

Draft Initial Study AND Mitigated Negative Declaration

Project Information

Project Title: Holgersen Minor Subdivision and Coastal Development Permit (PLN-2018-15039)

Lead Agency

Humboldt County Planning and Building Department – Planning Division
3015 H Street
Eureka, CA 95501
(707) 445-7541

Property Owners

Holgersen Niels & Charlotte Hwprs
5250 Greenwood Heights
Kneeland, CA 95549

Project Applicant

Holgersen Construction
5250 Greenwood Heights
Kneeland, CA 95549

Project Location

The project site is located in the Myrtle town area, on the north side of Edgewood Road, approximately 400 feet west of the intersection of Edgewood Road and Quaker Street, on the property known as 3409 Edgewood Road.

General Plan Designation

Residential Low Density (RL), Humboldt Bay Area Plan (HBAP),
Density: 3 to 7 dwelling units per acre.

Zoning

Residential Single Family--Minimum parcel size 5 acres (RS-5)

Project Description

The project consists of a Minor Subdivision. The project proposes subdivision of a 1.10-acre parcel into four (4) parcels and a Remainder as noted below along with a duplex on each of the proposed new parcels:

Parcel 1: 7,192 ft²

Parcel 2: 7,912 ft²

Parcel 3: 8,468 ft²

Parcel 4: 8,468 ft²

Remainder: 14,600 ft²

A Minor Subdivision to create four parcels and a Remainder. The parcel is developed with a single-family residence that will be relocated on the proposed Remainder. The parcels will be served with community water and sewer by the Humboldt Community Services District. The project is located in the Coastal Zone, therefore a Coastal Development Permit (CDP) is required. A duplex (two dwelling units) is proposed on Parcels 1 - 4. The proposed dwelling units on Parcels 1 and 2 each unit will be 1,080 square feet in size, 22 feet and 5 inches in height, with an attached one-car garage 240 square feet in size. The proposed dwelling units on Parcels 3 and 4 will be 1,200 square feet in size, 23 feet and 5 inches in height, with an attached one-car garage 276 square feet in size. The CDP also includes the construction of these duplex units and the removal of four structures. The applicant has submitted exception request letters for the following requirements: The installation of a paved access road, concrete sidewalk, curb, and gutter along the proposed access road, and the minimum easement dedication width of 40 feet to be reduced to 30 feet for the access road, drainage, and utilities to serve the project.

Baseline Conditions: Surrounding Land Uses and Setting

The project is located on the north side of Edgewood Road, approximately 400 feet west of the intersection of Edgewood Road and Quaker Street. The site is currently developed with a single-family residence that will be relocated onto the proposed Remainder. The site is mostly flat, the north portion of the site slopes slightly upwards towards the north with steeper portions towards the northern borders of the property. The property fronts and uses Edgewood Road as an access. The property is wholly located within the boundaries of an urban cluster as designated by the United States Census Bureau.

Surrounding land use and setting:

- North: Residential (single-family)
- East: Residential (single-family)
- South: Residential (single-family)
- West: Residential (single-family)

Other Public Agencies Whose Approval Is or May Be Required (permits, financing approval, or participation agreement): County Counsel, Humboldt County Public Works Department, Division of Environmental Health, Building Division, Redway Community Services District, Redway Fire Protection District, Regional Water Quality Control Board, California Department of Fish & Wildlife, CalFire, CalTrans Dist 1, Bear River Band, Intertribal Sinkiyone Wilderness Council, Northwest Information Center, PG&E.

Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1?

Yes. The project was referred to local Tribes, the Bear River Band, Blue Lake Rancheria, and Wiyot Tribe. Conditional approval referral responses were received from local Tribes and no archaeological survey or records search for the subject property have been completed. The standard accidental discovery of cultural/archaeological resources is provided as a condition of approval for the Tentative Map. All local tribes were additionally offered AB 52 consultation on December 2, 2020 and none of the tribes requested such consultation.

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

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 and Forestry Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input type="checkbox"/> Geology/Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <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 | <input type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities/Service | <input type="checkbox"/> Wildfire | <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 (EIR)** 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 those 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.



Signature

04/08/2022

Date

Leiloni Shine, Contract Planner
Printed Name

Humboldt County Planning
and Building Department

Evaluation of Environmental Impacts

- (1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project -specific screening analysis).
- (2) All answers must take account of 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.
- (3) Once the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- (4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).
- (5) Earlier analyses 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. (California Code of Regulations, title 14 Section 15063(c) (3) (D)). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review. **N/A**
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis. **N/A**
 - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project. **N/A**

Environmental Checklist

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. Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				X
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?				X

Discussion:

(a-d) Less than Significant, No Impact: The project site is not within an area mapped or designated with scenic vistas or resources. It is in the Coastal Zone, but outside of locations where specified areas of scenic values are mapped and certified by the state. The site has direct access to the north side of Edgewood Road. The views of the site's direct access point on Edgewood Road are partially blocked by an existing fence with a row of vegetation and trees. The proposed subdivision is consistent with the current zoning and General Plan land use designation and is consistent with the planned buildout of the area. The proposed parcels are currently developed with structures (single-family residence and accessory structures) four accessory structures are proposed for removal. One spruce tree with a 24-inch DBH is proposed for removal. The parcels will be served by a Local Road, Edgewood Road, connection to Quaker Street, a County Major Collector Road. Division of the parcel and construction of residential units within the area will not have substantial adverse aesthetic impacts and there is no indication that the project will significantly increase light or glare or effect nighttime views in the vicinity.

<p>II. Agriculture and Forestry Resources. 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. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:</p>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

Discussion:

(a-e) No Impact: Neither the subject property nor adjacent lands are within a Williamson Act Contract. The site does not contain prime farmland soils and does not contain unique farmland. Furthermore, agricultural protection policies identified in the General Plan involve lands planned Agriculture Exclusive and not Residential Low Density (RL), as the subject parcel is planned. The site's RL designation is used for areas suitable for residential use where urban services are available or are anticipated to be available; single family units on individual lots are the dominant use. The proposed subdivision is consistent with the existing zoning and General Plan designation. Single-family residences, including Accessory Dwelling Units, are a primary and compatible use within the RL designation and are principally permitted use in the site's Residential Single Family (RS-5) zoning district. The County finds no evidence that the project will result in a significant adverse impact on agricultural resources.

III. Air Quality. 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 Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?				X
b) 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?				X
c) Expose sensitive receptors to substantial pollutant concentrations?				X
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

Discussion:

(a-d) Less than Significant, No Impact: The project site is located within the North Coast Air Basin and the jurisdiction of the North Coast Unified Air Quality Management District (NCUAQMD). The North Coast Air Basin generally enjoys good air quality, but has been designated non-attainment (does not meet federal minimum ambient air quality standards) for particulate matter less than ten microns in size (PM₁₀). To address this, the NCUAQMD adopted a Particulate Matter Attainment Plan in 1995. This plan presents available information about the nature and causes of PM₁₀ standard exceedance, and identifies cost-effective control measures to reduce PM₁₀ emissions, to levels necessary to meet California Ambient Air Quality Standards. These include transportation measures (e.g., public transit, ridesharing, vehicle buy-back programs, traffic flow improvements, bicycle incentives, etc.), land use measures (infill development, concentration of higher density adjacent to highways, etc.), and combustion measures (open burning limitations, hearth/wood burning stove limitations; NCUAQMD 1995).

The proposed subdivision divides a parcel into four parcels all suitable for development, and one Remainder, with the proposed Remainder containing an existing single-family residence and accessory structures. The project proposes eight new residential units which is consistent with the planned density. Construction of the project will result in short-term emissions from the use of construction equipment and machinery that will temporarily impact air quality on the project site and surrounding area, however, these emissions are not anticipated to be significant based on the scope of the proposed project. The project would not: (1) obstruct implementation of the applicable air quality plan; (2) violate air quality standards; (3) contribute substantially to an existing or projected air quality violation; (4) expose sensitive receptors to substantial pollutant concentrations; or (5) create objectionable odors.

IV. Biological Resources. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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 and Game or U.S. Fish and Wildlife Service?				X
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means Fish?				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:

(a) No Impact: The project is not anticipated to 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. The proposed Remainder is developed with existing structures.

(b– d) No Impact: The project site has no defined watercourses and contains open space with a limited number of tree species present for residential landscaping purposes.

(e) Less than Significant: The project was initially referred to the CDFW for review, no referral comments were received from the agency. The proposed subdivision would not 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 Wildlife or U.S. Fish and Wildlife Service. One spruce tree, with a 24-inch DBH, is proposed to be removed. The project site is currently developed with a single-family residence and accessory structures as well as typical residential backyard features such as grass and ornamental shrubs. The proposed project would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means.

(f) No Impact: The project site is not within an adopted or proposed habitat conservation plan. The area is developed to residential levels. The County finds no evidence that the project will result in a significant adverse impact on any habitat conservation plan.

V. Cultural Resources. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		X		
c) Disturb any human remains, including those interred outside of formal cemeteries?		X		

Discussion:

(a) No Impact: No historical resources have been documented on site. The site is currently developed with existing residential development that has been determined not to be historically significant and no demolition of the structure is proposed, therefore, the project will have no impact on historical resources defined in California Environmental Quality Act (CEQA) §15064.5.

(b, c) Less than Significant with Mitigation: Pursuant to AB 52, the local Tribes, the Bear River Band, Blue Lake Rancheria, and Wiyot Tribe were offered consultation and declined. Referral responses have been received requesting that the standard accidental discovery of cultural/archaeological resources be included as a condition of approval for the Tentative Map. With mitigation to require a defined protocol in the event of accidental discovery of cultural/archaeological resources is provided as a condition of approval for the Tentative Map:

Mitigation Measures

MM-CU-1: The following note shall be placed on the Subdivision Map and shall be followed during all project construction: “If suspected archaeological resources are encountered during the project: 1. Stop work within 100 feet of the find; 2. Call the CalFire project representative, a professional archaeologist and representatives from the Bear River Band, Blue Lake Rancheria, and Wiyot Tribe; 3. The professional historic resource consultant, Tribe and CalFire officials will coordinate and provide an assessment of the find and determine the significance and recommend next steps.”

“If human remains are encountered: 1. All work shall stop and per CA Health and Safety Code Section 7050.5: 2. Call the Humboldt County Coroner at (707) 445- 7242; 3. The Coroner will determine if the remains are of prehistoric/historic Native American origin. If the remains are Native American Heritage Commission within 24 hours. 5. The NAHC is responsible under CA PRC 5097.98. (a)for identifying the most likely descendent (MLD) immediately and providing contact information. The MLD may, with the permission of the owner of the land, or his or her authorized representative, inspect the site of the discovery of the Native American human remains and may recommend to the owner means for treatment or disposition, with appropriate dignity, of the human remains and any associated grave goods. The descendants shall complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site.”

VI. Energy. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

Discussion:

(a-b) Less than Significant: The project will result in long-term minor energy consumption associated with the ongoing occupancy of the existing single-family residence and the proposed eight new units. The project will also result in short-term energy consumption associated with the construction of eight new residential units. New construction of residential units will include solar panels. The existing single-family residence and ADUs would be required to be designed to comply with the energy requirements of Title 24 of the Building Code. Therefore, no significant impact will occur in relation to existing energy consumption.

VII. Geology and Soils. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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:			X	
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 direct or indirect 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
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	

Discussion:

(a) Less than Significant: There are no known earthquake faults located within the site.

(i-iv) Less than Significant: The project site is located outside an Alquist-Priolo Earthquake Fault Zone. The proposed project divides one parcel into four parcels and a Remainder, the Remainder contains an existing single-family residence and accessory structures. Four new single-family residences and ADUs are proposed in association with the subdivision and will not expose people or structures to potential substantial adverse effects from rupture of a known earthquake fault, strong seismic ground shaking, or seismic-related ground failure, including liquefaction. The project is not within an area subject to landslides; therefore, the project will not expose people or structures to risk of lost, injury, or death involving landslides.

(b) Less than Significant: Any future residential construction or road improvements will utilize appropriate Best Management Practices (BMPs) which will prevent soil erosion and loss of topsoil. These details will be shown on construction documents and verified during plan check prior to commencement of any construction of the site.

(c) Less than Significant: The project is not located in or soils that are classified as being relatively stable, which is the highest stability rating. All future construction activities on the site would be required to adhere to County grading, Building Code, and Environmental Health Division requirements. The site has existing development that demonstrates the site can support development of additional residential structures. The project will not result in the creation of new unstable areas either on or off site due to physical changes in a hill slope affecting mass balance or material strength.

(d) Less than Significant: The project site is not located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994); therefore, the project will not create substantial risks to life or property.

(e) No Impact: The project has existing connections to community water and sewer provided by the Humboldt Community Services District. Future development of the site will be required to connect to the existing public

water and sewer infrastructure. Wastewater generated from the project will not impact soils onsite.

(f) **Less than Significant:** There are no known paleontological resources or unique geologic features on site.

VIII. Greenhouse Gas Emissions. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

Discussion:

(a-b) Less than Significant: In 2002 the California legislature declared that global climate change was a matter of increasing concern for the state's public health and environment, and enacted law requiring the California Air Resources Board (CARB) to control GHG emissions from motor vehicles (Health & Safety Code §32018.5 *et seq.*). In 2006, the California Global Warming Solutions Act (Assembly Bill 32) definitively established the state's climate change policy and set GHG reduction targets (health & Safety Code §38500 *et seq.*), including setting a target of reducing GHG emissions to 1990 levels by 2020. AB 32 requires local governments to take an active role in addressing climate change and reducing greenhouse gas (GHG) emissions. While methodologies to inventory and quantify local GHG emissions are still being developed, recommendations to reduce residential GHG emissions include promoting energy efficiency in new development.

The proposed project involves the division of a parcel into four lots for continued and expanded residential use. The continued and expanded residential uses on the lots would maintain long-term, limited emissions in air pollution from residential use and traffic however this is self-mitigated through existing building code standards which require solar power and the installation of outlets ready for electric vehicles. In addition, the location is within close proximity to existing bus routes. Because of the incidental nature of the greenhouse gas contributions, coupled with the low quantity of emission, the proposed project would not have a significant impact on the environment, nor conflict with applicable plan, policy, or regulation for the purposes of reducing greenhouse gas emissions.

IX. Hazards and Hazardous Materials. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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) Impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?			X	

Discussion:

(a-g) Less than Significant: The project site is not included on a list of hazardous material sites, nor does the proposed subdivision involve routine transport, use or disposal of hazardous materials. The project site is approximately one mile west of the Murray Field Airport and would not impact airport operations or be impacted by the Airport. The project is located within Review Area 2 of the Airport Influence Area. There are no private airstrips within the vicinity of the project site. The site will not result in unanticipated risk to the occupants of the site. The project will not create, or expose people or property to, hazardous materials, or impair implementation of, or physically interfere with, an adopted emergency response plan.

The parcel is not located in a high fire hazard severity area. The site is within the Humboldt Fire Protection District. Future development of the site will require compliance with the Uniform Fire Code and UBC. Edgewood Road provides access to the existing development on the project site, the proposed Remainder and four parcels will have access provided from a private driveway accessing Edgewood Road. An exception pursuant to 325-9 of county code will be needed to permit further subdivision without enlarging the size of the right-of-way to conform to the standard 50-foot width requirement.

X. Hydrology and Water Quality. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?			X	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			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 or through the addition of impervious surfaces in a manner, which would:			X	
(i) result in substantial erosion or siltation on- or off-site;			X	
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;			X	
(iii) 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; or			X	
(iv) impede or redirect flood flows?			X	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				X

Discussion:

(a-e) Less than Significant, No Impact: The proposed subdivision is consistent with the planned economic development of the area, in terms of both the County's Economic Development Element and the recently adopted Humboldt County General Plan 2017. The project site is an area that relies upon the use of a community water and sewer source (provided by the Humboldt Community Services District). According to the Flood Insurance Rate Map, the project site is located outside the 100 - and 500- year floodplains. Further, the project site is not within a mapped dam or levee inundation area. The site sits at an approximate elevation of 100 feet and is outside the areas that are subject to tsunami run-up. The project was reviewed by Public Works, who has recommended as a condition of approval that the applicant consider applying for an exception request under County Code Section 325-9 to allow for a 30-foot wide right of way for the Unnamed Access Road and the applicant has submitted an exception request letter. The project proposal includes a retention system that would capture and retain storm water to prevent an increase in storm water runoff sheet flowing onto nearby properties, it will require regular monitoring and maintenance by lot owners. The Preliminary Drainage Report completed by Atlas Engineering states that the storm water retention system can be designed and installed to accommodate storm water runoff from the proposed development; the proposed system will detain runoff in excess of the 2-year pre-development peak flow rate for storm return periods of 100 years or less. Exception Request Letters have been submitted for an exception to the requirements for a paved access road and concrete sidewalk, which would reduce additional hardscape infrastructure that can increase stormwater runoff. No streams, creeks or other waterways will be altered as a result of this subdivision. The project will not result in significant hydrologic or water quality impacts.

XI. Land Use and Planning. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?				X
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect ?				X

Discussion:

(a-b) No Impact: The project site is designated Residential Low Density (RL), by the Humboldt County General Plan 2017 and is zoned Residential Single Family (RS-5). The Land Use Element and Humboldt Bay Area Plan states that RL designation is “used for areas suitable for residential use where urban services are available or are anticipated to be available; single family units on individual lots are the dominant use”. The subject property is relatively flat and stable, and the site would continue to be served by a community water and sewer system, provided by the Humboldt Community Services District. Access will be provided by an Unnamed access road from Edgewood Road with private driveways to the proposed lots. Single-family residential and ADU development are compatible uses within the RL designation and is principally permitted in the site’s Residential Single Family (RS-5) zoning district. The proposed parcels meet all applicable zoning standards, including the minimum lot size of 5,000 square feet and minimum lot width of 50 feet, the smallest proposed lot is 7,192 square feet in size and 58 feet wide. The proposed development meets all applicable zoning standards including a maximum height of 35 feet, maximum ground coverage of 35%, and minimum front yard setback of 20 feet, rear yard setbacks of 10 feet, and interior side setback of 5 feet. The neighborhood is characterized as residential with a mix in parcel sizes to the north, east, west, and south. The proposed subdivision is consistent with the policies and regulations specified in the Humboldt County General Plan and the Humboldt Bay Area Plan. There are no habitat conservation or natural community conservation plans proposed or adopted for this area.

XII. Mineral Resources. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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

Discussion:

(a,b) No Impact: The project site is not designated as a rock extraction site on Figure 7-1, Rock and Mineral Extraction Sites of the Natural Resources and Hazards Background Report. On-site soils and geologic resources are not suitable as commodity materials that would be of value to the region or the state. The site is not designated as an important mineral resource recovery site by a local general plan, specific plan, or other land use plan. No impact would occur.

XIII. Noise. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				X
b) Generation of excessive ground borne vibration or ground borne noise levels?			X	
c) For a project located within the vicinity of a private airstrip or 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

Discussion:

(a) No Impact: This parcel is not located within a Noise Impact combining zone and will not generate a substantial increase in ambient noise levels in the vicinity of the project in excess of local standards.

(b) Less than Significant: Noises generated by the continued and expanded residential uses on the project site will maintain levels consistent with uses in a residential zone. The parcel is not located within a Noise Impact combining zone and the project will not generate a substantial increase in ambient noise levels in the vicinity of the project in excess of local standards. Noises generated by the proposed project development will result in a temporary increase during road/access driveway and residence construction as the project may require the use of heavy equipment (excavator, grader, loader, and backhoe). The County limits the construction hours, which will ensure the temporary noise increases do not create a significant impact. Construction of the project does not include equipment that would result in significant ground borne vibration. No significant permanent change in noise from the existing conditions would result from this project.

(c) No Impact: The project area is approximately one mile west of the Murray Field Airport, the nearest airport to the project site, located within the Review Area 2 of the Murray Field Airport Influence Area. The noise impacts associated with the airport are not anticipated to present a significant impact to the proposed subject property. Therefore, noise impacts will remain less than significant.

XIV. Population and Housing. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial unplanned 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 people or housing, necessitating the construction of replacement housing elsewhere?				X

Discussion:

(a, b) No Impact. The proposed project divides a parcel into four parcels suitable for residential development and one Remainder with an existing single-family residence and accessory structures. Eight new residential units will be developed. Residential uses are primary and compatible uses within the plan designation and zoning district and the development of the duplex units is consistent with Senate Bill 9 which has principally permitted duplexes on single family lots when located within designated urban clusters. This property is wholly within a defined urban cluster. The subdivision is consistent with the planned residential uses. The project does not propose the demolition of existing housing and does not require the construction of replacement housing.

XV. Public Services. 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 Incorporated	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	
<p>Discussion:</p> <p>(a - e) Less than Significant: Emergency response in the project area is the responsibility of the Humboldt Fire Protection District and the Humboldt County Sheriff's Office. The proposed project will divide a parcel into four parcels and one Remainder. The parcel is accessed by Edgewood Road, a locally maintained road. The parcels will take access via driveways from an unnamed access road from the property frontage along Edgewood Road.</p> <p>No new or physically altered government facilities are required as a result of the project. The project would not result in substantial adverse physical impacts associated with the provision of 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 fire protection, police protection, schools, parks, or other public facilities. Therefore, no impact would occur towards existing public services.</p>				

XVI. Recreation. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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:

(a-b) Less than Significant: The project does not include recreational facilities. Based on the scope of the project proposal that would create four lots for four duplexes, for a total of eight new residential units.. The increase in the local population from the construction of these residences would increase the use of existing neighborhood and regional parks to a less than significant degree. No additional recreational facilities are proposed or required for the project. The project will not require construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

XVII. Transportation. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?				X
b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?				X
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
d) Result in inadequate emergency access?				X

Discussion:

(a,b) No Impact: The parcel has direct access to and frontage along Edgewood Road, a County maintained, local road. The parcels will take access via a driveways from an unnamed access road from Edgewood Road, a local road bordering the parcel that will wind upslope towards the northern boundary of the site. The Land Use Division of Public Works has recommended conditions of approval, including roadway improvements. The project will not conflict with adopted policies supporting transportation. The proposed development is not anticipated to generate or attract more than 110 trips per day (110 is the number of trips used as a Screening Threshold for Small Projects in the State's Technical Advisory on Evaluating Transportation Impacts in CEQA) and is therefore not inconsistent with CEQA Guidelines Section 15064.3 subdivision (b).

(c,d) No Impact. With respect to road construction/design and emergency access, Edgewood Road borders the southern portion of the property with an existing access easement and provides access to existing development on the proposed Remainder. An exception pursuant to 325-9 of County Code will be needed to permit further subdivision without enlarging the size of the right-of-way to conform to the standard 50-foot width requirement. The Department of Public Works has required conditions of approval addressing the applicant to submit a complete hydraulic report and drainage plan in order to approve this project. With an approved Exception Request, the Department of Public Works will support a 30-foot-wide right-of-way. With an approved Exception Request for the installation of a paved access road and concrete sidewalk, the Department of Public Works has provided Unnamed Access Road standards for the proposed roadway improvements.

XVIII. Tribal Cultural Resources.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resource Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is :		X		
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as de fined in Public Resource Code section 5020.1(k), or		X		
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?		X		

Discussion:

(a-i,ii) Less than Significant with Mitigation:

Pursuant to AB52, all local tribes were offered consultation and declined. The project was initially referred to local Tribes under the original subdivision proposal for two lots. Referral responses have been received requesting that the standard accidental discovery of cultural/archaeological resources be included as a condition of approval for the Tentative Map. Referral responses were received from local Tribes, the Bear River Band, Blue Lake Rancheria, and Wiyot Tribe, and no archaeological survey or records search for the subject property have been completed. Mitigation Measure CU-1 will require the inadvertent discovery protocol which will ensure that no tribal cultural resources are impacted.

XIX. Utilities and Service Systems. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			X	
b) Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
c) Result in a determination by the wastewater treatment provider, which 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	
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

Discussion:

(a- e) Less than Significant: The County finds there is no evidence that the project will be inconsistent with the planned build-out of the area nor will it result in a significant adverse to utilities and service systems. The parcel is zoned for residential uses and the project is consistent with the planned residential density of the zone. The four proposed lots will be served by the Humboldt Community Services District for water and sewer connections, who currently provides service to the property. The parcel currently drains northerly, towards its northern parcel boundary. The Division of Public Works reviewed the project and will require as a condition of approval that the applicant provide a complete hydraulic report and drainage plan addressing storm water drainage on the site. The project proposal includes a retention system that would capture and retain storm water to prevent an increase in storm water runoff sheet flowing onto nearby properties, it will require regular monitoring and maintenance by lot owners. The Preliminary Drainage Report completed by Atlas Engineering states that the storm water retention system can be designed and installed to accommodate storm water runoff from the proposed development; the proposed system will detain runoff in excess of the 2-year pre-development peak flow rate for storm return periods of 100 years or less. The project will have no impact on the existing utilities and service systems.

XX. Wildfire. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?			X	
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire?			X	
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?			X	
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?			X	

Discussion:

(a-d) Less than Significant: The project does not propose new development and is located outside of the State Responsibility Area (SRA) for fire protection and is served by the Humboldt Fire Protection District. Edgewood Road borders the southern portion of the property with an existing access easement and provides access to existing development on the proposed Remainder. An exception pursuant to 325-9 of County Code will be needed to permit further subdivision without enlarging the size of the right-of-way to conform to the standard 50-foot width requirement. The project site has relatively stable slope stability, therefore, the risk of downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes, are anticipated to be minimal. The project site is not designated with the "High Fire Hazard Severity" rating. The project will not impact or increase wildfire hazard.

XXI. Mandatory Findings of Significance.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially 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, substantially 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	

Discussion:

(a through c) No Impact: The proposed project divides one parcel into a Remainder with an existing single-family residence and four parcels suitable for residential development and use. Staff finds no evidence that the proposed project will significantly degrade the quality of the environment, nor will it have impacts that are individually limited but cumulatively considerable. Based on the project as described in the administrative record, comments from reviewing agencies, a review of the applicable regulations, and discussed herein, the County finds there is no significant evidence to indicate the proposed project will have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly.

MITIGATION MONITORING AND REPORTING PROGRAM CHECKLIST

MM-CU-1: The following note shall be placed on the Subdivision Map and shall be followed during all project construction: “If cultural resources are encountered during construction activities the contractor on-site shall cease all work in the immediate area and within a 50-foot buffer of the discovery location. A qualified archaeologist and the appropriate Tribal Historic Preservation Officer are to be contacted to evaluate the discovery and, in consultation with the applicant and the planning Department, develop a treatment plan in any instance where impacts cannot be avoided.

Prehistoric materials may include obsidian or chert flakes, tools, locally darkened midden soils, groundstone artifacts, shellfish or faunal remains, and human burials. If human remains are found, the County Coroner must be contacted immediately at 707-445-7242.

Implementation Time Frame	Monitoring Frequency	Date Verified	To Be Verified By	Compliance Yes No	Comments / Action Taken
Prior to filing of the Map and during grading and project construction.	Continuous		HC Planning		



VICINITY MAP
N.T.S.

PROJECT DESCRIPTION:

THE OWNER, NIELS HOLGERSEN, IS PROPOSING A MINOR SUBDIVISION OF THE SUBJECT PARCEL INTO FOUR SEPARATE RESIDENTIAL PARCELS & REMAINDER.

GENERAL NOTES:

- DRAWING SCALE AS NOTED. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS.
- THIS IS NOT A BOUNDARY SURVEY. BOUNDARY INFORMATION DEPICTED HAS BEEN OBTAINED FROM HUMBOLDT COUNTY 2015 GIS DATA. ATLAS ENGINEERING HAS NOT VERIFIED THIS PROPERTY BOUNDARY.
- CONTOURS DERIVED FROM FIELD SURVEY BY MANHARD CONSULTING. CONTOUR INTERVAL IS ONE FOOT.

NOTES:

- EXISTING USE: RESIDENTIAL LOT WITH A SINGLE FAMILY RESIDENCE.
- IF THE PRIVATE LANE OR LANES SHOWN ON THIS PLAN OF SUBDIVISION, OR ANY PART THEREOF, ARE TO BE ACCEPTED BY THE COUNTY FOR THE BENEFIT OF THE LOT OWNERS ON SUCH LANE RATHER THAN THE BENEFITS OF THE COUNTY GENERALLY, SUCH PRIVATE LANE OR LANES OR PARTS THEREOF SHALL FIRST BE IMPROVED AT THE SOLE COST OF THE AFFECTED LOT OWNER OR OWNERS, SO AS TO COMPLY WITH THE SPECIFICATION AS CONTAINED IN THE THEN APPLICABLE SUBDIVISION REGULATIONS RELATING TO PUBLIC STREETS

PROJECT INFORMATION:

PROPERTY OWNER:
NIELS HOLGERSEN
5250 GREENWOOD HEIGHTS ROAD
KNEELAND, CA 95549

OWNER'S AGENT:
ATLAS ENGINEERING
252 G STREET
ARCATA, CA 95521
(707) 822-2822

SITE ADDRESS:
APN: 015-152-028
3409 EDGEWOOD ROAD
EUREKA, CA 95501

TREES TO BE REMOVED = 1

EARTHWORK QUANTITIES = TBD

WATER = PUBLIC
SEWER = PUBLIC

PARCEL SIZE = ±1.10 ACRES

ZONING: = RS-5

BUILDING SETBACKS:

FRONT	20'
SIDE	5'
REAR	10'

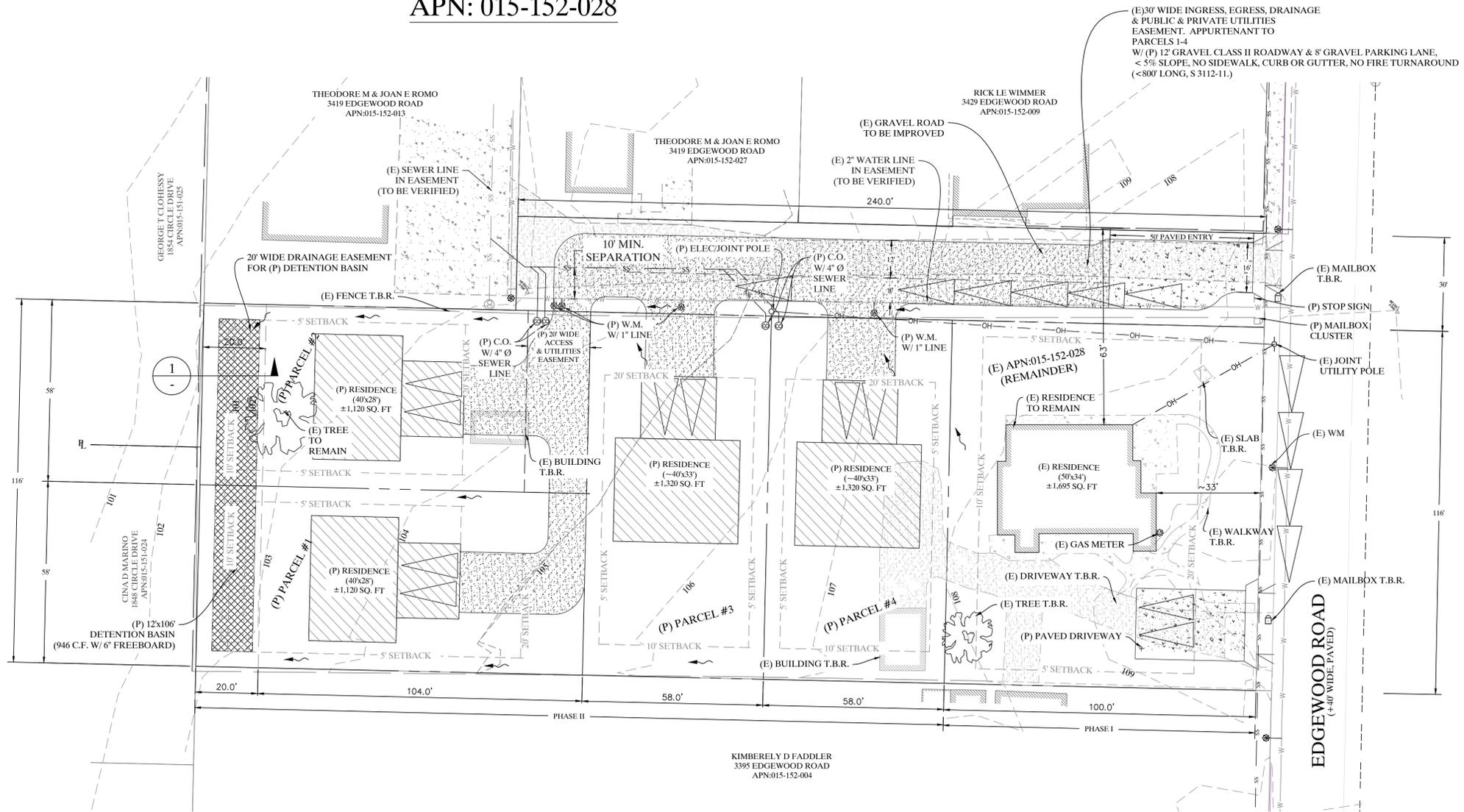
MAX. BLDG. HT. = 35'

SRA AREA:
IN COASTAL ZONE: = NO
IN 100 YR FLOOD ZONE: = NO

NIELS HOLGERSEN TENTATIVE PARCEL MAP

MINOR SUBDIVISION INTO FOUR PARCELS & ONE REMAINDER

APN: 015-152-028



(E) 30' WIDE INGRESS, EGRESS, DRAINAGE & PUBLIC & PRIVATE UTILITIES EASEMENT. APPURTENANT TO PARCELS 1-4
W/ (P) 12' GRAVEL CLASS II ROADWAY & 8' GRAVEL PARKING LANE, < 5% SLOPE, NO SIDEWALK, CURB OR GUTTER, NO FIRE TURNAROUND (< 800' LONG, S 3112-11.)

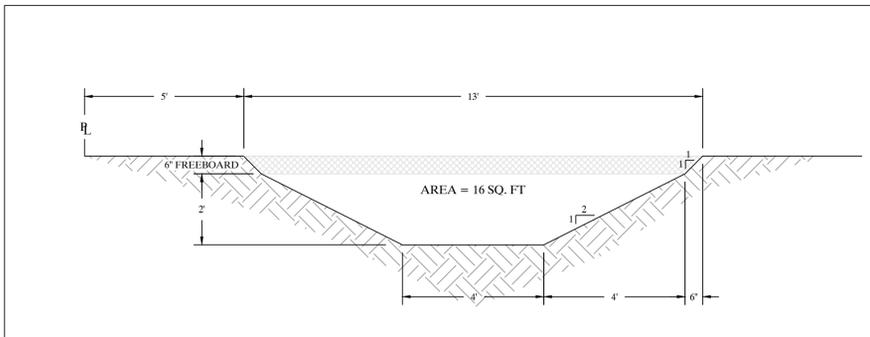
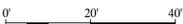
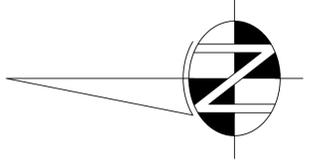
LEGEND

	1' CONTOUR	(P)	PROPOSED
	5' CONTOUR	(E)	EXISTING
	WIRE FENCE		EXIST POWER POLE
	WOOD FENCE		WATER METER
	CHAINLINK FENCE		SANITARY MANHOLE
	WATER LINE		WATER VALVE
	SANITARY SEWER LINE		SANITARY SEWER CLEANOUT
	OVERHEAD ELECTRIC		MAILBOX
	GRAVEL		EXISTING TREE
	CONCRETE		
	BUILDING STRUCTURE		
	BUILDING OVERHANG		

ABBREVIATIONS:

T.B.R. = TO BE REMOVED

NOTE:
ALL EASEMENTS OF RECORD ARE SHOWN ON THE TENTATIVE MAP AND WILL APPEAR ON THE RECORDED SUBDIVISION MAP.



PROPOSED DETENTION BASIN SECTION N.T.S. 1

ATLAS ENGINEERING
252 G ST.
ARCATA, CA 95521
(707) 822-2822 PH & FAX
WWW.ATLASENG.NET

TENTATIVE MAP
HOLGERSEN MINOR SUBDIVISION
3409 EDGEWOOD ROAD EUREKA, CA 95501
APN: 015-152-028

Date:	
Revision No.:	

Date: 7/16/2021

Project #: 18025

Drawn by: JAG

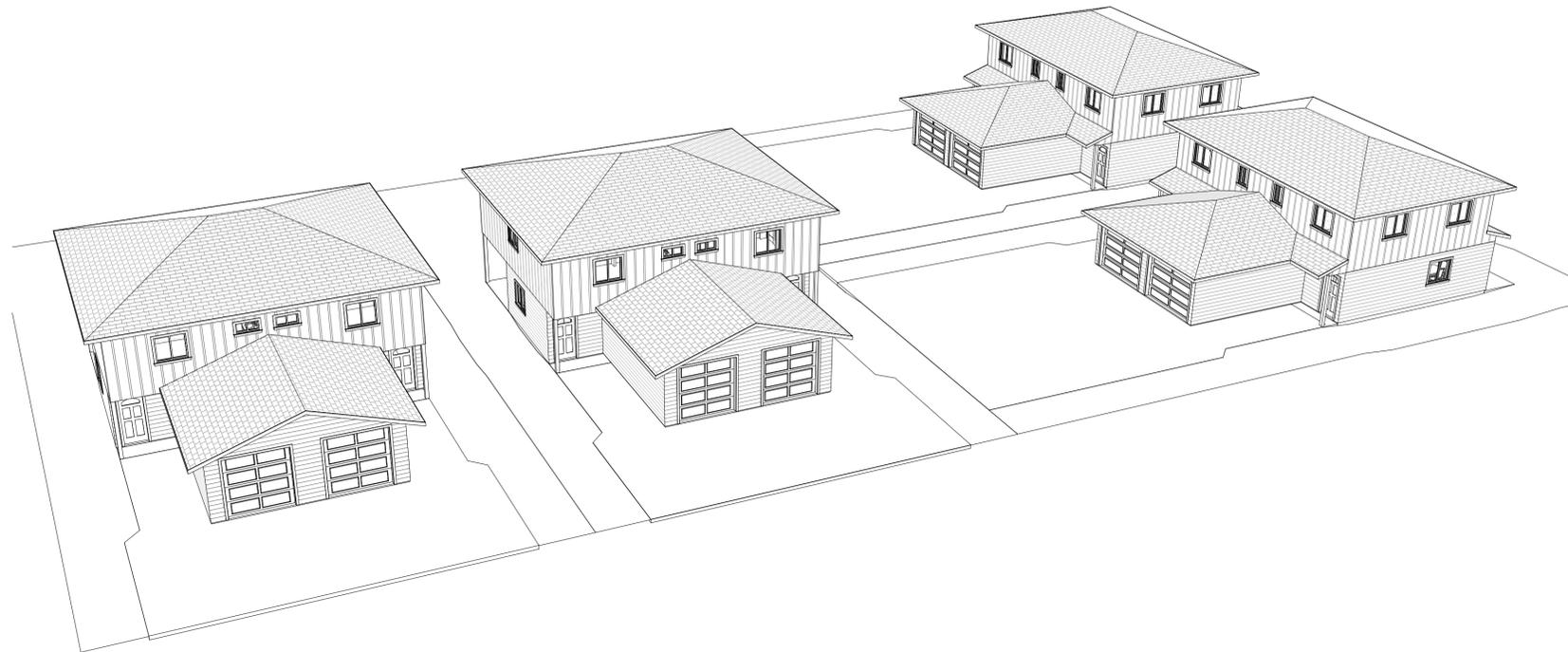
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Sheet No.

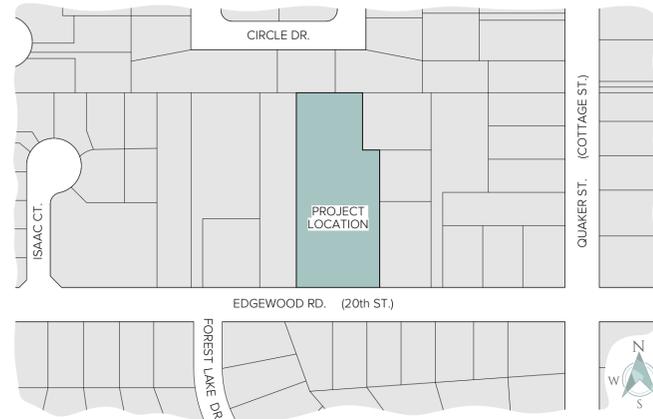
P1

HOLGERSEN SUBDIVISION

3409 EDGEWOOD RD.
EUREKA, CA 95501
APN: 015-152-028
8.11.2020



8 | SUBDIVISION PERSPECTIVE



4 | LOCATION MAP
SCALE: N.T.S.

PROJECT DESCRIPTION
PROJECT TO BE SERVED BY MUNICIPAL WATER & SEWER.
PROJECT SHALL COMPLY WITH THE FOLLOWING CODES:
2019 CALIFORNIA BUILDING CODE
2019 CALIFORNIA ENERGY CODE
2019 CALIFORNIA ELECTRICAL CODE
2019 CALIFORNIA FIRE CODE
2019 CALIFORNIA MECHANICAL CODE
2019 CALIFORNIA PLUMBING CODE
2019 CALIFORNIA RESIDENTIAL CODE
ALL ENGINEERING HAS BEEN INCORPORATED INTO THE PLANS.
OCCUPANCY: R-3
CONSTRUCTION TYPE: V-B

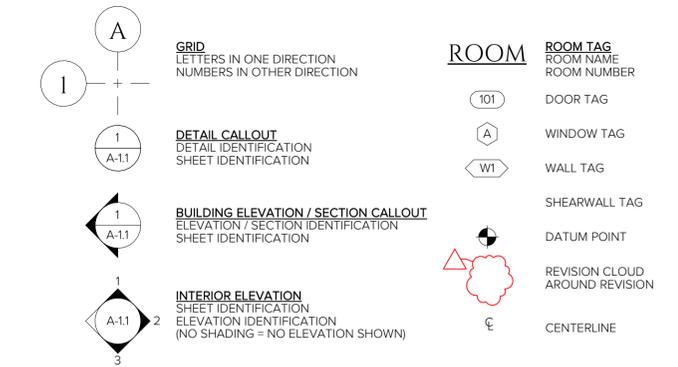
1 | PROJECT DESCRIPTION

•A- @ ALT ARCH.	AT ALTERNATE ARCHITECTURAL	•G- GWB GYPSUM WALLBOARD	•Q- NOT USED
•B- BD. BN BLKG BTM.	BOARD BOUNDARY NAIL BLOCKING BOTTOM	•H- HORIZ. HR. HT HORIZONTAL HOUR HEIGHT	•R- REF. REINFORCED REQ'D RWD REFRIGERATOR REQUIRED REDWOOD
•C- CAB. CL CLG. CLR C.M. CONC. CONT.	CABINET CENTERLINE CEILING CLEAR CARBON MONOXIDE CONCRETE CONTINUOUS	•I- INSUL. INT. INSULATION INTERIOR	•S- SCHED. S.D. SHT SIM. SPEC'S SQ. STRUCT S.W. S.W. E.N. SCHEDULE SMOKE DETECTOR SHEET SIMILAR SPECIFICATIONS SQUARE STRUCTURAL SHEAR WALL SHEAR WALL EDGE NAILING
•D- DBL D.F. DIA. DWR	DOUBLE DOUGLAS FIR DIAMETER DRAWER	•J- JNT JOINT	•T- T&B T&G TYP. TOP & BOTTOM TONGUE & GROOVE TYPICAL
•E- (E) EA E.F. ELEC. EN ENCL. EQ. EW EXT.	EXISTING EACH EXHAUST FAN ELECTRICAL EDGE NAILING ENCLOSED EQUAL EACH WAY EXTERIOR	•K- KIT(CH) KITCHEN	•U U.O.N. UNLESS OTHERWISE NOTED
•F- F.D. FIN. FLR F.N. FT. FTG	FLOOR DRAIN FINISHED) FLOOR FIELD NAILING FOOT/FEET FOOTING	•L- LAV. LAVATORY	•V- VERT. VTR VERTICAL VENT THROUGH ROOF
		•M- MAX. MANUF. (D) MECH. MIN. MECHANICAL MINIMUM	•W- W/IN W/OUT W.C. WD WITH WITHIN WITHOUT WATER CLOSET WOOD
		•N- (N) N.T.S. NEW NOT TO SCALE	•X, Y, Z- NOT USED
		•O- O.C. ON CENTER	
		•P- (P) PERP. P.L. PLWD P.T. PROPOSED PERPENDICULAR PROPERTY LINE PLYWOOD PRESSURE TREATED	

9 | TYPICAL ABBREVIATIONS

- ALL DIMENSIONS ARE TO THE FACE OF STUDS UNLESS OTHERWISE NOTED.
- WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE THE DRAWINGS.
- ALL EXTERIOR WALLS TO BE 2x6 STUDS AT 16" O.C. WITH R-21 BATT INSULATION, U.O.N.
- ALL INTERIOR WALLS TO BE 2x4 STUDS AT 16" O.C. U.O.N.
- WALLS TO BE 1/2 GWB, TYP., U.O.N. CEILINGS TO BE 5/8" TYPE 'X' GWB., U.O.N.
- ENCLOSED ACCESSIBLE SPACE UNDER STAIRS SHALL HAVE A MINIMUM OF 1/2" GYPSUM FIRE RESISTIVE PROTECTION, CRC 302.7
- WOOD SIDING, SHEATHING, AND WALL FRAMING ON THE EXTERIOR OF A BUILDING TO HAVE A CLEARANCE OF NOT LESS THAN 6" FROM THE GROUND AND NOT LESS THAN 2" FROM CONCRETE STEPS, SLABS, OR SIMILAR HORIZONTAL SURFACES EXPOSED TO WEATHER, R317
- FLOOR SHEATHING TO BE 3/4" T&G EXTERIOR GRADE PLYWOOD OVER 2x FLR JOISTS W/ R-30 INSULATION, U.O.N.
- GARAGE FLOOR USED FOR PARKING OF AUTOMOBILES OR OTHER VEHICLES SHALL BE SLOPED TO FACILITATE THE MOVEMENT OF LIQUIDS TO A DRAIN OR TOWARD THE MAIN VEHICLE ENTRY DOORWAY, CRC R309.1
- ROOF INSULATION TO BE R-38 BATT INSULATION.
- ALL INSULATION SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE-DEVELOPED INDEX OF NOTE MORE THAN 450.
- ALL NEW WINDOWS AND EXTERIOR GLASS DOORS TO HAVE INSULATING GLASS.
- GLAZING WITHIN 24" ARC OF EITHER VERTICAL EDGE OF A DOOR IN THE CLOSED POSITION SHALL BE TEMPERED.
- SAFETY GLAZING IS REQUIRED IN ALL FIXED AND OPERABLE PANELS OF SWINGING, SLIDING, AND BI-FOLD DOORS, R308.4.1
- EMERGENCY EGRESS WINDOW OPENING AT BEDROOMS TO PROVIDE A MINIMUM CLEAR HEIGHT OF 20" WITH A TOTAL CLEAR OPENING AREA OF 5.7 SF MINIMUM, AND A MAXIMUM OF 44" A.F.F. TO BOTTOM OF CLEAR OPENING, WHEN APPLICABLE.
- EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL BE CLEAR OF ANY OBSTRUCTION AND OPERATIONAL FROM THE INSIDE OF THE ROOM W/OUT THE USE OF KEYS, TOOLS, OR SPECIAL KNOWLEDGE, R310.1.1 & R310.1.4
- DUCTS PENETRATING THE WALLS OR CEILINGS SEPARATING THE DWELLING FROM THE GARAGE SHALL BE CONSTRUCTED OF A MIN. NO. 26 GAGE (0.48MM) SHEET STEEL OR OTHER APPROVED MATERIAL, R302.5.2, CBC 406.1.4
- WATER HEATER TEMP/PRESSURE RELIEF VALVE W/ DRAIN TO THE EXTERIOR OF BUILDING W/ 90° FITTING MIN. 6" AND MAX. 24" ABOVE FINISH GRADE, CPC 504.4, 504.6, 608.5
- WATER HEATER IN GARAGES SHALL BE LOCATED OR PROTECTED SO IT IS NOT SUBJECT TO PHYSICAL DAMAGE BY MOVING VEHICLES, CPC 507.13.1
- GAS UTILIZATION EQUIP. IN GARAGES SHALL BE INSTALLED SO THAT ALL BURNERS AND BURNER IGNITION DEVICES ARE LOCATED NO LESS THAN 18" ABOVE FLOOR, U.O.N. CPC 507.13, CMG 308.1
- PROVIDE NON-REMOVABLE BACKFLOW PREVENTION DEVICES ON EXTERIOR HOSE BIBS, CPC 603.4.6, 603.5.7, 602.3
- FORCED AIR UNIT AND WATER HEATER SHALL BE CA APPROVED, LISTED AND LABELED AND INSTALLED IN ACCORDANCE WITH THE TERMS OF ITS LISTING AND THE MANUFACTURE INSTALLATION INSTRUCTIONS.
- EQUIPMENT DESIGNED TO BE FIXED IN POSITION SHALL BE SECURELY FASTENED IN PLACE, CMG 303.5
- SHOWERS AND TUB SHOWER COMBINATIONS SHALL BE PROVIDED WITH INDIVIDUAL CONTROL VALVES OF THE PRESSURE BALANCE, THERMOSTATIC, OR COMBINATION PRESSURE BALANCE AND THERMOSTATIC TYPES THAT PROVIDE SCALD AND THERMAL SHOCK PROTECTION FOR THE RATED FLOW RATE OF THE INSTALLED SHOWERHEAD. THESE VALVES SHALL BE INSTALLED AT THE POINT OF USE AND IN ACCORDANCE WITH ASSE 1016 OR ASME A11 2.18.1/CSA B125.1 MAXIMUM MIXED WATER SETTING OF 120 DEGREES F. CPC 408.3
- SINGLE SHOWERHEAD SHALL HAVE A MAXIMUM FLOW OF NOT MORE THAN 1.8 PER MINUTE
- "WATER CLOSET-1.28 GALLONS PER FLUSH, "SHOWER HEAD-1.8 MAXIMUM GALLON PER MINUTE AT 80 PSI, "KITCHEN FAUCET-1.8 MAXIMUM GALLON PER MINUTE AT 60 PSI, FLOW MAY TEMPORARILY INCREASE TO 2.2 MAXIMUM GALLON PER MINUTE AT 60 PSI BUT MUST DEFAULT BACK TO 1.8 GALLON PER MINUTE MAXIMUM AT 60 PSI, "LAVATORY FAUCET-1.2 GALLON PER MINUTE MAXIMUM AT 60 PSI, CPC 403.
- BEST MANAGEMENT PRACTICES (BMPs) TO BE IMPLEMENTED. "RETAIN SOIL AND SEDIMENT ON THE CONSTRUCTION SITE; "PREVENT NON-STORM WATER DISCHARGES THAT WOULD DISCHARGE POLLUTANTS OFF SITE; "PREVENT THE DISCHARGE OF OTHER POLLUTANTS ASSOCIATED WITH CONSTRUCTION ACTIVITIES TO LAND OR SURFACE WATERS; "PERMANENTLY STABILIZE DISTURBED SOILS; "MINIMIZE THE EFFECTS OF INCREASED STORM WATER RUNOFF FROM IMPERVIOUS SURFACES.
- THE BRANCH CIRCUIT SERVING THE GARAGE RECEPTACLES SHALL NOT SERVE OUTLETS OUTSIDE OF THE GARAGE, CEC 210.52(G)(1)
- ALL 15 AND 20 AMP, 125 OR 250 VOLT RECEPTACLES INSTALLED OUTDOORS IN DAMP LOCATIONS UNDER CANOPIES AND ROOFED PORCHES NOT SUBJECT TO BEATING RAIN MUST BE LISTED WEATHER-RESISTANT TYPE WHEN THE PLUG IS NOT INSERTED, CEC 406.9(A)
- ALL 15 AND 20 AMP, 125 OR 250 VOLT RECEPTACLES INSTALLED OUTDOORS IN WET LOCATIONS MUST BE LISTED WEATHER-RESISTANT TYPE WHEN THE PLUG IS INSERTED, CEC 406.9(B)
- PROVIDE MINIMUM DEDICATED CIRCUITS AS FOLLOWS: 2 BRANCH CIRCUITS SERVING THE KITCHEN, PANTRY, DINING, AND BREAKFAST ROOM; 1 FOR ONLY THE LAUNDRY ROOM, 1 FOR ONLY THE BATHROOM(S), CEC 2010.11(C)
- PROVIDE A 1" MIN. LISTED RACEWAY TO ACCOMMODATE A DEDICATED BRANCH CIRCUIT FOR ELECTRICAL VEHICLE CHARGING IN ATTACHED GARAGE, CEC 4.106.4, CEC 25, CRC 309.8
- PROVIDE AN INTERSYSTEM BONDING ELECTRODE WHICH INCLUDES AT LEAST TREE GROUNDING OR BONDING CONDUCTORS REQUIRED FOR COMMUNICATIONS SYSTEMS - SHALL BE INSTALLED EXTERNALLY AT THE SERVICE ENTRANCE PANEL AS SPECIFIED IN CEC 800.100(B) AND 250.94
- REFRIGERANT SERVICE PORTS LOCATED OUTDOORS SHALL BE FITTED WITH LOCKING-TYPE TAMPER-RESISTANT CAPS CMC 1105.11

7 | PROJECT NOTES



5 | TYPICAL SYMBOLS

- CALGREEN MANDATORY MEASURES:**
- DUCT SYSTEMS ARE SIZED, DESIGNED, AND HAVE THEIR EQUIP. SELECTED PER §4.507.2.
 - AUTOMATIC IRRIGATION SYSTEMS CONTROLLERS INSTALLED AT THE TIME OF FINAL INSPECTION SHALL BE WEATHER-BASED PER §4.304.1.
 - PROTECT ANNULAR SPACES AROUND PIPES, ELECTRIC CABLES, CONDUITS AT EXTERIOR WALLS AGAINST THE PASSAGE OF RODENTS PER §4.406.1.
 - COVER DUCT OPENINGS AND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENINGS DURING CONSTRUCTION PER §4.504.1.
 - ADHESIVES, SEALANTS AND CAULKS SHALL BE COMPLIANT WITH VOC AND OTHER TOXIC COMPOUND LIMITS PER §4.504.2.1
 - PAINTS, STAINS AND OTHER COATINGS SHALL BE COMPLIANT WITH VOC LIMITS PER §4.504.2.2.
 - AEROSOL PAINTS AND COATINGS SHALL BE COMPLIANT WITH PRODUCT WEIGHTED MIR LIMITS FOR ROC AND OTHER TOXIC COMPOUNDS PER §4.504.2.3.
 - CARPET AND CARPET SYSTEMS SHALL BE COMPLIANT WITH VOC LIMITS PER §4.504.3.
 - MINIMUM 80% OF FLOOR AREA RECEIVING RESILIENT FLOORING SHALL COMPLY WITH §4.504.4.
 - PARTICLEBOARD, MEDIUM DENSITY FIBERBOARD (MDF) AND HARDWOOD PLYWOOD USED IN INTERIOR FINISH SYSTEMS SHALL COMPLY WITH LOW FORMALDEHYDE EMISSION STANDARDS.
 - INSTALL CAPILLARY BREAK AND VAPOR RETARDER AT SLAB ON GRADE FOUNDATIONS PER §4.505.2.
 - CHECK MOISTURE CONTENT OF BUILDING MATERIALS USED IN WALL AND FLOOR FRAMING BEFORE ENCLOSURE PER §4.505.3.

6 | CALGREEN NOTES

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ENGINEER:
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ATLAS ENGINEERING
252 G STREET
ARCATA, CA 95521
707.822.2822
michael@atlaseng.net

2 | PROJECT DIRECTORY

GENERAL

A-01	COVER SHEET
A-11	OVERALL SITE PLAN

PARCEL #1/#2

A-2.1	FLOOR PLANS
A-2.1	FLOOR PLANS
A-2.2	ROOF PLANS
A-2.2	ROOF PLANS
A-3.1	EXTERIOR ELEVATIONS & PERSPECTIVES
A-3.1	EXTERIOR ELEVATIONS & PERSPECTIVES

PARCEL #3/#4

A-2.1	FLOOR PLANS
A-2.1	FLOOR PLANS
A-2.2	ROOF PLANS
A-2.2	ROOF PLANS
A-3.1	EXTERIOR ELEVATIONS & PERSPECTIVES
A-3.1	EXTERIOR ELEVATIONS & PERSPECTIVES

3 | SHEET INDEX

REVISIONS

#	DATE	DESCRIPTION

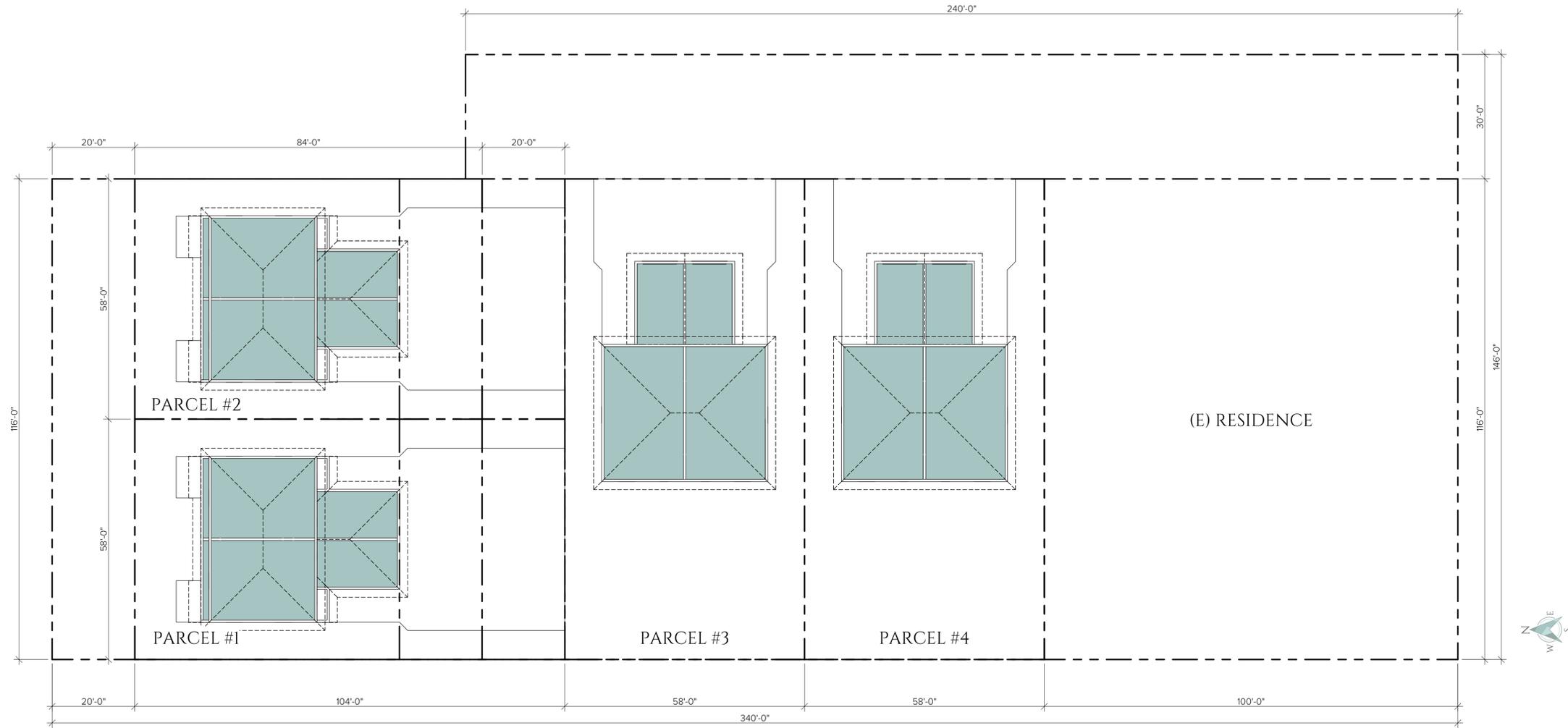
OWNER:
NIELS HOLGERSEN
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KNEELAND, CA 95549
707.496.6109
holgersenconst@gmail.com

SHEET NO.

A-01

DRAWN BY: CAT ORY
SHEET DATE: 8.11.2020

HOLGERSEN SUBDIVISION



1 | OVERALL SITE PLAN
SCALE: 1/16" = 1'-0"

HOLGERSEN SUBDIVISION

3409 EDGEWOOD RD.
EUREKA, CA 95501
APN: 015-152-028

OVERALL SITE PLAN

PRELIMINARY - NOT FOR CONSTRUCTION

REVISIONS

#	DATE	DESCRIPTION

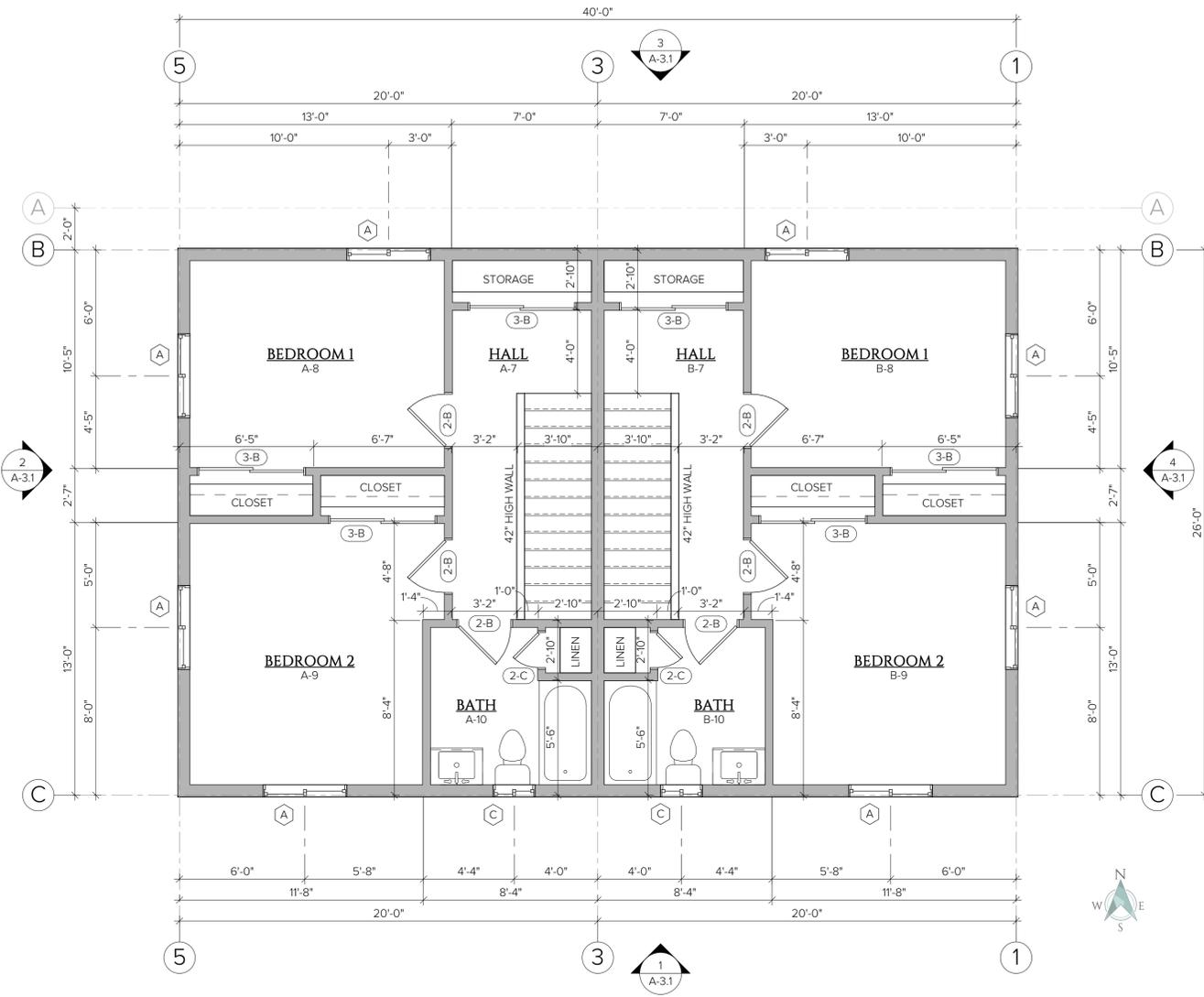
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NIELS HOLGERSEN
5250 GREENWOOD HGTS. RD.
KNEELAND, CA 95549
707.496.6109
holgersenconst@gmail.com

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A-1.1

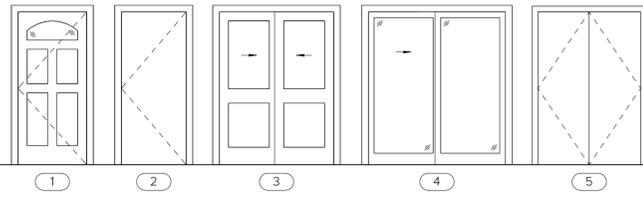
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SHEET DATE: 8.11.2020

HOLGERSEN
SUBDIVISION



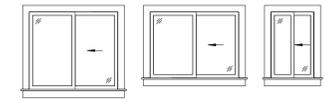
2 SECOND FLOOR PLAN
SCALE: 1/4" = 1'-0"

DOOR SCHEDULE						
TYPE	QTY	WIDTH	HEIGHT	DESCRIPTION	FIRE RAT'G	COMMENTS
1	2	3'-0"	6'-8"	4-PANEL HALF-MOON		
2-A	2	2'-8"	6'-8"	SINGLE FLUSH		
2-B	6	2'-6"	6'-8"	SINGLE FLUSH		
2-C	2	1'-8"	6'-8"	SINGLE FLUSH		
2-FR	2	2'-10"	6'-8"	SINGLE FLUSH	1HR.	SOLID-CORE, SELF-CLOSING
3-A	2	4'-6"	6'-8"	2-PANEL SLIDING CLOSET		
3-B	6	5'-0"	6'-8"	2-PANEL SLIDING CLOSET		
4	2	6'-0"	6'-8"	SLIDING GLASS		
5	2	4'-6"	6'-8"	DOUBLE FLUSH		
6	2	10'-0"	7'-0"	EXTERIOR GARAGE DOOR		TO BE SELECTED BY OWNER

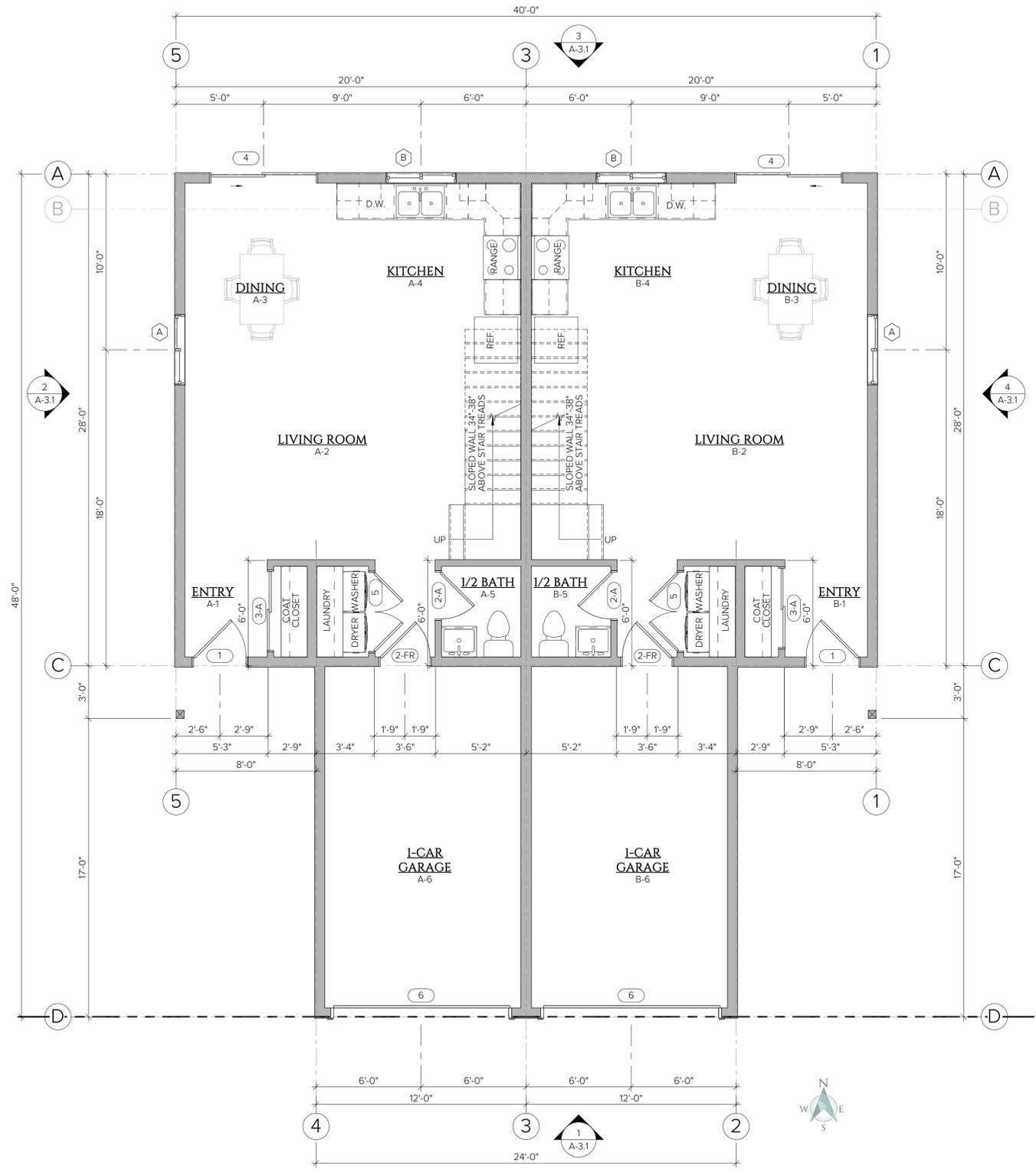


4 DOOR LEGEND & SCHEDULE

WINDOW SCHEDULE					
MARK	QTY	WIDTH	HEIGHT	OPERATION	COMMENTS
A	10	4'-0"	3'-6"	HORIZ. SLIDER	
B	2	4'-0"	3'-0"	HORIZ. SLIDER	
C	2	2'-0"	3'-0"	HORIZ. SLIDER	



3 WINDOW LEGEND & SCHEDULE



1 FIRST FLOOR PLAN
SCALE: 1/4" = 1'-0"

BUILDING AREA		
UNIT A		
RESIDENCE	1,080 SF	
GARAGE	240 SF	
UNIT B		
RESIDENCE	1,080 SF	
GARAGE	240 SF	

REVISIONS		
#	DATE	DESCRIPTION

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SHEET NO.
A-2.1

DRAWN BY: CAT ORY
SHEET DATE: 8.11.2020

HOLGERSEN SUBDIVISION
PARCELS #1 & #2

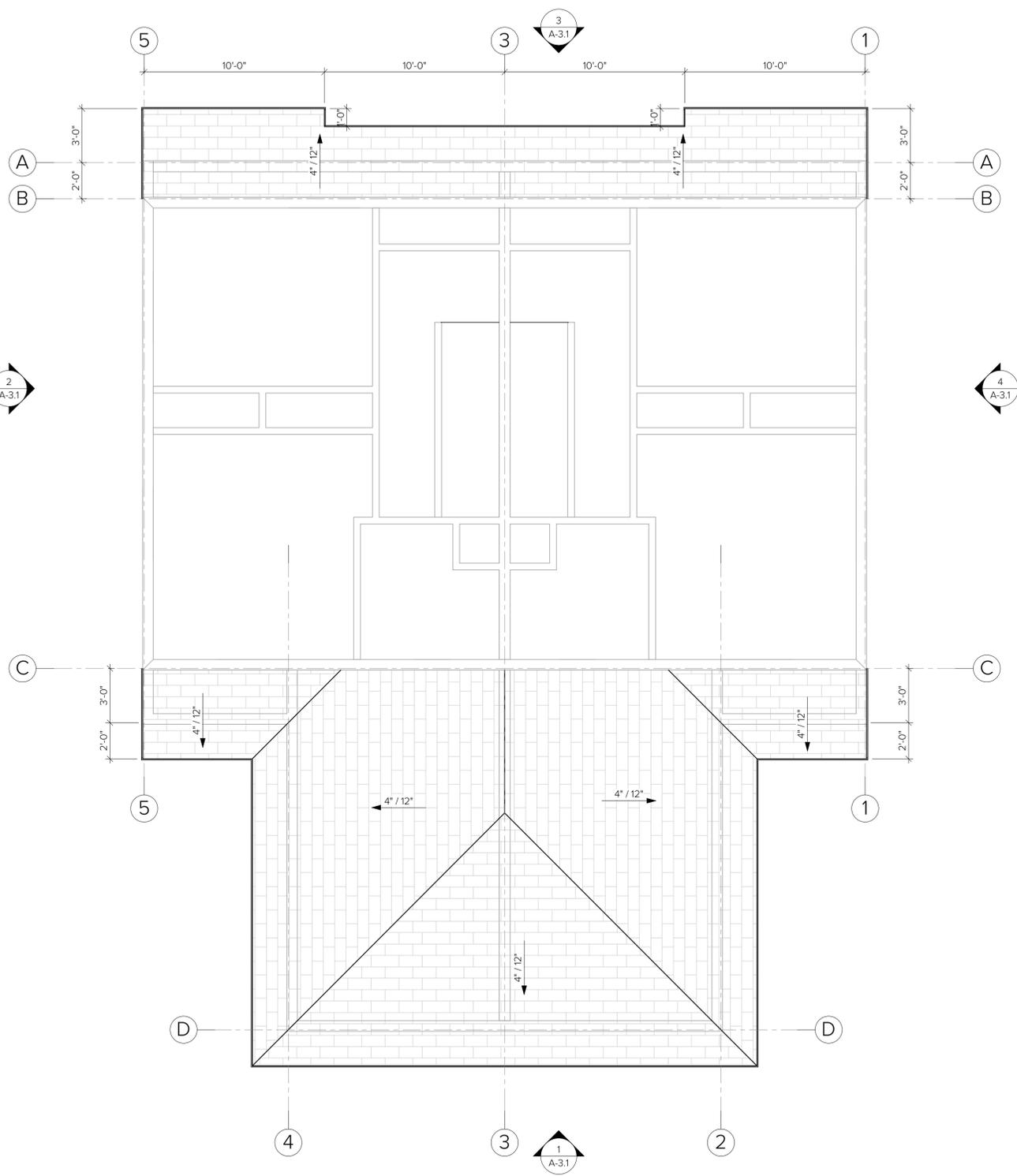
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#	DATE	DESCRIPTION

OWNER:
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 holgersenconst@gmail.com

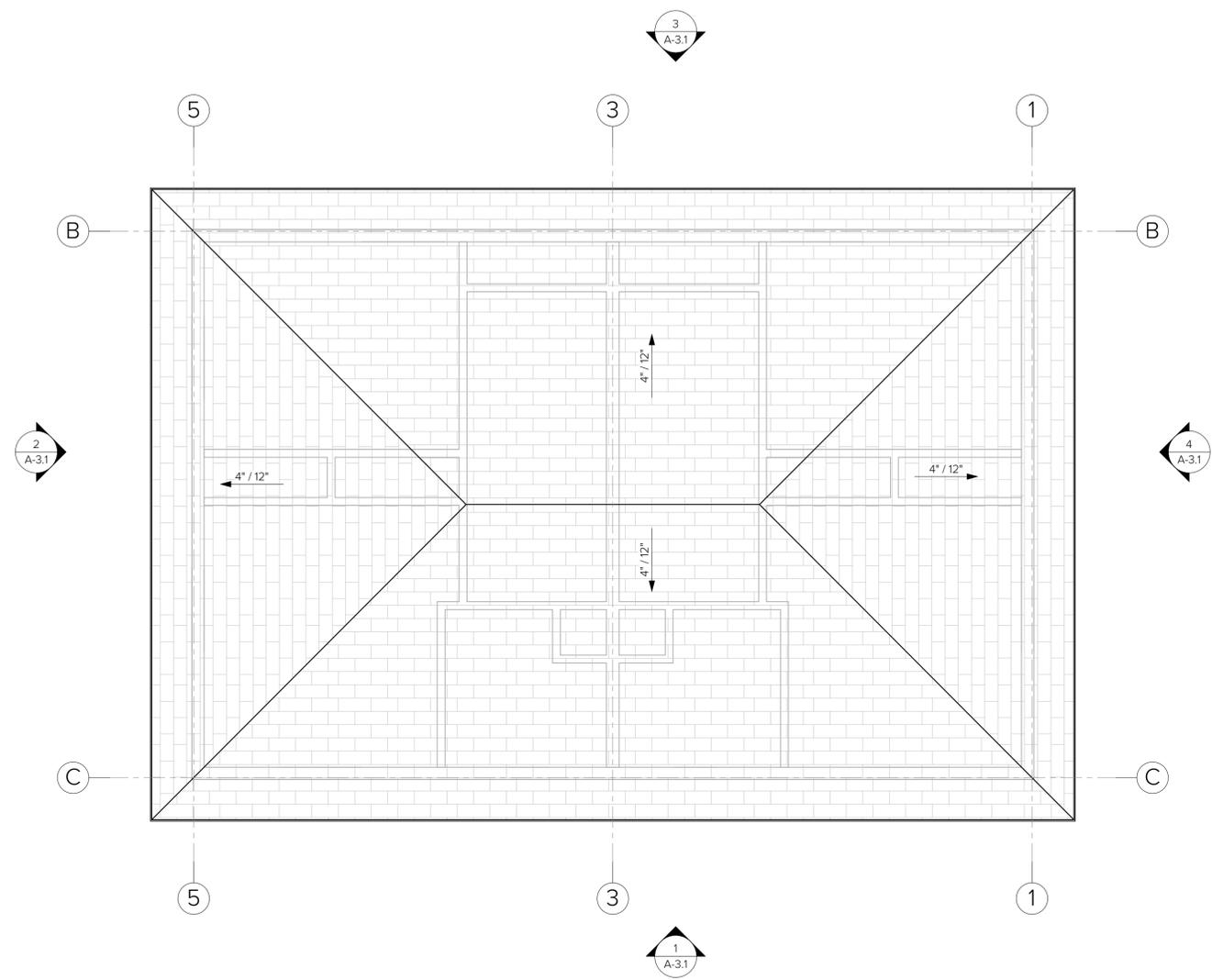
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 SHEET DATE: 8.11.2020

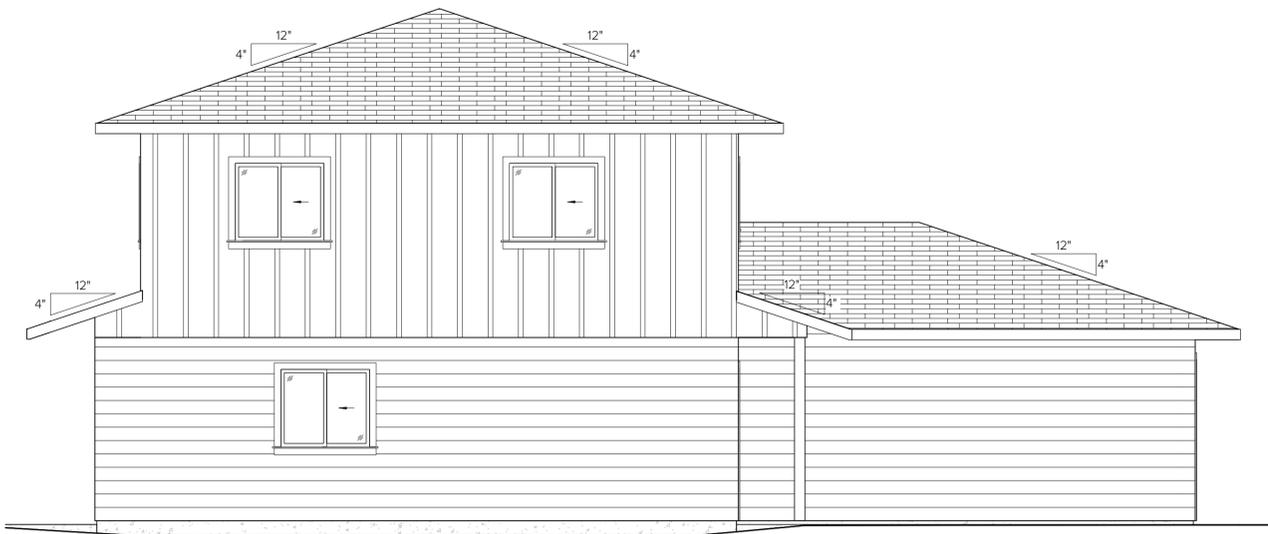
HOLGERSEN
 SUBDIVISION
 PARCELS #1 & #2



1 FIRST FLOOR ROOF PLAN
 SCALE: 1/4" = 1'-0"



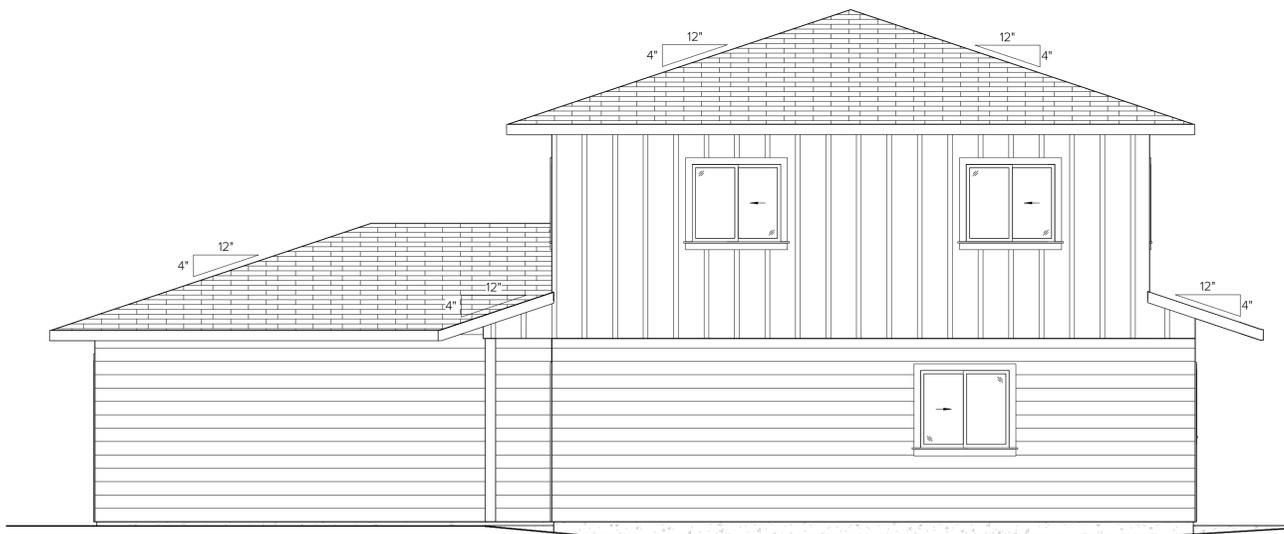
2 SECOND FLOOR ROOF PLAN
 SCALE: 1/4" = 1'-0"



2 | WEST ELEVATION
SCALE: 1/4" = 1'-0"



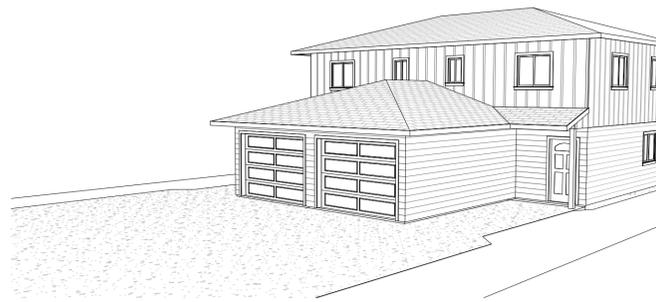
1 | SOUTH ELEVATION
SCALE: 1/4" = 1'-0"



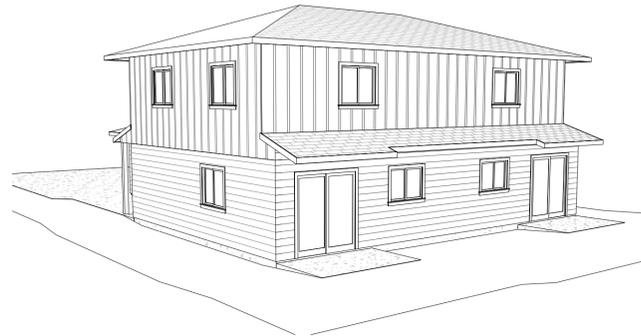
4 | EAST ELEVATION
SCALE: 1/4" = 1'-0"



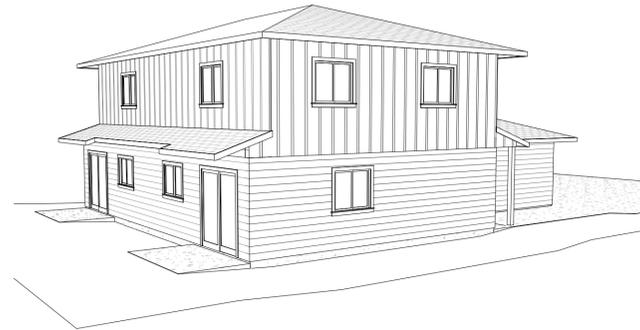
3 | NORTH ELEVATION
SCALE: 1/4" = 1'-0"



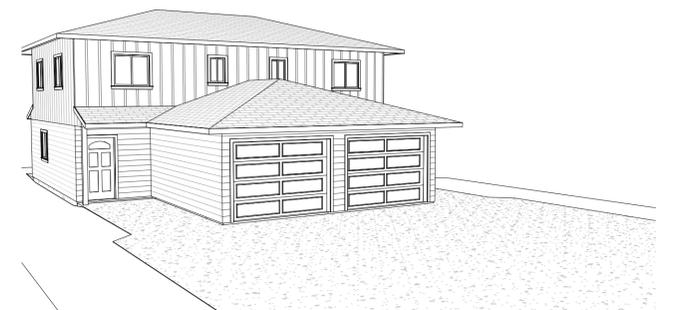
8 | SOUTH EAST PERSPECTIVE



7 | NORTH EAST PERSPECTIVE



6 | NORTH WEST PERSPECTIVE



5 | SOUTH WEST PERSPECTIVE

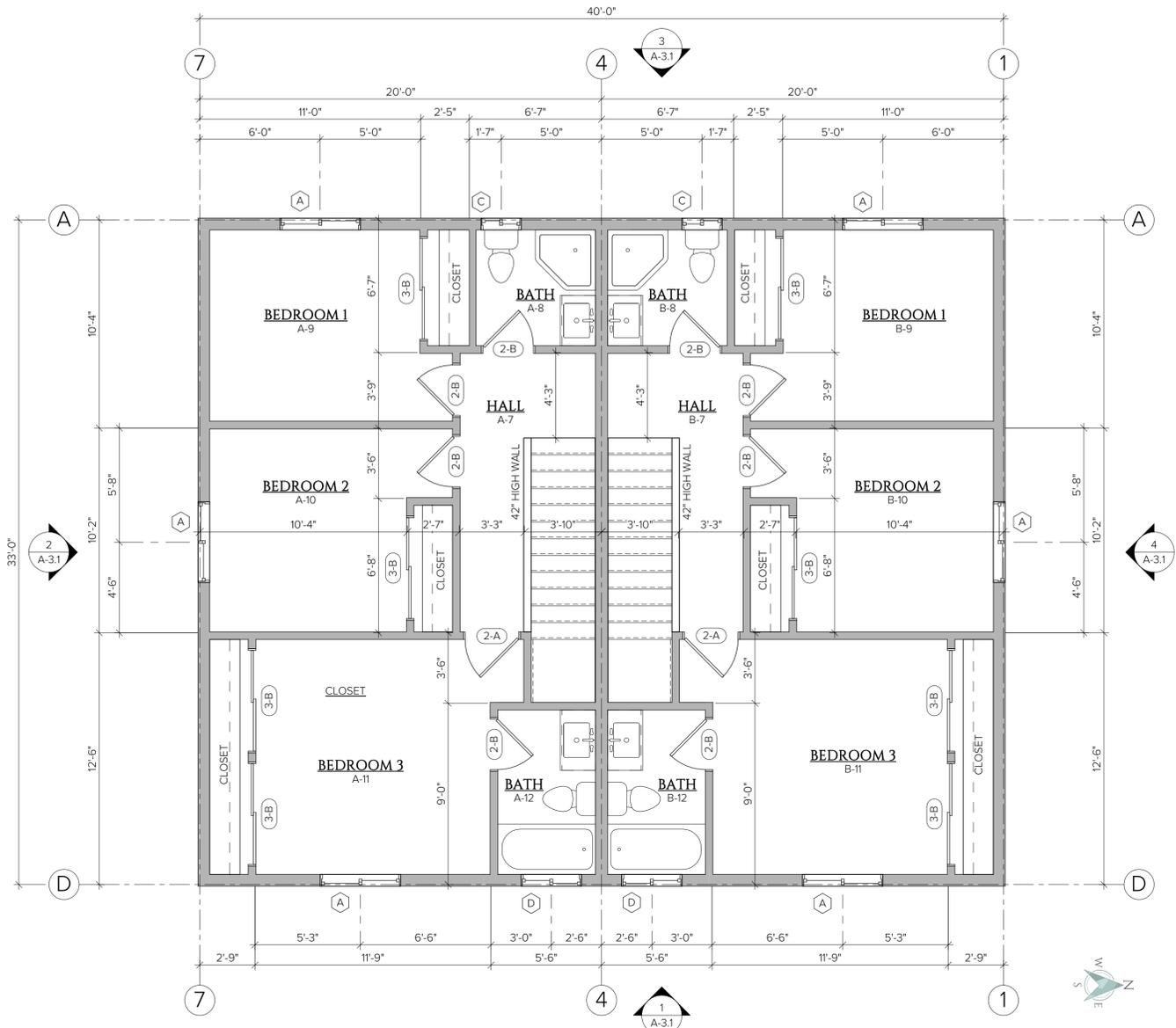
REVISIONS		
#	DATE	DESCRIPTION

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SHEET NO.
A-3.1

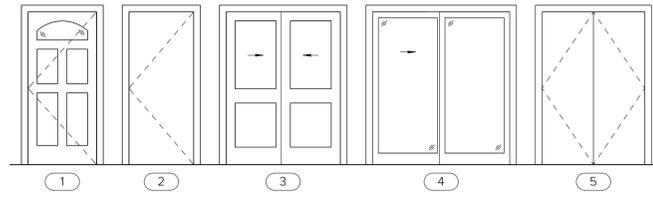
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SHEET DATE: 8.11.2020

HOLGERSEN
SUBDIVISION
PARCELS #1 & #2



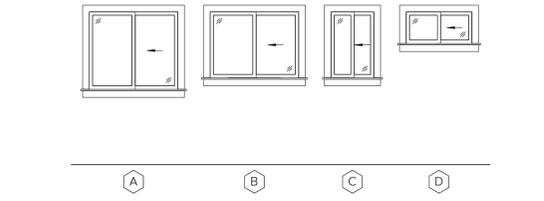
2 SECOND FLOOR PLAN
SCALE: 1/4" = 1'-0"

DOOR SCHEDULE						
TYPE	QTY	WIDTH	HEIGHT	DESCRIPTION	FIRE RAT'G	COMMENTS
1	2	3'-0"	6'-8"	4-PANEL HALF-MOON		
2-A	4	2'-8"	6'-8"	SINGLE FLUSH		
2-B	8	2'-6"	6'-8"	SINGLE FLUSH		
2-FR	2	2'-10"	6'-8"	SINGLE FLUSH		
3-A	2	4'-6"	6'-8"	2-PANEL SLIDING BYPASS	1HR.	SOLID CORE - SELF CLOSING
3-B	8	5'-0"	6'-8"	2-PANEL SLIDING BYPASS		
4	2	6'-0"	6'-8"	SLIDING GLASS		
5	2	4'-6"	6'-8"	DOUBLE FLUSH		
6	2	8'-0"	8'-0"	EXTERIOR GARAGE DOOR		TO BE SELECTED BY OWNER

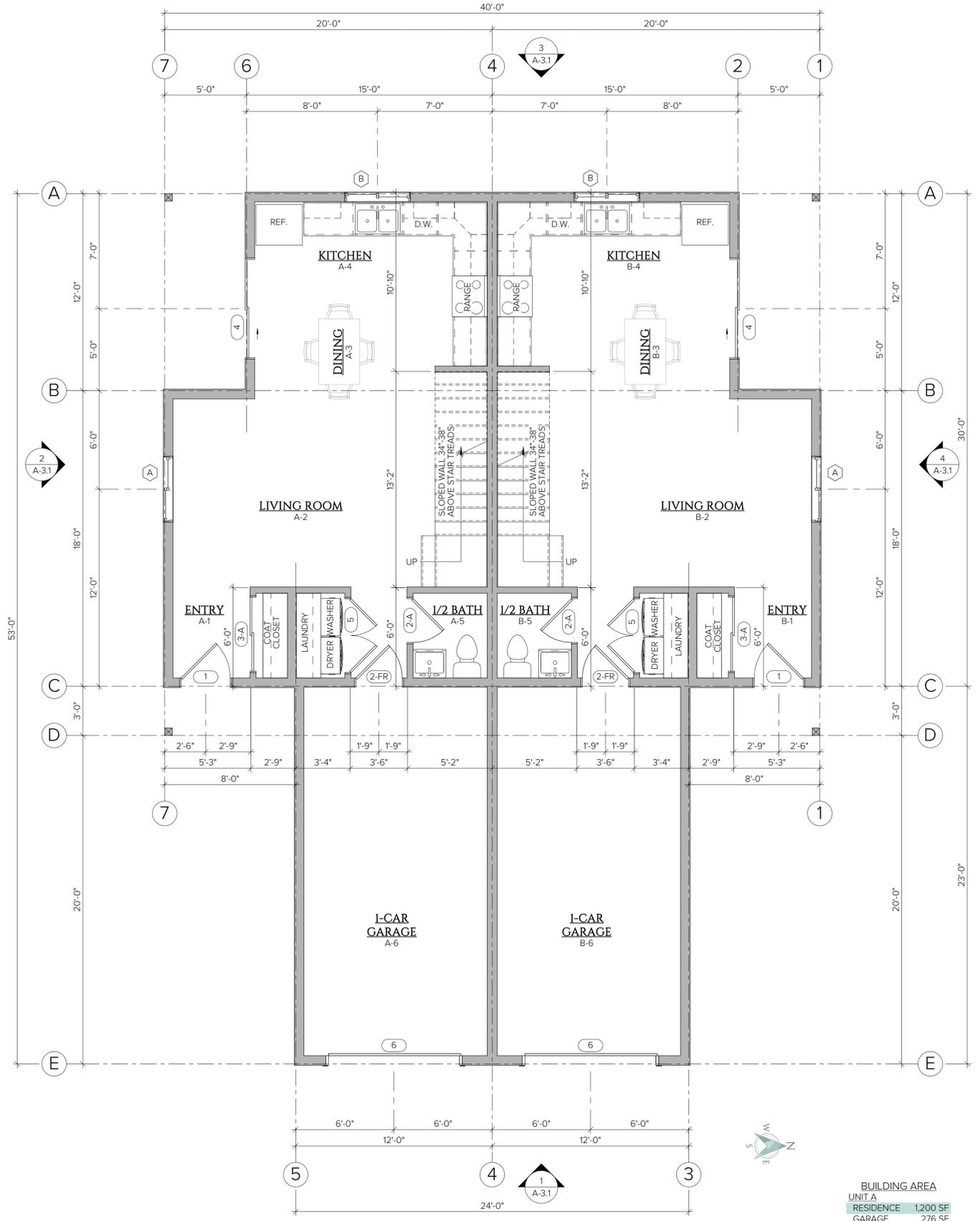


4 DOOR LEGEND & SCHEDULE

WINDOW SCHEDULE					
MARK	QTY	WIDTH	HEIGHT	OPERATION	COMMENTS
A	8	4'-0"	3'-6"	HORIZ. SLIDER	
B	2	4'-0"	3'-0"	HORIZ. SLIDER	
C	2	2'-0"	3'-0"	HORIZ. SLIDER	
D	2	3'-0"	1'-6"	HORIZ. SLIDER	



3 WINDOW LEGEND & SCHEDULE



1 FIRST FLOOR PLAN
SCALE: 1/4" = 1'-0"

BUILDING AREA	
UNIT A	
RESIDENCE	1,200 SF
GARAGE	276 SF
UNIT B	
RESIDENCE	1,200 SF
GARAGE	276 SF

REVISIONS		
#	DATE	DESCRIPTION

OWNER:
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A-2.1

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SHEET DATE: 8.11.2020

HOLGERSEN
SUBDIVISION
PARCELS #3 & #4

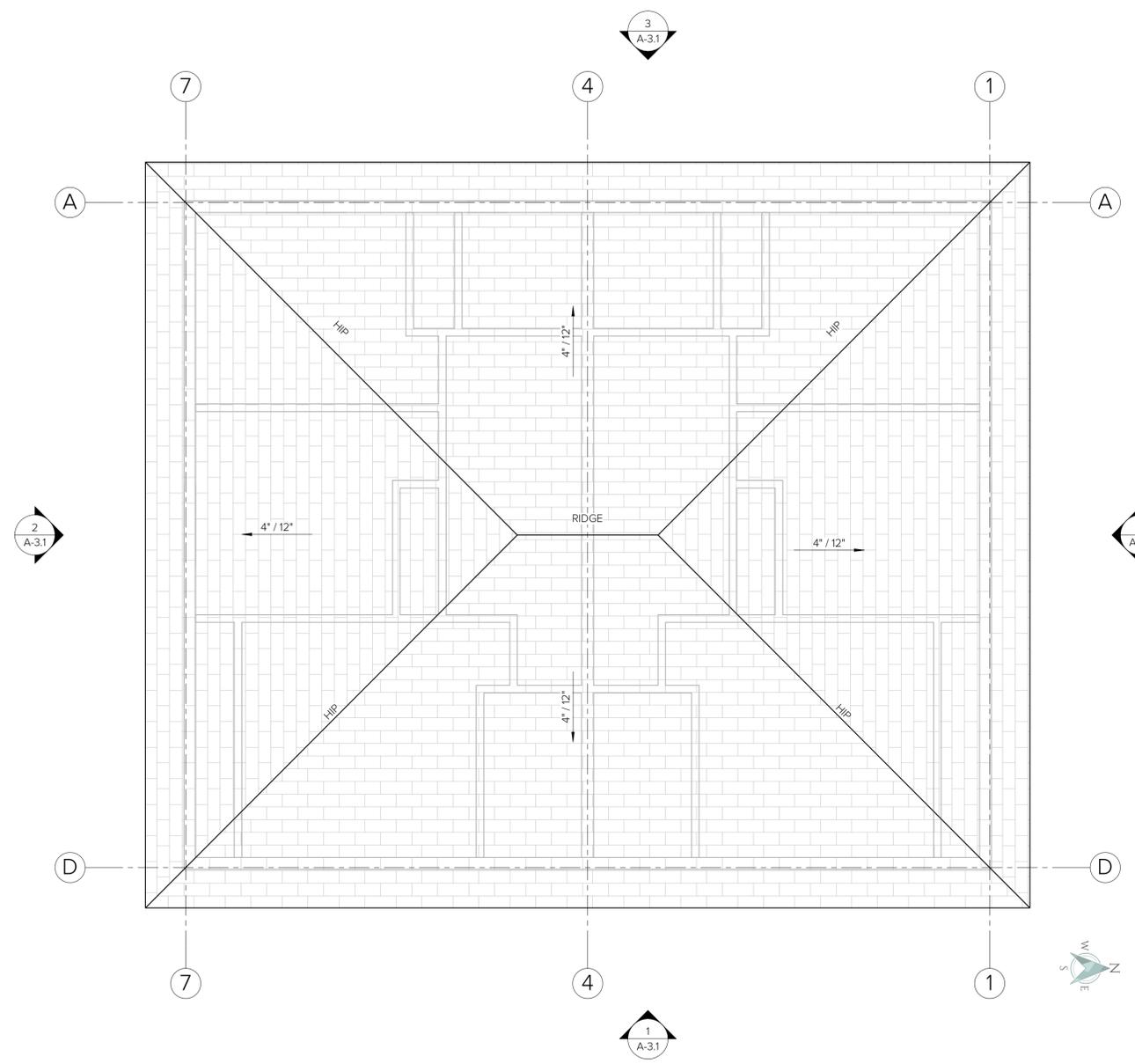
REVISIONS		
#	DATE	DESCRIPTION

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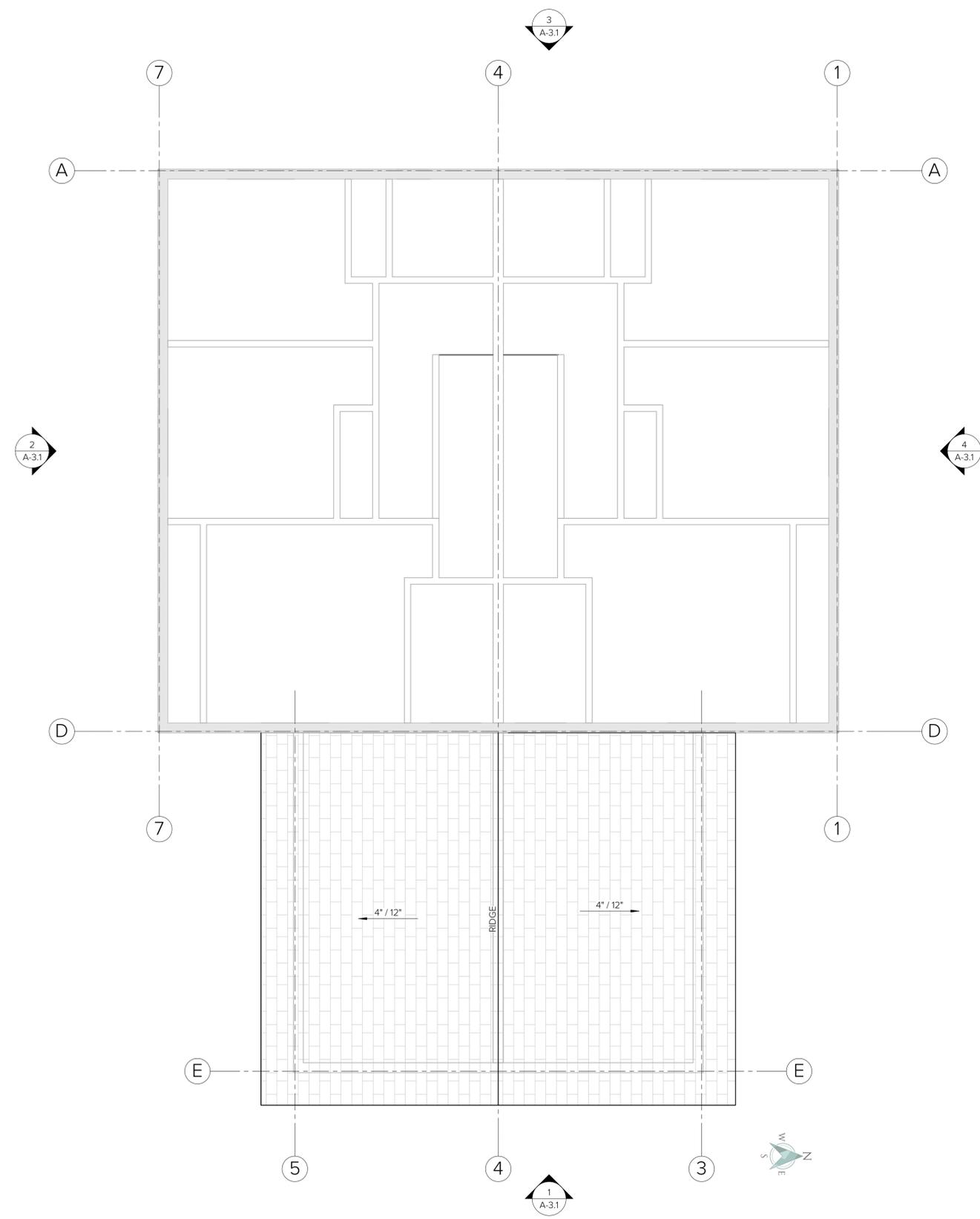
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DRAWN BY: CAT ORY
 SHEET DATE: 8.11.2020

HOLGERSEN
 SUBDIVISION
 PARCELS #3 & #4



2 SECOND FLOOR ROOF PLAN
 SCALE: 1/4" = 1'-0"



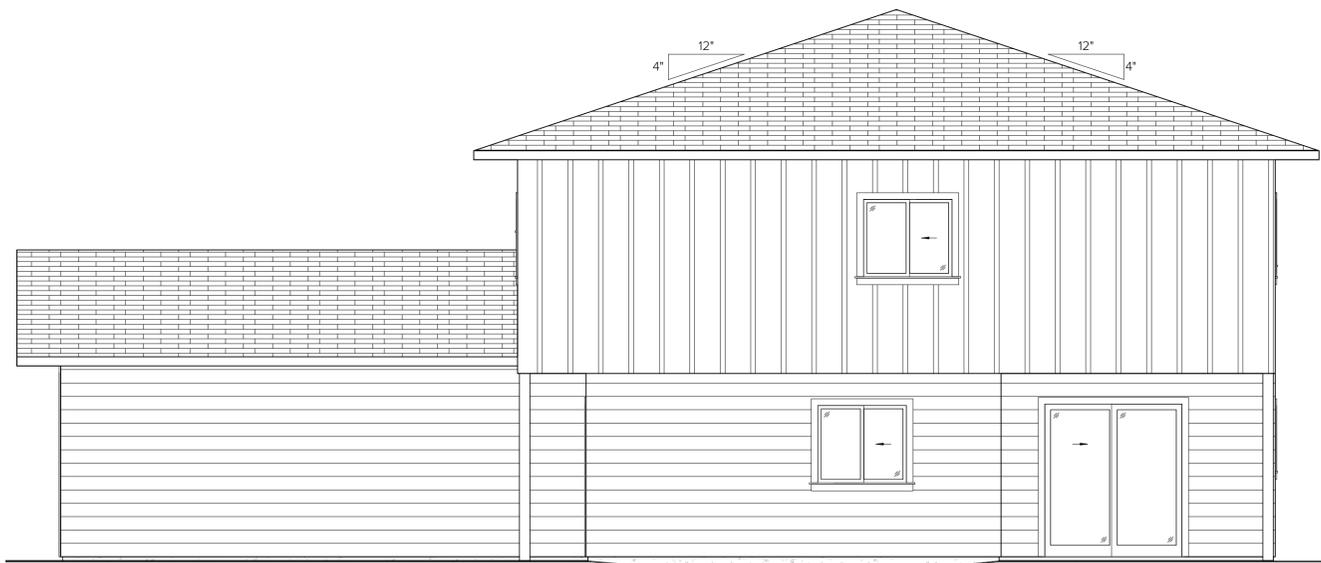
1 FIRST FLOOR ROOF PLAN
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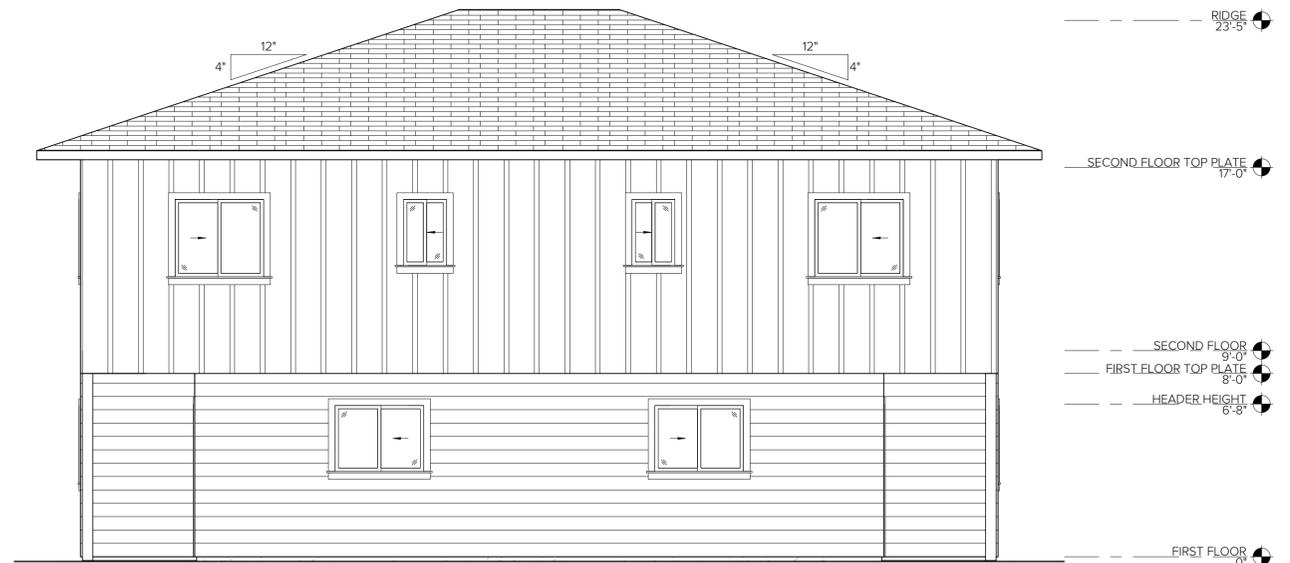
2 | SOUTH ELEVATION
SCALE: 1/4" = 1'-0"



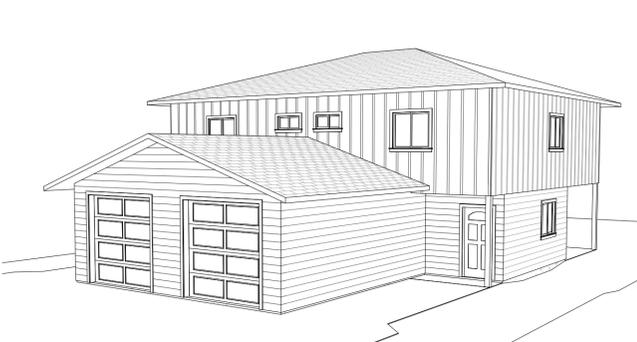
1 | EAST ELEVATION
SCALE: 1/4" = 1'-0"



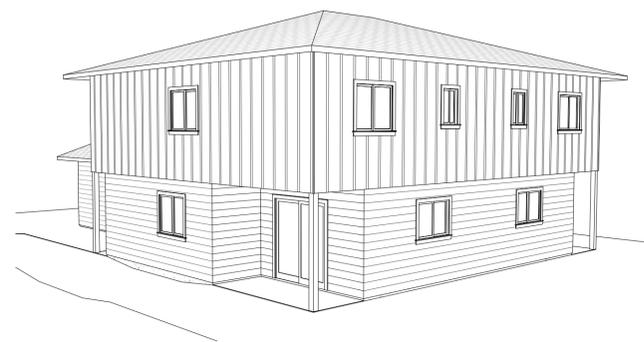
4 | NORTH ELEVATION
SCALE: 1/4" = 1'-0"



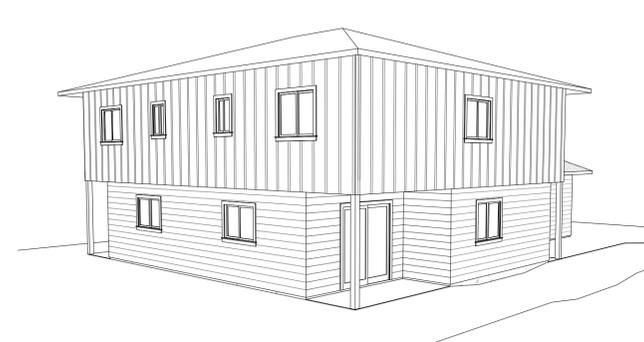
3 | WEST ELEVATION
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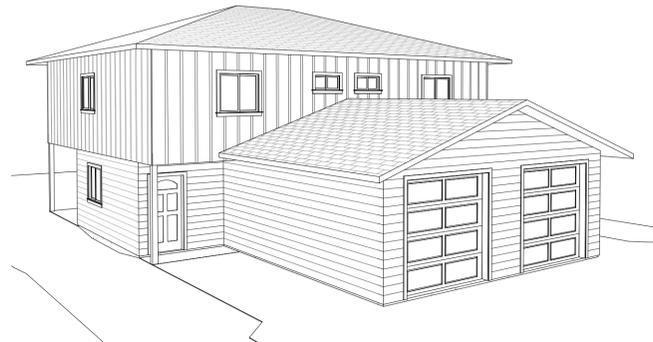
8 | NORTH EAST PERSPECTIVE



7 | NORTH WEST PERSPECTIVE



6 | SOUTH WEST PERSPECTIVE



5 | SOUTH EAST PERSPECTIVE

REVISIONS		
#	DATE	DESCRIPTION

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SHEET NO.

A-3.1

DRAWN BY: CAT ORY
SHEET DATE: 8.11.2020

HOLGERSEN
SUBDIVISION
PARCELS #3 & #4

PRELIMINARY DRAINAGE REPORT



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ENGINEERING

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HOLGERSEN MINOR SUBDIVISION

**3409 EDGEWOOD RD.
EUREKA, CA 95501
A.P.N. 015-152-028**

CLIENT NIELS HOLGERSEN

PRINCIPLE IN CHARGE

MICHAEL TAYLOR

PROJECT ENGINEER

JARED GOSSI

JOB No. 18025

DATE: 1-8-2020



INTRODUCTION

Acting on behalf of our Client, Niels Holgersen, and in conformance with the requirements of Humboldt County, we have reviewed the project site in Eureka, California, and prepared the following Preliminary Drainage Report for the proposed minor subdivision at APN 015-152-028, currently 3409 Edgewood Road. Access to the new parcels will be provided on Edgewood Road, an existing roadway along the south of the lots. The project will consist of two phases. Phase I will be the addition of new paved parking for the existing residence, and adding paved entries for the future parcels. Phase II will split the original parcel into 5 total parcels and add new residences and gravel entries. This report includes our assessment of the existing and proposed drainage conditions and our recommendations for storm water improvements necessary for construction of this project.

DRAINAGE ANALYSIS

Pre-Development Drainage Area

The existing parcel is identified as Assessor Parcel Number 015-152-028 in Humboldt County, California, and is approximately 1.07 acres in size. Latitude and longitude of the proposed development are 40°47'26" N and 124°7'40" W, respectively. Elevation at the site is approximately 100 feet above mean sea level.

The site slopes down gradually, less than 2 percent, to the north. The property is located in a residential area and is covered by shrubs, grasses and some landscaping. An existing single family residence and pavement cover approximately 7 percent of the existing parcel. A 10' wide gravel driveway is located at the eastern edge of the parcel.

Post-Development Drainage Area

In each phase of development the existing residence will remain. Phase I will add new paved parking for the existing parcel and paved entries for the future parcels. Phase II divide the entire lot into 5 total parcels. One 1200 square foot residence with a 484 square foot garage will be placed on each new parcel. A 30' wide public utility, ingress and egress easement will be present on the east side of the subdivision. A 20' wide portion of the north parcel will be used for a drainage facility to handle the increased runoff caused by the development of the subdivision.

Pre- and Post-Development Runoff

In order to prevent damage to surrounding properties or infrastructure by flooding caused by the development of this site, the proposed drainage basin has been sized to contain the difference in runoff between a 2-year pre-development storm and a 100-year post-development storm. The drainage swale/basin shall collect the calculated volume of runoff via surface grading. If necessary, roof drains may be tightlined to the drainage facility. To calculate the anticipated runoff, the Rational Method was used with the Intensity Duration Frequency (IDF) values obtained from NOAA for the parcel. Per USDA TR-55, the Kirpich formula was used to determine a minimum time of concentration (t_c) of 5 minutes for storm events affecting the subdivision. The runoff coefficients, "C", were calculated with a composite equation using pre- and post-development areas. The areas were calculated using existing parcel maps and plans and information provided by the Client.

The runoff calculations for the pre-development condition used a composite runoff coefficient of $C=.30$. Using a Rainfall Intensity of 1.41 (2-year storm, storm duration = 10 min.) and an area of 1.07 acres, the calculated pre-development runoff during a 2-year rainfall event was 0.457 cubic feet per second (ft^3/s).

The runoff calculations for the post-development condition used composite runoff coefficients of $C=0.22$ for Phase I and $C=.41$ for Phase II accounting for new construction and impervious surfaces; see attached calculations. Using a Rainfall Intensity of 3.74 (100-year storm, storm duration = 10 min.) and an area of 1.07 acres, the calculated post-development runoffs during a 100-year rainfall event were .89 cubic feet per second (ft^3/s) for Phase I and 1.66 cubic feet per second (ft^3/s) for Phase II. Drainage calculations are included in Attachment A.

Table 1 summarizes the flow rate for 2-year pre-development and 100-year post-development rainfall events and the change in runoff as a result of the proposed development for Phases I and II.

Table 1. Runoff Flow Rates for 2-Year Pre- and 100-Year Post Development Rainfall Events

Improvement	Area (Acres)	2-year Pre-Development Q (ft^3/s)	100-Year Post-Development Q (ft^3/s)	Change Q (ft^3/s)
Phase I	1.07	.457	.89	.43
Phase II	1.07	.457	1.66	1.20

Storm Water Detention System

Existing site conditions and the lack of nearby underground storm drainage infrastructure make a subterranean detention system with a metered outflow to existing drainage infrastructure impractical. Phase I is essentially a minor revision of access to the existing residence; therefore, no additional drainage infrastructure is required for Phase I. The full build-out of Phase II will alter much of the surface of the existing lot, and will require additional storm water detention features. Above ground drainage swales and a detention basin are suitable for this site and will provide both water quality control and flood control. A new detention basin shall be built on the north parcel, as shown on attached Sheet P1. Runoff from impervious areas on all parcels shall be routed to the basin via sheetflow. The basin shall be sized to contain the volume of runoff required to limit the offsite runoff to pre-development 2-year storm levels and will empty within 48 hours of a storm event. This runoff will be stored in the basin and will be released by infiltration into the soil. As shown in the attached calculations, the Skupien Method was used to determine the detention facility storage volume sufficient for containment of runoff generated by a 100-year post development storm event or less. The required detention system volume increased by a factor of safety of 1.4 is calculated to be 758 cubic feet based on a flow rate change of 1.20 ft^3/s (Phase II, full build-out). An 86 foot long by 2 feet deep basin with 2.25:1 sides and a 1' wide bottom has the required capacity and allows for 6" of freeboard. Alternate basin shapes may be used with the approval of the engineer-of-record.

To prevent flooding, proposed finish floor elevations shall be a minimum of 12" above the high water level of the detention basin. Roof downspouts for the buildings on all parcels shall be routed to the detention basin by surface grading or by piping. Driveways, impervious surfaces, and landscaping areas shall also be graded to allow sheet flow to the basin where feasible.

As shown in the calculations, the proposed detention basin provides sufficient volume to contain the runoff from a 100-year, post-development rainfall event and will drain the stored runoff within 48 hours. The basin is sized to limit runoff created by the development of all parcels, but is sited on the northern parcel and will limit runoff off of this site. Therefore, the detention facilities as designed are feasible and meet Public Works criteria. The proposed improvements and storm water detention systems should be constructed in the approximate locations as shown on the submitted Tentative Map (see Attachment).

Assumptions

1. For conservative estimates, it is assumed that all site runoff for all parcels discharge to a single point.
2. Soils are assumed to infiltrate at a rate of 0.5" per hour.

CONCLUSIONS

The improvements as described in this report are feasible and can be reasonably designed and installed to accommodate storm water runoff from the proposed development. The proposed storm water system will detain runoff in excess of the 2-year pre-development peak flow rate for storm return periods of 100 years or less. The final construction documents will show proposed drainage improvements in detail. Any changes to this report shall also be included in the final project Construction Plans.

Recommendations

1. Ground surfaces at this site shall be graded to prevent ponding and direct surface water away from building sites, edges of slabs and pavements, and cut/fill slopes towards suitable collection and discharge points. Slopes of at least 2% are recommended. Per Section 1803 of the CBC, a minimum positive drainage gradient of 5% is required to be established away from all proposed foundations and footings for a minimum horizontal distance of 10' where possible.
2. Erosion control/energy dissipating devices shall be installed at all water discharge locations as required. Under no circumstances should uncontrolled surface water drainage be allowed to flow across the building site or over any cut or fill banks.
3. Runoff from roofs should be controlled with the installation of gutters and downspouts along all rooflines at proposed dwellings and directed to the swale.
4. All land disturbing activities, including utility trenching, area grading, road/driveway construction and foundation work should be conducted between April 15th and October 15th to reduce the risk of erosion and sediment transport.
5. All improvements shall conform to all state and local building codes and Humboldt County improvement standards.
6. Any further subdivision proposed at this site shall be re-evaluated with a separate drainage study.
7. Soil bank slopes shall not exceed 2:1 unless measures are taken to stabilize the soil. Consult ATLAS Engineering for soil stabilization options.
8. Proposed basin shall be seeded with non-invasive grass or otherwise landscaped immediately after construction/excavation to prevent erosion, slow water flow and increase infiltration.

Post-Construction

1. Existing and new drainage facilities should be observed to verify that they are adequate and that no adjustments need to be made, especially during the first two years following construction. The basin will need to be periodically cleaned of silt and debris that may build up, and vegetation may need to be periodically replaced. Contact ATLAS engineering if any portion of the drainage system fails to operate as planned.

INSPECTION

An engineer from our office familiar with this site should be retained to inspect the improvements after they have been excavated and prior to the placement of engineered fill, base rock or asphalt paving to verify subsurface conditions are as expected, observe compliance with the design concepts and recommendations stated in this report, and allow design changes in the event that subsurface conditions differ from those anticipated. Grading and construction at this site should be performed in accordance with the code requirements of Humboldt County, the most current edition of the California Building Code (2019), and the recommendations of this report.

The validity of these recommendations is contingent on ATLAS Engineering being retained to provide a complete professional service. ATLAS Engineering cannot assume responsibility or liability for the adequacy of the recommendations when they are applied in the field unless we are retained to observe construction.

Also note that ATLAS Engineering is not responsible for any claims, damages, or liability associated with any other party's interpretation or reuse of this report for other projects or at other locations without our express written authorization. We recommend that the site and this report be reviewed by our office if the project is not begun within two years of the date of this report.

We make no warranty, expressed or implied, except that our services were performed in accordance with civil engineering principles generally accepted at this time and location. This report was prepared to provide engineering opinions and recommendations only. In the event there are any changes in the nature, design or location of the project, or if any future improvements are planned, the conclusions and recommendations contained in this report should not be considered valid unless 1) the project changes are reviewed by us, and 2) the conclusions and recommendations presented in this report are modified or verified in writing.

If there are any questions regarding this report, please do not hesitate to contact ATLAS Engineering at (707) 822-2822.

Sincerely,

Michael Taylor
Principal

LIST OF FIGURES AND ATTACHMENTS

Sheet P1. Tentative Map

Attachment A. Drainage Calculations

PROJECT: HOLGERSEN MINOR SUBDIVISION

JOB NO.: 18025

ENGINEER: JAG

DATE: 1/20/0

PAGE OF

PRELIMINARY DRAINAGE



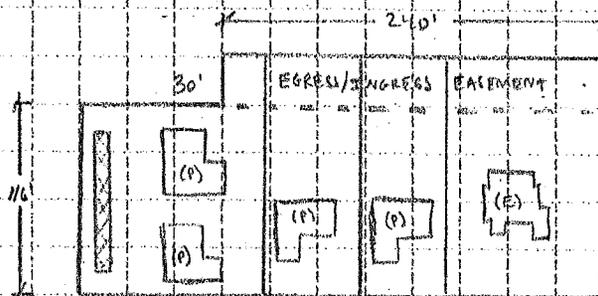
ATLAS
ENGINEERING

252 G ST.
ARCATA, CA 95521
(707) 822-2822 PH & FAX
WWW.ATLASENG.NET

SITE INFO

LAT: 40°47'26" N

LONG: 124°7'40" W



-STORMWATER FLOW- RATIONAL METHOD: Q = CIA

PRE DEVELOPMENT - TOTAL AREA = 46639 ft² = 1.07 ACRES

GRAVEL C = .8 AREA = 5631 sf / 46639 sf = 13%

PAVEMENT / ROOF C = .9 AREA = 3411 sf / 46639 sf = 07%

LAWN C = .17 AREA = 37592 sf / 46639 sf = 80%

COMPOSITE C VALUE = (.8)(.13) + (.9)(.07) + (.17)(.80) = .30

I₂ = 1.41" / hr (PER NOAA, SEE ATTACHMENT)

Q_(P) = CIA = (.30)(1.41" / hr) (1.49) (1/12.0) (1/3600 sec) (46639 ft²) = 457 cfs

PHASE I POST DEVELOPMENT - TOTAL AREA = 46639 ft²

GRAVEL C = .8 AREA = 0 sf

PAVEMENT / ROOF C = .9 AREA = 3354 sf / 46639 sf = 07%

LAWN C = .17 AREA = 43285 sf / 46639 sf = 93%

COMPOSITE C VALUE = (.9)(.07) + (.17)(.93) = .22

I₁₀₀ = 3.74" / hr

Q_(P) = CIA = (.22)(3.74" / hr) (1.49) (1/12.0) (1/3600 sec) (46639 sf) = .89 cfs

PHASE II POST DEVELOPMENT - TOTAL AREA = 46639 ft²

GRAVEL C = .8 AREA = 5784 sf / 46639 sf = 12.4%

PAVEMENT / ROOF C = .9 AREA = 10090 sf / 46639 sf = 21.6%

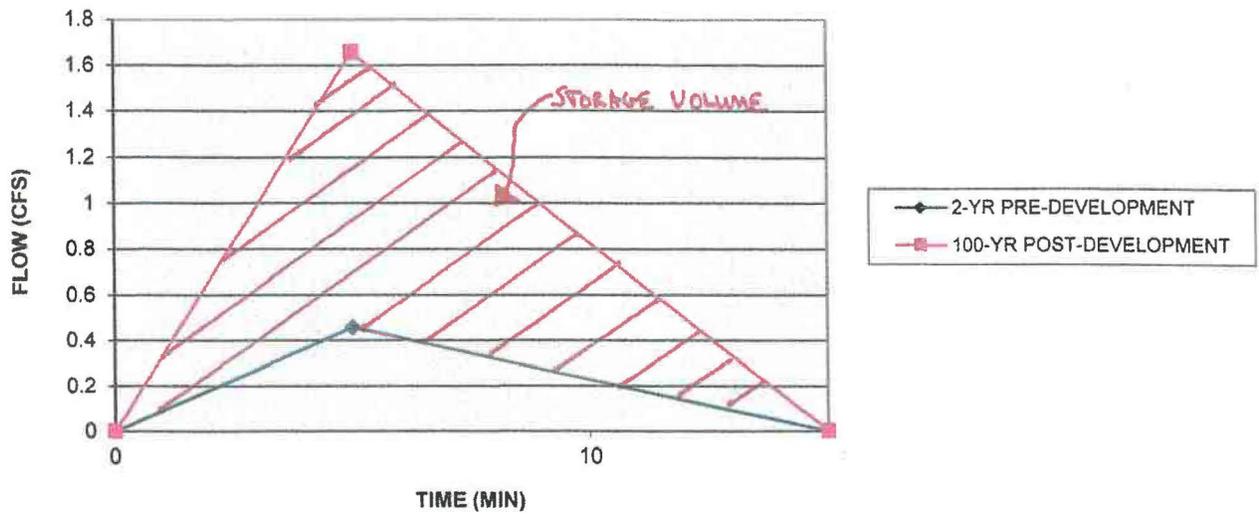
LAWN C = .17 AREA = 30765 sf / 46639 sf = 66%

COMPOSITE C VALUE = (.8)(.124) + (.9)(.216) + (.17)(.66) = .41

I₁₀₀ = 3.74" / hr

Q_(P) = (.41)(3.74" / hr) (1.49) (1/12.0) (1/3600 sec) (46639 sf) = 1.66 cfs

HYDROGRAPH - SUBDIVISION (PHASE II)



NOAA Atlas 14, Volume 6, Version 2 EUREKA WFO

WOODLEY IS

Station ID: 04-2910

Location name: Eureka, California, USA*

Latitude: 40.8097°, Longitude: -124.1603°

Elevation:

Elevation (station metadata): 20 ft**

* source: ESRI Maps

** source: USGS



POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Sarah Dietz, Sarah Heim, Lillian Hiner, Kazungu Maitaria, Deborah Martin, Sandra Pavlovic, Ishani Roy, Carl Trypaluk, Dale Unruh, Fenglin Yan, Michael Yekta, Tan Zhao, Geoffrey Bonnin, Daniel Brewer, Li-Chuan Chen, Tye Parzybok, John Yarchoan

NOAA, National Weather Service, Silver Spring, Maryland

[PF_tabular](#) | [PF_graphical](#) | [Maps & aeriels](#)

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches/hour) ¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	1.52 (1.34-1.76)	1.97 (1.73-2.27)	2.59 (2.26-2.99)	3.12 (2.70-3.65)	3.90 (3.24-4.73)	4.54 (3.68-5.64)	5.21 (4.12-6.67)	5.95 (4.56-7.87)	7.03 (5.12-9.74)	7.92 (5.56-11.4)
10-min	1.10 (0.960-1.26)	1.41 (1.24-1.63)	1.85 (1.62-2.14)	2.24 (1.93-2.61)	2.79 (2.32-3.39)	3.25 (2.63-4.04)	3.74 (2.95-4.78)	4.27 (3.26-5.64)	5.04 (3.68-6.98)	5.68 (3.98-8.18)
15-min	0.884 (0.776-1.02)	1.14 (0.996-1.31)	1.50 (1.30-1.73)	1.80 (1.56-2.11)	2.25 (1.87-2.73)	2.62 (2.12-3.26)	3.01 (2.38-3.85)	3.44 (2.63-4.55)	4.06 (2.96-5.63)	4.58 (3.21-6.60)
30-min	0.602 (0.528-0.694)	0.776 (0.680-0.896)	1.02 (0.890-1.18)	1.23 (1.06-1.44)	1.54 (1.28-1.86)	1.79 (1.45-2.22)	2.06 (1.62-2.63)	2.35 (1.80-3.10)	2.77 (2.02-3.84)	3.12 (2.19-4.50)
60-min	0.425 (0.373-0.490)	0.548 (0.480-0.632)	0.719 (0.627-0.832)	0.867 (0.750-1.01)	1.08 (0.900-1.31)	1.26 (1.02-1.57)	1.45 (1.14-1.85)	1.66 (1.27-2.19)	1.95 (1.43-2.71)	2.20 (1.54-3.17)
2-hr	0.332 (0.292-0.383)	0.414 (0.362-0.478)	0.530 (0.462-0.612)	0.630 (0.544-0.736)	0.776 (0.646-0.942)	0.896 (0.728-1.12)	1.03 (0.811-1.31)	1.17 (0.894-1.55)	1.38 (1.00-1.91)	1.55 (1.09-2.23)
3-hr	0.284 (0.249-0.327)	0.349 (0.306-0.403)	0.441 (0.385-0.510)	0.520 (0.450-0.608)	0.637 (0.530-0.774)	0.733 (0.596-0.912)	0.837 (0.661-1.07)	0.951 (0.727-1.26)	1.12 (0.814-1.55)	1.25 (0.880-1.81)
6-hr	0.207 (0.182-0.239)	0.251 (0.220-0.290)	0.312 (0.273-0.361)	0.365 (0.316-0.426)	0.442 (0.368-0.536)	0.505 (0.410-0.628)	0.572 (0.452-0.732)	0.646 (0.494-0.854)	0.753 (0.549-1.04)	0.841 (0.590-1.21)
12-hr	0.147 (0.129-0.169)	0.177 (0.155-0.204)	0.217 (0.190-0.252)	0.252 (0.218-0.295)	0.302 (0.251-0.367)	0.342 (0.278-0.425)	0.385 (0.304-0.492)	0.431 (0.329-0.569)	0.496 (0.362-0.687)	0.549 (0.385-0.791)
24-hr	0.102 (0.091-0.116)	0.122 (0.109-0.139)	0.150 (0.134-0.171)	0.173 (0.153-0.199)	0.205 (0.176-0.244)	0.231 (0.195-0.280)	0.258 (0.213-0.319)	0.287 (0.230-0.364)	0.327 (0.253-0.431)	0.359 (0.269-0.488)
2-day	0.066 (0.059-0.075)	0.080 (0.071-0.091)	0.098 (0.087-0.112)	0.113 (0.100-0.130)	0.134 (0.115-0.159)	0.150 (0.127-0.182)	0.167 (0.138-0.207)	0.185 (0.148-0.234)	0.209 (0.162-0.275)	0.228 (0.171-0.310)
3-day	0.049 (0.044-0.056)	0.060 (0.054-0.068)	0.074 (0.066-0.085)	0.086 (0.076-0.099)	0.101 (0.087-0.120)	0.114 (0.096-0.138)	0.126 (0.104-0.156)	0.139 (0.112-0.176)	0.156 (0.121-0.206)	0.170 (0.128-0.231)
4-day	0.040 (0.036-0.046)	0.050 (0.044-0.057)	0.061 (0.055-0.070)	0.071 (0.063-0.082)	0.084 (0.072-0.100)	0.094 (0.079-0.114)	0.104 (0.086-0.129)	0.115 (0.092-0.145)	0.129 (0.100-0.170)	0.140 (0.105-0.190)
7-day	0.029 (0.026-0.033)	0.036 (0.032-0.041)	0.045 (0.040-0.052)	0.052 (0.046-0.060)	0.062 (0.053-0.073)	0.069 (0.058-0.084)	0.076 (0.063-0.095)	0.084 (0.067-0.106)	0.094 (0.072-0.123)	0.101 (0.076-0.138)
10-day	0.024 (0.021-0.027)	0.030 (0.027-0.034)	0.037 (0.033-0.043)	0.043 (0.038-0.050)	0.051 (0.044-0.061)	0.057 (0.048-0.069)	0.063 (0.052-0.078)	0.069 (0.055-0.087)	0.077 (0.059-0.101)	0.083 (0.062-0.112)
20-day	0.017 (0.015-0.019)	0.021 (0.019-0.024)	0.026 (0.023-0.030)	0.030 (0.027-0.035)	0.035 (0.030-0.042)	0.039 (0.033-0.047)	0.043 (0.035-0.053)	0.047 (0.038-0.059)	0.052 (0.040-0.068)	0.055 (0.041-0.075)
30-day	0.014 (0.012-0.016)	0.017 (0.015-0.020)	0.021 (0.019-0.024)	0.025 (0.022-0.028)	0.029 (0.025-0.034)	0.032 (0.027-0.039)	0.035 (0.029-0.043)	0.038 (0.030-0.048)	0.041 (0.032-0.055)	0.044 (0.033-0.060)
45-day	0.012 (0.011-0.014)	0.015 (0.013-0.017)	0.018 (0.016-0.021)	0.021 (0.019-0.024)	0.024 (0.021-0.029)	0.027 (0.023-0.032)	0.029 (0.024-0.036)	0.031 (0.025-0.040)	0.034 (0.027-0.045)	0.037 (0.027-0.050)
60-day	0.011 (0.010-0.012)	0.013 (0.012-0.015)	0.016 (0.014-0.018)	0.018 (0.016-0.021)	0.021 (0.018-0.025)	0.023 (0.020-0.028)	0.025 (0.021-0.031)	0.027 (0.022-0.034)	0.030 (0.023-0.039)	0.031 (0.023-0.043)

¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

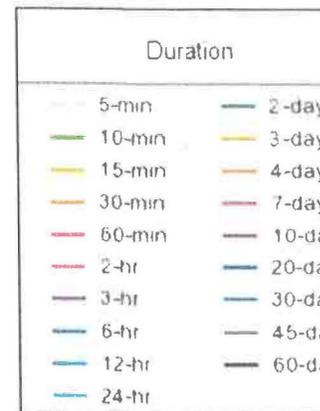
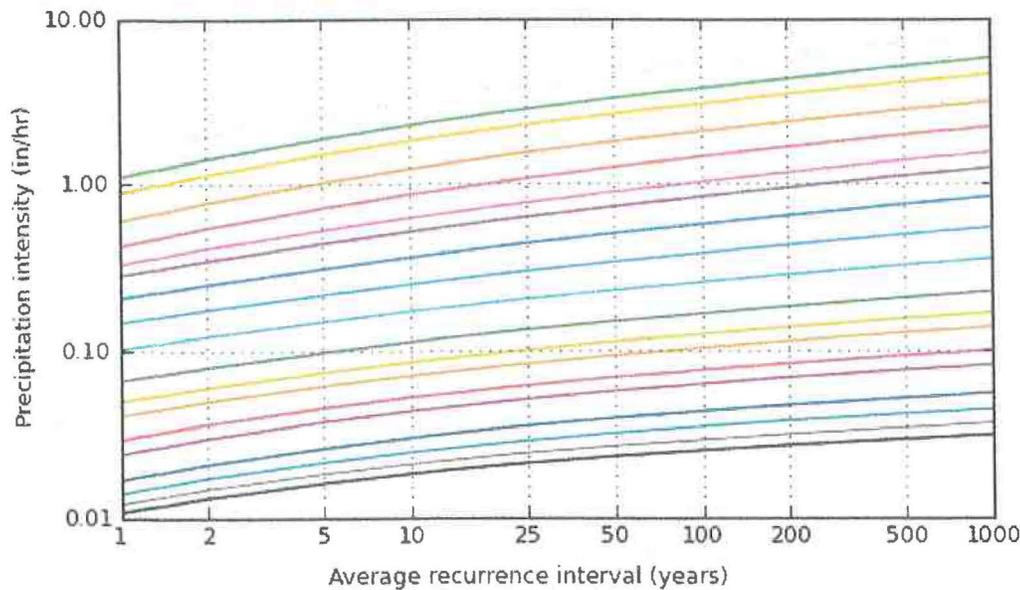
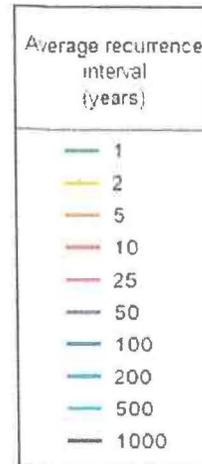
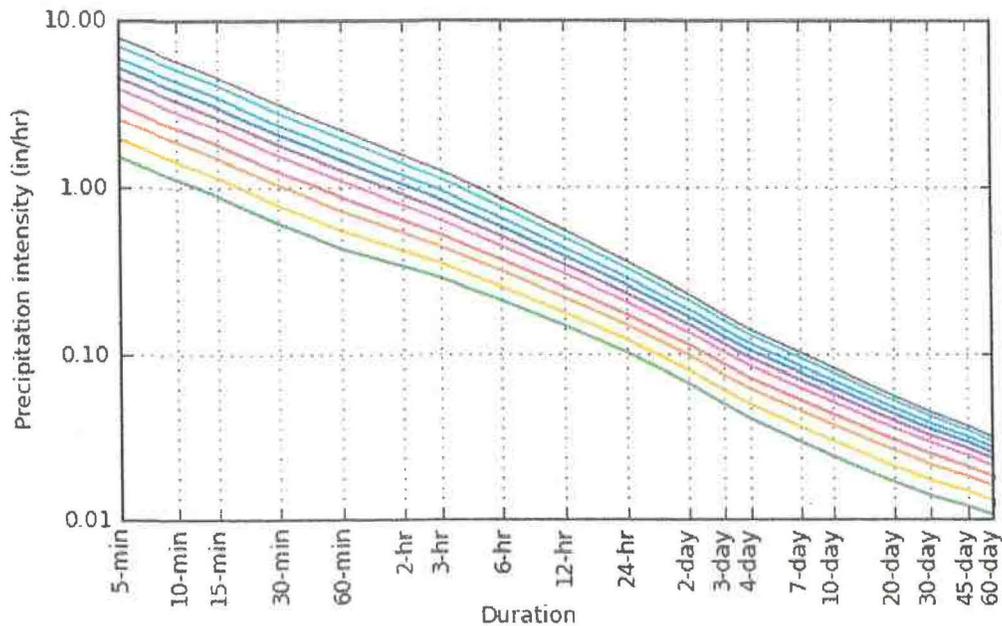
Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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PF graphical

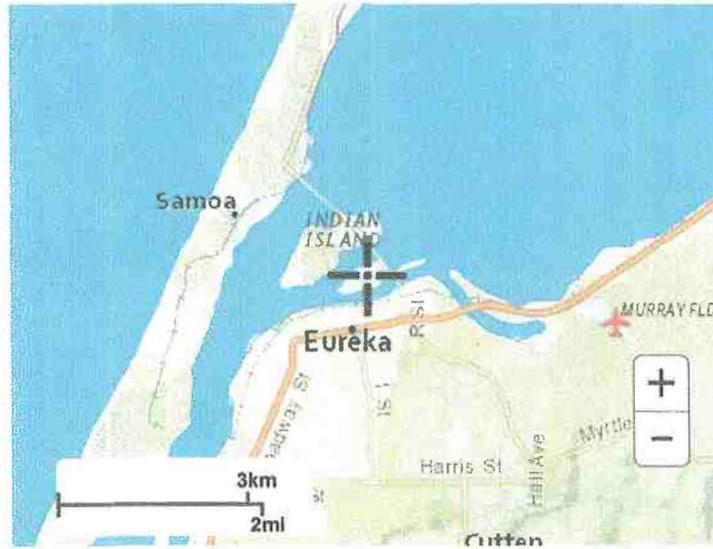
PDS-based intensity-duration-frequency (IDF) curves
Latitude: 40.8097°, Longitude: -124.1603°



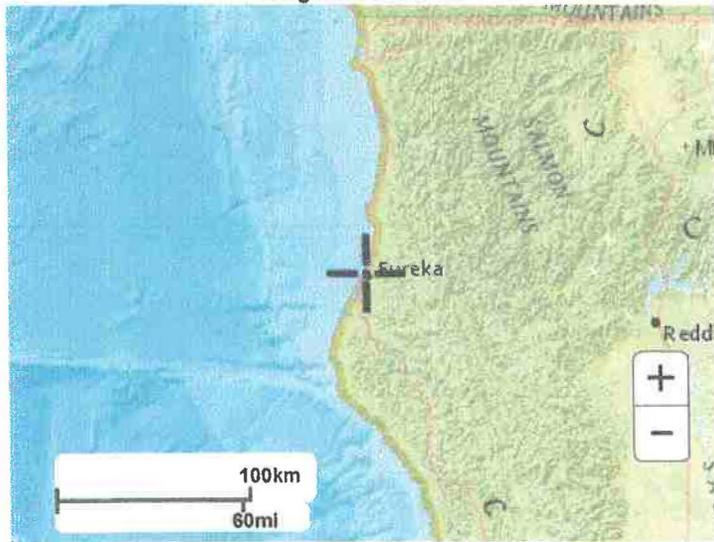
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Maps & aerials

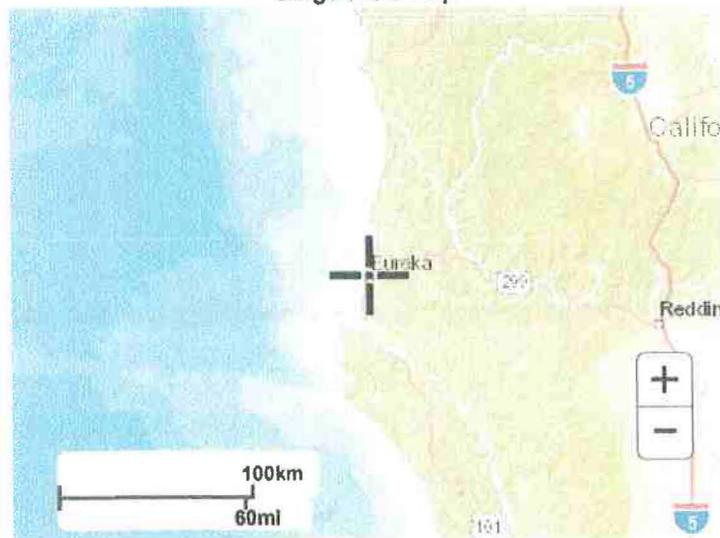
Small scale terrain



Large scale terrain



Large scale map



Large scale aerial

Precipitation Frequency Data Output

NOAA Atlas 2

40.79°N 124.13°W

Site-specific Estimates

Map	Precipitation (inches)	Precipitation Intensity (in/hr)
2-year 6-hour	1.69	0.28
2-year 24-hour	3.13	0.13
100-year 6-hour	3.45	0.58
100-year 24-hour	6.44	0.27

[Go to PFDS](#)[Go to NA2](#)

Hydrometeorological Design Studies Center - NOAA/National Weather Service

1325 East-West Highway - Silver Spring, MD 20910 - (301) 713-1669

Wed Aug 22 14:20:49 2018