

**INITIAL STUDY**

<b>PROJECT TITLE</b>	<b>CITY OF FERNDALE HOUSING ELEMENT</b>		
<b>PROJECT APPLICANT:</b>	City of Ferndale	<b>CASE NO (S):</b>	HE-051024
<b>PROJECT LOCATION:</b>	City of Ferndale City Limits		
<b>ZONING &amp; GENERAL PLAN DESIGNATION</b>	VARIOUS		
<b>PROJECT DESCRIPTION</b>	<b>City of Ferndale Housing Element Update</b>		

**LEAD AGENCY/CONTACT:** City of Ferndale; P.O. Box 1095; Ferndale, CA 95536; Nancy Kaytis-Slocum, City Planner; Phone: 707.786.4224; Fax: 707.786.9314; email [cityplanner@ci.ferndale.ca.us](mailto:cityplanner@ci.ferndale.ca.us).

**SURROUNDING LAND USES AND SETTING:** Ferndale is located in Humboldt County, about fifteen miles south of Eureka, approximately five miles west of U.S. Route 101, in the rural dairy area of the Eel River delta. This small community has traditionally had an agricultural-based economy that has transitioned to also include a very successful tourist economy. Specifically, the main industries in Ferndale are dairy farming, cattle ranching, tourism, lumber and wood products, and service. Ferndale is known for its architecturally stunning bed and breakfasts as well as the beautiful Victorian charm of antique shops, art galleries, museum and houses. These assets, as well as the surrounding beautiful country pasture, ocean views, and sweeping mountainsides all help to attract tourists from around the world. (Source: *Ferndale Community Report; Dr. Sheila L. Sheshan, Assistant Professor, Department of Sociology; Humboldt State University, June 2002*). The parcels that touch upon, and are outside of the City Limits have not been evaluated for development potential. However, they include six Single-Family Residence parcels, 27 rural parcels, one rural with timber influence parcel, one parcel subject to exemption, two timberland parcels, and one public facility parcel.

**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:** The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Aesthetics                  | <input type="checkbox"/> Agricultural Resources             | <input type="checkbox"/> Air Quality            |
| <input type="checkbox"/> Biological Resources        | <input type="checkbox"/> Cultural Resources                 | <input type="checkbox"/> Geology/Soils          |
| <input type="checkbox"/> Hazards/Hazardous Materials | <input type="checkbox"/> Hydrology/Water Quality            | <input type="checkbox"/> Land Use/Planning      |
| <input type="checkbox"/> Mineral Resources           | <input type="checkbox"/> Noise                              | <input type="checkbox"/> Population/Housing     |
| <input type="checkbox"/> Public Services             | <input type="checkbox"/> Recreation                         | <input type="checkbox"/> Transportation/Traffic |
| <input type="checkbox"/> Utilities/Service Systems   | <input type="checkbox"/> Mandatory Findings of Significance |   |

**DETERMINATION:** On the basis of this initial evaluation:

- I find that the proposed project **could not** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.
- I find that the proposed project **may** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.
- I find that the proposed project **may** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier **EIR** or **NEGATIVE DECLARATION**

pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier **EIR** or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

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 Nancy Kaytis-Slocum  
 City Planner, City of Ferndale

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 October 10, 2005  
 Date

**CHECKLIST AND EVALUATION OF ENVIRONMENTAL IMPACTS:** An explanation for all checklist responses is included, and all answers take into account the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts. The explanation of each issue identifies (a) the significance criteria or threshold, if any, used to evaluate each question; and (b) the mitigation measure identified, if any, to reduce the impact to less than significance. In the **CHECKLIST** the following definitions are used:

**"Potentially Significant Impact"** means there is substantial evidence that an effect may be significant.

**"Potentially Significant Unless Mitigation Incorporated"** means the incorporation of one or more mitigation measures can reduce the effect from potentially significant to a less than significant level.

**"Less Than Significant Impact"** means that the effect is less than significant and no mitigation is necessary to reduce the impact to a lesser level.

**"No Impact"** means that the effect does not apply to the proposed project, or clearly will not impact nor be impacted by the project.

I. AESTHETICS. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			X	
c) Substantially degrade the existing visual character or quality of the site and its surroundings?			X	
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?		X		
<p><b>DISCUSSION:</b> The project, Ferndale’s Housing Element, will not impact a designated scenic vista. The City is not located on a state scenic highway; however, views to the south include the Wildcat Mountains, and views to the east and west are of agricultural lands, views to the north include agricultural lands, as well as the Francis Creek and Salt River channels. The city’s zoning ordinance restricts building heights in all zones, thereby protecting view sheds. This project does not propose zone changes, which will protect the green belt of agricultural lands inside the city limits.</p>				

The acceptance of Ferndale’s Housing Element may subsequently result in construction of additional housing units. The City is currently considering the adoption of a “Lighting Ordinance” which will deal with exterior lighting within the city limits. However, acceptance of the Housing Element will not result in additional light pollution.

<b>II. AGRICULTURE RESOURCES.</b> In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				X
<p><b>DISCUSSION:</b> The City of Ferndale contains no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, and no Williamson Act contract lands. The surrounding properties are zoned both residential and agricultural and also contain no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, or Williamson Act contract lands. No zone changes are proposed with the Housing Element; therefore, the project will not result in the loss of agricultural lands, prime farmland, unique farmland or farmland of statewide importance.</p>				

<b>III. AIR QUALITY.</b> Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?				X
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?				X
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?				X
d) Expose sensitive receptors to substantial pollutant concentrations?				X
e) Create objectionable odors affecting a substantial number of people?				X
<p><b>DISCUSSION:</b> The North Coast Unified Air Quality Management District (NCUAQMD) is responsible for monitoring and enforcing local and state air quality standards. Air quality standards are set for emissions that may include, but are not limited to: visible emissions, particulate matter, and, fugitive dust. Pursuant to Air Quality Regulation 1, Chapter IV, Rule 400 – <i>General Limitations</i>, a person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property.</p> <p>Visible emissions are fairly self-explanatory. They include emissions that are visible to the naked eye, such as smoke from a fire. The Housing Element will set the tone for housing in the next five years, but will not, in itself, cause emissions. Some homes subsequently built may contain fireplaces or wood heat, which may affect visible emissions.</p>				

With regard to particulate matter, all of Humboldt County has been designated by the California State Air Quality Board as being in “non-attainment” for PM-10 air emissions. PM-10 air emissions include chemical emissions and other inhalable particulate matter with an aerodynamic diameter of less than 10 microns. PM-10 emissions include smoke from wood stoves and airborne salts and other particulate matter naturally generated by ocean surf. Because, in part, of the large number of wood stoves in Humboldt County and because of the generally heavy surf and high winds common to this area, Humboldt County has exceeded the state standard for PM-10 air emissions. Therefore, any use or activity that generates unnecessary airborne particulate matter may be of concern to the NCUAQMD.

Based on the conclusions above, Staff finds that the project (The Housing Element) will not result in adverse air quality impacts, nor result in a cumulatively considerable increase in the PM-10 non-attainment.

IV. BIOLOGICAL RESOURCES. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				X
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				X
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				X
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

**DISCUSSION:** The project site is the city limits of Ferndale. Francis Creek enters the City Limits from the south, and flows through Ferndale, exiting in the northeast corner of Ferndale to connect with Salt River, flowing to the northwest of Ferndale. At this time, Salt River is severely impacted by silt; however, the City of Ferndale, Humboldt County, the Army Corps of Engineers, the Coastal Commission, and the Resource Conservation District, among others, are actively working towards a solution to this drainage problem. Williams Creek flows approximately 1600’ to the east of Ferndale. The Pacific Ocean is approximately five miles to the west of Ferndale. The Wildcat mountains begin directly to the south of the City Limits of Ferndale. There are no known or expected migratory corridors in the City, or any listed or critical plant or animal species. The project will not convert riparian habitat to residential use, nor any sensitive natural community identified in local or regional plans, policies, and regulations by CA dept of Fish & Game or US Wildlife Service. Therefore, the project will have no impact on biological resources.

V. CULTURAL RESOURCES. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological				X

resource pursuant to '15064.5?				
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X
d) Disturb any human remains, including those interred outside of formal cemeteries?				X

**DISCUSSION:** No Known archaeological sites are known to exist in the project area. The following standard condition will be included as one of the conditions of approval for the project to limit the potential of impact to cultural resources. "If buried archaeological or historical resources are encountered during construction activities, the contractor on-site shall call all work in the immediate area to a halt temporarily, and a qualified archaeologist is to be contacted to evaluate the materials. Prehistoric materials may include obsidian or chert flakes, tools, locally darkened midden soils, groundstone artifacts, dietary bone, and human burials. If human burial is found during construction, state law requires that the County Coroner be contacted immediately. If the remains are found to be those of Native American, the California Native American Heritage Commission will then be contacted by the Coroner to determine the appropriate treatment of the remains." Based on the above, Staff concludes that the project will not have a substantial impact on cultural resources.

VI. GEOLOGY AND SOILS. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?				X
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				X
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				X
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X

**DISCUSSION:** All of Humboldt County is subject to a moderately high seismic ground shaking level. The proposed project is located within the City Limits of Ferndale, which was affected on 25 April 1992 by a magnitude 7.1 (Mw) earthquake that occurred near Cape Mendocino in Humboldt County. The location and orientation of rupture suggested an origin on or near the Cascadia subduction zone (CSZ) confirming the capability of the CSZ to produce strong earthquakes and local tsunamis. However, the subject property is not located nor is affected by active faults, tsunamis, landslides, erosion, subsidence, expansive soils, nor does it include unique geologic or physical features.

All property within the City of Ferndale is located in 'Seismic Zone 4' as prescribed by the Uniform Building Code. Therefore, all new construction must comply with the construction standards for Seismic Zone 4. Because all construction must comply with the Seismic Zone 4 standards of the Uniform Building Code, and because construction that conforms to the Uniform Building Code is presumed to meet the building safety standard, the potential impacts from seismic ground shaking and seismic ground failure, including liquefaction are considered less than significant.

The proposed project will not expose people or structures to potential adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. Refer to

Division of Mines and Geology Special Publication 42. According to the **Geologic Hazards maps of the Ferndale General Plan**, the project is located in an area that is geologically stable. Additionally, the project site is not located in a special studies zone or mapped in a potentially active fault zone according to the Special Study Maps prepared by the State of California. The project will not expose people or structures to substantial adverse effects from a fault rupture.

The City of Ferndale is located on relatively flat ground with no geologic features in the vicinity that could result in, or expose people to landslides. Therefore, no substantial soil erosion or loss of topsoil will result from the project.

The project (Ferndale’s Housing Element), in itself, will not affect Geology and Soils in any way. Any resulting construction after the acceptance of the Housing Element will be required to use Best Management Practices as prescribed in the Regional Water Quality Control Board regulations and the Uniform Building Code. Staff concludes that the project will not result in substantial adverse impacts relating to geology and/or soils.

VII. HAZARDS AND HAZARDOUS MATERIALS. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
g) Impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized area or where residences are intermixed with wildlands?				X

**DISCUSSION:** Acceptance of the Housing Element by Housing & Community Development, and ultimately by the Ferndale City Council will have no affect on hazards and hazardous materials.

There are no private airstrips within the City Limits. The Humboldt County Fairgrounds, located within the city limits, provides landing facilities in the form of a heliport for emergency services in times of flood, earthquake, medical evacuations, etc. The project will not impact normal operations of the fairground’s heliport, and use of the heliport will not impact the proposed project. Therefore, the project will not result in a safety hazard for people residing or working in the project area due to the proximity of the fairground’s heliport.

The proposed project will not affect any emergency response plans. The project site is located within City Limits of Ferndale; there are no “wild lands” near the project site. Therefore, there will be no impact as a result of wild land fires.

Based on the discussion above staff concludes that the project will result in less than significant impact with regards to hazards and hazardous materials.

VIII. HYDROLOGY AND WATER QUALITY. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?				X
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				X
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site?				X
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?			X	
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			X	
f) Otherwise substantially degrade water quality?				X
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary of Flood Insurance Rate Map or other flood hazard delineation map?				X
h) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?				X
i) Expose people or structures to a significant risk or loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
j) Result in inundation by seiche, tsunami, or mudflow?				X
<p><b>DISCUSSION:</b> The project, in and of itself will not violate any water quality standards or waste discharge requirements. The Housing Element will not affect groundwater, nor will it change drainage patterns existing within the City Limits. Although there are areas in Ferndale in the 100- and 500-year flood zones, existing Ordinances have regulations pertaining to building in these areas.</p> <p>Subsequent individual projects will be required to produce no net discharge of stormwater.</p> <p>Due to the known seismic activity in the Pacific Rim, a tsunami could impact the outlying areas of Ferndale. The City Limits of Ferndale are three to four miles south of the Eel River, as well as five to six miles from the mouth of the Eel. Any tsunami that has the potential to reach the “shores” of Ferndale would also run up the Eel River. However, based on research (<i>On Shaky Ground</i> Kathy Moley, 1966) a tsunami wave is not expected to affect those properties more than 2 miles from the shore. Therefore, staff concludes that the project would not result in inundation by tsunami.</p> <p>Staff concludes that the project will have less than significant impact on Hydrology and Water Quality..</p>				

IX. LAND USE AND PLANNING. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Physically divide an established community?				X
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the				X

general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				X
<b>DISCUSSION:</b> The City Limits of Ferndale include many different zones. The Housing Element does not propose any zone changes at this time. There are no specific plans or local coastal programs within Ferndale City Limits. Based on the above, staff concludes that the project will not result in an adverse impact to land use and planning.				

<b>X. MINERAL RESOURCES.</b> Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X
<b>DISCUSSION:</b> There are no known mineral resources within the City Limits. The Division of Mines and Geology has noted that the ‘Classification and Designation of Mineral Lands’ per the Surface Mining and Reclamation Act) Section 2790 ‘Minerals of Regional Significance’ and associated mapping has not occurred for Humboldt County and other than instream gravel resources and rock quarries, have not identified any mineral resources for needing protection from incompatible uses. The project will not therefore result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. Based on the project description and location, the proposed project will not result in any mineral resource-related significant impacts.				

<b>XI. NOISE.</b> Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				X
b) Expose persons to or generate excessive ground borne vibration or ground borne noise levels?			X	
c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				X
d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X

**DISCUSSION:** Noise is the quintessential local environmental impact. It does not travel well, it has no staying power beyond that of its source, and it does not accumulate in the environment. Nonetheless, prolonged noise exposure is a serious threat to human health, resulting in high stress levels and impaired hearing. Noise is not simply a matter of loudness, in scientific terms, it is actually a composite of three criteria that determine its impact: Intensity, Frequency, and Duration.

*Intensity.* Intensity is measured in decibels (dB) on a logarithmic scale (i.e., a sound of 60dB will be 10 times louder than one of 50dB, not merely 20 percent louder). The table below shows common identifiable noise sources and the approximate noise level measured in decibels. Often, for municipal noise enforcement purposes, the A-weighting scale, which is weighted toward the higher frequencies to account for human ear responses to sound, is the most commonly used and recommended. The use of the A-weighting scale is noted in the use of the abbreviation dBA.

Common Noise Levels in Decibels

	200	Noise Weapon
	190	
<b>LETHAL LEVEL</b>	180	
	170	
	160	
	150	Jet Aircraft (at 200')
	140	
	130	Pneumatic Riveter; Air Raid Siren
<b>THRESHOLD OF PAIN</b>	120	
	110	Amplified Rock Music (2-4' away)
	100	Food Blender (2-4' away); Motorcycle; Subway Train
	90	
	80	
<b>DANGER LEVEL</b>	70	Busy Street
	60	Normal Conversation
	50	Quiet Street (average urban interior)
	40	Quiet Room (residential area at night)
	30	Tick of a Watch (at 2')
	20	Whisper
	10	Leaves Rustling in the Wind
<b>THRESHOLD OF HEARING</b>	0	

*Frequency.* Frequency is measured in hertz (Hz) and relates to the number of cycles per second of sound wave. High frequencies within the human hearing range (approx. 100Hz to 20,000Hz) produce the "ear splitting" sensation associated with high-pitched tones. The concentration of a sound in a narrow frequency band, such as the whine of an incoming jet, is also more intensely felt than a mix of sounds across a wide range of frequencies.

*Duration.* Finally, duration simply refers to the length of time a sound lasts. This, too, has important and obvious consequences for human sensitivity. For instance, intermittent sounds are typically more annoying than steady ones, but the degree of discomfort depends greatly on the other two factors. In addition, very loud sounds do more hearing damage the longer they last. Time of day also matters. Nighttime noise is known to be more annoying than daytime noise, a factor that has caused the Federal Aviation Administration to adopt a weight measurement scheme for aircraft noise labeled Ldn (level day-night), which adds 10dB to evening noise in measuring cumulative impact. All three criteria must be considered in determining noise impacts.

The City’s adopted General Plan notes at least three different ambience conditions in Ferndale: Peak morning and late afternoon traffic. The second ambience level is during the remaining daylight hours of the day. This is when field measurements of ambience were taken, and it was found that the ambient level on Main Street was about 52 dBA, which is at least 20 dBA lower than during the peak traffic flow. At Fifth and Shaw Streets, the reading was 45 dBA, about 15 dBA lower than the peak traffic period ambience level. In outlying areas the peak traffic and normal daytime levels differ very little. Developing contours of the usual daytime ambience would be difficult since the lowest and highest readings were 45 and 52 decibels respectively, which is very quiet for a community during the day. The third ambience level is during the night when ambience levels are approximately 10 dBA lower than the usual daytime levels.

The parameters used for estimating transportation related noise include the traffic, the roadway, and the receiver. Traffic parameters affecting noise are the number and type of vehicles passing a point during a particular time period, and the average speed of the vehicles. Traffic noise increases as the number and average speed of automobiles increase. For example, if the automobile traffic volume doubles, the noise level from automobiles increases by about 3dBA. However, if the speed decreases to half, the noise level from automobiles decreases by about 6dBA. The engine-exhaust system and tire roadway interaction contribute prominently to overall automobile noise.

Noise levels generally decrease by 6dB at 50' and then an additional 6dB with a doubling of the distance from the noise source. The actual level of attenuation may increase depending on the introduction of noise insulation in construction, adjacent uses, and distance to noise source, and intervening topography, vegetation, and other buffers.

The proposed project, Ferndale’s Housing Element, would not result in any noise generation. An emergency heliport exists at the Humboldt County Fairgrounds within the City Limits. Because of the rare and intermittent use of the Fairgrounds heliport, the noise resulting from use of the heliport will have no discernable impact to development, and visa versa. The project is not located within the vicinity of a private airstrip.

Based on the above, staff concludes that the project will have less than significant impact with regard to noise.

<b>XII. POPULATION AND HOUSING. Would the project:</b>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and/or businesses) or indirectly (e.g., through extension of roads or other infrastructure)?			X	
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X

**DISCUSSION:** The proposed project, Ferndale’s Housing Element, is not proposing substantial population growth, zone changes or extension of roads or other infrastructure. No residences will be displaced. Therefore, staff concludes that the project will not result in substantial adverse impacts regarding population and housing.

<b>XIII. PUBLIC SERVICES.</b> Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Fire protection?			X	
b) Police protection?			X	
c) Schools?			X	
d) Parks?			X	
e) Other public facilities?			X	

**DISCUSSION:** The project, Ferndale’s Housing Element will not cause a need for additional Public Services. However, the resultant growth may eventually require a slight increase in the need for public services because of the increase in the number of dwellings.

<b>XIV. RECREATION.</b> Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

**DISCUSSION:** The City of Ferndale currently maintains two City owned parks within the city limits. Neither park is fully used with the population at approximately 1388. Upgrades to our existing parks are ongoing. Based on the above, staff concludes that the project will have no impact regarding recreation.

<b>XV. TRANSPORTATION/TRAFFIC.</b> Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?				X
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				X
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
d) Substantially increase hazards due to design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
e) Result in inadequate emergency access?				X
f) Result in inadequate parking capacity?				X
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				X

**DISCUSSION:** With the acceptance of Ferndale’s Housing Element, the level of service standard established by the county will not increase significantly. The project will not impact air traffic, and will not require or impact alternative transportation. Based on the above, staff concludes that the project will not have a significant adverse impact on transportation or traffic.

<b>XVI. UTILITIES AND SERVICE SYSTEMS. Would the project:</b>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			X	
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
d) Have insufficient water supplies available to serve the project from existing entitlements and resources (i.e., new or expanded entitlements are needed)?			X	
e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it does not have adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?			X	
f) Be served by a landfill with insufficient permitted capacity to accommodate the project’s solid waste disposal needs?			X	
g) Violate any federal, state, and local statutes and regulations related to solid waste?			X	

**DISCUSSION:** The City of Ferndale’s Wastewater Treatment Plant at 443 Port Kenyon Road provides wastewater services for the City of Ferndale. The wastewater treatment system capacity is 1 MGD (Million Gallons per Day). The dry weather flow is typically about 250,000 GPD (gallons per day). Peak wet weather flow can go as high as 2.5 MGD, which cannot be processed in a 24 hour period. The plant contains a seven-acre aeration pond, approximately 14 feet deep.

The City of Ferndale is currently under a sewer moratorium set by the Water Quality Control Board. The acceptance of Ferndale’s Housing Element will not affect Utilities and Service Systems. Subsequent construction will need to be approved by the Water Quality Control Board.

Del Oro Water Company supplies water within the City of Ferndale. The City of Ferndale water supply system’s maximum capacity is 518,000 GD. Current production average is 208,000 GD. Sixty-nine percent of the water is pulled from springs on the southern end of Ferndale. The springs run at full capacity, with back up production from the “Van Ness Street Well.” There are no plans to expand water services, as current operating levels of 40.3% of capacity are sufficient. The subject project would not significantly impact water supplies as the Del Oro water company would then be operating at approximately 42.4% of capacity.

The solid waste provider is the Humboldt Waste Management Authority (HWMA). The HWMA is a joint powers agreement between the County and the most of the incorporated Cities within the County for the disposal of waste. HWMA has contracted with Eel River Disposal to ship solid waste produced in Ferndale to a state licensed landfill located outside of Humboldt County. Currently solid waste is trucked to State licensed Anderson landfill in Shasta County California, which has excessive capacity and can accept the minimal amount of waste that may be generated by subsequent construction. Because this project will not generate solid waste, staff concludes the project will have no affect on solid waste disposal needs.

<b>XVII. MANDATORY FINDINGS OF SIGNIFICANCE.</b>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				X
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects).				X
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?				X
<b>DISCUSSION:</b> As discussed above, the proposed project, Ferndale’s Housing Element in and of itself will not degrade the quality of the environment. Construction projects resulting from the Housing Element may have environmental affects, but they will be researched at the time of proposal. No Zoning Changes are proposed with the Housing Element. Because of the current sewer hookup moratorium, subsequent projects will have to be approved by the Water Quality Control Board, or they will have to wait until the moratorium is lifted. As discussed herein, the project will not result in significant adverse impacts either to or from human beings.				

**EARLIER ANALYSES**

- a) Earlier Analyses Used. The following document(s), available at Ferndale City Hall, have adequately analyzed one or more effects of the project. Earlier analysis may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration (CEQA Guidelines Section 15063 (c)(3)(D)).
- b) Impacts Adequately Addressed. The following effects from the above checklist were within the scope of and adequately analyzed in the document(s) listed above, pursuant to applicable legal standards.
- c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Incorporated," the following are mitigation measures that were incorporated or refined from the document(s) described above.

**MITIGATION MEASURES, MONITORING, AND REPORTING PROGRAM – None**

**SOURCE/REFERENCE LIST:** The following documents were used in the preparation of this Initial Study. The documents are available for review at Ferndale City Hall, during regular business hours.

- a) Ferndale Municipal Code
- b) Ferndale General Plan as applicable
- c) Ferndale Resolution 00-15, Exhibit B “Environmental Evaluation Report dated May 15, 2000 supporting CEQA Initial Study Checklist.”
- d) Pamphlet *On Shaky Ground* by Kathy Moley, 1966.
- e) Application Submittal Materials
- f) Humboldt County General Plan, Volume II, Ferndale Community Plan, Planning Commission Approved Draft, September, 2002 referenced as “Ferndale Community Plan”
- g) Humboldt County General Plan, Volume I, Framework Plan, January, 1996