ORDINANCE NO.

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MOUNTAIN VIEW ADOPTING REQUIRED FINDINGS, AMENDING CHAPTER 8 (BUILDINGS) OF THE MOUNTAIN VIEW CITY CODE TO ADOPT LOCAL AMENDMENTS TO THE 2022 EDITIONS OF THE CALIFORNIA GREEN BUILDING STANDARDS CODE AND THE CALIFORNIA PLUMBING CODE TO ADD ELECTRICAL PREWIRING REQUIREMENTS AND TO MAKE CLARIFYING CHANGES TO RECYCLED WATER REQUIREMENTS, AND FINDING THE AMENDMENTS TO BE EXEMPT FROM REVIEW UNDER THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) PURSUANT TO CEQA GUIDELINES SECTIONS 15061(b)(3) AND 15308

WHEREAS, on June 25, 2024, the City Council provided direction to City staff to prepare amendments to Chapter 8 (Buildings) of the City Code to add electrical prewiring requirements when natural gas appliances are installed to further support electrification Citywide and prepare local infrastructure for zero nitrogen oxide (zero-NOx) appliance restrictions going into effect within the Bay Area Air Quality Management District's jurisdictional boundaries in the near term, which includes the City of Mountain View; and

WHEREAS, the California Building Standards Code ("California Building Code") allows cities to adopt local requirements to the California Plumbing Code (Title 24, Part 5) for dual-plumbing in buildings to support the use of recycled water systems statewide, and City staff seeks to clarify Mountain View's current dual-plumbing requirements in Chapter 8 of the City Code; and

WHEREAS, various state orders and statutes are targeted to the reduction of greenhouse gas emissions, including the California Green Building Standards Code (Title 24, Part 11) which contains mandatory green building provisions and which was previously locally amended in Chapter 8 of the City Code to contain the City's electrical prewiring requirements under Ordinance No. 15.22, adopted by the City Council on December 13, 2022; and

WHEREAS, California Health and Safety Code Section 17958 requires cities adopt building regulations that are substantially the same as those adopted by the California Building Standards Commission and contained in the California Building Code; and

WHEREAS, California Health and Safety Code Sections 17958.5, 17958.7 and 18941.5 allow the City to make changes or modifications to the building standards contained in the California Building Code based upon express findings that such changes or modifications are reasonably necessary because of local climatic, geological, or topographical conditions; and

WHEREAS, California Green Building Standards Code Section 101.7.1 provides that local climatic, geographical, or topographical conditions include environmental conditions established by a city, county, or city and county through findings; and

WHEREAS, following adoption of this Ordinance, the local amendments to the 2022 California Green Building Standards Code, the 2022 California Plumbing Code, and Chapter 8 of the City Code will, in accordance with Public Resources Code Section 25402.1(h)(2) and Section 10-106 of the 2022 California Administrative Code (Title 24, Part 1), be submitted to the California Building Standards Commission for filing; and

WHEREAS, the City Council held a duly noticed public hearing on October 22, 2024 on this Ordinance and received and considered all information, documents, and comments presented at said hearing regarding amendment(s) to Chapter 8 of the City Code, including the recommendation from the City Council report, and project materials;

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF MOUNTAIN VIEW DOES HEREBY ORDAIN AS FOLLOWS:

Section 1. Findings. The City Council finds that each of the changes or modifications to the Code are reasonably necessary because of local climatic, geological, or topographical conditions in the area encompassed by the boundaries of the City of Mountain View and adopts the following findings in support of local necessity for the changes or modifications as follows:

1. Mountain View is located in the Santa Clara Valley, which is densely populated and located in the most severe seismic zone, Seismic Zone 4, capable of producing substantial seismic activity. Mountain View is situated on alluvial soils between San Francisco Bay and the San Andreas Fault zone. The City's location makes it particularly vulnerable to damage by seismic events. The relatively young geological processes that have created the San Francisco Bay Area are still active today. The City of Mountain View is subject to earthquake hazard caused by its proximity to San Andreas Fault and the Hayward Fault. Both of these faults are considered major Northern California earthquake faults which may experience rupture at any time. Thus, because the City is within a seismic area which includes these earthquake faults, Chapter 8 of the Mountain View City Code currently includes requirements that are designed to better limit property damage as a result of seismic activity and establishes criteria for repair of damaged properties following a local emergency. However, decreasing natural gas infrastructure and potable water use over time by encouraging electrification and recycled water will reduce fire risk and over-use of limited water resources in a difficult geological area.

2. Mountain View is located in the southwestern section of the San Francisco Bay and is built atop the alluvial deposits that surround the margins of the Bay. The topography of Mountain View contains only modest variations in elevation above the water level of the San Francisco Bay. With limited topographical changes, the introduction of more electric and recycled water infrastructure Citywide is considered safe and sustainable with less risk for disruption due to natural hazards.

3. The seasonal climatic conditions during the late summer and fall create severe fire hazards to the public health and welfare in the City. The hot, dry weather can result in wildland fires on the brush-covered slopes west of Interstate 280. Natural gas combustion and gas

appliances emit a wide range of air pollutants, such as carbon monoxide (CO), nitrogen oxides (NOx, including nitrogen dioxide (NO_2)), particulate matter (PM), and formaldehyde, which, according to a UCLA study, have been linked to various acute and chronic health effects and additionally exceed levels set by national and California-based ambient air quality standards. The burning of fossil fuels used in the generation of electric power and heating of buildings contributes to climate change, which could result in sea level rise, including in San Francisco Bay, that could put Mountain View homes and businesses, public facilities, and U.S. 101 (Bayshore Freeway) at risk. All-electric new buildings benefit the health, safety, and welfare of Mountain View and its residents. Encouraging electric construction and use of recycled water will support reducing greenhouse gases produced in Mountain View and will contribute to reducing the impact of climate change and the associated risks. Due to decreases in annual rainfall, Mountain View experiences the effect of drought and water-saving more than other communities in California.

4. Green building enhances the public health and welfare by promoting the environmental and economic health of the City through the design, construction, maintenance, operation, and deconstruction of buildings and sites by incorporating green practices into all development. The City's green provisions are designed to achieve:

a. An increase in energy efficiency in buildings;

b. Reduce the use of natural gas in buildings, which improves indoor environmental quality and health and reduces fire risk over time;

c. Encourage dual plumbing and the use of recycled water, where available in the City;

d. Provide durable buildings that are efficient and economical to own and operate; and

e. Promote the health and productivity of residents, workers, and visitors to the City.

5. The above-described findings support the imposition of measures to increase prewiring requirements in buildings in the City to reduce greenhouse gas emissions and encourage dual plumbing in the City to reduce potable water use.

Section 2. Chapter 8, Article I, Division III (Green Building Code) of the Mountain View City Code is hereby amended to add, delete, or modify Section 8.20.28 as set forth below (section titles are shown in **bold** font, deletions shown by ~~strikethrough~~ and additions are shown in underline).

SEC. 8.20.28. - Section 202 amended.

Section 202 of the 2022 California Green Building Standards Code is amended to modify the following definitions:

ALTERNATE GREEN BUILDING STANDARD. A private, third-party green building rating system not explicitly referenced in this code that achieves green building goals through a comprehensive checklist of requirements. To use an alternate standard, the applicant must prove it is at least equivalent to the referenced green building standard.

APPLICANT. Any entity or any subsequent owner of the site that applies to the city for the applicable permits to undertake any project types regulated by this code.

AREA OF IMPROVEMENT. The area (in square feet) where interior building improvements are proposed. Such improvements can include, but are not limited to, painting, installing carpet or flooring, and replacing or upgrading mechanical, electrical, or plumbing systems.

CITY. City means the City of Mountain View.

DC FAST CHARGER. A DC Fast Charger (DCFC) is equivalent to an EV Level 3 charging station.

~~**ENFORCING AGENCY.** The community development department in the City of Mountain View as specified by this code.~~

ELECTRIC HEATING APPLIANCE. A device that produces heat energy to create a warm environment by the application of electric power to resistance elements, refrigerant compressors or dissimilar material junctions, as defined in the California Mechanical Code.

~~**EV (**~~**ELECTRIC VEHICLE (EV) CAPABLE.** A parking space linked to a listed electrical panel with sufficient capacity to provide at least ~~provide at least~~ 110/120 volts and 15/20 amperes to the parking space. Conduit is installed to the parking space, and building electrical system has ample capacity to serve future load. An electrician would be required to complete the circuit before charging is possible.

ELECTRIC VEHICLE CHARGING STATION (EVCS). A parking space that includes installation of electric vehicle supply equipment (EVSE), Level 1, 2 or 3.

~~**EV (**~~**ELECTRIC VEHICLE (EV) INSTALLED—LEVEL 1.** Capable of charging at 120V, 20A. This is the equivalent of a standard home outlet and can charge a typical car to run forty (40) miles of range in an eight (8) hour/overnight charge.

~~**EV (**~~**ELECTRIC VEHICLE (EV) INSTALLED—LEVEL 2.** Capable of charging at 240V, 30 to 40A. This is the service capacity typically used for larger appliance loads in homes and can charge four

(4) times faster than Level 1 chargers and can charge a typical car to run up to one hundred eighty (180) miles during an eight (8) hour charge.

~~EV (~~**ELECTRIC VEHICLE (EV) INSTALLED—LEVEL 3.** Capable of charging at 240V, 30 to 40A. As applied in this code, a Level 3 shall be SAE J1772 (IEC Type 1) or alternative approved by the chief building official.

~~EV (~~**ELECTRIC VEHICLE (EV) READY.** A parking space provided with all power supply and associated outlet, electrical panel labeled EV Ready and positioned near where people will park; charger not installed.

~~**ELECTRIC VEHICLE CHARGING STATION (EVCS):** A parking space that includes installation of electric vehicle supply equipment (EVSE), Level 1, 2 or 3.~~

ENFORCING AGENCY. The community development department in the City of Mountain View as specified by this code.

FOR-PROFIT KITCHEN. A commercial kitchen in a restaurant, not established to provide goods to an office building or campus; and that is open to the general public during all business hours of operation.

~~**GREEN POINT RATED (GPR).** Refers to a residential green building rating system developed by Build It Green. Projects can use any of the adopted GPR checklists that most appropriately apply to the project type proposed.~~

GREEN BUILDING CERTIFICATION INSTITUTE (GBCI™). Oversees and administers the building certifications and professional designations for the U.S. Green Building Council's LEED® ; Green Building Rating Systems™.

GREEN POINT RATED (GPR). Refers to a residential green building rating system developed by Build It Green. Projects can use any of the adopted GPR checklists that most appropriately apply to the project type proposed.

KITCHEN, INSTITUTIONAL COMMERCIAL. Refers to a kitchen dedicated to a food-service establishment that provides meals at institutions, including schools, colleges and universities, hospitals, correctional facilities, private cafeterias, nursing homes and other buildings or structures in which care or supervision is provided to occupants.

KITCHEN, QUICK-SERVICE COMMERCIAL. Refers to a kitchen dedicated to an establishment primarily engaged in providing fast food, fast casual, or limited services. Food and drink may be consumed on premises, taken out or delivered to the customer's location.

LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN (LEED®). Refers to a green building rating system developed by the U.S. Green Building Council for residential and nonresidential

projects. Projects can use any of the adopted LEED®; checklists that most appropriately apply to the project type proposed.

MEET THE INTENT. To demonstrate compliance with the green building requirements of LEED®; or GPR without formally submitting documentation to the U.S. Green Building Council's Green Building Certification Institute or Build It Green for verification and certification. The applicant must follow the approaches and procedures in the guidebook or reference guides for respective rating systems and submit the required documentation and verification materials as outlined in Section 102 of this code to the community development department. This includes meeting all mandatory prerequisites and minimum point totals of each category, if required per the rating system.

MIXED-USE. The construction of a building or buildings that include both commercial and residential uses.

NET FREE AREA (NFA). The total unobstructed area of the air gaps between louver and grille slats in a vent through which air can pass. The narrowest distance between two (2) slats, perpendicular to the surface of both slats, is the air gap height. The narrowest width of the gap is the air gap width. The NFA is the air gap height multiplied by the air gap width multiplied by the total number of air gaps between slats in the vent.

NONRESIDENTIAL BUILDING. Any building constructed or occupied for a use other than residential, which may include, but is not limited to, commercial or hotel uses.

PROJECT. Any proposed development that is regulated by this code.

QUALIFIED GREEN BUILDING PROFESSIONAL. A licensed professional, such as an architect or contractor, trained through the Green Building Certification Institute as a LEED® AP; or through Build It Green as a certified green building professional, or similar qualifications if acceptable to the chief building official.

SELF-VERIFICATION. Verification by the applicant or a qualified green building professional that the project has met the standards as indicated for the project type set forth in this code.

SQUARE FEET (GROSS). The gross square footage of a structure includes all floor area enclosed within the walls of the structure (measured from the outside perimeter of the wall).

TENANT IMPROVEMENTS. Any owner or authorized agent who intends to enlarge, alter or change the occupancy of a building or structure, or to erect, enlarge, alter or convert any electrical, gas, mechanical, or plumbing system, the installation of which is regulated by the California Building Code, or to cause any such work to be done, shall obtain the required permit and must comply with the requirements included in this code.

ZONING PERMIT. Any discretionary permit approval from the planning division that includes conditions of approval.

Section 3. Chapter 8, Article I, Division III (Green Building Code) of the Mountain View City Code is hereby amended to add Sections 8.20.34 and 8.20.35 as new text as set forth below (section titles are shown in **bold** font, deletions shown by ~~strikethrough~~ and additions are shown in underline).

SEC. 8.20.34. - Subsection 4.106.5 added.

Section 4.106, "Site Development," of the 2022 California Green Building Standards Code is amended to add:

4.106.5 Electric ready new construction for one- and two-family dwellings and townhouses. New construction residential one- and two-family dwellings and townhouse buildings shall comply with the following and in accordance with Table 4.106.5:

1. **Heat pump space heater ready.** A system(s) using a gas or propane furnace to serve an individual dwelling unit(s) shall meet the requirements of Section 150.0(t) of Title 24, Part 6 and, in addition, include on construction drawings a designated location for a future heat pump compressor unit of a size that can serve the size of the dwelling unit(s) with either a drain installed or natural drainage provided for condensate.

2. **Electric readiness requirements for any system(s) using gas or propane.** Where any system(s) using gas or propane is (are) installed, the construction drawings shall indicate electrical infrastructure and physical space accommodating the future installation of an electric equivalent of that appliance that serves the same function, which must be certified by a registered design professional or licensed electrical contractor, and be installed to comply with:

    a. "Appliance" refers to, but is not limited to, indoor or outdoor installations of space-conditioning (heating/cooling) equipment, water-heating equipment, clothes dryer, cooking appliances, fire pits, fireplaces, and heating equipment for pools, spas, saunas; and

    b. Branch circuit wiring to be electrically isolated and designed to serve a future electric appliance with the same function in accordance with the minimum in Table 4.106.5, unless an otherwise specified future electric appliance is proposed in accordance with manufacturer requirements and the California Electrical Code, including the appropriate voltage, phase, minimum amperage and, in all cases, an electrical receptacle or junction box must be located within three (3) feet of the appliance that is accessible with no obstructions. Appropriately sized conduit may be installed in lieu of conductors; and

c. Label both ends of the unused conductors or conduit with "For Future Electrical Appliance"; and

d. Reserve a circuit breaker(s) in the electrical panel for each branch circuit, appropriately labeled for the appliance (e.g., "Reserved for Future Electric Fireplace"), and positioned on the opposite end of the panel supply conductor connection; and

e. Any connected subpanels, panelboards, switchboards, busbars and transformers shall be sized to serve the future electric appliance. The electrical capacity requirements shall be adjusted for demand factors in accordance with the California Electrical Code; and

f. Physical space for the future electric appliance(s), including equipment footprint, shall be depicted on the construction drawings. The footprint necessary for the future electric appliance(s) may overlap with non-structural partitions and with the location of currently designed combustion equipment.

Table 4.106.5: Minimum Requirements for Electric Ready Appliance[1]

Type of Appliance	Minimum Required Branch Circuit Conductor[2]	Minimum Dedicated Branch Circuit Wiring[3]
Cooking appliances	50 amps	240 volt
Clothes Dryer	30 amps	
Fireplace	20 amps	
Fire pit	20 amps	
Heat pump space heater	50 amps	
Water Heater	30 amps	
Pools, Spas, Saunas	Based on manufacturer specifications	

1. An alternative minimum can be proposed in accordance with manufacturer specifications and the California Energy Code. Documentation demonstrating compliance must be submitted with construction drawings.
2. The branch circuit must comply with all requirements of Section 4.106.5.2.
3. Shall be installed within three (3) feet of the appliance with no obstructions.

SEC. 8.20.35. Subsection 4.106.6 added.

Section 4.106 "Site Development," of the 2022 California Green Building Standards Code is amended to add:

4.106.6 Electric ready new construction for multifamily dwellings, hotels and motels. All multi-family residential new construction with three (3) units or more and any new construction hotels and motels shall comply with Sections 4.106.6.1 through 4.106.6.4**.**

4.106.6.1 Building electrical system size. The building electrical system shall be sized to meet the future electric requirements of the electric-ready equipment specified in Section 8.20.35 and in the California Energy Code, Title 24, Part 6, Sections 160.9 (a) – (c) for space conditioning equipment, cooking appliances and clothes dryers. To meet this requirement, the building main service conduit, the electrical system to the point specified in each subsection and any on-site distribution transformers shall have sufficient capacity to supply full rated amperage at each electric-ready appliance in accordance with the California Electrical Code.

4.106.6.2 Individual unit/room heat pump water heater-ready. Any system(s) using a gas or propane water heater(s) to serve individual dwelling units or an individual hotel/motel room shall, in addition to the requirements of the California Energy Code Section 160.4(a) for water heaters, include the following components and shall meet the following requirements:

1. The construction drawings shall indicate the location of the future heat pump water heater, which shall have minimum clear interior dimensions of 39” in length x 39” in width x 96” in height; and

2. Include a ventilation method meeting one of the following subsections a. through e. below:

    a. The designed space for the future heat pump water heater shall have a minimum volume of 700 cubic feet; or

    b. The designed space reserved for the future heat pump water heater shall vent to a communicating space in the same pressure boundary via permanent openings with a minimum total net free area of 250 square inches, such that the total combined volume connected via permanent openings is 700 cubic feet or larger. The permanent openings shall either be:

        i. Fully louvered doors with fixed louvers consisting of a single layer of fixed flat slats; or

        ii. Two (2) permanent fixed openings, consisting of a single layer of fixed flat slat louvers or grilles, one commencing within twelve (12) inches from the top of the enclosure and one (1) commencing within twelve (12) inches from the bottom of the enclosure; or

    c. The designed space reserved for the future heat pump water heater shall include two (2), eight (8) inch capped ducts, venting to the building exterior, with both of the following:

        i. All ducts, connections and building penetrations shall be sealed; and

ii. Exhaust air ducts and all ducts which cross pressure boundaries shall be insulated to a minimum insulation level of R-6; or

d. Airflow from termination points shall be diverted away from each other; or

e. Otherwise designed in accordance with manufacturer specifications.

4.106.6.3 Central heat pump water heater electric-ready. A central water heating system(s) using gas or propane to serve multiple dwelling units or multiple hotel/motel rooms shall include all of the following:

1. **Input Capacity.** The system input capacity of the gas or propane water heating system shall be determined as the sum of the input gas or propane capacity of all water heating devices associated with each gas or propane water heating system;

2. **Space Reserved**. Space reserved shall include:

a. For heat pumps, the minimum space reserved shall include space for service clearances, air flow clearances, and keep-outs, and shall meet one of the following:

i. If the system input capacity of the gas water heating system is less than 200,000 BTU per hour, the minimum space reserved for the heat pump shall be 2.0 square feet per input 10,000 BTU per hour of the gas or propane water heating system, and the minimum linear dimension of the space reserved shall be 48 linear inches; or

ii. If the system input capacity of the gas water heating system is greater than or equal to 200,000 BTU per hour, the minimum space reserved for the heat pump shall be 3.6 square feet per input 10,000 BTU per hour of the gas or propane water heating system, and the minimum linear dimension of the space reserved shall be 84 linear inches; or

iii. The space reserved shall be the space required for a heat pump water heater system that meets the total building hot water demand as calculated and documented by the licensed professional associated with the project.

b. For systems with tanks, the minimum space reserved shall include space for service clearances and keep outs and shall meet one of the following:

i. If the system input capacity of the gas water heating system is less than 200,000 BTU per hour, the minimum space reserved for the storage and

temperature maintenance tanks shall be 4.4 square feet per input 10,000 BTU per hour of the gas or propane water heating system; or

ii. If the system input capacity of the gas water heating system is greater than or equal to 200,000 BTU per hour, the minimum physical space reserved for the storage and temperature maintenance tanks shall be 3.1 square feet per input 10,000 BTU per hour of the gas or propane water heating system; or

iii. The space reserved shall be the space required for a heat pump water heater system that meets the total building hot water demand as calculated and documented by the licensed professional associated with the project.

3. **Ventilation.** Ventilation shall be provided by meeting one of the following:

a. A physical space shall be reserved for the heat pump, shown on construction drawings, and labeled "For Future Heat Pump" at the location; or

b. A pathway shall be reserved for future routing of supply and exhaust air via ductwork from the reserved heat pump location to an appropriate outdoor location. Penetrations through the building envelope for louvers and ducts shall be planned and identified for future use. The reserved pathway and penetrations through the building envelope shall be sized to meet one of the following:

i. If the system input capacity of the gas water heating system is less than 200,000 BTU per hour, the minimum air flow rate shall be 70 CFM per input 10,000 BTU per hour of the gas or propane water heating system and the total external static pressure drop of ductwork and louvers shall not exceed 0.17 inch, when the future heat pump water heater is installed; or

ii. If the system input capacity of the gas water heating system is greater than or equal to 200,000 BTU per hour, the minimum air flow rate shall be 420 CFM per input 10,000 BTU per hour of the gas or propane water heating system and the total external static pressure drop of ductwork and louvers shall not exceed 0.17 inch when the future heat pump water heater is installed; or

iii. The reserved pathway and penetrations shall be sized to serve a heat pump water heater system that meets the total building hot water demand as calculated and documented by the licensed professional associated with the project; or

c. Otherwise designed in accordance with manufacturer specifications.

4. **Condensate drainage piping.** An approved receptacle that is sized in accordance with the California Plumbing Code to receive the condensate drainage shall be installed within three (3) feet of the reserved heat pump location; or piping shall be installed within three (3) feet of the reserved heat pump location to an approved discharge location that is sized in accordance with the California Plumbing Code, and meets one of the following:

   a. If the system input capacity of the gas water heating system is less than 200,000 BTU per hour, condensate drainage shall be sized for 0.2 ton of refrigeration capacity per input 10,000 BTU per hour; or

   b. If the system input capacity of the gas water heating system is greater than or equal to 200,000 BTU per hour, condensate drainage shall be sized for 0.7 ton of refrigeration capacity per input 10,000 BTU per hour; or

   c. Any condensate drainage shall be sized to serve a heat pump water heater system that meets the total building hot water demand as calculated and documented by the licensed professional associated with the project.

5. **Electrical.**

   a. Physical space shall be reserved on the bus system of the main switchboard or on the bus system of a distribution board to serve the future heat pump water heater system, including the heat pump and temperature maintenance tanks. In addition, the physical space reserved shall be capable of providing adequate power to the future heat pump water heater in accordance with the following:

      i. For the heat pump, the physical space reserved shall comply with one of the following:

         a. If the system input capacity of the gas water heating system is less than 200,000 BTU per hour, provide 0.1 kVA per input 10,000 BTU per hour; or

         b. If the system input capacity of the gas water heating system is greater than or equal to 200,000 BTU per hour, provide 1.1 kVA per input 10,000 BTU per hour; or

         c. The physical space reserved supplies sufficient electrical power required to power a heat pump water heater system that meets the total building hot water demand as calculated and documented by the licensed professional associated with the project.

ii. For the temperature maintenance tank, the physical space reserved shall comply with one of the following:

a. If the system input capacity of the gas water heating system is less than 200,000 BTU per hour, provide 1.0 kVA per input 10,000 BTU per hour; or

b. If the system input capacity of the gas water heating system is greater than or equal to 200,000 BTU per hour, provide 0.6 kVA per input 10,000 BTU per hour; or

c. The physical space reserved supplies sufficient electrical power required to power a heat pump water heater system that meets the total building hot water demand as calculated and documented by the licensed professional associated with the project.

4.106.6.4 Electric readiness requirements for any system(s) using gas or propane. Where any system(s) using gas or propane is (are) installed, the construction drawings shall indicate electrical infrastructure and physical space accommodating the future installation of an electric equivalent of that appliance, as certified by a registered design professional or licensed electrical contractor, and be installed to comply with:

1. "Appliance" refers to, but is not limited to, indoor or outdoor installations of space-conditioning (heating/cooling) equipment, water-heating equipment, clothes dryers, cooking appliances, fire pits, fireplaces, and heating equipment for pools, spas, saunas; and

2. Branch circuit wiring to be electrically isolated and designed to serve a future electric appliance in accordance with manufacturer requirements and the California Electrical Code, including the appropriate voltage, phase, minimum amperage and an electrical receptacle or junction box within three (3) feet of the appliance that is accessible with no obstructions. Appropriately sized conduit may be installed in lieu of conductors; and

3. Label both ends of the unused conductors or conduit with "For Future Electrical Appliance"; and

4. Reserve a circuit breaker(s) in the electrical panel for each branch circuit, appropriately labeled for the appliance (e.g., "Reserved for Future Electric Fireplace"), and positioned on the opposite end of the panel supply conductor connection; and

5. Any connected subpanels, panelboards, switchboards, busbars and transformers shall be sized to serve the future electric appliance. The electrical capacity requirements

shall be adjusted for demand factors in accordance with the California Electrical Code; and

6. Physical space for future electric appliances, including equipment footprint, shall be depicted on the construction drawings. The footprint necessary for future electric appliances may overlap with nonstructural partitions and with the location of currently designed combustion equipment.

Section 4. Chapter 8, Article I, Division III (Green Building Code) of the Mountain View City Code is hereby amended to renumber Sections 8.20.34 through 8.20.44 to Sections 8.20.36 through 8.20.46 as set forth below (section titles are shown in **bold** font, deletions shown by ~~strikethrough~~ and additions are shown in underline).

SEC. ~~8.20.34~~8.20.36. - Subsection 4.410.2 amended.

Subsection 4.410.2 of the 2022 California Green Building Standards Code is amended to read as follows:

4.410.2 Recycling by occupants. When five (5) or more dwellings units are constructed on a building site, provide readily accessible area(s) that serves all building and residents on the site and are identified for the depositing, storage and collection of nonhazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste and metals, or meet a lawfully enacted local recycling ordinance, if more restrictive. This area(s) must be in the same location as the area(s) for depositing trash.

SEC. ~~8.20.35~~8.20.37. - Subsection 4.503.1 amended.

Subsection 4.503.1 of the 2022 California Green Building Standards Code is amended to read as follows:

4.503.1 General. Any installed gas fireplace shall be a direct-vent, sealed-combustion type. Any installed wood stove or pellet stove shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as applicable and shall have a permanent label indicating they are certified to meet the emissions limits Wood stoves, pellet stoves and fireplaces shall also comply with applicable local ordinances. Mountain View City Code Chapter 8, Article 1, Division VI shall be referenced for wood-burning appliances.

SEC. ~~8.20.36~~8.20.38. Subsection 5.106.1 amended.

Subsection 5.106.1 of the 2022 California Green Building Standards Code is amended to read as follows:

5.106.1 Stormwater sediment and erosion control plan. For newly constructed projects of less than one (1) acre, develop and implement a stormwater sediment and erosion control plan

that has been designed specific to its site. The stormwater sediment and erosion control plan shall be developed to provide equivalent protection to projects regulated by the state stormwater NPDES construction permit (greater than one (1) acre of disturbed land), and Subsection 35.32.10.1(T) in accordance with the Mountain View city code. The stormwater pollutant control measures that shall be included in the plan are erosion control, run-on and runoff control, sediment control, advanced treatment (as appropriate), good site management and nonstormwater management through all phases of construction until it is fully stabilized by landscaping or the installation of permanent erosion control measures.

Note: No state permit is required, but construction best management practices (BMP) as approved by the City of Mountain View shall be followed. BMP include, but are not limited to, the following:

1. Erosion and sediment control BMP:

    a. Scheduling construction activity;
    b. Preservation of natural features, vegetation and soil;
    c. Drainage swales or lined ditches to control stormwater flow;
    d. Mulching or hydroseeding to stabilize soils;
    e. Erosion control covers to protect slopes;
    f. Protection of storm drain inlets (gravel bags or catch basin inserts);
    g. Perimeter sediment control (perimeter silt fence, fiber rolls);
    h. Sediment trap or sediment basin to retain sediment on-site;
    i. Stabilized construction exits;
    j. Wind erosion control.

2. Housekeeping BMP:

    a. Material handling and waste management;
    b. Building materials stockpile management;
    c. Management of washout areas (concrete, paints, stucco, etc.);
    d. Control of vehicle/equipment fueling to contractor's staging area;
    e. Vehicle and equipment cleaning performed off-site;
    f. Spill prevention and control.

SEC. ~~8.20.37~~8.20.39. - Subsection 5.106.2 amended—Stormwater pollution prevention for projects that disturb one (1) or more acres of land.

Section 5.106.2 of the 2022 California Green Building Standards Code is amended to read as follows:

5.106.2 Stormwater pollution prevention for projects that disturb one (1) or more acres of land. Projects that will disturb greater than one (1) acre of land are required to obtain coverage under the State of California Construction General Permit prior to issuance of a demolition permit

or a grading permit from the city. A "Notice of Intent" (NOI) and "Stormwater Pollution Prevention Plan" (SWPPP) shall be prepared and submitted to the state, and proof of coverage under the Construction General Permit shall be submitted to the city.

SEC. ~~8.20.38~~8.20.40. - Subsection 5.106.3 added—Postconstruction stormwater control requirements.

Section 5.106.3 of the 2022 California Green Building Standards Code is added to read as follows:

5.106.3 Postconstruction stormwater control requirements. Postconstruction stormwater controls are required for certain projects as defined and described in Provision C.3 of the Municipal Regional Stormwater NPDES Permit, and Sec. 35.4 of the Mountain View city code.

SEC. ~~8.20.39~~8.20.41. - Subsection 5.106.5.2 added—Designated parking for clean-air vehicles.

Section 5.106.5.2 is added to the California Green Building Standards Code to read as follows:

5.106.5.2 Designated parking for clean-air vehicles. New projects shall meet the requirements designated on Table A5.106.5.3.2, additions or alterations that add ten (10) or more vehicular parking spaces, provide designated parking for any combination of low-emitting, fuel-efficient and carpool/van pool vehicle will follow Table 5.106.5.2.

SEC. ~~8.20.40~~8.20.42. Subsection A5.106.5.3 amended.

Section 5.106.5.3 of the 2022 California Green Building Standards Code is amended to read as follows:

5.106.5.3 Electric vehicle (EV) charging. [N] Construction to provide electric vehicle infrastructure and facilitate electric vehicle charging shall comply with Section 5.106.5.3.1 or Section 5.106.5.3.2 and shall be installed in accordance with the California Building Code and the California Electrical Code.

SEC. ~~8.20.41~~8.20.43. Subsection 5.106.5.3.1 amended.

Section 5.106.5.3.1 of the 2022 California Green Building Standards Code is amended to read as follows:

5.106.5.3.1 EV-capable spaces. [N] EV capable spaces shall be provided in accordance with Table 5.106.5.3.2 and the following requirements:

1. Raceways complying with the California Electrical Code and no less than one (1) inch (25 mm) diameter shall be provided and shall originate at a service panel or a

subpanel(s) serving the area, and shall terminate in close proximity to the proposed location of the EV capable space and into a suitable listed cabinet, box, enclosure or equivalent. A common raceway may be used to serve multiple EV capable spaces.

2. A service panel or subpanel(s) shall be provided with panel space and electrical load capacity for a dedicated 208/240 volt, 40-ampere minimum branch circuit for each EV capable space, with delivery of 30-ampere minimum to an installed EVSE at each EVCS.

3. The electrical system and any on-site distribution transformers shall have sufficient capacity to supply full rated amperage at each EV capable space.

4. The service panel or subpanel circuit directory shall identify the reserved overcurrent protective device space(s) as "EV CAPABLE." The raceway termination location shall be permanently and visibly marked as "EV CAPABLE."

SEC. ~~8.20.42~~8.20.44. - Subsection 5.106.5.3.2 amended and Table 5.106.5.3.2 added.

Section 5.106.5.3.2 of the 2022 California Green Building Standards Code is amended to read as follows:

5.106.5.3.2 Tier 2. Table 5.106.5.3.2 shall be used to determine the number of EV-capable spaces required. Refer to Section 5.106.5.3 for design requirements.

When EV-capable spaces are provided with EVSE to create EVCS per Table 5.106.5.3.2, refer to Section 5.106.5.3.2 for the allowed use of Level 2 or Direct Current Fast Charger (DCFC) and Section 5.106.5.3.3 for the allowed use of Automatic Load Management System (ALMS).

One (1) EV charger with multiple connectors capable of charging multiple EVs simultaneously shall be permitted if the electrical load capacity required by Section 5.106.5.3.1 for each EV-capable space is accumulatively supplied to the EV charger.

TABLE A5.106.5.3.2

Total Number of Actual Parking Spaces[1]	Tier 2 Number of Required EV-Capable Spaces	Tier 2 Number of EVCS (EV-Capable Spaces Provided with EVSE)[2]
0-9	3	0
10-25	8	3
26-50	17	6
51-75	28	9
76-100	40	13
101-150	57	19
151-200	79	26
201 and over	45 percent of total parking spaces[3]	33 percent of EV-capable spaces[3]

1. In accordance with Government Code Section 65863.2(f), for new multi-family residential and nonresidential development on properties located within one-half (1/2) mile of a major transit stop as defined in Section 21155 of the Public Resources Code, the "total number of actual parking spaces" for purposes of this table and determination of the number of EV-capable spaces is based on the minimum number of parking spaces that, absent Government Code Section 658363.2, would otherwise be required for the development per Chapter 36 of this Code.
2. The number of required EVCS (EV-capable spaces provided with EVSE) in Column 3 count toward the total number of required EV-capable spaces shown in Column 2.
3. Calculation for spaces shall be rounded up to the nearest whole number.

SEC. ~~8.20.43~~8.20.45. - Subsection 5.106.5.3.2.1 added.

Section 5.106.5.3.2.1 is added to the California Green Building Standards Code to read as follows:

5.106.5.3.2.1 Parking addition in existing nonresidential buildings per occupancies:

1. Existing occupancy Class B offices building. When new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or altered and the work requires a building permit, ten (10) percent of the total number of parking spaces added or altered shall be EVCS with Level 2 EV Ready. Any existing EV Capable spaces on the building property required by the locally adopted codes at the time of building permit shall be upgraded to a minimum of Level 1 EV Ready. Upgrades shall be required at currently designated vehicle parking spaces. Upgrades shall be required for remaining parking spaces after meeting the accessibility requirements of California Building Code Chapters 11A and 11B.

2. Existing hotel and motel occupancy buildings. When new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or altered and the work requires a building permit, ten (10) percent of the total number of parking spaces added or altered shall be EVCS with Level 2 EV Ready. Any existing EV Capable spaces on the building property required by the locally adopted codes at the time of building permit shall be upgraded to a minimum of Level 1 EV Ready. Upgrades shall

be required at currently designated vehicle parking spaces. Upgrades shall be required for remaining parking spaces after meeting the accessibility requirements of California Building Code Chapters 11A and 11B.

3. Existing all other nonresidential occupancy buildings. When new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or altered and the work requires a building permit, ten (10) percent of the total number of parking spaces added or altered shall be EVCS with Level 2 EV Ready. Any existing EV Capable spaces on the building property required by the locally adopted codes at the time of building permit shall be upgraded to a minimum of Level 1 EV Ready. Upgrades shall be required at currently designated vehicle parking spaces. Upgrades shall be required for remaining parking spaces after meeting the accessibility requirements of California Building Code Chapters 11A and 11B.

SEC. ~~8.20.44~~8.20.46. - Subsection 5.106.5.3.3 amended.

Section 5.106.5.3.3 of the 2022 California Green Building Standards Code is amended to read as follows:

5.106.5.3.3 EV charging space calculation. [N] Table A5.106.5.3.2 shall be used to determine if single or multiple charging space requirements apply for the installation of EVSE, with a minimum one (1) EV3 Fast Charger being installed for each fraction of one hundred (100) parking spaces provided.

Section 5. Chapter 8, Article I, Division III (Green Building Code) of the Mountain View City Code is hereby amended to add Section 8.20.47 as new text as set forth below (section titles are shown in **bold** font, deletions shown by ~~strikethrough~~ and additions are shown in underline).

SEC. 8.20.47. - Subsection 5.106.13 added.

Section 5.106, "Site Development," of the 2022 California Green Building Standards Code to add the following:

5.106.13 Electric-ready new construction nonresidential buildings. New construction nonresidential buildings shall comply with Sections 5.106.13.1 and 5.106.13.2, as applicable:

5.106.13.1 Electric readiness requirements for commercial kitchens. Electric readiness for newly constructed commercial kitchens shall meet the following requirements:

1. Quick-service commercial kitchens and institutional commercial kitchens shall meet all of the following requirements:

    a. Include a dedicated branch circuit wiring and outlet that would be accessible to cooking appliances; and

b. Label both ends of the unused conductors or conduit with “For Future Electrical Appliance”; and

c. The branch circuit conductors shall be rated at 50 amps minimum; and

d. The electrical service shall meet one of the following:

i. Have a capacity not less than 800 amps; or

ii Have a capacity adequate for the future electrification of all kitchen appliances, including those appliances presently designated for natural gas or propane. Capacity shall be demonstrated with an electrical load calculation prepared in accordance with the California Electrical Code by a registered design professional or licensed electrical contractor.

2. The main electrical service panel shall be sized to accommodate at least two (2) additional 50 amp breakers.

5.106.13.2 Electric readiness requirements for any system(s) using gas or propane. Where any system(s) using gas or propane is (are) installed, the construction drawings shall indicate electrical infrastructure and physical space accommodating the future installation of an electric equivalent of that appliance, which must be certified by a registered design professional or licensed electrical contractor, and be installed to comply with:

1. “Appliance” refers to, but is not limited to, indoor or outdoor installations of space-conditioning (heating/cooling) equipment, water-heating equipment, clothes dryers, cooking appliances, firepits, fireplaces, and heating equipment for pools, spas, saunas; and

2. Branch circuit wiring to be electrically isolated and designed to serve a future electric appliance in accordance with manufacturer requirements and the California Electrical Code, including the appropriate voltage, phase, minimum amperage, and an electrical receptacle or junction box within three (3) feet of the appliance that is accessible with no obstructions. Appropriately sized conduit may be installed in lieu of conductors; and

3. Label both ends of the unused conductors or conduit with “For Future Electrical Appliance”; and

4. Reserve circuit breakers in the electrical panel for each branch circuit, appropriately labeled for the appliance (e.g., “Reserved for Future Electric Water Heater”), and positioned on the opposite end of the panel supply conductor connection; and

5. Any connected subpanels, panelboards, switchboards, busbars and transformers shall be sized to serve the future electric appliance. The electrical capacity requirements shall be adjusted for demand factors in accordance with the California Electrical Code; and

6. Physical space for future electric appliances, including equipment footprint, shall be depicted on the construction drawings. The footprint necessary for future electric appliances may overlap with nonstructural partitions and with the location of currently designed combustion equipment.

Section 6. Chapter 8, Article I, Division III (Green Building Code) of the Mountain View City Code is hereby amended to renumber Sections 8.20.45 through 8.20.47 to Sections 8.20.48 through 8.20.50 as set forth below (section titles are shown in **bold** font, deletions shown by ~~strikethrough~~ and additions are shown in underline).

SEC. ~~8.20.45~~8.20.48. - Subsection 5.305.1 amended.

Subsection 5.305.1 of the 2022 California Green Building Standards Code is amended to read as follows:

5.305.1.1 Recycled water supply systems. Recycled water supply systems shall be installed in accordance with Sections 5.305.1.1, 5.305.1.2, the California Plumbing Code and Chapter 35, Article V—Recycled Water for Irrigation of the Mountain View city code.

SEC. ~~8.20.46~~8.20.49. - Subsection 5.503.1 amended.

Subsection 5.503.1 of the 2022 California Green Building Standards Code is amended to read as follows:

5.503.1 General. Install only a direct-vent sealed-combustion gas or sealed wood-burning fireplace, or a sealed wood stove or pellet stove, and refer to residential requirements in the California Energy Code, Title 24, Part 6, Subchapter 7, Section 150. Wood stoves, pellet stoves and fireplaces shall comply with applicable local ordinances. Mountain View city code Chapter 8, Article 1, Division IV shall be referenced for wood-burning appliances.

SEC. ~~8.20.47~~8.20.50. - Subsection 5.504.4.3.2 amended.

Subsection 5.504.4.3.2 of the 2022 California Green Building Standards Code is amended to read as follows:

5.504.4.3.2 Verification. Verification of compliance with this section shall be provided at the request of the City of Mountain View. Documentation may include, but is not limited to, the following:

1. Manufacturer's product specification.
2. Field verification of on-site product containers.

Section 7. Chapter 8, Article II (Plumbing Code) of the Mountain View City Code is hereby amended to add Section 8.30.5 as new text as set forth below (section titles are shown in **bold** font, deletions shown by ~~strikethrough~~ and additions are shown in underline).

SEC. 8.30.5 – Subsection 1505.1 amended.

Subsection 1505.1, "General," of the California Plumbing Code is amended to add:

1505.1.3. Structures Required to Dual-Plumb. All new nonresidential buildings or groups of new nonresidential buildings where the total square footage of the building(s) is greater than twenty-five thousand (25,000) square feet, shall incorporate dual plumbing in the design of the building to allow the use of recycled water, when it becomes available, for flushing toilets and urinals and priming floor traps.

Section 8. The provisions of this ordinance shall be effective on January 1, 2025, which is more than thirty (30) days from and after the date of its adoption.

Section 9. If any section, subsection, sentence, clause, or phrase of this ordinance is for any reason held to be unconstitutional, such decision shall not affect the validity of the other remaining portions of this ordinance. The City Council hereby declares that it would have passed this ordinance and each section, subsection, sentence, clause, or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared unconstitutional.

Section 10. Pursuant to Section 522 of the Mountain View City Charter, it is ordered that copies of the foregoing proposed ordinance be posted at least two (2) days prior to its adoption in three (3) prominent places in the City and that a single publication be made to the official newspaper of the City of a notice setting forth the title of the ordinance, the date of its introduction, and a list of the places where copies of the proposed ordinance are posted.

Section 11. This ordinance is exempt from the requirements of the California Environmental Quality Act (CEQA) per Section 15061(b)(3) of the CEQA Guidelines (Title 14,

Chapter 3 of California Code of Regulations), the common-sense exemption, as it can be seen with certainty that there is no possibility that the changes adopted will have a direct or reasonably foreseeable indirect physical change in the environment or significant effect on the environment; and Section 15308 of the CEQA Guidelines (Actions by Regulatory Agencies for Protection of the Environment) as this ordinance is an action taken by a regulatory agency for the purpose of protecting the environment by reducing greenhouse gas emissions that are produced from buildings.

– – – – – – – – – – –

LH/4/ORD
823-10-22-24o-so