CALIFORNIA COASTAL COMMISSION
NORTH COAST DISTRICT OFFICE
1385 EIGHTH STREET, SUITE 130
ARCATA, CA 95521
VOICE (707) 826-8950
FAX (707) 826-8960

W12b

1-23-0136

(Sequoia Forest Products LLC)

SEPTEMBER 6, 2023

EXHIBITS

Exhibit 1 – Vicinity Map

Exhibit 2 – Project Description, Demo Plan, and Septic Repair Site Plan

Exhibit 3 – Soil and Groundwater Management Plan

Exhibit 4 – Comments Received Prior to Publication of the Staff Report

LACO EUREKA UKIAH SANTA ROSA 1-800-515-5054 www.lacoassociates.com	PROJECT	Repair OWTS Evaluation	BY GLM	FIGURE 1
	CLIENT	Sequoia Forest Products	DATE 3/24/23	
	LOCATION	Brainard Mill Site, Eureka, CA	CHECK	
		Location Map	SCALE 1" = 2000'	10255.01

Exhibit 1- Vicinity Map
CDP 1-23-0136
Sequoia Forest Products LLC

LACO

MEMORANDUM

Administrative Coastal Development Permit Request
5151 State Highway 101, Eureka, California
Sequoia Forest Products LLC

Date:	May 8, 2023
Project No.:	10255.01
Prepared For:	California Coastal Commission
Prepared By:	Megan Marruffo, Senior Planner
Reviewed By:	Meghan Ryan, Planning Director
Cc:	Peter Stroble, Sequoia Forest Products LLC

Attachments:

Figures:	Figure 1: Demolition Site Plan
	Figure 2: Septic Repair Site Plan
Appendix 1:	Stormwater Pollution Prevention Plan (SWPPP)
Appendix 2:	Soil and Groundwater Management Plan
Appendix 3:	Emergency On-Site Wastewater Treatment Evaluation and Mound Design
Appendix 4:	CDFW Site Visit Comments

1.0 INTRODUCTION

The purpose of this memorandum is to provide additional information on the proposed project proposed by Sequoia Forest Products LLC (Applicant) at the properties identified as Assessor's Parcel Numbers (APNs): 017-081-001 and 404-141-004, located at 5151 State Highway 101 within the city limits of Eureka, California (Site; Figure 1), in response to questions and comments received from the California Coastal Commission (Coastal Commission). The properties, collectively, are known as the "Brainard site" and are currently under the ownership of the California Redwood Company. The Site is located between Highway 101 to the west and Humboldt Bay to the east, within the City of Eureka. The Site has a land use and zoning designation of General Industrial (IG/MG, respectively) under the City of Eureka 2040 General Plan and City of Eureka Coastal Zoning Regulations (Chapter 156 of ited within the State-retained

Exhibit 2- Project Description, Demo Plan, and Septic Repair Site Plan
CDP 1-23-0136
Sequoia Forest Products LLC

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707 443-5054

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3

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jurisdiction of the Coastal Commission and was annexed into City jurisdiction from the County of Humboldt in 2018.

LACO, on behalf of the Applicant, submitted an application to the Coastal Commission on February 16, 2023, requesting a De Minimis Waiver. It is understood that, typically, any "development" occurring within the Coastal Zone requires a Coastal Development Permit (CDP) from the California Coastal Commission, unless it is found to be exempt. "Development" as defined in the Coastal Act (Section 30106) includes but is not limited to the following: construction, reconstruction, demolition, or alteration of the size of any structure, including any facility of any private, public, or municipal utility (where "structures" are further defined to include, but is not limited to, any building, road, pipe, flume, conduit, siphon, aqueduct, telephone line, and electrical power transmission and distribution line). Based on information received from the Coastal Commission since the submittal date, the Applicant and LACO understand that an Administrative CDP would be required for the project.

Additional information included in this memorandum includes the following:

- Additional detail regarding the proposed emergency septic system repairs;
- Discussion of potential directional drilling required for electrical system upgrades;
- Details regarding the planned re-routing of fire suppression water lines;
- Information pertaining to foundation work and ground disturbance associated with equipment installation;
- Discussion of potential interior building renovations; and
- Summary of the March 22, 2023, site visit with the California Department of Fish and Wildlife (CDFW).

2.0 PROJECT DESCRIPTION

The Applicant is proposing a state-of-the-art, ultra-high fiber recovery sawmill at the Site that would focus primarily on processing redwood logs into lumber products for the residential fence market, and would primarily utilize small, second growth logs from commercial forestry operations. The mill would utilize non-covered spaces for loading/unloading and staging finished goods and raw material inventory. All manufacturing equipment would be inside existing on-site buildings. Development requirements to accommodate this operation are minimal and will involve the following: structure demolition, electrical utility upgrades, and septic system repairs. The proposed use is principally permitted under the City of Eureka zoning regulations and would not require a Conditional Use Permit (CUP), although building and demolition permits would be required from the City for any interior and exterior modifications, including the proposed building demolition (further discussed below). An Onsite Wastewater Treatment System (OWTS) Repair Permit will also be obtained from the County of Humboldt Department of Environmental Health (DEH) for the proposed septic system repairs.

2.1 Existing Site Features

The Site is developed with approximately 401,000 square feet of building space and is almost entirely paved. A narrow strip of railroad grade owned by Northwestern Pacific Railroad Company (APN: 017-081-002 and a portion of APN: 404-141-003) borders the Brainard site to the south and east. The Site has been utilized for heavy industrial uses over several decades, as evidenced by historical aerial imagery. The Site continues to be used for industrial warehousing and manufacturing.

Exhibit 2- Project Description, Demo Plan, and Septic Repair Site Plan
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Although the Site is located within the city limits of Eureka, it is not served by community sewer and water services connections at this time. Domestic water is obtained from two (2) on-site wells located on the eastern parcel (APN: 404-141-004). One of the wells is located directly to the southeast of the administrative offices, which are located on the easternmost portion the Site; the other well is located directly east of the existing 500,000-gallon fire reservoir located on the southwestern portion of the eastern parcel and southeastern portion of the western parcel (APN: 017-081-001).

Wastewater infrastructure on the Site includes four (4) existing septic tanks and existing leaching lines. Two of the four existing septic tanks are located on the western portion of the Site, with the other two located on the eastern parcel of the Site. The City is actively pursuing grant funding in order to extend community sewer service to the Brainard site; however, the exact timing for completion of the extension project is unknown. Based on discussions with Humboldt County Department of Environmental Health (DEH), they approve of the continued use of an existing Onsite Wastewater Treatment System (OWTS) at the Site until community sewer service is available at the Site. However, repairs to one of the existing OWTS near the existing Planer Mill building (Building FF) is currently proposed to maintain its functionality.

Electrical power and natural gas at the Site are provided by Pacific Gas and Electric Company (PG&E). An existing power pole, transformer, and gas meter are located on the southeastern-most portion of the eastern parcel (APN: 404-141-004) near the existing administrative offices (Building JJ). A PG&E easement is located parallel to the existing railroad tracks running along the southern portion of the Site, on the northwest side of the railroad tracks.

The Site has two ingress/egress points that connect directly with U.S. Highway 101. The primary and active point is near the northeastern end of the Site. The secondary and inactive point is located approximately 2,600 feet southwest of the primary point; this access point would remain inactive under the project. Traffic exiting the northern driveway is controlled by a stop sign. The driveways contain an uncontrolled railroad crossing, although the railroad is not currently operational. The driveways cross a manmade inboard ditch that runs along the southeastern edge of the railroad grade. The Site also contains considerable paved areas and an internal road network.

Stormwater and drainage on-site are managed with an existing levee and inboard drainage system. The Site contains an existing Stormwater Pollution Prevention Plan (SWPPP), prepared by SHN Engineers and Geologists in June 2015, and revised in September 2016, September 2017, July 2018, and August 2022 (previously submitted). The 2015 SWPPP includes best management practices (BMPs) in addition to inspection and maintenance procedures. The SWPPP will be evaluated and revised accordingly for the proposed project as necessary, once the property purchase is completed. Electronic copies of the 2015 SWPPP and subsequent amendments are enclosed as Appendix 1.

2.2 Planned Operations

The proposed ultra-high fiber recovery sawmill would be located within Building FF, with administrative operations to occur within Building JJ. In addition, raw materials unloading and staging is proposed to occur within the area to the south of Building FF, where the majority of the buildings are slated for demolition. The finished project would be sold "green" (i.e., not dried). The areas on the north and west sides of Building FF would be utilized for storing packaged/unitized finished goods.

Exhibit 2- Project Description, Demo Plan, and Septic Repair Site Plan
CDP 1-23-0136
Sequoia Forest Products LLC

The Applicant plans to have no more than 50 full-time employees on-site during initial operations. Most employees would be located in Building FF, with a small number of administrative employees to be located in Building JJ. A second shift is planned in the future, which is anticipated to add an additional 40 employees. These changes are currently anticipated for 2028. Please note that inclusion of the second shift would not increase the total number of employees on-site at any given time beyond 50 employees, as the second shift would occur at a different time.

2.3 Site Improvements

The following subsections provide a brief overview of the proposed on-site improvements, which include demolition of existing buildings, electrical utility upgrades, OWTS repairs, re-routing of fire suppression water lines, and equipment installation.

The Applicant has indicated that Phase I and Phase II Environmental Site Assessments (ESAs) have been performed on-site, which concluded that environmental impacts due to previous Site uses are unlikely. Additionally, an asbestos assessment has also been completed, in addition to abatement of asbestos that did not require invasive deconstruction of building or parts of buildings. Please note that the Applicant is bound by a confidentiality clause with the Seller and is unable to release the reports at this time. Once the property purchase has been completed, the Applicant can share these reports with the Coastal Commission.

As described in the Soil and Groundwater Management Plan (SGMP) prepared by LACO on May 5, 2023 (Appendix 2), the prior uses at the Site utilized above-ground storage tanks for storage of various fields, and underground storage tanks (USTs) for storage of gasoline. An unauthorized release from the USTs resulted in an investigation and remediation overseen by DEH, which was closed in 1993. Soil and groundwater sampling since that time have been below Environmental Screening Levels. As noted in the SGMP, soil and groundwater encountered while conducting the work associated with the proposed project is not expected to be impacted with contaminants caused by previous Site uses. However, soil, groundwater, and debris related to the demolition of the existing septic system and water supply lines (discussed further below) should and would be stored on-site until disposed of in an appropriately licensed facility according to the recommendations contained in the SGMP.

In addition, the Applicant is eager to integrate the Humboldt Bay Trail with the Site so that employees can commute on foot or on bicycle. The Applicant started discussions with the Humboldt County Public Works Department about how to design this access, but do not yet have an actionable design. Once a plan is in place, the Applicant would submit a subsequent CDP application for that work. The Applicant also plans to provide the space to accommodate restroom facilities near the proposed trail when that project becomes reality.

The Applicant further understands that the Site is exposed to the threat of being impacted adversely by Sea Level Rise (SLR) and have reviewed recent SLR assessments commissioned by both the City of Eureka and the County of Humboldt. Based on information found in these reports, it is understood that it would likely be 30 or more years before SLR has a level of impact on the Site that would render it infeasible to conduct operations there, which is well beyond the timeframe required for this project to satisfy investors' return expectations. Nevertheless, the Applicant would be prepared to retreat from the property at such time that operating on it in full compliance with local, state, and federal environmental regulations becomes economically infeasible.

Exhibit 2- Project Description, Demo Plan, and Septic Repair Site Plan
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2.3.1 Building Demolition

As illustrated in the Site Plan (see Figure 1), the proposed improvements entail removal of sixteen (16) buildings totaling approximately more than half of the Site's current square footage (approximately 218,695 SF, or 55% of buildings). The buildings proposed for removal and to remain include the following, as listed on the Site Plan:

BUILDINGS TO BE DEMOLISHED	
NAME	SQUARE FOOT
B	32,581
G AND H	260
I	260
K	25,150
CC	3,683
W	374
V	17,229
HH	18,705
U	64,814
L	50,467
O	783
P	1,255
N	962
Q	684
R	1,488
Total:	*218,695 sf*

BUILDINGS TO REMAIN	
NAME	SQUARE FOOT
E AND F	5,990
FF	171,181
JJ	260
A	208
AA	38
BB	92
C	60
D	868
EE	1,740
GG	297
II	123
M	495
S	146
T	278
X	68
Y	208
Z	127
Total:	*182,179 sf*

Required on-site demolition would fall into two phases: hazardous waste removal and general demolition debris removal. Each phase is estimated at approximately six (6) months, for a total of twelve (12) months. Ideally, the Applicant plans to start demolition within three (3) months after appropriate permits are obtained.

The buildings proposed for demolition are currently in a declining state of maintenance and have been deemed an economic liability, are an aesthetic "eyesore", are not required for operations of the facility, and many pose logistical obstruction to efficient and safe flow of vehicles and materials. All building foundations are proposed to be left in place to minimize disturbance. In addition, BMPs would be employed during demolition to ensure all potential impacts are minimized (see Section 2.3.7, below).

Initial demolition debris is planned to be stored inside Buildings HH and U (also slated for demolition). Any stockpiling of demolition debris from these final buildings would be stored in the northwest annex section of Building FF.

2.3.2 Electrical Utility Upgrades

The Site is currently served with electrical power from PG&E. To support planned operations, electrical utility upgrades would be required. Currently, there is one (1) 2,500 KVA transformer on-site located just north of building GG; however, operations would require a total of 7,500 KVA, requiring installation of two (2) additional 2,500 KVA transformers. The proposed transformers would utilize directional boring to make the connection, the boring would occur near the southeastern corner of the planer building (Building FF), just north of Building GG. The boring length would be approximately 40 feet in length at a depth of 42 inches. The boring diameter would be less than 6 inches. Historical diagrams and photos of the Site provide evidence to support the Site contained considerably more electrical service than what is currently located on-site. The existing transformer is fed by an existing outside overhead line.

Exhibit 2- Project Description, Demo Plan, and Septic Repair Site Plan
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2.3.3 *On-Site Wastewater Treatment System Repairs*

Onsite Wastewater Treatment System (OWTS) repairs are proposed for the project. Representatives from LACO and DEH met on-site on February 14, 2023, to discuss options for repairing the Site's existing OWTS. The required repairs would be processed under an emergency repair permit with the County.

As provided in LACO's *Emergency On-Site Wastewater Treatment Evaluation and Mound Design* letter (OWTS Evaluation Letter), dated May 5, 2023 (see Appendix 3), two existing septic systems were evaluated, including: (1) an existing system for the office building and (2) an existing system for the planer mill building. Per the OWTS Evaluation Letter, the existing office OWTS is installed in the dike, northwest of the office septic tank (approximately 1,000 gallons). The Humboldt Bay trail is currently designed to cover the leach field and is likely to require that the leach field be abandoned. The planer mill OWTS includes an 800-gallon septic tank and leach field (although the number of leach lines could not be determined and their assumed location is currently paved).

Proposed OWTS improvements involve installation of a Wisconsin mound (185' L x 30' W x 3.5' H; 7,000 square feet of disturbance) within the area of the old planer mill leach field. The system has been sized to accommodate 110 people per day (two shifts of approximately 55 people) at 15 gallons per person per day, for a total daily maximum effluent flow of 1,650 gallons per day. The new system would require a new 5,000-gallon, dual-chambered concrete septic tank to be installed. As further described in the OWTS Evaluation Letter, DEH has requested the system be pretreated to minimize potential groundwater impact due to the high groundwater on-site. LACO recommends installation of two AdvanTex AX-RTUV Treatment Systems in parallel to treat the effluent from the septic tank, which would also reduce the nitrogen load to the mound.

Additionally, per the OWTS Evaluation Letter, the Wisconsin mound disposal field would require a pump system to distribute effluent to the mound. The pump system would convey effluent flow from the new 5,000-gallon septic tank through the AdvanTex treatment system into a proposed 1,000-gallon pump tank. The pump tank would house an effluent pump that would pump the effluent approximately 70 linear feet along a 2-inch supply line into the center manifold of the Wisconsin mound field. The office waste would be collected in the existing septic tank and transferred to a pump chamber, where it would be pumped to the new septic tank for the planer mill via a proposed 1,300-linear-foot septic line. The proposed improvements are shown in Figure 2. As per Figure 2, the proposed OWTS repair is anticipated to result in approximately 7,000 square feet of disturbed area for construction, with the new pump tank near the office building to result in approximately 100 square feet of disturbance and the proposed septic line to result in a disturbed area of approximately 1,300 square feet.

The OWTS Evaluation Letter further notes that "the roof drains must be tightlined around the back side of the mound to a drainage drop inlet structure to the west of the mound to minimize addition of noneffluent liquid into the system." In other words, the roof drains in the area of the proposed mound need to be collected and piped away from between the building and the mound to eliminate the additional water loading to the back of the mound and ensure water cannot pond behind the mount. Proposed improvements include tilling the upper 12 inches creating a level area for placement of mound sand to accommodate the system. The area behind the mound (mostly comprised of weeds and grass) and an area approximately 10 feet beyond the mound footprint would be sloped to direct water away from the mound and the exposed soil would be covered by grass. No cut would occur and fill would be less than 50 cubic yards.

Exhibit 2- Project Description, Demo Plan, and Septic Repair Site Plan
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Sequoia Forest Products LLC

The proposed OWTS would accommodate the total number of employees anticipated on-site. The proposed Wisconsin Mound system is being approved as an emergency repair and would be in use until such time City services are connected to the Site. The City has provided a "Will-Serve" Letter.

2.3.4 Re-Routing of Fire Suppression Water Lines

There are two 8-inch fire suppression lines that serve the planner mill (Building FF) in the vicinity of the proposed mound system. These lines will be relocated by connecting two new lines to the existing main and routing them around the mound system, they will connect to the existing risers and check valves at the building. The existing line between the main and the risers will be cut and capped on either end and abandoned in place.

2.3.5 Equipment Installation and Foundations

As previously described, the proposed ultra-high fiber recovery sawmill would be located within Building FF, with administrative operations to occur within Building JJ. In addition, raw materials unloading and staging is proposed to occur within the area to the south of Building FF, where the majority of the buildings are slated for demolition.

Due to the ample amount of space available, the project would not "high deck" raw materials (as often seen at or near Schmidbauer Lumber in Eureka and at the Mad River Lumber log yard on West End Road in Arcata), and raw material "decks" planned under the project would be 20 feet in height or less. Raw material would be unloaded and transported onsite with standard raw material handling rolling stock equipment. Additionally, current plans entail using only the northern half of the property for the proposed operation, which comprises approximately 40 acres. The Applicant does not have any immediate or future planned use for the southern balance of the Site.

In addition, the operation would include some stationary raw material in-feed equipment used for conveying raw material into the sawmill installed on the pavement surface adjacent to the south end of Building FF. This equipment and foundation would occupy a footprint of roughly 2,496 square feet (52' L x 48' W x 18" D) and would be no more than 12 feet high.

There would be three standard residuals bins to collect sawdust, bark, and chips, and load into open-top trucks, proposed to be installed along the western exterior edge of Building FF. The bins would occupy a footprint of approximately 1,800 square feet (60'x30') and would stand approximately 50 feet high, below the height of immediately adjacent Building FF. Please note there is currently a large residual bin on-site, located adjacent to the southern edge of Building FF.

Installation of equipment would require foundation work and, therefore, some ground disturbance:

Raw Materials Infeed:
The internal support foundations would be 36 feet long, with one at 5-feet-wide wide and two at 4-feet-wide; both would be at a depth of 24 inches, with a total area of 468 square feet and 26 yards of excavated material. Between these footings a thin 6-inch slab that is 6 inches above grade would be added, resulting in no excavation. The area where the equipment extends into the sawmill (Building FF, 16' W x 48' L x 24" D) would require a new concrete slab. The approximate excavation would be 18 inches below existing grade, and the slab would be elevated 6 inches, requiring approximately 36 yards of removed material.

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Chip and Sawdust Bins:
Beneath each bin would be a 200-square-foot concrete slab to support a truck drive path. The elevation would be 6 inches above existing grade and 12 inches deep, resulting in 6 inches of excavation. On each side of the truck drive path, there would be a thicker concrete foundation to support the bins. It would be approximately 2.5 feet deep, 6 inches above grade, resulting in an excavation that is 2 feet deep. The area per bin is approximately 170 square feet.

2.3.6 Building Renovations

Interior rooms are planned inside Building FF. The rooms may include a lunch/break room, a programmable logic control (PLC) room for housing computer infrastructure, and small office spaces for supervisors. A restroom remodel is also planned. These improvements would all be completely interior rooms that would require no additional foundation work or expansion of the building envelope.

No planning or design work for these interior improvements is prepared. Our understanding is that interior work of this nature does not require a CDP, but should that not be the case, the Applicant would apply for a separate CDP when plans are developed.

2.3.7 Proposed Best Management Practices (BMPs)

All demolition, OWTS improvements, and limited foundation work would be completed with appropriate BMPs implemented, including but not limited to the following:

- Given the age of the buildings proposed for demolition, presence of lead-based paint is assumed, and would be disposed of in accordance with all applicable regulations].
- The Seller had an asbestos assessment performed in 2022 on all buildings in question, and subsequently carried out an extensive project to abate all asbestos that did not require invasive deconstruction of building or parts of buildings. Consequently, the Applicant has been made aware of which buildings contain asbestos as well as precisely where asbestos is present in each building. The Applicant plans to utilize this information to remove asbestos surgically and dispose of it in accordance with prevailing law [including but not limited to U.S. Environmental Protection Agency (EPA; 40 CFR), U.S. Department of Transportation (DOT; 49 CFR), and Occupational Safety and Health Administration (OSHA; 29 CFR)].

  Please note these assessments are the property of the Seller, and the Applicant's Purchase & Sale Agreement with the Seller prohibits the Applicant from including the report in the application at this time. Once the property purchase is completed (but prior to demolition), the Applicant would be able to share these reports.
- All work would occur on paved surfaces.
- Any stockpiling would occur within the empty buildings or should stockpiling be required outside, the materials would be properly contained and covered ahead of any precipitation.
- All debris would be promptly removed and properly disposed of at an off-site facility.
- Appropriate erosion control (e.g., silt fencing, silk sock(s), straw wattle(s), etc.) would be installed around the septic repair location to prevent any run-off into Humboldt Bay.
- The use of firehoses is proposed to wet down areas in order to reduce dust associated with demolition from leaving the Site.

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Sequoia Forest Products LLC

Additionally, no ground soil would be disturbed during the building demolition. All building foundations are proposed to be left in place. However, should concrete piers or footings be encountered that are above the existing grade, they would be removed by way of cutting or jack hammering down to the surface of the existing grade without penetrating the surface. Should portions of the concrete foundations be degraded to a point that require removal entirely, concrete would only be removed to the bottom of the foundation's slabs or footings. Following demolition, any areas requiring repair to establish suitable drive paths for mobile equipment and motor vehicles would be repaired with ¾-minus rock (fill) and asphalt (surface).

With implementation of the respective BMPs and with ground disturbance limited only to the location of the septic system repairs, significant environmental impacts are not anticipated, including impacts to the immediately adjacent Humboldt Bay. All proposed measures described above would ensure there would be no runoff or contamination from hazardous materials, and all work would occur within previously disturbed areas. No on-site processing of the demolition debris would occur, further minimizing potential impacts. Concrete and steel would be transported to a recycling yard and other debris would be hauled to a landfill near Redding. Timber or large beams of wood that are cost-effective to recycle would be recycled in order to minimize waste to be transported to the landfill. Demolition debris would be loaded into haul trucks with an excavation, in as large of pieces that would fit in the gondola study trucks. It is estimated that between 160 and 200 truckloads of material would be removed from the Site.

Views would also not be impacted, but would actually be improved by removing dilapidated, obsolete structures and creating additional openings for views of Humboldt Bay to those passing by the Site on Highway 101. Additionally, as the property is privately-owned, there would be no impact to public access.

2.4 Coordination with California Department of Fish and Wildlife (CDFW)

Two (2) representatives of LACO met with CDFW on-site on March 22, 2023, in response to the Coastal Commission's March 9, 2023, inquiry as to whether the CDFW was consulted to confirm the presence or absence of sensitive species, including bats, which may utilize abandoned buildings for roost sites. During the site visit, existing buildings slated for demolition were inspected for the presence of bats. In written comments received from CDFW on March 22, 2023 (see Appendix 4), it was noted that strong evidence of bat use was not observed in any of the buildings visited during the site visit, and that the buildings do not "provide the kind of thermal insultation and protection from the elements that bats generally prefer, particularly for maternity colonies and overwintering sites." However, the remains of multiple swallow nests, in addition to several owl pellets and whitewash, were observed.

In order to avoid potential take of nesting birds, CDFW recommends that building demolition occur from September through February, outside of the bird nesting season (typically, mid-March through mid-August for most species). Should building demolition be requested during the bird nesting season, CDFW notes that the Applicant may have a qualified biologist conduct nest surveys and identify buildings without active nests. CDFW requests these surveys be conducted no more than seven (7) days prior to demolition and be re-done if there is a lapse in project activities of seven days or more.

The Applicant is agreeable to having nesting surveys completed for any demolition scheduled during the standard nesting period. Should any active nests be identified within any of the buildings slated for removal during the nesting season, the Applicant agrees to allow the nesting to be completed prior to building removal or until a qualified biologist determines the nest(s) are no longer active.

Exhibit 2- Project Description, Demo Plan, and Septic Repair Site Plan
CDP 1-23-0136
Sequoia Forest Products LLC

3.0 CONCLUSION

Thank you for your consideration and hope this memorandum provides sufficient information and justification to support an Administrative Coastal Development Permit from the Coastal Commission for the proposed project. Please do not hesitate to call us at (707) 443-5054 should you have any questions or require any additional information.

Exhibit 2- Project Description, Demo Plan, and Septic Repair Site Plan
CDP 1-23-0136
Sequoia Forest Products LLC

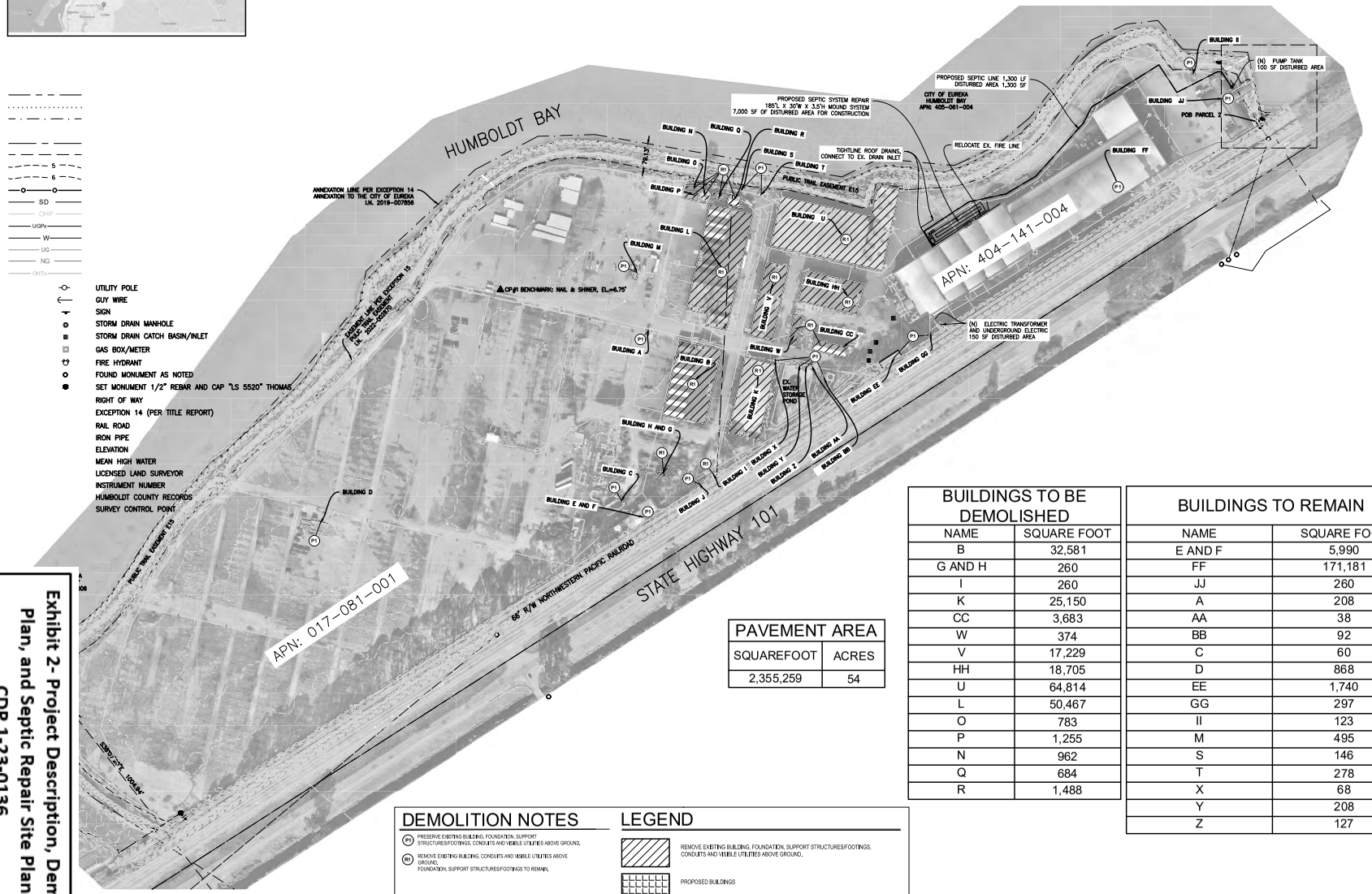
FIGURES

Exhibit 2- Project Description, Demo Plan, and Septic Repair Site Plan
CDP 1-23-0136
Sequoia Forest Products LLC

LACO

SEQUOIA FOREST PRODUCTS LLC DEMOLITION PROJECT

COASTAL COMMISSION DE MINIMIS WAIVER REQUEST
5151 STATE HIGHWAY 101, EUREKA, CA 95501
APNs: 017–081–001 and 404–141–004



PAVEMENT AREA	
SQUAREFOOT	ACRES
2,355,259	54

BUILDINGS TO BE DEMOLISHED	
NAME	SQUARE FOOT
B	32,581
G AND H	260
I	260
K	25,150
CC	3,683
W	374
V	17,229
HH	18,705
U	64,814
L	50,467
O	783
P	1,255
N	962
Q	684
R	1,488

BUILDINGS TO REMAIN	
NAME	SQUARE FOOT
E AND F	5,990
FF	171,181
JJ	260
A	208
AA	38
BB	92
C	60
D	868
EE	1,740
GG	297
II	123
M	495
S	146
T	278
X	68
Y	208
Z	127

DEMOLITION NOTES

(P1) PRESERVE EXISTING BUILDING, FOUNDATION, SUPPORT STRUCTURES/FOOTINGS, CONDUITS AND VISIBLE UTILITIES ABOVE GROUND.

(R1) REMOVE EXISTING BUILDING, CONDUITS AND VISIBLE UTILITIES ABOVE GROUND. FOUNDATION, SUPPORT STRUCTURES/FOOTINGS TO REMAIN.

LEGEND

REMOVE EXISTING BUILDING, FOUNDATION, SUPPORT STRUCTURES/FOOTINGS, CONDUITS AND VISIBLE UTILITIES ABOVE GROUND.

PROPOSED BUILDINGS

Exhibit 2- Project Description, Demo Plan, and Septic Repair Site Plan
CDP 1-23-0136
Sequoia Forest Products LLC

NO. REVISION | DATE

NOTES:
These are not construction documents and may not be to scale

LACO SURVEYORS | ENGINEERS | PLANNERS | GEOLOGISTS
lacoassociates.com

SEQUOIA FOREST PRODUCTS LLC.
5151 STATE HWY 101
EUREKA, CA 95501
APNs: 017-081-001 and 404-141-004

PLAT NO.
JOB NO. 10255.01
DATE MAY 4, 2023
DESIGNER
CHECKED DRAWN
SHEET

SEQUOIA FOREST PRODUCTS LLC SEPTIC REPAIR SITE PLAN

5151 STATE HIGHWAY 101, EUREKA, CA 95501
APNs: 017-081-001 and 404-141-004

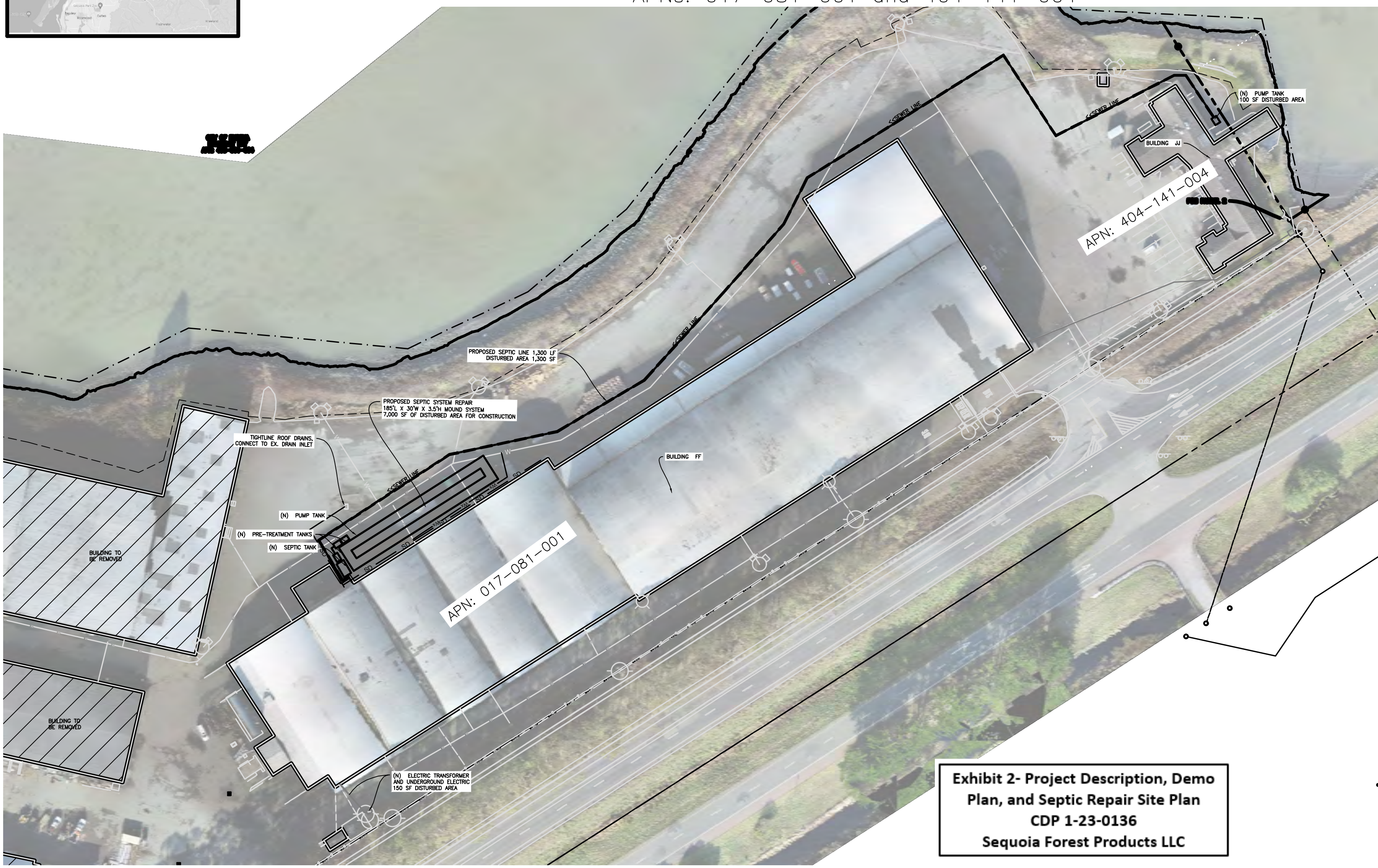


Exhibit 2- Project Description, Demo Plan, and Septic Repair Site Plan
CDP 1-23-0136
Sequoia Forest Products LLC

NOTES:
These are not construction documents and may not be to scale

LACO
SURVEYORS | ENGINEERS | PLANNERS | GEOLOGISTS
lacoassociates.com

SEQUOIA FOREST PRODUCTS LLC.
5151 STATE HWY 101
EUREKA, CA 95501
APNs: 017-081-001 and 404-141-004

LACO

May 5, 2023

10255.01

Sequoia Forest Products
506 Second Avenue, Suite 2300
Seattle, Washington 98104

Attention: Peter Stroble

Subject: Soil and Groundwater Management Plan - Revised
Brainard Mill Site, 5151 Highway 101, Eureka, California

Dear Mr. Stroble:

Development plans for the above-referenced property (Site) primarily include renovation and demolition of existing structure where minimal ground disturbance is anticipated, and management of construction debris is described in other documents. This Soil and Groundwater Management Plan covers the planned re-routing of potable and fire suppression water supply lines, installing a new septic system, and adding lines to connect buildings currently served by two separate septic systems.

The Site has historically been the location of a sawmill and remanufacturing facility since first developed in at least the early 1950s. A teepee burner was in use through the early 1970s, and the facility used above-ground storage tanks for storage of various fuels, and underground storage tanks (USTs) for storage of gasoline. An unauthorized release from the USTs resulted in an investigation and remediation overseen by Humboldt County Division of Environmental Health, which was closed in 1993. Soil and groundwater sampling since then related to Phase I and II Environmental Site Assessments in 2014 and 2015 and planning work as part of a new trail system that incorporates the berm separating the Site from Humboldt Bay, have been below Environmental Screening Levels (SFRWQB 2019)

Phase I Environmental Site Assessments (ESA) were completed for the property in 2014 (SLR) and 2022 (LACO). The Site was also the subject of investigation and cleanup from a leaking underground fuel tank (LUST) in the late 1980s. The work was overseen by Humboldt County Division of Environmental Health, which closed the case in the early 1990s. The LUST was not in the vicinity of the proposed construction covered by this SGMP and is not anticipated to lead to impacted soil or groundwater in this area.

The two Phase I ESAs recommended limited Phase II ESA work based on the potential for previous site uses to lead to dioxin impacts to soil or groundwater. Soil sampling during SLR's Phase II (2015) included three soil shallow soil samples in the general area covered by this SGMP that were analyzed for chlorinated phenols, a precursor to dioxins generated by the conical burners that were used onsite. LACO's Phase II ESA looked only at soil near the location of the conical burners. Neither of these Phase II ESAs reported results that would indicate the presence of dioxins.

Because of these previous studies, in our opinion, the likelihood of encountering impacts to soil or groundwater in anything other than *di minimus* concentrations in the area covered under this SGMP is low. Therefore, this SGMP treats soil that will be encountered during construction activities as non-hazardous, with provisions included for the unlikely possibility of encountering soil or groundwater with visual or olfactory signs of impact.

1.0 SOIL AND GROUNDWATER MANAGEMENT

Soil and groundwater encountered while conducting the work outlined above are not expected to be impacted with contaminants caused by previous Site uses. However, soil, groundwater, and debris related to the demolition of the existing septic system and water supply lines should be stored onsite until disposed of in an appropriately licensed facility according to the recommendations below.

1.1 Pre-construction Requirements

The following actions should be taken prior to the start of construction activities, or any soil-disturbing activities:

- A ticket shall be submitted to Underground Service Alert North (Phone: 811, Web: usanorth811.org) at least 48 hours before commencing construction.
- Refer to LACO utility maps for utility conflicts in addition to those noted by USA (Figure 1).

1.2 Soil Management

If construction activities produce visible dust or sediment, dust control measures established by the North Coast Unified Air Quality Management District and the City of Eureka shall be applied. This includes water mist or spray and shall be at all times applied during activities that generate dust. Water should not be applied at a rate that saturates the soil and generates sediment runoff. Water mist shall also be applied to the road surface in areas where vehicle or equipment traffic is expected.

If soil or groundwater with detectable petroleum hydrocarbon odor or visible sheen are encountered, they shall be excavated and/or extracted to the extent practicable and segregated into stockpiles or DOT 55-gallon drums, labeled appropriately with the owner's name, contents, and date of first accumulation, and stored on Site until characterized according to Section 2.0. Stockpiles of soil with visible contamination should be placed on top of 10 mil plastic, with sheets lapped where necessary to prevent seepage of contaminants into underlying soil. Stockpiles should not exceed 1,000 cubic yards or a height of 20 feet. If these conditions are encountered, construction personnel should implement Level D personal protective equipment (PPE) as described below.

Soil without visible contamination should also be stockpiled until sampled for characterization if it will be disposed of offsite; however, it is not required that the stockpile to placed on top of plastic sheeting.

Stockpiles shall be protected with an appropriate perimeter control (i.e., fiber rolls). If a stockpile will not be used or disposed for 14 days or more, it should be covered with 10 mil plastic to prevent dust migration or discharge of sediment-laden stormwater. If drums are used to store soil, they shall be labeled appropriately and stored at the Site pending characterization before transport to a certified treatment or disposal facility.

1.3 Groundwater Management

Groundwater that accumulates during construction activities shall be pumped to the onsite water storage pond, which is used only for fire suppression. Groundwater is typically shallow at the Site and encountering groundwater should be expected during the planned construction.

2.0 PERSONAL PROTECTIVE EQUIPMENT

Level D protection, as defined by the Occupational Safety and Health Administration (OSHA) Hazardous Waste Operations and Emergency Response Standard (HAZWOPER) are set forth in Title 29, Code of Federal Regulations, Part 1910.120, will be observed on site should obviously impacted soil and/or groundwater as described in Sections 1.2 and 1.3 be encountered. All workers and visitors to the work area will be required to wear, at a minimum, a hard hat, eye protection, safety vest for visibility, and steel-toed rubber boots. At the discretion of the Site Safety Officer, additional PPE may be required.

PPE will be maintained by trained employees and will be inspected by the Site Safety Officer or other employees as directed by the Site Safety Officer.

Table 1: Level D PPE

Protection Level:	Modified Level D
Head:	Hard hat
Eye:	Safety glasses or goggles
Ear:	Earplugs or earmuffs as warranted
Hand:	Latex, cotton, or leather gloves as appropriate
Body:	Normal work clothes: long-sleeve shirts and long pants, plus high-visibility "traffic vests" when work is performed in (or near) streets, alleys, driveways, parking lots, or any other areas where vehicles may be encountered
Feet:	Steel-toed rubber boots

3.0 SOIL CHARACTERIZATION

Stockpiled soil that is intended for offsite disposal will be sampled for laboratory analysis in order to determine the appropriate disposal facility. Soil encountered during this project is anticipated to be classified as non-hazardous waste, defined as follows, and appropriate for disposal at a Class III landfill.

- Nonhazardous waste and non-Resource Conversation and Recovery Act (RCRA) hazardous waste are wastes that do not cause harm to human or environmental health. These wastes may or may not have specific disposal requirements. Based on analyses to date, we anticipate no more than de minimis concentrations of contaminants; therefore, they are appropriate for reuse onsite, but will require characterization for offsite disposal.

Stockpiles shall be sampled at the following interval, or as required by the disposal facility: one four-point composite sample, to be composited by the laboratory, per 250 cubic yards where the total volume of soil does not exceed 2,499 cubic yards. Samples shall be analyzed for:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (EPA) Method 8260B.
- Semi-volatile organic compounds (SVOCs) and polycyclic aromatic hydrocarbons (PAHs) by EPA Method 8270C.
- Total petroleum hydrocarbons – diesel-range organics (TPH-DRO) by EPA Method 8015B
- Total petroleum hydrocarbons – oil-range organics (TPH-ORO) by EPA Method 8015B
- Total petroleum hydrocarbons – gasoline-range organics (TPH-GRO) by EPA Method 8015B
- California Title 22 metals – EPA Method 6010B/7470.
- Dioxins and Furans by EPA Method 1613B (note: only required if 8270 analyses result in detectable chlorinated phenols).

4.0 LIMITATIONS

LACO has exercised a standard of care equal to that generated for this industry to ensure that the information contained in this report is current and accurate. LACO disclaims any and all liability for any errors, omissions, or inaccuracies in the information and data presented in this report and/or any consequences arising therefrom, whether attributable to inadvertence or otherwise. LACO makes no representations or warranties of any kind including, but not limited to, any implied warranties with respect to the accuracy or interpretations of the data furnished. LACO assumes no responsibility of any third-party reliance on the data presented. Data generated for this report represents information gathered at that time and at the indicated locations. It should not be utilized by any third party to represent data for any other time or location. It is known that site and subsurface environmental conditions can change with time and under anthropologic influences. This report is valid solely for the purpose, site, and project described in this document. Any alteration, unauthorized distribution, or deviation from this description will invalidate this report.

5.0 REFERENCES

LACO Associates. 2022. Phase I Environmental Site Assessment, 5151 State Highway 101, Eureka, California.

LACO Associates. 2023. Letter Report of Findings, Limited Phase II Environmental Site Assessment, Brainard Mill Site, 5151 State Highway 101, Eureka, California.

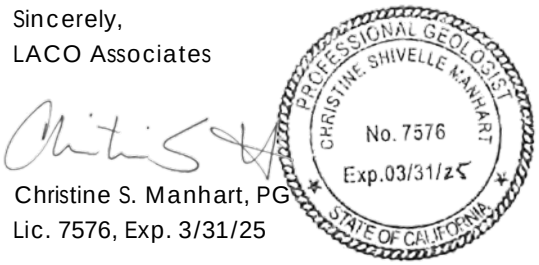
Occupational Safety and Health Administration (OSHA). Title 29, Code of Federal Regulations, Part 1910.120.

San Francisco Bay Regional Water Quality Control Board. "Environmental Screening Levels 2019 Revision 2," Available by request: ESLs.ESLs@waterboards.ca.gov

SLR International Corp. (SLR). 2014. Phase I Environmental Site Assessment. California Redwood Company. Brainard Mill, 5151 Highway 101 North, Eureka, California 95551.

SLR International Corp. (SLR). 2015. Summary Report for Phase II Environmental Site Assessment. California Redwood Company. Brainard Mill, Eureka, California 95551.

Sincerely,
LACO Associates



Christine S. Manhart, PG
Lic. 7576, Exp. 3/31/25

CSM:hjc

P:\10200\10255 Sequoia Forest Products\10255.01 Pre-Purchase Site Assessment\08 Geology\Reports\SGMP\10255.01 Brainard Mill Site SGMP 20230420.docx

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

2656 29th Street, Suite 201
Santa Monica, CA 90405

Matt Hagemann, P.G, C.Hg.
(949) 887-9013
mhagemann@swape.com

July 28, 2023
California Coastal Commission
North Coast District Office
1385 8th Street #130
Arcata, CA 95521
Tatiana.Garcia@coastal.ca.gov
Sent via email

Subject: Comments on Sequoia Forest Products LLC, Application No. 1-23-0136

Dear Ms. Garcia,

These comments are submitted on behalf of my client, Humboldt Baykeeper, which was launched in 2004 with a mission to safeguard coastal resources for the health, enjoyment, and economic strength of the Humboldt Bay community through education, scientific research, and enforcement of laws to fight pollution.

The Project proposes demolition and removal of sixteen (16) existing industrial buildings (including the boiler tower and dry kiln buildings, which are not required for the proposed use) and improvements to the existing septic system and electrical system.

1. The Revised Soil and Groundwater Management Plan dated May 5, 2023, (Exhibit 3, p.3) calls for soil characterization in stockpiled soils to be sampled for Dioxins and Furans by EPA Method 1613B only if 8270 analyses result in detectable chlorinated phenols. This is not adequate, since non-detections for PCP/TCP are often accompanied by high concentrations of dioxins. Pentachlorophenol, the primary potential source of dioxins and furans on the site, was prohibited for treating lumber in the 1980s, and has a short half-life, whereas dioxins and furans are much more persistent. This means that high concentrations of dioxins and furans often are detected when chlorinated phenols are not detected.

   Furthermore, dioxins and furans were detected in the only two samples analyzed for these Constituents of Concern in the 2021 Corridor Sampling Report for the Humboldt County Public Works in association with the Humboldt Bay Trail South Project (GHD Sept. 2021). One of these samples contained such high concentrations of the congeners

associated with pentachlorophenol that it had to be diluted and reanalyzed (Frontier Analytical Laboratory, 2021). We strongly recommend analyzing all samples for dioxins and furans, given that Humboldt Bay is on the 303(d) list as impaired by these extremely toxic, persistent compounds, and due to the proposed construction of an on-site sewage treatment system in potentially contaminated soil. In addition, the site was built on fill in what was once a tidal wetland, so there is a high likelihood that groundwater on the site is hydrologically connected to Humboldt Bay and presents a potential risk to remobilize and/or discharge dioxins and furans.

We understand that analyzing samples for dioxins and furans is expensive, and therefore recommend that at the very least, composite sampling be conducted as an initial screening method.

2. While we support Special Condition 5B, it does not ensure that contaminated soil will be removed. We strongly recommend adding the following language to Special Condition 5B: "Following excavation, five-point composite confirmation soil and sediment samples would be collected from the walls and the floor of each excavation area to evaluate contaminant concentrations in remaining soils and sediment."

3. We recommend that the hearing be postponed until the Phase I and II Site Assessments referenced in the Soil and Groundwater Management Plant are provided by the applicant and included in the record.

Thank you for the opportunity to comment on this proposed project. If you have any questions or would like to discuss these concerns, please contact Jennifer Kalt at Humboldt Baykeeper via email at jkalt@humboldtbaykeeper.org or by telephone at (707)-499-3678.

Sincerely,

Matt Hagemann, P.G., C.Hg.

Appendix A. **Corridor Sampling Report, Humboldt Bay Trail South – Segment 5.** Report prepared for Humboldt County Department of Public Works, 13 September 2021. GHD Inc. Eureka, CA.

Corridor Sampling Report

Humboldt Bay Trail South – Segment 5

Humboldt County Department of Public Works

13 September 2021

The Power of Commitment

GHD Inc
718 Third Street,
Eureka, California 95501, USA
T (707) 443 8326 | **E** eureka @ghd.com | **ghd.com**

Printed date	13/09/2021 7:43:00 AM
Last saved date	13 September 2021 7:43 AM
File name	11228763 – RPT – HBTS SEG 5 Corridor Sampling Report
Author	Matthew Tolley, Amy Monier, Brian Silva
Project manager	Josh Wolf
Client name	Humboldt County Department of Public Works
Project name	Humboldt Bay Trail South – Segment 5
Document title	Corridor Sampling Report | Humboldt Bay Trail South – Segment 5
Revision version	Rev 00
Project number	11228763

Document status

Status Code	Revision	Author	Reviewer		Approved for issue		
			Name	Signature	Name	Signature	Date
FINAL	00	Matt Tolley	Brian Silva		Josh Wolf		

Executive summary

GHD is pleased to provide the following Corridor Sampling Report (report) for the Humboldt County Department of Public Works (HCDPW) in association with the Humboldt Bay Trail South Project (project). This report summarizes field soil sampling activities conducted by HCDPW on June 8th and 9th, 2021 in support of project design limited to project trail Segment 5 (project site). This report included the following components associated with soil sampling at the project site: a summary of HCDPW field activities, an evaluation of HCDPW provided laboratory data for reuse, and an evaluation of data for waste characterization and worker health and safety screening criteria purposes. This report is a stand-alone document that describes the field procedures, field observations, and sample collection methods performed by HCDPW. As described in this report, GHD did not perform any field work or sample collection. GHD's scope is limited to a review of laboratory analytical results, data evaluation, data validation, findings, and recommendations for soil management during project construction.

This report summarizes the results associated with the June 8th and 9th, 2021 soil sampling event conducted by HCDPW in compliance with GHD's *Humboldt Bay Trail Sampling Analysis Plan – Segment 5 (GHD, 2021).* Additionally, this report supports obligations stated under Mitigations Measure HAZ-2 (Preliminary Site Investigation and Sampling) in the project's California Environmental Quality Act (CEQA) Initial Study/Mitigated Negative Declaration (GHD, February 2018).

As summarised in GHD's *Humboldt Bay Trail Sampling Analysis Plan – Segment 5 (GHD, 2021)*, Segment 5 is approximately 5,400 feet in length and is the focus area of this Report. Segment 5 is located along the California Redwood Company (CRC) perimeter level. This property previously operated as a sawmill and as of 2017, the majority of CRC property has been utilized as a warehouse facility and staging areas for a variety of tenants. The levee top width dimension is generally greater than twelve feet wide and typically constructed with soil and rip rap materials.

The project is intended to provide non-motorized (primarily pedestrian and bicycle) transportation and recreational access connecting the City of Eureka Waterfront Trail to Humboldt Bay Trail North via a Class I multi-use trail. The Project will connect to the existing Eureka Waterfront Trail, starting south of North Coast Railroad Authority's (NCRA) Eureka Slough Bridge in Eureka, continuing along the NCRA railroad transportation corridor north toward Brainard Slough.

Soil sample locations are presented in Appendix A (Figures) for reference and use. Tabulated analytical results from Segment 5 soil sampling are presented in Appendix B (Tables). Laboratory analytical reports associated with soil samples collected by HCDPW are presented in Appendix C (Analytical Laboratory Reports). Field notes associated sample collection and onsite work conducted by HCDPW are presented in Appendix D (Field Notes) and an overview matrix of sample locations is presented in Appendix E (Humboldt Bay Trail Segment 5 – Soil Sampling Matrix)

This report is subject to, and must be read in conjunction with, the limitations set out in section 1.4 and the assumptions and qualifications contained throughout the report.

Contents

Table index (embedded in document)

Appendices

1. Introduction

1.1 Purpose of this report

The purpose of this report is to document work performed and summarize analytical data resultant from soil samples collected by HCDPW on June 8th and 9th, 2021. Soils were sampled at HBTS Segment 5 by HCDPW in association with the project to determine applicability of soil re-use onsite, special handling requirements, and environmental considerations during project construction. GHD was contracted by HCDPW to review and evaluate laboratory analytical results associated with HBTS Segment 5 project soil sampling.

GHD's data evaluation included comparison of analytical results against applicable Department of Toxic Substances (DTSC) Screening Levels (SL's) and Environmental Protection Agency (EPA) Regional Screening Levels (RSL's). This report is a stand-alone document that describes the field procedures, field observations, and sample collection methods performed by HCDPW. The following subsections discuss laboratory analytical results, data evaluation, data validation, findings, and recommendations for soil management during project construction.

1.2 Project description

The Project is intended to provide non-motorized (primarily pedestrian and bicycle) transportation and recreational access connecting the City of Eureka Waterfront Trail to Humboldt Bay Trail North via a Class I multi-use trail. The Project will connect to the existing Eureka Waterfront Trail, starting south of North Coast Railroad Authority's (NCRA) Eureka Slough Bridge in Eureka, continuing along the NCRA railroad transportation corridor north toward Brainard Slough.

In addition to the proposed trail improvements between Eureka and Brainard Slough, the project includes sections of cable barrier fencing that are proposed to be installed at specified locations between the existing Humboldt Bay Trail North Project and United States Highway 101. The proposed trail alignment and key components are depicted on Figure 1 located in Appendix A (Figures). For the purposes of this study and as depicted on Figure 1 (Appendix A), the approximate 4.2-mile trail alignment was divided into nine functional study segments, in addition to the Humboldt Bay trail North segment, where extension of the safety cable barrier is proposed.

As summarised in GHD's *Humboldt Bay Trail Sampling Analysis Plan – Segment 5 (GHD, 2021)*, Segment 5 is approximately 5,400 feet in length and is the focus area of this report. Segment 5 is located along the California Redwood Company (CRC) perimeter levee adjacent to Humboldt Bay. This property previously operated as a sawmill and as of 2017, much of the CRC property has been utilized as a warehouse facility and staging areas for a variety of tenants. The levee top width is generally greater than twelve feet wide and appears to be constructed with soil and rip rap materials.

1.3 Project regulatory setting

The Project is subject to applicable rules and regulations governing the handling, transport and disposal of soil potentially containing constituents of concern (COC's), including, but not limited to the following:

1. Federal Resource Conservation and Recovery Act (RCRA).
2. California Environmental Protection Agency (Cal/EPA).
    a. California Health and Safety Code, Chapter 6.5, California Code of Regulations (CCR) Title 22.
3. California Department of Toxic Substances Control (DTSC).
    a. California Hazardous Waste Classification rules and regulations.
    b. 2001 State of California Information Advisory – Clean Imported Fill Material.

4. Department of Industrial Relations (DIR), Division of Occupational Safety and Health (Cal/OSHA).
    a. Title 8, CCR Section 1532.1 Lead

1.4 Scope and limitations

This report: has been prepared by GHD for Humboldt County Department of Public Works and may only be used and relied on by Humboldt County Department of Public Works for the purpose agreed between GHD and Humboldt County Department of Public Works as set out in section 1.4 of this report.

GHD otherwise disclaims responsibility to any person other than Humboldt County Department of Public Works arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in section 5.1 of this report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report (refer section(s) 1.5 of this report). GHD disclaims liability arising from any of the assumptions being incorrect.

The services undertaken by GHD in connection with this report were limited to data analysis and review of soil samples collected by HCDPW. GHD is not responsible for means and methods of collection or quality of samples.

1.5 Reporting assumptions

GHD's scope of work was limited and did not include field work, field work coordination, soil sample collection or any laboratory testing.

The HCDPW was solely responsible for the following:

1. Collecting soil samples and documentation of locations consistent with the GHD SAP dated May 6, 2021.
2. Ensuring that qualified and experienced staff collect samples in accordance with industry standard operating procedures.
3. Providing GHD with a stand-alone memo or report that documents field procedures, field observations, and collection methods.
4. Providing GHD with analytical results in .pdf and .xls format.
5. Pre-sampling and post-sampling decontamination of equipment.

The content of the report is based on assumptions made by GHD as described in this report and associated contracting documents. It is GHD's understanding that the report is solely to be used by HCDPW specifically in connection with the project and project site, and this stated purpose was a significant factor in determining the scope and level of service provided for in the contracting documents. Should the project or the report purpose change, this report immediately ceases to be valid and use of it by HCDPW, or any other party without GHD's prior review and written authorization, shall be at the user's sole risk.

2. Sampling activities

Field activities were conducted by HCDPW between June 8th and 9th, 2021. in accordance with GHD's *Sampling and Analysis Plan* (SAP) *Humboldt Bay Trail South (Segment 5),* dated May 6th, 2021. Sampling activities were conducted

by HCDPW at 12 locations as listed below in Table 2.1 (Sample Location Detail) and in the Project Soil Sampling Matrix presented as Appendix E (Humboldt Bay Trail Segment 5 – Soil Sampling Matrix). GHD provided HCDPW standard operation procedures (SOP's) for collection of soil samples. GHD did not directly observe HCDPW collecting soil samples and understands, per HCDPW that the SOP was implemented during the June 2021 field work.

Segment 5 follows the perimeter levee around the CRC facility property. Twelve soil borings (5-1 through 5-12) were advanced along Segment 5 as depicted on Figure 2 (Appendix A). At boring locations where grading cuts extend beyond one foot below ground surface (bgs), soil samples were collected from various intervals (0.0 to 5.0 bgs). A collective total of 16 samples were collected by HCDPW for this study.

2.1 Sampling pre-field activities

Prior to initiating the field activities, site access arrangements were coordinated by HCDPW.

The proposed location of each soil boring was marked with white paint prior to breaking ground and an Underground Service Alert (USA North 811) ticket was submitted at least two full business days prior to commencement of the work.

2.2 Sampling methodologies

At each of the 12 sample locations (Figure 2), HCDPW advanced soil borings using a hand auger or stainless-steel trowel and removed vegetation, rocks, ballast, and other debris from the sample in order to provide sufficient soil volumes for chemical analysis. The depth of soil borings ranged from 0.5 to 5.0 feet bgs. Soil samples were placed into clean, laboratory-supplied 400 millileter (ml) glass jars which were completely filled and sealed. The soil sample equipment was decontaminated between each location using detergent, followed by a clean water rinse. Sample collection depths are present in Table 2.1 (Sample Location Detail) and indicated on Figure 2 (Appendix A).

Following collection, each sample container was labelled with the sample number, sampling location, sample depth and time. The sample jars were placed in a cooler containing ice for transport to the state-certified laboratory for chemical analyses. The sample information was recorded on a chain-of-custody (COC) form which accompanied the samples to the laboratory. As detailed on the COCs, where a single soil sample was collected from a boring, samples were classified with an "S". Where multiple samples were collected from a boring, the near-surface soil samples (0.0 to 1.0 bgs) were classified as "a". Samples collected from 2.25 to 3.0 bgs were classified as "b" and the samples collected at 5.0 bgs was classified as "c". The sample naming convention was developed based upon the GHD SAP (2021) sampling requirements, location, and depth of sample collection.

All soiling boring locations were fully restored after sample collection by back-filling with native soils.

Field mapping of sample locations was completed by HCDPW, and GPS point representing sample locations were provided to GHD by HCDPW.

The collected soil sample depths are indicated below in Table 2.1 as well as presented on Figure 2 and Design sheets C-113 through C-121 (Appendix A).

Table 2.1 Sample Location Detail

Sample ID	Sample Depth (ft bgs)	Assessor Parcel Number (APN)	Sample Location
5-1-S	0.5	017-081-001-000	Levee
5-2-S	0.5	017-081-001-000	Levee
5-3-S	1.25	017-081-001-000	Levee
5-4a-S	1.0	017-081-001-000	Levee
5-4b-S	2.25	017-081-001-000	Levee
5-5-S	0.5	017-081-001-000	Levee
5-6a-S	1.0	017-081-001-000	Levee

Table 2.1 Sample Location Detail

Sample ID	Sample Depth (ft bgs)	Assessor Parcel Number (APN)	Sample Location
5-6b-S	3.0	017-081-001-000	Levee
5-6c-S	5.0	017-081-001-000	Levee
5-7a-S	1.0	017-081-001-000	Levee
5-7b-S	2.25	017-081-001-000	Levee
5-8-S	0.5	017-081-001-000	Levee
5-9-S	0.5	017-081-001-000	Levee
5-10-S*	1.0	017-081-001-000	Levee
5-11-S*	0.5	017-081-001-000	Levee
5-12-S*	0.5	017-081-001-000	Levee

Notes:

- S = Soil sample collected by HCDPW
- a = Near surface sample collected by HCDPW.
- b = Below surface sample collected by HCDPW.
- c = Deep sample collected by HCDPW.
- * = Soil from this location was analyzed for dioxins and furans using EPA Method 1613/SW-846 Method 8290A.

3. Chemical analyses and results

Soil samples collected from the 12 sample locations were submitted to North Coast Laboratories, Inc. (NCL), a California-certified analytical laboratory. Some samples were placed on hold pending results of initial analyses, while others were submitted for various constituents of concern, as detailed in GHD's 2021 SAP. Select sample analyses for constituents of concern and associated analytical methods included:

1. Total Petroleum Hydrocarbons as Gasoline (TPHg), Total Petroleum Hydrocarbons as Diesel (TPHd), and Total Petroleum Hydrocarbons as Motor Oil (TPHmo) by EPA Method 8015;
2. CAM 17 Metals by EPA Method 6010B/6020/7196
3. Contingency analyses for California and/or Federal hazardous waste characteristics;
4. Organochlorine Pesticides by EPA Method 8081;
5. Herbicides by EPA Method 8151;
6. Semi-volatile Organic Compounds (SVOCs) by EPA Method 8270; and
7. Dioxins and Furans by EPA Method 1613/SW-846 Method 8290A.

The laboratory data evaluation process included a comparison of analytical results against applicable screening criteria are presented in Appendix B (Tables). The laboratory data evaluation processed assessed the following for soil located within Segment 5:

1. Soil can be considered for unrestricted use by the contractor
2. Soil can be reused for the project, onsite or at another project site, and under which conditions apply
3. Soil is required to be deposed offsite at a licensed landfill
4. Requisite worker protection protocols related to project soil impacts.

As presented in the 2021 GHD Sap, analyses varied for each boring location. A summary overview of analysis is presented below in Table 3.1 Sample Analysis Matrix).

Table 3.1 Sample Analysis Matrix

Sample ID	Sample Location	TPHg by EPA Method 8015	TPHd by EPA Method 8015	TPHmo by EPA Method 8015	CAM 17 Metals	Organochlorine Pesticides by EPA Method 8081	Herbicides by EPA Method 8151	SVOCs by EPA Method 8270	Dioxins and Furans
5-1-S	Segment 5	X	X	X	X	X	X	X	
5-2-S	Segment 5	X	X	X	X	X	X	X	
5-3-S	Segment 5	X	X	X	X	X	X	X	
5-4a-S	Segment 5	X	X	X	X	X	X	X	
5-4b-S	Segment 5	X	X	X	X	X	X	X	
5-5-S	Segment 5	X	X	X	X	X	X	X	
5-6a-S	Segment 5	X	X	X	X	X	X	X	
5-6b-S	Segment 5	X	X	X	X	X	X	X	
5-6c-S	Segment 5	X	X	X	X	X	X	X	
5-7a-S	Segment 5	X	X	X	X	X	X	X	
5-7b-S	Segment 5	X	X	X	X	X	X	X	
5-8-S	Segment 5	X	X	X	X	X	X	X	
5-9-S	Segment 5	X	X	X	X	X	X	X	
5-10-S*	Segment 5	X	X	X	X	X	X	X	X
5-11-S*	Segment 5	X	X	X	X	X	X	X	X
5-12-S*	Segment 5	X	X	X	X	X	X	X	

Notes:

- EPA = Environmental Protection Agency
- S = Soil Sample
- X = Sample analyzed for associated constituents of concern

3.1 Analytical Results

In general, analytical results indicate:

- Organochlorine Pesticides, chlorinated herbicides and SVOCs were all below laboratory reporting limits.
- TPHd was detected in 13 of 16 samples ranging from below laboratory reporting limits to 280 mg/kg (5-6c-S).
- TPHg was only detected in 2 samples: sample 5-7a-S at 2.1 mg/kg and sample 5-7b-S at 1.3 mg/kg.
- TPHmo was detected in 13 of 16 samples ranging from below laboratory reporting limits to 5,400 mg/kg (5-6c-S).
- CAM 17 metals were below their respective screening levels except for chromium.

    - Chromium exceeded the soluble threshold limit concentration (STLC) for waste characterization.
    - 12 samples (5-1-S, 5-2-S, 5-3-S, 5-4A-S, 5-4B-S, 5-5-S, 5-7A-S, 5-8-S, 5-9-S, 5-10-S, 5-11-S and 5-12-S) were subsequently analyzed for chromium via STLC.
- Dioxins and furans were detected in both analyzed samples at a toxic equivalency (TEQ) of 151 for sample 5-10-S and 15.2 for sample 5-11-S.

Tabulated analytical results are included in Appendix B and the laboratory analytical reports are included in Appendix C.

3.2 Comparison to screening levels

Analytical results from Segment 5 were compared to DTSC SL's (Human Health Risk Assessment Note 3, June 2020). In the absence of an established DTSC SL, EPA RSL's (May 2021) were used.

TPHd, TPHg, TPHmo, organochlorine pesticides, chlorinated herbicides, SVOCs, antimony, barium, beryllium, cadmium, cobalt, copper, lead, molybdenum, nickel, selenium, silver, thallium, vanadium, zinc, mercury, and dioxins and furans were either not detected or were below their respective screening levels.

Arsenic exceeded the DTSC commercial/industrial soil screening level (0.36 mg/kg) in 12 of the 16 samples analyzed (Appendix A, Table 2). However, these exceedances are all within published background levels for arsenic in California soils (0.6 to 11.0 mg/kg). Additionally, the low-level detections of arsenic and generally even distribution across the study area gives further indication that the detections are background and not from historical operations.

Chromium was below EPA Composite Worker RSL (human health) screening levels for all samples, however the soluble threshold limit concentration limit (STLC) trigger level for waste characterization (per CCR Title 22) was exceeded (50 mg/kg) in 12 of the 16 samples (Appendix A, Table 2). These 12 samples required additional analysis via STLC (CAM WET) to determine soil hazard classification (California hazardous waste, non-hazardous waste, etc.) at these locations.

The STLC results were additionally required to complete the soil management and use evaluation process. The STLC analysis was subsequently performed to understand if the solubility threshold is exceeded for these samples. Of the twelve samples analyzed via STLC, three samples were reported non-detect (5-7a-S, 5-8-S, and 5-12-S), soil at these locations are considered non-hazardous waste.

The remaining nine samples analyzed (5-1-S, 5-2-S, 5-3-S, 5-4a-S, 5-4b-S, 5-5-S, 5-9-S, 5-10-S, and 5-11-S) ranged between 330 ug/L to 800 ug/L but were below the CCR Title 22 Soluble Threshold STLC of 5,000 ug/L. Soil at these locations are considered non-hazardous waste.

4. Conclusions and recommendations

Based on the information presented in this report, soil from Segment 5 is considered non-hazardous and is suitable for reuse onsite. While chromium exceeded the STLC trigger level in 12 samples, subsequent STLC analysis shows that the resulting leachate is below the screening criteria of 5,000 ug/L.

If soil is to be disposed of offsite, soil should be profiled and disposed of at an appropriate disposal facility due to the detections of petroleum hydrocarbons, arsenic, chromium, and dioxins and furans. Additionally, a health and safety plan should be prepared, and site workers should wear appropriate personnel protective equipment (PPE) during soil disturbance activities.

5. References

GHD. November 2017. Initial Site Assessment, Humboldt Bay Trail south. Prepared for Humboldt County Department of Public Works.

GHD. February 2018. Initial Study & Proposed Mitigation Negative Declaration, Humboldt Bay Trail south. Prepared for Humboldt County Department of Public Works.

GHD. August 2020. Corridor Sampling Report, Humboldt Bay Trail South. Prepared for Humboldt County Department of Public Works.

GHD. May 2021. Sampling and Analysis Plan, Humboldt Bay Trail South. Prepared for Humboldt County Department of Public Works.

State of California Environmental Protection Agency Department of Toxic Substance Control (DTSC). 2001. Information Advisory Clean Imported Fill Material.