CITY OF FORT BRAGG

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November 7, 2025

Morgan Bigelow
Project Manger
Site Mitigation and Restoration Program – Berkeley Office
Department of Toxic Substance Control

CONSIDERATIONS FOR A CONSOLIDATION CELL TO ACCOMMODATE CONTAMINATED SOILS RELATED TO OPERABLE UNIT-E REMEDIATION PROJECT

Dear Ms. Bigelow,

Thank you for the opportunity to provide input on whether an on-site consolidation cell would be an allowable approach to address contaminates within OU-E. The City believes that on-site terrestrial treatment and consolidation of contaminated sediment could be permissible.

Please find enclosed memo prepared by Marie Jones Consulting with input from City and Coastal Commission staff. Ms. Jones served as the City's Community Development Director for thirteen years, and has worked extensively on remediation issues related to the former Georgia Pacific mill site.

Respectfully,

S. McCormick

Sarah McCormick
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City of Fort Bragg

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MEMO

TO:	**Sarah McCormick, Economic Development Manager**
DATE:	**November 5, 2025**
PREPARED BY:	**Marie Jones, Marie Jones Consulting**
RE:	**Planning Permit Process and Prospects for a CDP for a Consolidation Cell on the GP Mill Site to Accommodate Dioxin Contaminated Soils from a Operable Unit E Remediation Project**

This memo provides:

1) An overview of why the Coastal Commission will not retain review authority for the proposed remediation project.

2) An overview of the prior CDP review and approval process for a consolidation cell for dioxin contamination soils from the Coastal Trail remediation process.

3) A review of the City's current LCP policies as they relate to the potential establishment of a new consolidation cell for soils from a Mill Pond Remediation process.

This memo was reviewed and vetted with City and Coastal Commission staff as part of its preparation. The Coastal Commission will have de novo review authority on a CDP appeal.

1. COASTAL PERMITTING JURISDICTION FOR NEW CONSOLIDATION CELL

The California Coastal Act, enacted in 1976, mandates that each local government with jurisdiction in whole or in part within the coastal zone prepare a local coastal program (LCP) for that portion of the coastal zone within its jurisdiction. Prior to the certification of a local government's LCP by the Coastal Commission, the Commission is

responsible for reviewing all proposed development projects within the coastal zone within the local government's jurisdiction. After certification of a local government's LCP, Coastal Act section 30519 states that the development review authority shall no longer be exercised by the Commission over any new development proposed within the area to which the certified LCP applies and instead shall be delegated to the local government that is implementing the LCP. The Commission retains development review authority over tidelands, submerged lands, and public trust lands in the coastal zone. The Commission also retains appeal authority over local government actions, meaning after certification of its LCP, certain actions taken by a local government on a coastal development permit (CDP) application may be appealed to the Commission.

If a local government's decision on a CDP is appealed to the Commission for review, the Commission's consideration of the appeal is a two-step process. The first step is determining whether the appeal raises a substantial issue that the Commission, in the exercise of its discretion, finds to be significant enough to warrant the Commission taking jurisdiction over the CDP application. Should the Commission determine that a substantial issue exists, the local government's decision on the CDP application is effectively nullified, and the Commission will then consider (in a separate public hearing or at the same hearing where substantial issue is found) the proposed CDP application "de novo" (anew). The applicable test for the Commission to consider in a de novo review of a development project is whether the proposed development is in conformity with the certified LCP and, if the development is between the sea and the first public road paralleling the sea, whether the application is in conformity with the public access policies of the Coastal Act.

The City of Fort Bragg has a certified LCP, which was originally approved by the Coastal Commission in the 1980s and which was comprehensively updated and recertified by the Commission in 2008. As the Mill Site is within an LCP-certified area, the City is responsible for the review of CDP applications for development associated with the Mill Site. Pursuant to its CDP authority, the City reviewed and approved Georgia Pacific's first proposed remediation project for the Mill Site in 2005. However, that approval was appealed to the Commission (Commission Appeal No. A-1-FTB-05-053), and the Commission found the appeal raised a substantial issue with respect to the grounds on which the appeal was filed. As such, the City's permit decision was nullified, and the Commission reviewed Georgia Pacific's CDP application de novo. The Commission subsequently approved the CDP application for the remediation project, with conditions, in May 2006 (Commission De Novo CDP No. A-1-FTB-05-053).

After approving a coastal development permit de novo, if changes to the project are proposed (such as after CDP approval but prior to or during project implementation), the Commission retains review authority for any such proposed changes to its de novo CDP through a CDP amendment process. At times, changes to a project that has been constructed or completed may be proposed, or changes may be proposed to certain conditions and restrictions imposed on a development project or subject property

through the Commission's de novo CDP. In those cases, the Commission may retain review authority pursuant to its CDP amendment process, particularly if such changes may lessen or avoid the intent of the approved permit, conditions or restrictions (e.g., if a deed restriction imposed under the Commission's CDP is proposed to be terminated due to newly discovered material information that was not known/discovered at the time the Commission granted the CDP).

In the case of the CDP approved de novo by the Commission in 2006 for Georgia Pacific's remediation project (CDP No. A-1-FTB-05-053), the permit was amended multiple times by the Commission to authorize certain changes to the original permit conditions, and in some cases additional related remediation and site characterization activities were proposed under those amendment requests, including, under a CDP amendment authorization in 2009, relating to the removal of 13,000 cubic yards of contaminated soils from the Coastal Trail and their subsequent placement in a 1.5-acre consolidation cell. That permit amendment (CDP Amendment Application No. A-1-FTB-05-053-A6) also authorized certain proposed changes to special conditions imposed by the Commission on the original de novo CDP. When it later was determined that the consolidation cell was not functioning properly and, for various reasons, the decision was made to remove it (see history below), since the Commission had permitted the construction of the consolidation cell under the CDP amendment referenced above, the Commission also retained review authority over the proposed removal of the consolidation cell. The Commission approved CDP Amendment Application No. A-1-FTB-05-053-A9 in 2011 authorizing the removal of the consolidation cell, offsite disposal of contaminated soils, waste, and debris, and backfilling of the excavated area with clean fill materials.

If the new property owner (Mendocino Railway) were to propose a new consolidation cell on the Mill Site, the City would be responsible for reviewing the CDP application for the proposed new development in an LCP-certified area. The City's approval could be appealed to the Commission. An appeal to the Coastal Commission is likely, due to significant community involvement, interest, and controversy surrounding this project. Therefore, close coordination between City and California Coastal Commission staff during project permitting is advisable.

The prior CDPs for remediation of the Mill Site were reviewed under the City's old (original) LCP. That LCP was comprehensively updated with new policies and standards in 2008, and thus, the standard of review for a new CDP would be the City's current (updated) certified LCP.[1] While a consolidation cell was approved in 2008, that prior authorization cannot be utilized to predict the outcome of a future consolidation cell permit request. Whether or not a new consolidation cell permit is granted will depend on the specific project location and details, what coastal resource issues may be raised,

[11] Accessible from the City's website: https://www.city.fortbragg.com/departments/community_development/general_plan_zoning_information/local_coastal_program.php.

whether there are feasible, less environmentally damaging alternatives available to remediate contaminated soils, and whether the project as proposed is consistent with the City's currently certified LCP. An analysis of the conformance of a consolidation cell with the City's LCP is provided in section 3 below.

2. CONSOLIDATION CELL PERMIT HISTORY

The consolidation cell has a rich permit history which includes multiple appeals and modifications by the California Coastal Commission. This permit and appeal history is summarized below.

CDP Permit Number	**Project Description**
City Council & Planning Commission Approval of Local CDP 3-05 October 11, 2005 August 10, 2005	The initial CDP request from Georgia Pacific primarily authorized removal of several industrial structures on the Georgia-Pacific Mill Site as well as authorization for additional Investigation and Interim Remedial Measures Project. Specifically, the CDP authorized: (1) removal of building foundations, additional investigation, and if necessary, interim remedial measures (IRMs) at the following areas: (a) Compressor House, (b) Former Sawmill #1, (c) Powerhouse and associated buildings, (d) Fuel Barn, (e) Chipper Building, (f) Water Treatment Plant, (g) Powerhouse Fuel Storage Building, (h) Sewage Pumping Station, (i) Dewatering Slabs, (j) Water Supply Switch Building, (k) Former Mobile Equipment Shop, and (l) associated subsurface structures; (2) removal of debris from Glass Beaches #1 through #3; and (3) removal of geophysical anomalies on Parcels 3 and 10 of the former Georgia-Pacific Sawmill site. The project was approved with fifty-eight special conditions, including requirements that: (1) the project be conducted in conformance with the excavation and stockpiling performance standards set forth in the work plan and stormwater pollution prevention plan; (2) all other applicable permits be obtained prior to commencement and copies thereof be provided to the City; (3) a final dust prevention and control plan be submitted for the review and approval of the City Engineer; (4) temporary fencing be erected around the impounded wetlands at the site and no equipment or stockpiling be placed within 50 feet of wetland areas or within 100 feet from the outer perimeter of rare plant areas; (5) a copy of the finalized rare plant mitigation and monitoring plan approved by the California Department of Fish and Game be submitted to the City; (6) a final revegetation plan be submitted for the review and approval of the Community Development Director; (7) additional rare plant surveys be conducted for those plants which were not in their blooming cycle at the time preceding botanical reports had been prepared; and (8) if evidence of cultural resource materials are uncovered, all work cease and a qualified archaeologist be consulted as to the significance of the materials and appropriate disposition and/or mitigation measures.

Commission Appeal and CDP Nos. A-1-FTB-05-053 December 14, 2005 (Appeal hearing) and May 12, 2006 (De Novo CDP hearing)	The City's permit was appealed to the Coastal Commission, with the appeal raising contentions that the project as approved by the City did not conform to LCP policy requirements or adequately address issues related to: (a) sensitive habitat areas, including the extent and types of wildlife utilization of these sensitive areas; (b) water quality protection, including issues associated with the stockpiling of contaminated materials and insufficient analysis of excavation and removal of solid waste debris; (c) archaeological resources protection; and (d) geologic instability concerns. The Commission determined (in December of 2005) that the appeal raised a substantial issue with respect to the grounds on which the appeal was filed. Thus, the City's permit approval was nullified, and the Commission took jurisdiction over the CDP application. The Commission approved Georgia Pacific's permit request de novo. The Commission attached nine new special conditions to the permit, which were intended to assure consistency with the provisions of the Fort Bragg LCP and the public access and recreation policies of the Coastal Act.
Commission CDP Amendment Nos. A-1-FTB-05-053-A1 through A-1-FTB-05-053-A5 September 2006 to May 2008	Georgia Pacific requested, and the Commission granted, five amendments to its de novo CDP between September 2006 and May 2008. The amendments involved (generally) revisions to: the authorized foundation removal and interim measures; to various special conditions included on the original (de novo) permit; to increase the extent and scope of building demolition work; and to perform modified remedial measures. Four of those amendments were immaterial, meaning they were project changes determined to be functionally related to the Commission's underlying de novo CDP that the Commission's Executive Director determined would not result in adverse impacts, either individually or cumulatively, on coastal resources or public access. One amendment (-A2) involving revisions to special conditions related to marine mammal monitoring requirements and measures needed to protect cultural resources and was processed as a material amendment.
Commission CDP Amendment No. A-1-FTB-05-053-A6 December 12, 2008	Project (material) amendment to (1) excavate approximately 13,000 cubic yards of dioxin-impacted soil from several areas in Parcel 10 (within the area referred to as Operable Unit A [OU-A South]; (2) construct an approximately 1.5-acre consolidation cell with an engineered cap for onsite, with subsurface management of the excavated dioxin-impacted soil; and (3) modify special conditions of the Commission's original (de novo) permit regarding the protection of sensitive bird species and to allow construction activities to be conducted outside of the previously authorized work window. . This CDP Amendment authorized on-site consolidation and capping of approximately 13,000 cubic yards of dioxin/furan-impacted soil. Consolidated dioxin contaminated soils were removed from southern parcels of the Mill Site, which were later sold to the City for the construction of the Fort Bragg Coastal Trail Project. These contaminated soils were then consolidated on site in a consolidation cell per DTSC approvals of the Final Operable Unit A (OU-A) Consolidation Cell Work Plan. Pursuant to Special Condition 12 of the amendment, the consolidation cell was authorized on a temporary five-

	year basis, because at the time that the amendment was acted on, DTSC had not yet completed its 5-year review of the OU-A RAP, and it was unclear whether there may be treatment methods available in the future (e.g., fungal degradation techniques) to treat the contained materials. The applicant was thus required to re-apply for a separate amendment application within five years to either remove the consolidation cell or propose to retain it permanently. (The applicant did remove the consolidation cell as described below). Any proposal to retain the consolidation cell was required to be supported by an analysis demonstrating its effectiveness over the past five years, a discussion of whether remediation techniques were available to successfully treat the contamination rather than simply contain it in place, and an updated alternatives analysis demonstrating that there were no feasible, less environmentally damaging alternatives available.
Commission CDP Amendment No. A-1-FTB-05-053-A7 September 2010	Immaterial amendment to reduce the likelihood of stormwater runoff and ground water entering into the previously constructed dioxin-contaminated soil consolidation cell by (a) deepening existing perimeter ditches along the southern and eastern edges of the cell and shifting the ditches laterally away from the cell, (b) replacing two 12-inch-diameter culverts down gradient of the cell, and (c) extending the geosynthetic clay liner (GCL) in the final cover system across the northern anchor trench to divert water away from the anchor trench.
Commission CDP Amendment No. A-1-FTB-05-053-A9 September 6, 2011	Coastal Development Permit Amendment Application No. A-1-FTB-05-053-A9, the application of Georgia Pacific Corporation for the removal of the previously authorized approximately 1.5-acre contaminated soil consolidation cell at the former Georgia-Pacific Wood Products Manufacturing Facility in Fort Bragg. See related description in -A6 above.

The Consolidation Cell, constructed in 2008, unexpectedly captured and contained approximately one million gallons of stormwater runoff per year. This rate of infiltration into the Consolidation Cell was much greater than had been expected and led to a greater than expected water management effort. No evidence of release from the Consolidation Cell was identified. The stormwater was pumped from the Consolidation Cell, and transported to the City of Fort Bragg Wastewater Treatment Plant (WWTP) for discharge with periodic sampling to verify compliance with discharge limitations. The permittee evaluated various alternatives to correct the infiltration problem. Upgrades to the cap of the Consolidation Cell were considered, as was removal of the Consolidation Cell with transportation and disposal of the contaminated soil to licensed landfills. The changes to the consolidation cell authorized under CDP Amendment A-1-FTB-05-053-A7 (above) were never constructed because Georgia Pacific determined that it was in its best interest to haul the materials off site. Ultimately, removal of the Consolidation Cell and off-site disposal of the soils contained in the cell was determined to be a practical and environmentally beneficial alternative to upgrading the existing cap based on such factors as the construction effort to upgrade the cap, long term maintenance of

the facility, continued water management activities post-upgrade, and loss of land value in future potential development.

It is unclear if a new design for consolidation cell can overcome these stormwater challenges.

Community Acceptance Concerns and Potential Engineering Challenges for a Consolidation Cell

The prior consolidation cell approach represented a community compromise that was challenged through an appeal. The compromise attempted to balance concerns over the environmental costs (greenhouse gas emissions) and environmental justice issues associated with hauling materials to another community versus the potential environmental effects of retaining contaminated materials on site and creating an area of land that would be potentially undevelopable. This was a controversial project which resulted in packed hearings and many letters of opposition to City Council, DTSC, the Water Board and the Coastal Commission.

It is unclear, if a consolidation cell would receive community acceptance, which is a concern that is considered by DTSC in its deliberations. Some potential community acceptance issues with consolidation cell could include:

1. Dedication of a large area of land for a consolidation cell, which could allow passive recreation activities or open space but would likely not support development.

2. Issues about design, engineering and technical performance. Given that the prior cell design leaked, effort would need to be made to ensure that would not become an issue in a new design.

3. Issues relating to the specific proposed location of the consolidation cell, such as potential impacts on ocean views, how it related to the long-term land use goals for the site, stormwater management, etc.

It could be beneficial for DTSC to seek community input on this alternative. Likely, if a CDP was approved by City Council it would be appealed to the Coastal Commission, so close coordination with the Coastal Commission on this option is also recommended.

3. ANALYSIS OF THE CONFORMANCE OF POTENTIAL CONSOLIDATION CELL WITH THE CITY'S LCP

The following includes a generic and theoretical analysis of the conformance of an undescribed consolidation cell project (lacking details on specific location, size, design, etc.) with City's Certified Local Coastal Program. Clearly, an actual project would receive a more detailed and nuanced analysis.

This analysis assumes:

1. That the project would not be located within 100 feet (or more, if a buffer analysis recommended a larger buffer) of wetlands, environmentally sensitive habitat or archaeological resources. So, studies for all of these resources and appropriate buffer widths should be completed prior to selection of a potential consolidation cell location.
2. That the project will not interfere with public access and recreation.

LCP Land Use Policies

The City will need to determine if a consolidation cell is a "permitted use" within the Timber Resources Industrial zoning district or whether an LCP amendment would be needed to change the land use and zoning designation of the consolidation cell area to a designation that would allow for the construction of a consolidation cell. Under the existing certified LCP, this use is not specifically described in the zoning category definition (see below). Generally, the Timber Resources Industrial zone does allow "related support activities." Also, a consolidation cell could be considered part of "Related Support Facilities and Activities Required to Maintain Manufacturing Operations." Remediation related to prior, permitted industrial uses may be considered related activities to such manufacturing operations. In fact, such "Related Support Facilities" specifically allow "buffer areas or screening used for industrial purposes but which enable the operation to comply with noise, air quality, water quality, and other environmental standards." Although the remediation work itself does not serve a "screening" purpose, it is environmental cleanup directly related to the allowed industrial screening uses for which the pond was created and which was the source of the contamination. And even though the remediation would not be part of "maintaining" the manufacturing operations -- that have now ceased, the remediation is required by law and by direct order of DTSC, and is a consequence of the maintenance of such manufacturing activities and operations, deriving directly from Georgia-Pacific's operations at the property (and the order was originally directed at GP). Thus, a consolidation cell may fit within this permitted use.

On the other hand, since manufacturing operations have stopped, the City may determine that it is not allowable given current zoning. Generally, the Director of Community Development has the authority to determine the meaning and applicability of any provision of the City's Coastal LUDC that is subject to interpretation; the Director may also refer such issues to the City's Planning Commission for determination, which may be appealed to the City Council.

Timber Resources Industrial (IT) This designation is intended primarily for timber resource and forest products related manufacturing. It allows a variety of industrial uses relating to forest products processing such as log yards, manufacturing wood products, planing mills, storage of forest by-products, commercial seedling nurseries, and related support activities including railroad lines, truck shipping facilities, boiler and powerhouse operations, and related uses. In addition, it allows aquaculture with issuance of a conditional use permit. Open space, public parks, and recreation use types and public facilities are also permitted in this district. The uses listed below are examples of the types of uses which may be allowed in this designation. Refer to the Coastal LUDC for a more precise definition of permitted and conditional uses.

- Log Yard Activities - unloading, loading, and storage of logs.

- Storage and Inventory of finished product and forest by-products, and storage of finished goods inventory, including chips, bark, and hog fuel. Storage includes indoor and outdoor storage.

- Manufacturing and Remanufacturing: sawmills, studmills, veneer plants, plywood and/or layup plants, fence plants, planing mills, portable or fixed wood chip or hog fuel manufacture, dry kilns, and air dry yards.

- Product Shipping Operations: includes trucking, rail shipping, and maritime operations, wholesale distribution, re-loading facilities and operations.

- Remanufacturing and Secondary, Value-Added Manufacturing of forest products: includes, but not limited to, finger jointing, molding and pattern plants, sash and door plants, window plants, gluelam beams, truss and joint fabrication, engineered forest products such as laminated veneer lumber, particleboard or oriented strand board and pallet plants.

- Commercial Seedling Nursery Operations.

- **Related Support Facilities and Activities Required to Maintain Manufacturing Operations including**: railroad lines that include areas for car storage, boiler and powerhouse operations for timber product manufacture, warehousing of products produced on site, maritime docks, shops for maintenance, fabrication and fueling, water collection, storage, transport, and treatment, fire alarm and control systems, security systems, areas for storage of salvage and/or recycling of metals, wood, wire, rubber and other materials, **and buffer areas or screening used for industrial purposes but which enable the operation to comply with noise, air quality, water quality, and other environmental standards**.

- Aquaculture with a conditional use permit.

- Public parks and recreation facilities, open space and conservation uses, and public facilities such as stormwater retention ponds and wetland treatment systems.

The tables below present a brief preliminary analysis of compliance requirements for a consolidation cell project with relevant policies of the City's Coastal General Plan. Additional analyses are needed to verify compliance with the City's Coastal Land Use & Development Code (Zoning Code). This analysis of compliance with the Zoning Code would be done as part of a project-specific permit application for a particular remediation option.

Relevant Land Use LCP Policies	Path to compliance
Policy LU-6.2 In areas designated for industrial land uses, coastal-dependent and coastal-related industrial uses shall have priority over other industrial uses on or near the shoreline.	The Coastal Act and the City's LCP prioritize coastal-dependent and coastal-related industrial uses over other industrial uses. Approval of a consolidation cell, which is not a coastal-dependent or coastal-related use, would need to be supported by findings demonstrating an adequate supply of industrial lands remain available for priority coastal-dependent and coastal-related uses, or that the area of the consolidation cell could support other such uses once remediation is complete, potentially including public access or recreation which are also coastal related priority uses. Given the availability of undeveloped or underutilized industrial lands on the Mill Site or the potential for re-use of the area of the consolidation cell, these findings could likely be made.
Policy LU-7.4 Where feasible, locate new hazardous industrial development away from existing developed areas.	If the consolidation cell is considered hazardous, it should be located away from existing developed areas.
Policy LU-7.5 **Industrial Land Use Standards**: Require that industrial development avoid or minimize creating substantial pollution, noise, glare, dust, odor, or other significant adverse impacts.	Compliance with this policy typically can be achieved through application of appropriate project design measures and construction BMPs.

LCP Safety & Hazard Policies

Policy	Compliance

Policy SF-1.1 **Minimize Hazards**: New development shall: (a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard; and (b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs. Policy SF-1.2: All ocean-front and blufftop development shall be sized, sited and designed to minimize risk from wave run-up, flooding, and beach and bluff erosion hazards, and avoid the need for a shoreline protective structure at any time during the life of the development.	A proposed consolidation cell shall be engineered to ensure that it does not contribute to erosion and that the weight of the soil does not contribute to instability of the underlying geology. Importantly, the development should be sited sufficiently away from the bluff edge to account for bluff retreat over the life of the development, and the effects of sea level rise should be factored into slope stability and bluff setback calculations. The intent of these policies is to appropriately site new development such that it avoids the need for shoreline armoring in the future to protect the permitted development, should erosion and instability occur during the development's lifespan.
Policy SF-1.3: **Geotechnical report required**. Applications for development located in or near an area subject to geologic hazards, including but not limited to areas of geologic hazard shown on Map SF-1, shall be required to submit a geologic/ soils/ geotechnical study that identifies all potential geologic hazards affecting the proposed project site, all necessary mitigation measures, and demonstrates that the project site is suitable for the proposed development and that the development will be safe from geologic hazard. Such study shall be conducted by a licensed Certified Engineering Geologist (CEG) or Geotechnical Engineer (GE) and shall be prepared consistent with the requirements of Section 18.54.040(C) of the Coastal Land Use and Development Code. Refer to Map SF-1: Geologic Hazards. Refer to the General Plan Glossary for definitions of these terms.	This report likely would be required for any consolidation cell proposed to be located on the Mill Site or other bluff top lands in the City.
Policy SF-1.4: **Blufftop Setback**. All development located on a blufftop shall	As with the previously cited policies, the development would need to be sited

be setback from the bluff edge a sufficient distance to ensure that it will be stable for a projected 100-year economic life. Stability shall be defined as maintaining a minimum factor of safety against sliding of 1.5 (static) or 1.1 (pseudostatic), as described in Section 18.54.040(F) of the Coastal Land Use and Development Code. This requirement shall apply to the principal structure and accessory or ancillary structures. Slope stability analyses and erosion rate estimates shall be performed by a licensed Certified Engineering Geologist or Geotechnical Engineer.	sufficiently away from the bluff edge to account for bluff retreat over the economic life of the development, factoring in the effects of sea level rise and increased waves. The policy requires the economic lifespan to be presumed as 100 years.
Policy SF-1.5: Siting and design of new blufftop development and shoreline protective devices shall take into account anticipated future changes in sea level. In particular, an acceleration of the historic rate of sea level rise shall be considered. Development shall be set back a sufficient distance landward and elevated to a sufficient foundation height to eliminate or minimize to the maximum extent feasible hazards associated with anticipated sea level rise over the expected 100-year economic life of the structure.	Same comments as above.
Policy SF-1.7: **Alterations to Landforms**: Minimize, to the maximum feasible extent, alterations to cliffs, bluff tops, faces or bases, and other natural land forms in the Coastal Zone. Permit alteration in landforms only if erosion/runoff is controlled and either there exists no other feasible environmentally superior alternative or where such alterations re-establish natural landforms and drainage patterns that have been eliminated by previous development activities.	The project's final grades would need to conform with existing topography on the site to the maximum extent feasible. Given that the site no longer has "natural topography" as it has been heavily graded and reformed in the past, a change in slope for the consolidation cell could be appropriate so long as the final slopes appear natural.
Policy SF-1.10: **Seawalls, Breakwaters and Other Shoreline Structures**: Prohibit construction of seawalls,	This policy prohibits the construction of seawalls and other armoring devices to protect new development except in certain limited

breakwaters, revetments, groins, harbor channels, retaining walls, and other structures altering the natural shoreline processes unless a finding is made that such structures are required: (1) to serve coastal-dependent uses; or (2) to protect public beaches in danger from erosion; or (3) to protect existing structures that were legally constructed prior to the effective date of the Coastal Act; …; or (5) for a development consistent with Section 30233(a) of the Coastal Act and only when it can be demonstrated that said existing structures are at risk from identified hazards if no feasible or less environmentally damaging alternative is available and the structure has been designed to eliminate or mitigate adverse environmental impacts, including impacts upon local shoreline sand supply. The design and construction of allowed protective structures shall respect natural landforms and provide for lateral beach access…	instances enumerated in the policy. This policy could likely be met with an appropriate location and design of the consolidation cell away from areas subject to tidal inundation and or sea level rise.
Policy SF-2.4 **Tsunami**: Minimize development in areas subject to tsunami. Policy SF-2.5: Review development proposals to ensure that new development is not in an area subject to tsunami damage and if such development is otherwise allowable that it is designed to withstand tsunami damage.	The consolidation cell would not be permittable in the lowland area of OU-E, which is the only area subject to tsunami.
Policy SF-8.1 **Protection from Hazardous Waste and Materials**: Provide measures to protect the public health from the hazards associated with the transportation, storage, and disposal of hazardous wastes (TSD Facilities).	The consolidation cell must be designed to protect public health.
Policy SF-8.2 **Support Environmental Review of Hazardous Waste Transportation, Storage and Disposal Facilities**: Support a thorough environmental review for Hazardous	A full CEQA review would be required for a consolidation cell. The EIR for this project would satisfy this requirement.

Waste Transportation, Storage and Disposal (TSD) Facilities, including waste to energy projects, proposed in the Fort Bragg area.	
Policy SF-8.2 **Protection from Hazardous Waste and Materials**: Provide measures to protect the public health from the hazards associated with the transportation, storage, and disposal of hazardous wastes (TSD Facilities).	DTSC and the applicant would need to provide sufficient evidence to the City to ensure that the hazardous wastes are secured in the consolidation cell such that they would not be a threat to public health, and that they would be appropriately monitored for any changes to threats to public health.
Policy SF-8.2 **Support Environmental Review of Hazardous Waste Transportation, Storage and Disposal Facilitie**s: Support a thorough environmental review for Hazardous Waste Transportation, Storage and Disposal (TSD) Facilities, including waste to energy projects, proposed in the Fort Bragg area. Program SF-8.2.1 Require that the environmental review of proposed Hazardous Waste TSD Facilities shall, at a minimum, contain the following analysis and information: a) A worst-case generic description, estimating the number, type, scale, scope, location, and operating characteristics of proposed TSD Facility(ies) based on the projected volumes and types of hazardous waste. Data from existing facilities regarding the probability of accidents, spills, and explosions should be documented and included; b) An assessment of risk resulting from the accidental release, fire, and explosion of hazardous waste. This assessment should take into account all phases of operation including transport, storage, and treatment. The assessment of risk should include the probability of occurrence and magnitude of impact;	DTSC's RAP and/or the EIR for this project should address Policy SF-8.2 and address the items listed under program SF-8.2.1 "a through e".

c) Quantify estimates of air emissions, by applying emissions rates of existing facilities to the future volumes of hazardous waste and identifying emissions for incinerator facilities under worst case circumstances; d) An assessment of non-incineration alternatives for hazardous waste treatment such as chemical dechlorination for the detoxification of PCBs, dioxins, solvents, and pesticides; photolysis; and biological treatment; and e) Review of the operating characteristics of proposed TSD Facilities, taking into account maintenance and operating procedures, emissions monitoring, and safety devices to assure the ongoing enforceability of the mitigating measures that are required.	

LCP Policies to Protect Water Quality

Relevant Water Quality LCP Policies	Path to compliance
Policy OS-1.12 **Drainage & Erosion Control Plan.** Permissible development on all properties containing environmentally sensitive habitat, including but not limited to those areas identified as ESHA Habitat Areas on Map OS-1, shall prepare a drainage and erosion control plan for approval by the City. The plan shall include measures to minimize erosion during project construction, and to minimize erosive runoff from the site after the project is completed. Any changes in runoff volume, velocity, or duration that may affect sensitive plant and animal populations, habitats, or buffer areas for those populations or habitats, shall be reviewed by a qualified biologist to ensure that there will not be adverse hydrologic or, erosion, or sedimentation impacts on	This plan likely would be required if any ESHA is in the site vicinity.

sensitive species or habitats. Mitigation measures shall be identified and adopted to minimize potential adverse runoff impacts. All projects resulting in new runoff to any streams in the City or to the ocean shall be designed to minimize the transport of pollutants from roads, parking lots, and other impermeable surfaces of the project.	
Policy OS-9.1 **Minimize Introduction of Pollutants.** Development shall be designed and managed to minimize the introduction of pollutants into coastal waters (including the ocean, estuaries, wetlands, rivers, streams, and lakes) to the extent feasible.	The design of the consolidation cell will need to ensure that pollutants contained in consolidated soils do not get into stormwater and thereby migrate into wetlands.
Policy OS-9.2 **Minimize Increases in Stormwater Runoff.** Development shall be designed and managed to minimize post-project increases in stormwater runoff volume and peak runoff rate, to the extent feasible, to avoid adverse impacts to coastal waters.	If the consolidation cell includes an impervious cover, it will need to include a stormwater infiltration system (bioswales, etc.) to infiltrate stormwater that falls on top of the consolidation cell cover into nearby areas.
Policy OS-9.5**. Maintain and Restore Biological Productivity and Water Quality.** The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.	The design of the consolidation cell will need to ensure that pollutants contained in consolidated soils do not get into stormwater or groundwater and thereby migrate into wetlands or coastal waters.
Policy OS-10.1**: Construction-phase Stormwater Runoff Plan.** All development that requires a grading permit shall submit a construction-phase	Construction of the consolidation cell would require development and implementation of a construction-phase erosion, sedimentation, and polluted runoff control plan.

erosion, sedimentation, and polluted runoff control plan. This plan shall evaluate potential construction-phase impacts to water quality and coastal waters, and shall specify temporary Best Management Practices (BMPs) that will be implemented to minimize erosion and sedimentation during construction, and prevent contamination of runoff by construction chemicals and materials.	
Policy OS-10.2**: Post-Construction Stormwater Runoff Plan.** All development that has the potential to adversely affect water quality shall submit a post-construction polluted runoff control plan ("Runoff Mitigation Plan"). This plan shall specify long-term Site Design, Source Control, and, if necessary, Treatment Control BMPs that will be implemented to minimize stormwater pollution and erosive runoff after construction, and shall include the monitoring and maintenance plans for these BMPs.	A post-construction polluted runoff control plan will be required.
Policy OS-10.3**: Emphasize Site Design and Source Control BMPs.** Long-term post-construction Best Management Practices (BMPs) that protect water quality and control runoff flow shall be incorporated in the project design of development that has the potential to adversely impact water quality in the following order of emphasis: A) Site Design BMPs: Any project design feature that reduces the creation or severity of potential pollutant sources, or reduces the alteration of the project site's natural flow regime. Examples include minimizing impervious surfaces, and minimizing grading. B) Source Control BMPs: Any schedules of activities,	A) Project design should minimize impervious surfaces and include other site design BMPs. B) Project should include long-term post-construction source control BMPs.

prohibitions of practices, maintenance procedures, managerial practices, or operational practices that aim to prevent stormwater pollution by reducing the potential for contamination at the source of pollution. Examples include covering outdoor storage areas, use of efficient irrigation, and minimizing the use of landscaping chemicals. C) Treatment Control BMPs: Any engineered system designed to remove pollutants by simple gravity settling of particulate pollutants, filtration, biological uptake, media adsorption, or any other physical, biological, or chemical process. Examples include vegetated swales, and storm drain inserts. Site Design BMPs may reduce a development's need for Source and/or Treatment Control BMPs, and Source Control BMPs may reduce the need for Treatment Control BMPs. Therefore, all development that has the potential to adversely affect water quality shall incorporate effective post-construction Site Design and Source Control BMPs, where applicable and feasible, to minimize adverse impacts to water quality and coastal waters resulting from the development. Site Design and Source Control BMPs may include, but are not limited to, those outlined in the City's Storm Water Management program.	C) Project may need to address treatment control BMPs if contaminated soils have any possibility to migrate or if appropriate to guard against inadvertent migration.
Policy OS-10.4**: Incorporate Treatment Control BMPs if Necessary**. If the combination of Site Design and Source Control BMPs is not sufficient to protect water quality and coastal waters	Treatment control BMPs would be required.

consistent with Policy OS-9.3, as determined by the review authority, development shall also incorporate post-construction Treatment Control BMPs. Projects of Special Water Quality Concern (see Policy OS-12.1) are presumed to require Treatment Control BMPs to meet the requirements of OS-9.3. Treatment Control BMPs may include, but are not limited to, those outlined in the City's Storm Water Management program, including biofilters (e.g., vegetated swales or grass filter strips), bioretention, infiltration trenches or basins, retention ponds or constructed wetlands, detention basins, filtration systems, storm drain inserts, wet vaults, or hydrodynamic separator systems.	
Policy OS-11.2**: Preserve Functions of Natural Drainage Systems**. Development shall be sited and designed to preserve the infiltration, purification, detention, and retention functions of natural drainage systems that exist on the site, where appropriate and feasible. Drainage shall be conveyed from the developed area of the site in a non-erosive manner.	The Mill Site is heavily developed and does not include many natural drainage systems.
Policy OS-11.3**: Minimize Impervious Surfaces.** Development shall minimize the creation of impervious surfaces (including pavement, sidewalks, driveways, patios, parking areas, streets, and roof-tops), especially directly connected impervious areas, where feasible. Redevelopment shall reduce the impervious surface site coverage, where feasible. Directly connected impervious areas include areas covered by a building, impermeable pavement, and/or other impervious surfaces, which drain directly into the storm drain system without first flowing across permeable land areas (e.g., lawns).	If the consolidation cell can be constructed as a pervious system, that is preferrable, though not required. However, to the degree feasible, impervious surfaces should be minimized.

Policy OS-11.4**: Infiltrate Stormwater Runoff.** Development shall maximize on-site infiltration of stormwater runoff, where appropriate and feasible, to preserve natural hydrologic conditions, recharge groundwater, attenuate runoff flow, and minimize transport of pollutants. Alternative management practices shall be substituted where the review authority has determined that infiltration BMPs may result in adverse impacts, including but not limited to where saturated soils may lead to geologic instability, where infiltration may contribute to flooding, or where regulations to protect groundwater may be violated.	Project design should ensure that stormwater from any impervious surfaces is appropriately infiltrated on site as part of the project design.
Policy OS-11.5**: Divert Stormwater Runoff into Permeable Areas**. Development that creates new impervious surfaces shall divert stormwater runoff flowing from these surfaces into permeable areas, where appropriate and feasible, to enhance on-site stormwater infiltration capacity.	See above comment.
Policy OS-11.8**: Landscape with Native Plant Species**. The City shall encourage development to use drought-resistant native plant species for landscaping, to reduce the need for irrigation and landscaping chemicals (e.g., pesticides and fertilizers).	Upon completion the consolidation cell would need to be landscaped with native plants.
Policy OS-11.10**: Continue Operation and Maintenance of Post-Construction BMPs.** Permitees shall be required to continue the operation, inspection, and maintenance of all post-construction BMPs as necessary to ensure their effective operation for the life of the development.	An O&M plan and plan implementation would be required.

The project would be considered a development of special water quality concern (as defined in Policy OS-12.1) due to its size, as the project would include more than 5,000 SF of impervious area. Thus, the consolidation cell would have to comply with the following additional policies:

Policy OS-12.2**: Additional Requirements for Developments of Special Water Quality Concern**. All Developments of Special Water Quality Concern (as identified in Policy OS-12.1, above) shall be subject to the following four additional requirements to protect coastal water quality:	
1) Water Quality Management Plan. The applicant for a Development of Special Water Quality Concern shall be required to submit for approval a Water Quality Management Plan (WQMP), prepared by a qualified licensed professional, which supplements the Runoff Mitigation Plan required for all development. The WQMP shall include hydrologic calculations per City standards that estimate increases in pollutant loads and runoff flows resulting from the proposed development, and specify the BMPs that will be implemented to minimize post-construction water quality impacts.	Project will require a Water Quality Management Plan.
2) Selection of Structural Treatment Control BMPs. As set forth in Policy OS-10.4, if the review authority determines that the combination of Site Design and Source Control BMPs is not sufficient to protect water quality and coastal waters as required by Policy OS-9.3, structural Treatment Control BMPs shall also be required. The WQMP for a Development of Special Water Quality Concern shall describe the selection of Treatment Controls BMPs, and applicants shall first consider the BMP, or combination of BMPs, that is most effective at removing the pollutant(s) of concern, or provide a justification if that BMP is determined to be infeasible.	Structural Control BMPs may be required.
3) 85th Percentile Design Standard for Treatment Control BMPs. For post-construction treatment of runoff in Developments of Special Water Quality Concern, Treatment Control BMPs (or suites of BMPs) shall be sized and designed to treat, infiltrate, or filter the amount of stormwater runoff produced by all storms up to and including the 85th percentile, 24-hour storm event for volume-based BMPs, and/or the 85th percentile, 1- hour storm event (with an appropriate safety factor of 2 or greater) for flow-based BMPs.	85^{th} percentile storm is the design model for all treatment designs.
4) Goal for Runoff Reduction. In Developments of Special Water Quality Concern, the post-development peak	

stormwater runoff discharge rate shall not exceed the estimated pre-development rate for developments where an increased discharge rate will result in increased potential for downstream erosion or other adverse habitat impacts.	This standard would need to be met.

In addition, during the construction process the consolidation cell would need to comply with the following policies:

Policy OS-14.1: **Minimize Polluted Runoff and Pollution from Construction**. All development shall minimize erosion, sedimentation, and the discharge of other polluted runoff (e.g., chemicals, vehicle fluids, concrete truck wash-out, and litter) from construction activities, to the extent feasible. Policy OS-14.2: **Minimize Land Disturbance During Construction**. Land disturbance activities during construction (e.g., clearing, grading, and cut-and-fill) shall be minimized, to the extent feasible, to avoid increased erosion and sedimentation. Soil compaction due to construction activities shall be minimized, to the extent feasible, to retain the natural stormwater infiltration capacity of the soil. Policy OS-14.3: **Minimize Disturbance of Natural Vegetation**. Construction shall minimize the disturbance of natural vegetation (including significant trees, native vegetation, and root structures), which are important for preventing erosion and sedimentation. Policy OS-14.4: **Stabilize Soil Promptly**. Development shall implement soil stabilization BMPs (including, but not limited to, re-vegetation) on graded or disturbed areas as soon as feasible. Policy OS-14.5: **Grading During Rainy Season**. Grading is prohibited during the rainy season (from November 1 to March 30), except in response to emergencies, unless the review authority determines that soil conditions at the project site are suitable, and adequate erosion and sedimentation control measures will be in place during all grading operations.

Visual Resource LCP Policies

Policy CD-1.1: **Visual Resources**. Permitted development shall be designed and sited to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural landforms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance scenic views in visually degraded areas.	The mill site arguably does not have any natural landforms, since it was graded flat for industrial operations. This area is visually degraded and new land forms proposed for the consolidation cell should enhance scenic views if feasible. This could be achieved through public access to the top of the consolidation cell to access better coastal views. If the proposed project includes a significant change in grade or change in vegetation character impacting visual resources, the

	impact to visual resources will need to be analyzed.
Policy CD-1.4: New development shall be sited and designed to minimize adverse impacts on scenic areas visible from scenic roads or public viewing areas to the maximum feasible extent.	See above comment.
Policy CD-1.5: All new development shall be sited and designed to minimize alteration of natural landforms by: 1. Conforming to the natural topography. 2. Preventing substantial grading or reconfiguration of the project site. 3. Minimizing flat building pads on slopes. Building pads on sloping sites shall utilize split level or stepped-pad designs. 4. Requiring that man-made contours mimic the natural contours. 5. Ensuring that graded slopes blend with the existing terrain of the site and surrounding area. 6. Minimizing grading permitted outside of the building footprint. 7. Clustering structures to minimize site disturbance and to minimize development area. 8. Minimizing height and length of cut and fill slopes. 9. Minimizing the height and length of retaining walls	Please see comment to Policy CD 1.1 above. Given that the site no longer has “natural topography” as it has been heavily graded and reformed in the past, a change in slope for the consolidation cell could be appropriate so long as the final slopes look natural.
Policy CD-2.5: **Scenic Views and Resource Areas:** Ensure that development does not adversely impact scenic views and resources as seen from a road and other public rights-of-way.	See above comment for policy CD-1.1.

Coastal Land Use & Development Code.

This City’s Coastal Land Use and Development Code includes many specific regulations which will be applied to the final remediation solution on the mill site, including a potential consolidation cell.

Please see the following specific sections:

The project is subject to the requirement to obtain a Coastal Development Permit.

https://www.codepublishing.com/CA/FortBragg/#!/LUC17/FortBraggLUC177/FortBraggLUC1771.html#17.71.045

The project will need to obtain a grading permit.
https://www.codepublishing.com/CA/FortBragg/#!/LUC17/FortBraggLUC176/FortBraggLUC1760.html#17.60

The project will need to comply with chapter 17.62 Grading, Erosion and Sediment Control regulations.

https://www.codepublishing.com/CA/FortBragg/#!/LUC17/FortBraggLUC176/FortBraggLUC1762.html#17.62

The Project will need to comply with 17.64 Stormwater Runoff and Pollution Control regulations:

https://www.codepublishing.com/CA/FortBragg/#!/LUC17/FortBraggLUC176/FortBraggLUC1764.html#17.64

The Project will need to comply with 17.5 Resource Management regulations:

https://www.codepublishing.com/CA/FortBragg/#!/LUC17/FortBraggLUC175/FortBraggLUC175.html

USFWS/CDFW Review

The water surface and wetlands in and adjoining the ponds, open grassland, and coastal bluffs in the vicinity of the proposed work sites represent areas where either observed or potential habitat utilization by several environmentally sensitive wildlife species subject to protections afforded by the Federal Endangered Species Act and/or the Migratory Bird Act, as administered by the U.S. Fish and Wildlife Service (USFWS) and CDFW, has been documented. These species include, but are not limited to, brown pelican (*Pelecanus occidentalis californicus*), snowy egret (*Egretta thula*), white tailed kite (*Elanus leucurus*), bald eagle (*Haliaetus leucocephalus*), and western snowy plover (*Charadrius alexandrinus nivosus*). In addition, the project site also is considered as containing habitat conditions suitable for the endangered Howell's spineflower (*Chorizanthe howellii*) and Menzies' wallflower (*Elysium menziesii*). In addition, the larval host plant Early Blue Violet (*Viola adunca*) for the endangered Behren's silverspot butterfly (*Speyeria zerene behrensii*) may also occur on portions of the former mill site. Therefore, any proposed project will be reviewed by the USFWS to ensure that the project as may be conditionally authorized by USFWS under any technical assistance consultation, incidental take statement, or harassment permit is consistent with the project approval granted via a coastal development permit.

California Environmental Quality Act (CEQA)

The proposed project will be reviewed in its entirety for conformance with CEQA and appropriate mitigation measures shall be implemented.