installed electrical equipment for a swimming pool, hot tub, spa or swim spa shall not be located closer than 5' from inside wall of the swimming pool, hot tub, spa or swim spa. The 5' separation may be reduced by the installation of a permanent barrier, such as a solid wall, fixed glass windows or doors, etc. The 5' separation shall be determined by the shortest path or route that a cord can travel from the spa, hot tub, swim spa, or swimming pool to the equipment.

Field installed electrical equipment must meet the following additional requirements:

- (1) Heaters are listed as a "swimming pool heater or a spa heater";
- (2) Pumps are listed as a "swimming pool pump" or "spa pump" or "swimming pool/spa pump";
- (3) Other equipment such as panelboards, conduit, and wire are suitable for the environment and comply with the applicable codes;
- (4) The field assembly or installation of "recognized components" shall not be permitted.

FPN: WAC 296-46B-680(4)

21.70.360 National Electrical Code Article 680.40 amended—General.

Article 680.40 of the National Electrical Code is amended and supplemented by the addition of a new subsection (A) and a new subsection (B) to Article 680.40, to read as follows:

(A) Modular, Self-Contained Spa or Hot Tubs. Equipment assemblies for self-contained spas or hot tubs shall be installed within 1.5 m (5 ft.) from the inside wall of the spa or hot tub. Equipment assemblies shall be listed or field evaluated as a unit with the spa or hot tub.

FPN: WAC 296-46B-680(1)

(B) Packaged Spa or Hot Tub Equipment Assemblies. Equipment assemblies (skid pack) pre-packaged by a factory shall not be installed closer than 1.5 m (5 ft.) from the inside wall of the spa or hot tub and shall be listed as a package unit.

FPN: WAC 296-46B-680(2)

21.70.370 National Electrical Code Article 680.70 amended—General.

Article 680.70 of the National Electrical Code is amended and supplemented by the addition of the following text to the end of the first paragraph, to read as follows:

Hydromassage bathtubs must be listed as a unit and bear a listing mark which reads "Hydromassage bathtub."

FPN: WAC 296-46B-680(6)

Article 700. Emergency Systems

21.70.375 National Electrical Code Article 700.9 amended—Wiring, emergency systems.

Article 700.9 of the National Electrical Code is amended and supplemented by amending Article 700.9(A) to read as follows:

(A) Identification. All boxes and enclosures larger than 150 mm (6 in.) by 150 mm (6 in.) (including transfer switches, generators and power panels) for emergency circuits shall be permanently marked with an identification plate that is orange in color so they will be readily identified as a component of the emergency circuit or system. All other device and junction boxes for emergency systems and circuits must be orange in color, both inside and outside.

FPN: WAC 296-46B-700(4)

Article 760. Fire Alarm Systems

21.70.380 National Electrical Code Article 760.10 amended—Fire alarm circuit identification.

Article 760.10 of the National Electrical Code is amended and supplemented by the addition of new text to follow the end of the first paragraph, to read as follows:

Device and junction boxes for fire alarm systems other than the surface raceway type shall be red in color, both inside and outside. Power-limited fire protective signaling circuit conductors shall be durably and plainly marked in or on junction boxes or other enclosures to indicate that it is a power-limited fire protective signaling circuit.

FPN: WAC 296-46B-700(3)

Chapter 21.74

Development Fees

21.74.010 Scope of Ordinance.

This ordinance establishes fees collected by the Fire & Building Department, for development services. For the purpose of this ordinance, the term "the Director" means Fire & Building Department Director or the Director's authorized representative. The term "Building Official" means the Building Official or the Building Official's authorized representative.

21.74.015 Administration.

The Director is authorized to interpret the provisions of this ordinance and may issue rules for its administration. This includes, but is not limited to, correcting errors and omissions and adjusting fees to match the scope of the project. The fees established here will be reviewed annually, and, effective January 1 of each year, may be administratively increased or decreased, by an adjustment to reflect the current published annual change in the Seattle Consumer Price Index for Wage Earners and Clerical Workers as needed in order to maintain the cost recovery objectives established by the City Council.

21.74.020 Responsibility for Payment of Fees.

For the purposes of this ordinance, the term "applicant" means the person or organization who paid the fee and/or is responsible for the ongoing payment of the fees. Both the applicant and the owner of the property, for which the permit or approval is required, are individually responsible for the payment of the fees administered under this ordinance.

(1) Fee Requirements: The following applies to the payment of fees and charges:

(A) No application for a permit, approval, or service under the Kirkland Municipal Code will be accepted by the City unless all fees required at submittal by any City Code or regulation have been paid.

(B) No plans or specifications relating to any application filed with the City under the Kirkland Municipal Code will be reviewed by the City until all fees required for review by any City code or regulation have been paid.

(C) No final decision on an application for a permit or approval will be made until all fees required by any City code or regulation have been paid, except as authorized by the Director.

(D) No final inspection will be done nor temporary, or final certificate of occupancy issued, nor Utility project acceptance granted until all fees required by any City code or regulation to be paid prior to such final inspection, issuance of certificate of occupancy, or acceptance have been paid.

(2) Insufficient Funds: Any applicant whose payment of fees is returned to the City for Non-Sufficient Funds, or whose credit card payment is denied, will be charged the City standard insufficient funds fee. The original fees and the returned check fee are due and payable within five (5) working days of notification. If these fees are not paid within five (5) working days of notification, a stop-work order shall be posted on the site. In addition to the foregoing, the Director may take other appropriate actions to collect amounts due.

(3) Disputes: If a dispute arises as to the validity, or correct amount, of a fee, the fee determined by the City must be paid before the City will conduct any further review, inspection, or service. The fee may be paid under protest, in which case the applicant must specify, in writing within thirty (30) days of the date paid, the reason why such fee is not due or is due in a different amount than requested by the City. The written request must be submitted to the Director. Within thirty (30) days of the written request the Director will make a final determination of whether the fee is due, or if the dispute is as to the amount of the fee, a final determination as to the amount due. There is no administrative appeal of that decision.

(4) Fee Responsibility Changes: If the original applicant or owner sells or otherwise transfers their interest in a project, they are required to notify the City. They remain liable for fees and charges associated with development services which were incurred prior to the date the City is notified in writing that the fee responsibility has changed. The new applicant or owner is also responsible for such fees and if the same are not paid the Director may stop review of the project, revoke any permit or approval or take any other appropriate action.

(5) Waived Fees: Fees in this chapter shall be waived for the bonus or additional units or floor area being developed in exchange for construction of affordable housing units pursuant to Chapter 112 of the Kirkland Zoning Code. The value of fees to be waived will be the average fee per unit based on the permit fees for the residential portion of the project and the total number of dwelling units in the project that is subject to Chapter 112 of the Kirkland Zoning Code. Any claim for waived permit fees must be made before payment of permit fees.

21.74.025 General Provisions for all Permits, Approvals and Development Services Fees.

(1) Fee Calculation: The fees for applications for development services established or referenced in this ordinance will be calculated using the fee schedule in effect at the time the review, inspection, or service is performed and/or due. Each application stands alone and is considered individually for the purpose of calculating fees

(2) City Projects: The Fire & Building Department will collect all appropriate fees for utility-funded, Capital Investment Program, and Special Purpose Fund projects except as authorized by the Director.

(3) Refunds: Any fee established in this ordinance which was erroneously paid or collected will be refunded if a timely request is received. Table 1 is used to calculate refunds for applications or issued permits or approvals which are withdrawn, canceled, or expired.

Table 1 - Calculating Refunds		
<u>Stage in review Process - Application Submitted</u>		
<u>Type of Fee</u>	<u>Review Started</u>	
Flat review fee or review fee based on valuation, fixtures, devices, size, lots	Non refundable	
<u>Stage in Construction Process - Permit Issued</u>		
<u>Type of Fee</u>	<u>No Work Started</u>	<u>Work Started</u>
State Building Code	Non refundable	Non refundable
Flat inspection fee or inspection fee based on valuation, fixtures, devices, size	20% Non refundable, 80% refundable	Non refundable

a. Refunds for fees collected and not specifically mentioned herein will be refunded at the direction and discretion of the Director or specific ordinance.

b. Before any refund is released to the applicant the following will be deducted from the refund amount: all fees or charges owed on the subject application or permit; all

fees or charges owed on any associated application or permit; any fees or charges that have been assigned to a collection agency plus the fee added on by the collection agency.

(4) Definition of Single Family: For purposes of this ordinance, "single family" means a building containing not more than two dwelling units each having only one kitchen and each designed for occupancy exclusively by one family. In-unit work, in a residential building over two units, will be considered a single family application when the scope of work is limited to one unit.

(5) Reinspection Fee: In instances where reinspection fees have been assessed, no additional inspection of the work is performed until the required fees are paid.

(6) Outside Consultants: For the use of outside consultants for plan checking and inspections, or both: Actual costs, which include administrative and overhead costs.

(7) Add-on Fees: Fees due after issuance as a result of a field inspection that identified a scope of work different from the work permitted are due and payable within five (5) working days of notification.

(8) Multi-building Projects: Separate building, mechanical, electrical, plumbing, and fire protection permits are required for each building in a multi-building complex.

(9) Work without a Permit or Approval: It is unlawful to proceed with any work or any portion of any construction, installation, alteration, repair, or use when the required fee has not been paid and the permit or approval issued. When work for which a permit or approval is required by the Kirkland Municipal Code, regulation, or standard is started or proceeded with prior to obtaining that permit or approval, a penalty may be levied in an amount up to double the fee required for the work unlawfully conducted, as determined by the Director. This provision does not apply to emergency work when it is proved to the satisfaction of the appropriate Director that such work was urgently necessary and that it was not practical to obtain a permit before the commencement of the work. In all such cases, a permit must be obtained as soon as it is practical to do so; and if there is an unreasonable delay in obtaining the permit, a double fee (as provided in this ordinance) will be charged. The payment of this double fee does not relieve any person from fully complying with the requirements of the Kirkland Municipal Code in the execution of the work or from any other penalties prescribed by law. Such person may also be required to reimburse the City for all expenses related to any enforcement proceedings as determined by the Director.

(10) Consultants: The applicant bears the cost of retaining consultants when the City determines it is necessary to obtain required technical expertise.

(11) Recording Fees: The applicant bears the cost of fees associated with the recording of documents with King County.

(12) Additional Review: Review time required on a project prior to, or in lieu of, an application, is charged at the appropriate hourly rate, as determined by the Director.

(13) Definition of Development Service Fee-Based Activity: The fees established herein apply to any activity performed by development services staff required to reach a final decision on an application and to reach the final approval of the work authorized by an issued permit, commonly called "review" and "inspection". This includes, but is not limited to, review of plans and specifications, site visits, public involvement and public hearings, preconstruction meetings, inspections, re-inspections, and occupancy requirements.

21.74.030 General Provisions for Construction Permit Fees.

(1) Scope: These general provisions apply to all permits issued by the Fire & Building Department.

(2) Miscellaneous Inspections and Other Fees: Table 2 is used to calculate fees for miscellaneous inspections and additional plan review.

Table 2 - Miscellaneous Inspections and Other Fees			
<u>Type</u>	<u>Per Hour</u>	<u>Minimum Fee</u>	<u>Due</u>
Inspection or plan review outside normal hours (in addition to the normal inspection fee)	\$118.50	2 hours	Within 5 days of notification
Plan review resulting from changes to approved plans (in addition to the normal fees associated with a change in scope of work)	\$79	.5 hour	At revision issuance
Energy/Indoor Air Quality Code		\$75.00 + \$.01/square foot	At Issuance
Washington State Building Code Council Surcharge: building, spa and satellite dish permits Mult-Family permits		\$4.50 \$4.50 for 1 st dwelling unit + \$2.00 each additional unit	
Permit renewals		½ the original permit fee	
Re-inspection fee (in addition to the normal inspection fee)	\$79	1 hour	Within 5 days of notification
Landlord/Tenant Inspections conducted pursuant to RCW 59.18.115		\$15.00	At submittal
Interdepartmental pre-submittal conferences. Fee is applied as a credit towards the plan review fees on complete applications filed within 180 days of the conference. Fee is forfeited if applicant fails to make appointment		\$350.00	At submittal

(3) **Building Permits**

(a) Scope: The fees and provisions established here apply to the installation, relocation, addition, demolition, or repair of construction work that requires a permit.

(b) Determination of Value or Valuation: The determination of the value or valuation under any of the provisions of this ordinance, unless otherwise noted, will be made on the basis of building valuation data published by a nationally recognized code organization or other valuation criteria approved by the appropriate Director. The valuation to be used in computing the plan review and permit fees will be the total value of all construction work, including labor and materials, for which the permit is issued, as well as

all finish work, painting, roofing, electrical, plumbing, heating, air conditioning, elevators, fire-extinguishing systems, or any other permanent work or permanent equipment. The "gross area" used in conjunction with the building valuations, means the total areas of all floors - measured from the exterior face, outside dimensions, or exterior column line of a building - including basements, cellars, and balconies but not including unexcavated areas. Where walls and columns are omitted in the construction of a building, such as an open shed or marquee, the exterior wall of the open side or sides will be considered the edge of the roof. When the value is unknown it will be determined by the appropriate Director.

(c) Building Permit Fee Schedule: Table 3 is used to calculate the building inspection fee once the determination of value has been made. The inspection fee is due at issuance.

Table 3 – Building Inspection Fees Based on Valuation	
<u>Total Valuation</u>	<u>Fee</u>
\$1 to \$500	\$23.50
\$501 to \$2,000	\$23.50 for the first \$500 plus \$3.05 for each additional \$100 or fraction thereof, to and including \$2,000
\$2,001 to \$25,000	\$69.25 for the first \$2,000 plus \$14.00 for each additional \$1,000 or fraction thereof, to and including \$25,000
\$25,001 to \$50,000	\$391.75 for the first 25,000 plus \$10.10 for each additional \$1,000 or fraction thereof, to and including \$50,000
\$50,001 to \$100,000	\$643.75 for the first \$50,000 plus \$7.00 for each additional \$1,000 or fraction thereof, to and including \$100,000
\$100,001 to \$500,000	\$993.75 for the first \$100,000 plus \$5.60 for each additional \$1,000 or fraction thereof, to and including \$500,000
\$500,001 and up	\$3,233.75 for the first \$500,000 plus \$4.75 for each additional \$1,000 or fraction thereof

(d) Plan Review Fees: When the plans and/or specifications describing the proposed construction are reviewed by the Building Official, the fee will be 65 percent of the building inspection fee as shown on Table 3. A plan review deposit is due at submittal, and any excess of the deposit over the plan review fee owed will be credited to the issuance fees. If the deposit is insufficient to cover the plan review fee, the applicant will pay the amount of the insufficiency at the time of issuance.

(e) State Building Code Fee: The state building code fee is collected at issuance for the state on all building, spa, satellite dish, antenna, and demolition permits at the rate of \$4.50 each. The fee for multi-family building permits is \$4.50 for the first unit and \$2.00 for each additional unit. The fee is due at issuance.

(f) Single Family Combination New Construction Permits: The fee for the mechanical and plumbing permits of a single family, new construction permit are each 8% of the building inspection fee. The fee for the electrical permit is 9.5% of the inspection fee. These fees are due at issuance and are in addition to the building inspection fee.

(g) Fees for Sign Permits: Table 4 is used to calculate fees for sign permits. The plan review fee is due at submittal and the inspection fee is due at issuance.

(h) Fees for Moving Buildings: Table 5 is used to calculate fees for moving

buildings. The fee is due at issuance.

Table 4 – Sign Permits	
	<u>Fee</u>
Plan Review	
Non-illuminated signs (each sign)	Table 3 – minimum fee \$40.00
Illuminated signs (each sign)	Table 3 – minimum fee \$79.00
Inspection Fees	
Marquee or building mounted sign (each sign)	Table 3 – minimum fee \$40.00
Free Standing or pole mounted sign (each sign)	Table 3 – minimum fee \$65.00

Table 5 – Moving Buildings		
<u>Application Filing Fee</u>		
<u>Move Type</u>	<u>Fee</u>	
Class I & II	\$100.00	
Class III & IV	\$75.00	
<u>Inspection Fee – Class I or II only</u>		
<u>Distance from City Hall</u>		
Up to 10 miles	\$130.00	
Over 10 miles	\$130.00 plus \$1.00/mile	
<u>Right of Way Inspection Fee</u>		
<u>Dimensional Combinations</u>	<u>Normal Business Hours</u>	<u>After Hours</u>
1	\$55.20	\$81.05
2	\$110.40	\$162.05
3 or more	\$55.20/hour	\$81.05/hour

(4) Electrical Permits

(a) Scope: The fees established here apply to the installation, relocation, addition, or repair of electrical work that requires a permit.

(b) Electrical Permit Fee Schedule: Table 6 is used to calculate inspection fees for the installation, replacement, relocation, or repair of each electrical service, system, circuit, appliance and other electrical work once the determination of value has been made. Valuation is determined based on the prevailing fair market value of the materials, labor, and equipment needed to complete the work.

Table 6 – Electrical Inspection Fees Based on Valuation	
<u>Total Valuation</u>	<u>Fee</u>
Up to \$250.00	\$45.00
\$251 to \$2,000	\$45.00 for the first \$250 plus \$7.48 per \$100.00 or fraction thereof
\$2001 to \$25,000	\$176.00 for the for the first \$2,000 plus \$16.50 per \$1,000 or fraction thereof
\$25,001 to \$50,000	\$555.50 for the first \$25,000 plus \$14.90 per \$1,000 or fraction thereof
\$50,001 to \$100,000	\$928.00 for the first \$50,000 plus \$10.10 per \$1,000 or fraction thereof
\$100,001 and above	\$1,433 for the first \$100,000 plus \$8.70 per \$1,000 or fraction thereof

Table 6 – Low Voltage Electrical Inspection Fees for Security, Telephone, and Computer Wiring	
<u>Total Valuation</u>	<u>Fee</u>
Up to \$2,000	\$45.00
\$2,001 to 25,000	\$176.00 for the first \$2,000 plus \$16.50 per \$1,000 or fraction thereof x 25%
\$25,001 to \$50,000	\$555.50 for the first \$25,000 plus \$14.90 per \$1,000 or fraction thereof x 25%
\$50,001 to \$100,000	\$928.00 for the first \$50,000 plus \$10.10 per \$1,000 or fraction thereof x 25%
\$100,001 and above	\$1,433 for the first \$100,000 plus \$8.70 per \$1,000 or fraction thereof x 25%

(c) **Electrical Plan Review Fee:** When submittal documents are required by Section 21.70.090, a plan review fee shall be collected at submittal of the electrical permit. Said plan review fee shall be twenty percent of the electrical permit fee. The plan review fees specified in this subsection are separate fees from the permit fees shown in Table 6. When submittal documents are incomplete or changed so as to require additional plan review or when the project involves deferred submittal items, an additional plan review fee shall be charged at the rate of seventy-nine dollars per hour.

(d) **Miscellaneous Electrical Inspection Fees:** Table 7 is used to calculate Permit fees for miscellaneous electrical permits. The fees are due at issuance.

Table 7 – Miscellaneous Electrical Inspection Fees	
<u>Type</u>	<u>Fee</u>
Carnivals - including art and street fairs, haunted houses, amusement rides, and other temporary events	Base Fee - \$ 79.00 Per Concession - \$ 20.00 Maximum Fee - \$250.00
Signs - new circuit installation (for electrical	\$65.00

Table 7 – Miscellaneous Electrical Inspection Fees	
<u>Type</u>	<u>Fee</u>
connection. A separate sign permit is required)	
Portable Classrooms and Mobile Home Service	\$79.00
Swimming Pools, Hot Tubs, Spas, and Saunas (for electrical connection. A separate building and/or plumbing permit is also required)	\$79.00
Temporary Power	\$65.00 1 – 200 amperes \$110.00 201 – 400 amperes Table 6 over 400 amperes

(5) Mechanical Permits

(a) Scope: The fees established here apply to the installation, relocation, addition, or repair of mechanical work that requires a permit.

(b) Wiring: The fees established in this subsection do not include the electrical wiring, which requires a separate permit.

(c) New One & Two Family Dwelling Inspection Fee Schedule: Table 8 is used to calculate the fees for miscellaneous single-family mechanical permits. The fees are due at issuance.

Table 8 – Mechanical Inspection Fees – One & Two Family Dwellings	
<u>Type</u>	<u>Fee</u>
Air Conditioners with or without duct work	\$29.00 for each dwelling
Appliance Vents	\$7.25 per vent
Furnace - up to and including 100,000 B.T.U.s - including duct work, piping and thermostat wiring	\$29.00
Furnace - over 100,000 B.T.U.s - including duct work, piping, and thermostat wiring	\$38.00
Gas Piping Only - no fixture installation	\$29.00 per permit
Gas Appliances with gas piping	\$29.00 each appliance
Heat pumps with or without duct work	\$29.00 for each dwelling
Minimum Permit Fee	\$29.00
Permit Issuance Fee	\$5.00
Wood Stoves or Heaters including gas piping	\$21.00

(d) Commercial & Multi-family Inspection Fee Schedule : Table 9 is used to calculate inspection fees for the installation, replacement, relocation, or repair of each commercial heating, ventilation, air-conditioning, or freezing unit or system, and other mechanical equipment once the determination of value has been made. Valuation is determined based on the prevailing fair market value of the materials, labor, and equipment needed to complete the work. The inspection fee is due at issuance.

Table 9 - Mechanical Permit Fees Based on Valuation	
<u>Total Valuation</u>	<u>Fee</u>
Up to \$1,000	\$45
\$1,001 to \$100,000	\$45 for the first \$1,000 plus \$16.00 for each additional \$1,000 or fraction thereof to and including \$100,000
\$100,001 and above	\$1,612 for the first \$100,000 plus \$ 14.00 for each additional \$1,000 or fraction thereof

(e) Plan Review Fee: When plans and/or specifications describing the mechanical installation are reviewed by the Building Official, the fee is 25 percent of the fee calculated for the mechanical permit based on such plans and/or specifications. The plan review fee is due at submittal and is in addition to the permit fee.

(6) Plumbing Permits

(a) Scope: The fees established here apply to the installation, relocation, addition, or repair of plumbing work that requires a permit.

(b) Fixtures: For the purposes of this ordinance, "fixture" means and includes any appliance which connects to water, drain, or vent.

(c) Fee Schedule: Table 10 is used to calculate plumbing fees. The plan review fees are due at issuance and are in addition to the inspection fee.

Table 10 - Plumbing Inspection Fees		
	<u>Fee</u>	<u>Due At</u>
Permit Issuance Fee	\$5.00	Issuance
Minimum Permit Fee	\$29.00	Issuance
Each Plumbing Fixture on one trap or a set of fixtures on one trap (including water, drainage piping and backflow protection therefore)	\$9.50	Issuance
Rainwater Systems – per drain (inside building)	\$9.50	Issuance
For each water heater and/or vent	\$9.50	Issuance
For each industrial waste pre-treatment interceptor including its trap and vent, excepting kitchen-type grease interceptors functioning as fixture traps	\$9.50	Issuance
For each installation, alteration or repair of water piping an/or water treating equipment, each	\$9.50	Issuance
For each repair or alteration of drainage or vent piping, each fixture	\$9.50	Issuance
For each lawn sprinkler system on any one meter including backflow protection devices therefore	\$9.50	Issuance
For each backflow preventer not included in above item:		Issuance
2-inch diameter and smaller	\$9.50	
over 2-inch diameter	\$19.00	
For repiping domestic water lines within existing structures:		Issuance
Single-family	\$20.00	
Multifamily	\$20.00/unit	
For each medical gas piping system serving one to five inlet(s)/outlet(s) for a specific gas	\$85.00	Issuance
For each additional medical gas inlet(s)/outlet(s)	\$5.00	Issuance

(d) **Plan Review Fee:** When plans and/or specifications describing the plumbing installation are reviewed by the Building Official, the fee is 65 percent of the fee calculated for the plumbing permit based on such plans and/or specifications. The plan review fee is due at submittal and is in addition to the permit fee.

(7) **Land surface Modification Permit Fees**

(a) **Scope**

(b) **Plan Review Fee:** Table 11 is used to calculate the plan review fee on Land Surface Modification Permits. The plan review fee is due at submittal.

Table 11 –Grading Plan Review Fee	
	<u>Fee</u>
1,000 cubic yards or less	\$79.00
1,001 to 10,000 cubic yards	\$158.00
10,001 to 100,000 yards	\$158.00 for the first 10,000 cubic yards, plus

Table 11 –Grading Plan Review Fee	
	<u>Fee</u>
	\$24.50 for each additional 10,000 cubic yards or fraction thereof
100,001 to 200,000 cubic yards	\$269.75 for the first 100,000 cubic yards, plus \$13.25 for each additional 10,000 cubic yards or fraction thereof.
200,001 cubic yards or more	\$402.25 for the first 200,000 cubic yards, plus \$7.25 for each additional 10,000 cubic yards or fraction thereof

(c) Grading Inspection Fee Schedule: Table 12 is used to calculate fees for clearing and grading inspections. The grading inspection fee is due at issuance of the permit.

Table 12 –Grading Inspection Fees	
	<u>Fee</u>
50 cubic yards or less	\$39.50
51 to 100 cubic yards	\$79.00
101 to 1,000 cubic yards	\$79.00 for the first 100 cubic yards, plus \$17.50 for each additional 100 cubic yards or fraction thereof
1,001 to 10,000 cubic yards	\$194.50 for the first 1,000 cubic yards, plus \$14.50 for each additional 1,000 cubic yards or fraction thereof
10,001 to 100,000 cubic yards	\$325.00 for the first 10,000 cubic yards, plus \$66.00 for each additional 10,000 cubic yards or fraction thereof
100,001 cubic yards or more	\$919.00 for the first 100,000 cubic yards, plus \$36.50 for each additional 10,000 cubic yards or fraction thereof

(8) Fire Prevention Fees

(a) Scope: The fees established here apply to development services by the Fire Prevention Office of the Fire Department.

(b) Review Fee Schedule: Table 13 is used to calculate the fees for the Bureau of Fire Prevention review and inspection of applications.

Table 13 – Fire Prevention Review & Inspection Fees			
<u>Type</u>	<u>Hourly Rate</u>	<u>Minimum</u>	<u>Due At</u>
Flammable or combustible liquid tank	\$79.00	2 hours	Issuance
Temporary membrane structures	\$79.00	1 hour	Issuance

Table 13 – Fire Prevention Review & Inspection Fees			
<u>Type</u>	<u>Hourly Rate</u>	<u>Minimum</u>	<u>Due At</u>
Recreational Fires	\$79.00	1 hour	Issuance
Plan Review ^A	\$79.00	1 hour	Issuance

^A This fee is charged when the scope of work requires Fire review.

(c) Fire Protection Sprinkler Systems: Table 14 is used to calculate permit fees for water and chemical nozzle systems. The permit fee is due at issuance.

Table 14 Section I - New Fire Protection Sprinkler Systems	
<u>Size</u>	<u>Fee</u>
1 to 100 heads	\$330.00
101 to 200 heads	\$410.00
201 to 300 heads	\$500.00
301 or more heads	\$500.00 for the first 300 and \$50.00 per 100 devices or fraction thereof

Table 14 Section II - NFPA 13 D Systems (SFR)	
1 to 40 heads	\$180.00
41 or more heads	\$240.00

Table 14 Section III - Risers or Supplies	
Per riser ¹	\$25.00
Per supply (post/wall indicator valve, double detector check valve, connection) ²	\$410.00

¹ One "supply" shall consist of a post or wall indicator valve, a double detector check valve assembly, and a fire department connection (one each).

² One "riser" shall consist of an interior zone supply with all accompanying trim with flow switch or pressure switch. It may be either a stand alone vertical riser, one vertical riser of a manifold system, or where zones are controlled at floors, one floor control valve and all accompanying trim and flow switch.

Table 14 Section IV - Tenant Improvement or Modification of Fire Sprinkler Systems	
1 to 5 heads	\$110.00
6 to 10 heads	\$150.00
11 to 20 heads	\$200.00
21 to 40 heads	\$260.00
41 to 100 heads	\$330.00
101 to 200 heads	\$410.00
201 to 300 heads	\$500.00
301 or more heads	\$500.00 for the first 300 plus \$50.00 per 100 devices or fraction thereof

Table 14 Section V - New Fire Suppression System Other than Sprinklers (e.g., Hood and Duct, FM200 etc.)	
1 to 20 heads	\$160.00
21 to 40 heads	\$200.00
41 or more heads	\$200 for the first 40 plus \$40.00 per each 40 additional devices or portion thereof.

Table 14 Section VI - Tenant Improvement or System Modification to Fire Suppression System Other than Sprinklers (e.g., Hood and Duct, FM200 etc.)	
1 to 5 heads	\$100.00
6 to 10 heads	\$120.00
11 to 20 heads	\$160.00
21 or more heads	\$160.00 for the first 20 plus \$40.00 per each 20 additional devices or portion thereof.

(d) Fire Alarm Systems: Table 15 is used to calculate permit fees for fire alarm systems. The permit fee is due at issuance.

Table 15 Section I – New Fire Alarm or Detection System Devices	
1 to 100 devices	\$330.00
101 to 200 devices	\$410.00
201 or more devices	\$410.00 for the first 200 devices plus \$50.00 per 100 devices or fraction thereof

Table 15 Section II – Tenant Improvement of Fire Alarm or Detection System Devices	
1 to 5 devices	\$110.00
6 to 10 devices	\$150.00
11 to 20 devices	\$200.00
21 to 40 devices	\$260.00
41 to 100 devices	\$330.00
101 to 200 devices	\$410.00
201 or more devices	\$410.00 for the first 200 devices plus \$50.00 per 100 devices or fraction thereof

Table 15 Section III – New Fire Alarm Monitoring System – In Addition to Fees in Sections I or II	
FACP	\$150.00
Transmitter	\$150.00
FACP and Transmitter	\$200.00

Table 15 Section IV – Replace Fire Alarm Monitoring System and/or Components – In Addition to Fees in Section II	
FACP	\$110.00
Transmitter	\$110.00
FACP and Transmitter	\$120.00

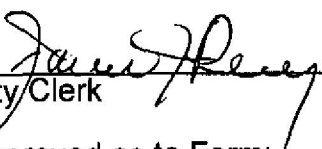
Section 2. If any provision of this ordinance or its application to any person or circumstance is held invalid, the remainder of the ordinance, or the application of the provision to other persons or circumstances is not affected.

Section 3. This ordinance shall take effect and be in force on July 1, 2004, and after its passage by the Kirkland City Council and publication pursuant to Section 1.08.107, Kirkland Municipal Code in the summary form attached to the original of this ordinance and by this reference approved by the City Council.

Passed by majority vote of the Kirkland City Council in open meeting this 1st day of June, 2004.

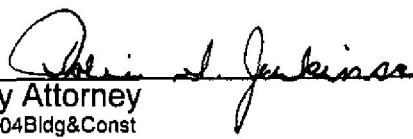
Mary Alice Burleigh
MAYOR

Attest:



City Clerk

Approved as to Form:



City Attorney
Ord\04Bldg&Const

PUBLICATION SUMMARY
OF ORDINANCE NO. 3946

AN ORDINANCE OF THE CITY OF KIRKLAND REPEALING AND REENACTING KIRKLAND MUNICIPAL CODE TITLE 21, RELATING TO BUILDING AND CONSTRUCTION, TO COMPLY WITH NEW STATE STANDARDS, PROVIDE OTHER NEEDED AMENDMENTS AND CREATING A NEW CHAPTER 74 REGARDING DEVELOPMENT FEES.

SECTION 1. Repeals and reenacts Kirkland Municipal Code Title 21, relating to Building and Construction, to comply with new state standards, provide other needed amendments and creating a new Chapter 74 regarding development fees.

SECTION 2. Provides a severability clause.

SECTION 3. Establishes the effective date as July 1, 2004, and authorizes publication of the ordinance by summary, which summary is approved by the City Council pursuant to Section 1.08.017 Kirkland Municipal Code.

The full text of this Ordinance will be mailed without charge to any person upon request made to the City Clerk for the City of Kirkland. The Ordinance was passed by the Kirkland City Council at its meeting on the 1st day of June, 2004.

I certify that the foregoing is a summary of Ordinance No. 3946 approved by the Kirkland City Council for summary publication.


City Clerk

Ord\04Bldg&ConstPubSum