

**STATE OF HAWAI‘I
DEPARTMENT OF LAND AND NATURAL RESOURCES
OFFICE OF CONSERVATION AND COASTAL LANDS
HONOLULU, HAWAI‘I**

February 10, 2017

**BOARD OF LAND AND
NATURAL RESOURCES
STATE OF HAWAI‘I
HONOLULU, HAWAI‘I**

REGARDING: Conservation District Use Application (CDUA) MA-3776 for the *Makai Hāna Landfill Clean-up and Closure Project*

APPLICANT: County of Maui – Department of Environmental Management

AGENT: Munekiyo Hiraga

LANDOWNER: State of Hawai‘i (*Fee Owner*); County of Maui (*EO No. 3304*)

LOCATION: Hāna District, Island of Maui

TMKs: (2) 1-3-006:012

AREA OF PARCEL: 34 acres

AREA OF USE: 6.4 Acres

SUBZONE: General & Limited

DESCRIPTION OF AREA:

The proposed project site is the *Hāna Landfill* which is located on the eastern coast of Maui, adjacent to Ka‘inalimu Bay, north of Hana (**Exhibit 1**). The current landfill is cut into two (2) sections, separated by Waikoloa Road – these are designated as the active Hāna Landfill and the Makai Hāna Landfill (**Exhibit 2**). The *active* Hāna Landfill is located on approximately 13.2 acres *mauka* (landward) of Waikoloa Road while the Makai Hāna Landfill (MHL), and the focus of this application, is located on approximately 6.4 acres *makai* (seaward) of Waikoloa Road (**Exhibit 3**). The project site (i.e., Parcel 012) is located north of Hāna Bay and is accessed by Waikoloa Road via the Hāna Highway. The parcel to the south of the subject property is currently vacant, and is owned by *Keola Hāna Maui, Inc.* while east of the project site the Pacific Ocean. For reference, the proposed project area (i.e., the MHL) is located within the State Land Use Conservation District General and Limited Subzones (**Exhibit 4**).

According to the applicant, the Hāna Landfill has been utilized by the County of Maui for solid waste disposal since the 1960’s. In 1969, the State Board of Land and Natural Resources (BLNR)

approved a right-of entry in favor of the County of Maui to utilize a portion of Parcel 12, approximately 29 acres in area, along with a 20-ft. wide road easement, for a garbage dump site. Since 1969, the Hāna Landfill has served as the sole disposal and recycling facility for the districts of Ke‘anae, Nāhiku, Hāna, Kīpahulu, and Kaupō.

According to information proved in the CDUA, landfill operations were carried out into the 2000’s in the area *makai* of Waikoloa Road on the portion of land located within the Conservation District. Waste disposed in the MHL included municipal solid waste, green waste, construction and demolition waste, and scrap metal, including old automobiles. Around 2003, the MHL operations were closed and The portion of Parcel 12 lying west of Waikoloa Road outside the Conservation District continued to receive waste. This area is still in use and is the area of the current active landfill operations. After all disposal activities at the MHL were discontinued around 2003, most waste was covered with soil, although some areas of green waste were left without cover and allowed to decompose. Scrap metal was removed for recycling. Over time, most of the MHL area became covered with natural vegetation ranging from grass to heavy brush.

There are no utilities to the *active* Hāna Landfill. Electrical power is provided by photovoltaic panels with a gasoline fuel generator as backup. Communication is by radio and mobile phones. Water is hauled to the site by a water truck that is used for non-drinking purposes, such as dust control. An individual toilet is onsite served by an individual wastewater system (IWS). Drainage at the *active* Hāna Landfill is handled by an existing drainage basin.

There are no structures located within the MHL site; however, there are several existing structures located near the active portion of the Hāna Landfill including the landfill office buildings, monitoring wells, and other operational devices (**Exhibit 5**).

Environment

Descriptions of the project site suggest the area contains moderately deep, gently sloping to steep, well drained soils with textures ranging from moderately fine to fine grained. Lava flows underlie the project site, consisting of geologically “recent” flows. The underlying “flows” consist of hard, glassy, and angular pieces of lava that is difficult to traverse. The Flood Insurance Rate Map (FIRM) for this region indicates that the site is in Flood Zone X, and area of low flood risk and minimal flooding. Two (2) small areas along the eastern boundary of the MHL are located within Flood Zone AE; this represents a special flood hazard area subject to inundation by the one percent (1%) annual chance flood with base flood elevation of seventeen (17) feet above sea level (asl).

Floral and Faunal Resources

As indicated in the Environmental Assessment for the project, the project area is heavily vegetated with lowland, windward, non-native forest except for cleared portions around the existing landfill. During a Flora and Fauna survey conducted in November 2006 by an agent for the applicant, the terrain of the property was placed into three categories: (1) forest; (2) landscape; and (3) landfill.

In the forest area, which surrounds the MHL, the undeveloped portion of this property were described as disturbed, wet, lowland forest dominated by non-native plant species such as Ironwood, gunpowder tree, African-tulip, and “star” flower. Only a few native species were observed on site, they include *hala*, *naupaka*, *kaunaoa*, and *kakalaioa*.

The “landscape” area refers to the active Hāna Landfill site; it was stated by the applicant that the area has received awards for its attractive landscape. Ornamental plants have been placed around the entrance, the load office, and along the existing access roadway.

The “landfill” area is a cleared and grubbed, largely barren ground and covered trash. The covered areas including the MHL and the periphery have an abundance of common non-native plants that have taken over exposed soil and previously disturbed ground. Only one native plant was observed at the “landfill” area (common *uhaloa*).

According to a review by the US Fish and Wildlife Service (USFWS) in 1999, no federally listed threatened or endangered species were found on the property, nor were any observed that could be considered candidates for such status; additionally, no “special habitats” were observed or documented.

Storm water and Drainage

As stated in the CDUA, storm water drainage in the vicinity of the project site generally follows natural contours, sheet flowing into streams and gullies which eventually discharges into coastal waters. Within the limits of the MHL, extensive grass and landscaping covers the area. The vegetative cover and porous cinder soils generally provide the necessary capacity to absorb runoff in times of heavy rains. Since the *active* Hāna Landfill operates above the surrounding grade, offsite runoff during storm conditions from the MHL area to the *active* Hāna Landfill area is prevented by natural contours. Under current conditions, the *active* Hāna Landfill is graded with a soil cover in a series of terraces, sloped outward to control runoff resulting from direct rainfall. The terraces are sloped to direct runoff downslope into an existing storm water detention basin located on site.

Existing Cultural, Architectural, and Archeological Resources

An Archaeological Assessment (AA) of the existing and future active portions of the Hāna Landfill site and adjacent State lands was carried out in September 2003. The field assessment found no significant material culture remains during the inspection of the project area. In addition, no significant above-ground structural remains were noted in the adjacent area. Given the very rocky surface of the surrounding a' a terrain, it does not appear likely that the immediate study area was substantially utilized by pre-contact Hawaiians or during the post-contact sugar and ranch eras. It was stated by the applicant that the level of previous disturbance from the grading and filling operations has likely eliminated any evidence of former use throughout the project area.

An updated AA, which included subsurface testing, was carried out in June 2015, around the perimeter of the limits of waste to assess potential impacts of the proposed action on historic properties. In response to comments dated *October 8, 2015* from the State Historic Preservation Division (SHPD), a revised archaeological assessment was submitted to SHPD for review. A pedestrian survey and fourteen (14) backhoe test excavations were utilized to assess subsurface conditions along the boundaries of the MHL site. Shallow fill deposits were found to overlay a 'a lava substrate in sampled portions of the project area. There were no significant material culture remains located during the surface inspection and subsurface testing of accessible portions of the project area. The general area in the vicinity of the margin of the MHL appears to have been previously impacted by bulldozing activities.

The updated AA report further recommended that a project specific monitoring plan be developed with the input of the SHPD. By letter dated *December 24, 2015*, SHPD accepted the revised archaeological assessment report and concurred with the recommendation for archaeological monitoring.

A Cultural Impact Assessment (CIA) was completed for the proposed project, and included research and review of historical information as well as interviews with local residents and community leaders. The CIA reported that the area has been heavily degraded by the present landfill facility use, and has been in operation for decades. One interviewee stated that in the 1970's Hāna residents would leave items at the landfill as an impromptu "swap meet", thus it became a community staple. Along the coast is the Pi'ilani Trail which circumnavigates the Island of Maui, is still present and in use. An access easement preserves the path in this area, and no work is proposed near or on the existing path as it is not within the existing boundaries of the project site.

The Hāna district is noted as being significant from a historical and cultural perspective due to its long history of use by native Hawaiians. However, lands in the vicinity of the project site have been significantly altered through landfill development and the existing Hāna Landfill facility. In addition, archaeological field work, historical research and local resident interview indicate there are no historic properties or significant cultural or religious activities which will be adversely impacted by the proposed action.

PROPOSED LAND USES:

According to the applicant, the proposed action is necessary to comply with Title 40 of the *Code of Federal Regulations* (CFR), which sets forth minimum national criteria under the Resource Conservation and Recovery Act, for all *municipal solid waste landfill* (MSWLF) units. All MSWLF units that receive waste on or after October 9, 1993 are required to meet the provision of Title 40; with regards to the MHL, clean-up and removal (or lining and covering) the municipal solid waste (MSW) deposited at the MHL from 1993 (effective date of CFR 40) to 2003 is necessary to meet these federal criteria. CFR 40 regulations are mirrored in the State of Hawai'i, Hawai'i Administrative Rules (HAR) §11-58.1-17 which have also been approved by the US Environmental Protection Agency (EPA) and authorize the State of Hawai'i Department of Health (DOH) to review and approve closure activities. As such, the CFR regulations are met through compliance with the HAR, §11-58.1-17.

To bring the MHL into compliance with Federal and State regulations, the County of Maui conducted a subsurface investigation to determine and document the limits, depth, and volume of the waste that was placed in the MHL during the years of active use. The investigation mapped the limits of the MHL area, and estimated the volume of waste to be approximately 89,200 cubic yards (c.y.) with an additional 10,300 c.y. of clean soil would need to be excavated. Rather than a "closure in place" alternative (which would require placement of a soil cap and engineered drainage facilities) the County of Maui – Department of Environmental Management (DEM) proposed a "clean closure" which will involve removal of all the waste from the MHL and the transfer of removed waste across Waikoloa Road to the *active* Hāna Landfill area. Scrap metal will be set aside for hauling to a recycling facility.

The Maui DEM has stated, a “clean closure” of the MHL will involve the following procedures, titled “Removal Protocol”:

- Survey and demarcate the limits of the waste (**Exhibit 6**);
- Clear and grub vegetation from any area slated for waste removal – disturbed areas will be limited to phases in order to minimize soil erosion;
- Strip existing cover soil to expose the buried refuse, and stockpile the soil as fill required for subsequent grading purposes, any excess soil will be available for use as daily cover for the *active* Hāna Landfill;
- Excavate refuse to expose clean native soil, and haul out refuse to a process area of the *active* Hāna Landfill. Processing of refuse will be conducted by: 1) removal of large metal items to a stockpile, 2) removal of abandoned automobiles buried in gullies at the southeast corner of the project area, 3) removal of any large wood items including stumps or logs, to a separate stockpile area, 4) depending on conditions, removal of other items or material that can be readily separated for recycling, and 5) transfer the remaining refuse to the *active* Hāna Landfill.

After all refuse has been excavated from an area, soil samples will be collected from the exposed subgrade, and tested to determine compliance with Department of Health (DOH) *Environmental Action Levels* (EAL). In addition, samples will be collected from native soils in areas hydrogeologically upgradient from the landfill, to determine background levels of any chemical constituents detected in subgrade soil within the landfill footprint. Any areas where subgrade levels with soil constituents exceeding EALs and background concentrations will be further excavated to expose bedrock or to soils that test within background concentrations.

No area of exposed subgrade will be backfilled, covered with soil, or revegetated until testing has determined soil contaminant levels are below the stated EAL values. The excavated area will be surveyed to determine if there are any encroachments beyond the permitted site boundaries; once the survey is completed the site will be graded to achieve a relatively uniform slope to manage runoff.

The removal of waste will occur in three (3) phases over a period of three (3) years (**Exhibit 7, 7a, 7b**):

1. Phase I – removal of approximately 25,000 c.y. of refuse and 3,000 c.y. of soil;
2. Phase II – removal of approximately 32,000 c.y., of refuse and 3,000 c.y. of soil; and
3. Phase III – removal of approximately 33,000 c.y. of refuse and 3,000 c.y. of soil.

The refuse excavation and removal will be conducted in a series of small stages in order to minimize the area of exposed waste. After all refuse has been removed, the site will be graded (**Exhibit 8**), erosion control measures emplaced, and the site will be planted with an appropriate mixture of grasses and other ground cover to bring the site, to the extent possible, back to its pre-landfill topography.

ALTERNATIVES ANALYSIS:

While the preferred alternative for the proposed project is the “clean closure” of the MHL, the applicant provided an alternative analysis for the closure of the MHL which would still meet the requirements outlined by the State and Federal Government:

Close in Place Alternative

The close in place alternative would require importing low-to-medium permeability soils to place a minimum of 18-inches of soil “cap” over the entire 6.4 acres MHL area; additional work would include engineered drainage facilities, and compliance with post-closure maintenance and monitoring for a minimum of 30-years. It was determined that this alternative was incompatible with the objectives of the Conservation District and required long-term maintenance and monitoring.

No-Action Alternative

The no action alternative would mean that the MHL would not be in compliance with the Federal and State regulations which would present difficulties in the future use of the site as a Municipal Waste and Land Fill area.

SUMMARY OF COMMENTS:

The Office of Conservation and Coastal Lands (OCCL) referred the application to the following state agencies for review and comment: DLNR – Maui District Land Office (MDLO), Division of Forestry and Wildlife (DOFAW), State Historic Preservation Division (SHPD), Commission on Water Resource Management (CWRM), Engineering Division (ENG), and the Division of Conservation and Resource Enforcement (DOCARE). Additional State Agencies include: State of Hawai‘i (SOH) Department of Transportation (HDOT), SOH-Department of Health (HDOH), Office of Hawaiian Affairs (OHA) and the Office of Environmental Quality Control (OEQC). The application was also provided to the County of Maui – Planning Department, the US Fish and Wildlife Service (USFWS), as well as the Hāna Public Library and Hāna Community Center for review and comment.

Comments received from the following agencies have been summarized by staff as follows:

DLNR – Forestry and Wildlife (DOFAW)

Agency had no comments on the proposed project

DLNR – Engineering (ENG)

Agency had no comments on the proposed project

DLNR – Maui District Land Office (MDLO)

No comments were received

DLNR – State Historic Preservation Division (SHPD)

Field work was conducted by one archeologist on May 29 and June 3, 2015. Fourteen (14) trenches were mechanically excavated; no historic properties were encountered. Due to negative findings from the inventory survey this report has been submitted as an Archeological Assessment.

Archeological monitoring is recommended during initial earthmoving activities around the margins of the old landfill and we concur with that recommendation. An archeological monitoring plan will be submitted to SHPD for review and approval pursuant to Hawaii Administrative Rules (HAR) §13-279. The draft archeological assessment meets the requirement specified in HAR §13-275 and is accepted.

Applicant Response: *We acknowledge the archaeological assessment report was accepted by SHPD. As requested by SHPD an Archaeological Monitoring Plan (AMP) was prepared and submitted to SHPD in August 2016. The AMP is under review by SHPD and SHPD Log No. for the AMP is 2016.01933.*

DLNR – Division of Conservation and Resource Enforcement (DOCARE)

Review of CDUA MA-3776 and a corresponding site visit to the effected areas failed to raise any Law Enforcement Concerns related to the proposed project and permit. A non-Law Enforcement Concern observed is that there is private land below the proposed site that may be affected by the proposed project with water run-off and/or wind blowing dust and debris. There is indication that people are residing on these properties. A check of Tax Maps would indicate that no State Land is affected by the concern.

Applicant Response: *We acknowledge the there are no law enforcement concerns regarding the proposed project and permit. During construction appropriate Best Management Practices (BMPs) will be implemented by the County of Maui, such as collection of stormwater from the site and re-use for dust control. These measures will ensure that potential short-term impacts related to dust and debris removal are appropriately managed. As such, significant adverse impacts on surrounding land uses are not anticipated with the proposed project.*

State Department of Health (DOH)

We have the following comments to offer:

- *National Pollutant Discharge Elimination System (NPDES) permit coverage may be required for this project. The Clean Water Branch should be contacted at 808-586-4309.*
- *The Solid Waste Section of the Solid & Hazardous Waste Branch should be contacted at 808-586-4226*

It is strongly recommended that the Standard Comments found at the Departments website be reviewed and any comments specifically applicable to this project should be adhered to.

Applicant Response: *On behalf of the County of Maui, Department of Environmental Management (DEM) we offer the following information, which addresses the comments listed above:*

- *If required, a National Pollutant Discharge Elimination System (NPDES) permit will be obtained prior to the initiation of the clean-up and closure.*
- *DEM has and will continue to consult with the Solid Waste Section of the Solid & Hazardous Waste Branch regarding review and implementation of the proposed project.*

As recommended the Standard Comments found at the Departments website have been forwarded to the DEM and its project engineer for review and as appropriate will be adhered to as part of the project implementation.

Commission on Water Resource Management (CWRM)

There may be the potential for ground or surface water degradation/contamination and recommend that approvals for this project be coordinated upon a review by the State Department of Health and the developer's acceptance of any resulting requirements related to water quality.

Applicant Response: *On behalf of the County of Maui, Department of Environmental Management (DEM) we offer the following information, which addressed your comment:*

We note your comment regarding potential for ground or surface water degradation/contamination from the proposed project. The DEM has and will continue to consult with the Department of Health regarding the review and implementation of the proposed project.

Office of Hawaiian Affairs (OHA)

No comments received from agency.

County of Maui – Planning Department

No comments received from agency.

State of Hawaii – Department of Transportation (HDOT)

Based on the information provided, the proposed project does not appear to significantly impact the State highway system. Therefore, we have no objections on the application. However, please note that a permit must be obtained from the State DOT District Office for the transport of oversized and/or overweight materials and equipment on State highway facilities.

Applicant Response: *On behalf of the County of Maui – Department of Environmental Management we acknowledge that the Department of Transportation (DOT) has no objections to the CDUA.*

The use of oversized and/or overweight materials and equipment on State highway facilities is not anticipated at this time. The materials removed from the MHL will be transported across Waikoloa Road to the active Mauka Hana Landfill. However, if it becomes necessary to utilize State highway facilities, appropriate permits will be obtained from the DOT district Office.

US Fish and Wildlife Service (USFWS)

*Based on information you provided and pertinent information in our files, including data compiled by the Hawai'i Biodiversity and Mapping Project, there are five federally listed species in the vicinity of the project area: The endangered Hawaiian hoary bat, Hawaiian petrel, hawksbill sea turtle, the threatened Newell's shearwater, green sea turtle, and a species proposed for listing as endangered, the band-rumped storm-petrel. There is no proposed or final critical habitat within the vicinity of the project area. The USFWS provided recommendations to avoid and minimize project impacts to listed species, these are presented in **Exhibit 9**.*

Applicant Response: *It is noted that no endangered or threatened species of flora, fauna or avifauna were identified during a biological survey that was previously conducted within the*

project site. Although the project area is surrounded by lowland non-native species forest areas, the project site itself is comprised of a cleared area consisting of mostly grasses and intermittent low lying shrubs. There are no trees within the project site greater than 15-feet in height. Further, as recommended in your letter, no barbed wire fencing will be installed during implementation of this project. As such, adverse impact on the Hawaiian hoary bat are not anticipate with implementation of the proposed project.

All work during construction will be conducted during daylight hours. As such, outdoor lighting will not be installed during the clean-up and closure work. As such, project implementation is not anticipated to present adverse impacts on seabirds that may traverse the area.

The project site is located approximately 250-feet mauka (inland) from the pali along the shoreline. As such, the project is not anticipating to present adverse impacts on sea turtles that may transition along the coastline. Further, as noted previously, construction will be conducted during daylight hours and no outdoor lighting will be installed.

*A copy of **Exhibit 9**, the USFWS recommended Best Management Practices (BMP), has been provided to the DEM and its design engineer for review and incorporation into the projects BMP plan, as applicable.*

ANALYSIS:

Following review and acceptance for processing, the Applicant's Agent was notified, by letter dated August 24, 2016 that:

- A. Your proposal to conduct site remediation on the subject parcel is an identified land use within the Conservation District General Subzone pursuant to Hawaii Administrative Rules (HAR), §13-5-22, P-6, **PUBLIC PURPOSE USES (D-1)**, *Not for profit land uses undertaken in support of a public service by an agency of the county, state, or federal government, or by an independent non-governmental entity, except that an independent non-governmental regulated public utility may be considered to be engaged in a public purpose use. Examples of public purpose uses may include but are not limited to public roads, marinas, harbors, airports, trails, water systems and other utilities, energy generation from renewable resources, communication systems, flood or erosion control projects, recreational facilities, community centers, and other public purpose uses, intended to benefit the public in accordance with public policy and the purpose of the conservation district.* Please note that the final decision to approve or deny this proposal rests with the Board of Land and Natural Resources (BLNR);
- B. Pursuant to HAR §13-5-40, Hearings, a public hearing *is not* required;
- C. A Draft Environmental Assessment (DEA) was published in the Office of Environmental Quality Control (OEQC) publication, *The Environmental Notice (EN)* on April 8, 2016. The Final EA (FEA) and public notice of determination was published on June 8, 2016; and
- D. Per letter dated August 16, 2016, a Special Management Area (SMA) Use Permit Approval (Permit #SM1 2016/0001) was granted by the County of Maui – Department of Planning for the proposed project.

The OCCL published notification of this Conservation District Use Application (CDUA) in the *September 8, 2016* issue of the Office of Environmental Quality Control (OEQC) publication the Environmental Notice.

CONSERVATION CRITERIA:

The following discussion evaluates the merits of the proposed land use by applying the criteria established in HAR, §13-5-30.

- 1) *The proposed use is consistent with the purpose of the Conservation District.*
The objective of the Conservation District is to conserve, protect, and preserve the important natural resources of the state through appropriate management and use to promote their long-term sustainability and the public health, safety and welfare.

The *Makai Hana Landfill* (MHL) was established prior to the establishment of the Conservation District which is the current State Land Use designation; the facility discontinued operations around 2003. The proposed clean-up and closure of the MHL appears to meet the purpose of the Conservation District by bringing the landfill operations into compliance with current Federal and State Department of Health (DOH) regulations, and by employing vegetative stabilization and landscaping.

- 2) *The proposed land use is consistent with the objectives of the Subzone of the land on which the use will occur.*

The objective of the “Limited” Subzone is to limit uses where natural conditions suggest constraints on human activities. Alternatively, the objective of the “General” subzone is to designate open space where specific conservation uses may not be defined, but where urban use would be premature.

It was stated by the applicant that the proposed clean-up and closure of the MHL could be considered to be consistent with the objectives of the two (i.e., General and Limited) subzones, particularly as it involves removal of stored municipal waste out of the Conservation District. As the objective of the Limited Subzone is to “limit uses”, staff suggests that the abandonment and removal of the MHL from the Conservation District may be considered as “limiting uses” at this site. Additionally, staff believes this project is considered consistent with the general subzone since the waste removal and site remediation will create an open space area vegetated and undeveloped.

- 3) *The proposed land use complies with the provisions and guidelines contained in Chapter 205A, HRS entitled "Coastal Zone Management", where applicable.*

Per letter dated *August 16, 2016*, a Special Management Area (SMA) Use Permit Approval (Permit #SM1 2016/0001) was granted by the County of Maui – Department of Planning for the proposed project.

Staff believes the proposed use is consistent with Chapter 205A, HRS objectives and policies regarding:

Recreational Resources: The proposed clean-up and closure of the MHL and relocation of the municipal solid waste to the *active Hāna landfill* is not anticipated to result in any adverse physical alterations to the environment. The MHL post clean-up topography will be designed to promote natural drainage conditions. Soil testing, to ensure subgraded conditions are below DOH *Environmental Action Levels* (EALs), will monitor for any potential impacts to coastal recreational resources. Further, access to and along the shoreline environment, including the ancient Pi'ilani Trail, are located outside the project boundaries and will not be impacted by the proposed action. The Pi'ilani Trail is located within a 250-foot conservation area between the eastern landfill boundary and the coastline.

Historical Resources: An archaeological assessment (AA) was conducted in 2003 on the subject property, indicating that the underlying lands have been significantly altered during decades of grading and landfill activities. There were no significant material culture remains identified by the inspection. The archaeological assessment carried out with subsurface testing around the boundaries of the MHL area in 2015 indicated the proposed clean-up and closure action is not anticipated to have an adverse effect on historic properties. However, given the near coastal location of the project site, it was not possible to test within the physical footprint of the MHL. *Archaeological monitoring is recommended during initial ground altering activities around the margins of the MHL and periodically when work is near the original land surface elevation.* In the event that any subsurface archaeological resources are encountered during grading activities, all work will be halted in the vicinity of the find and the SHPD will be contacted immediately to determine an appropriate mitigation strategy.

Scenic and Open Space Resources: The project site is not located within a designated or established coastal view plane corridor. The proposed project is not anticipated to result in adverse impacts to shoreline views or open space resources. The *active Hāna landfill* operations are located over 350 feet from the shoreline outside of the Conservation District.

Coastal Ecosystems/Marine Resources: Best Management Practices (BMPs) will be utilized to ensure that grading activities related to the proposed project do not adversely impact coastal ecosystems. Runoff from the active landfill operations will continue to be channeled and directed to the existing onsite detention basin. Further, the County of Maui - DEM will continue to maintain its quarterly groundwater monitoring program as well as the use of BMPs during daily landfill operations to minimize impacts to the surrounding environment.

Economic Uses/Managing Development: The MHL operation has been ongoing at the subject property since the 1960's. Removal of the solid waste from the MHL to the current *active Hāna landfill* will aim to maintain a public facility which is necessary to the County and State.

Other: During grading activities associated with the clean-up of the MHL, appropriate BMP's will be utilized to ensure the downstream coastal environment is not adversely impacted. A 250-foot conservation area exists between the current landfill eastern boundary and the shoreline; this buffer should hopefully provide adequate protection for coastal resources.

- 4) *The proposed land use will not cause substantial adverse impact to existing natural resources within the surrounding area, community or region.*

Since this facility has been in operation for decades, and it provides a necessary municipal waste storage location for residents in Hāna, staff believes that the removal of municipal waste and the proposed closure of the MHL is not anticipated to cause substantial adverse impact to existing natural resources within the surrounding area, community, or region. It will be a benefit to relocate the waste to the active landfill outside of the Conservation District, and this project will also make the MHL compliant with Federal and State regulations.

- 5) *The proposed land use, including buildings, structures and facilities, shall be compatible with the locality and surrounding areas, appropriate to the physical conditions and capabilities of the specific parcel or parcels.*

This proposed project is limited to the removal of waste from an existing MHL to the adjacent active Hāna landfill site and the cleanup/closure of the MHL; The proposed project is compatible with the current use and existing landfill operations located in this area.

- 6) *The existing physical and environmental aspects of the land, such as natural beauty and open space characteristics, will be preserved or improved upon, whichever is applicable.*

Once closure of the MHL is completed, the area will be landscaped with grass and vegetated for stability and soil erosion control. As the site was a landfill for decades, the proposed removal of waste and closure of the MHL can only aim to improve the character of the site – attempts to blend the landscape and vegetation with the surrounding area is planned.

- 7) *Subdivision of land will not be utilized to increase the intensity of land uses in the Conservation District.*

The proposed project does not involve the subdivision of Conservation District lands.

- 8) *The proposed land use will not be materially detrimental to the public health, safety and welfare.*

The objective of the proposed removal and closure of the existing MHL is to bring the site into compliance with State and Federal regulations related to Municipal Waste storage. Staff believes the closure of this site should provide a positive benefit to residents and the community by improving the site and facility operations, and landscaping and grading to mitigate previous impacts and landscape changes.

CULTURAL AND HISTORICAL IMPACT REVIEW:

An archaeological assessment (AA) was prepared by an agent for the applicant in 2015 and did not identify or report any historic or cultural resources along the boundary of the MHL. However, the AA noted that given the near coastal location of the site, as well as the fact that it was not possible to test within much of the physical footprint of the MHL, *archaeological monitoring is*

recommended during initial earthmoving activities around the boundaries of the old landfill, and periodically when the operations are near the original land surface elevation.

A *cultural impact assessment* (CIA) was also carried out at the project site; this report found that although the Hāna District is noted as being significant from a historical and cultural perspective, the lands in the vicinity of the project site have been significantly altered through decades of landfill use. Portions of the nearby Pi'ilani Trail are located along the shoreline of the subject property outside of the area conveyed to the County of Maui (i.e., Executive Order (EO) No. 3304). Access to and along the shoreline from the Pi'ilani Trail will continue during the life of the project, and is not expected to be impacted by the proposed clean-up and closure of the MHL.

Due to the objectives of the proposed project, the existing use of the site, the lack of observed or documented cultural practices, and the decades long development history – staff believes customary and traditional rights conducted in the vicinity of the project site would not be adversely affected by the proposed project.

To the extent to which traditional and customary native Hawaiian rights are exercised, the proposed action does not appear to affect traditional Hawaiian rights; it is believed that no action is necessary to protect these rights.

DISCUSSION:

The proposed land use being applied for under this Conservation District Use Application (CDUA) is being pursued in order to bring the existing *Makai Hāna Landfill* (MHL) into compliance with both Federal and State regulations related to municipal waste.

The proposed project is limited to the clean-up and closure of the MHL. Once completed, the area will be landscaped with grass. The areas surrounding the Hāna Landfill site are vacant lands much of which is owned by the State of Hawai'i. As such, the clean-up and closure is not expected to have a significant visual impact on any individual or community.

Temporary drainage control measures, such as silt fences and berms to channel storm water runoff from exposed surfaces to temporary retention basins will be implemented as part of the project to minimize sedimentation impacts. Once the clean-up and closure is completed, erosion controls and revegetation of slopes will be implemented to facilitate natural drainage of the area.

During implementation of the project, controls will be established to prevent short-term impacts to public health and the environment from fugitive dust and/or storm-water run-off. Care will be taken to mitigate dust during excavation and removal activities that may disrupt surface soils; this will include the spraying of water and the erection of a perimeter fence to mitigate fugitive dust.

As outlined in the CDUA, the project site has a decades long history of heavy use and impacts associated with landfill activities which have severely impacted the land and its natural character. At this point the goal should be to return the land to a condition that may provide a benefit to the public, and by doing so, reduce the hazards associated with long term municipal waste storage.

The OCCL staff has the onerous duty of evaluating the appropriateness of a project based on a complete and comprehensive assessment that has been assembled from acceptance of the application, to the writing of this staff report. This report outlines the effects the proposed land uses represent to natural resources, recreation, and the environment within the project area; based on the information provided staff believes project impacts will not be significant or cumulative. Additionally, this projects public benefit appears to be necessary for fulfilling Federal and State regulations with regards to the storage and management of municipal solid waste.

In conclusion, staff believes that this project, as proposed, is consistent with Conservation District objectives, and based on the above discussion and information received, Staff recommends as follows:

RECOMMENDATION:

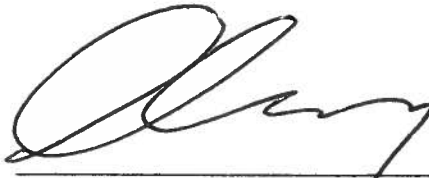
Based on the preceding analysis, Staff recommends that the Board of Land and Natural Resources **APPROVE** this application for the *Makai Hāna Landfill Clean-up and Closure* project located in the Hāna District, Island of Maui, on Tax Map Key: (2) 1-3-006:012, subject to the following conditions:

1. The permittee shall comply with all applicable statutes, ordinances, rules, and regulations of the federal, state, and county governments, and applicable parts of this chapter;
2. The permittee, its successors and assigns, shall indemnify and hold the State of Hawai'i harmless from and against any loss, liability, claim, or demand for property damage, personal injury, and death arising out of any act or omission of the applicant, its successors, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit;
3. The permittee shall obtain appropriate authorization from the department for the occupancy of state lands, if applicable;
4. Before proceeding with any work authorized by the department or the board, the permittee shall submit four copies of the construction plans to the chairperson or an authorized representative for approval for consistency with the conditions of the permit and the declarations set forth in the permit application. Three of the copies will be returned to the permittee. Plan approval by the chairperson does not constitute approval required from other agencies;
5. Unless otherwise authorized, any work or construction to be done on the land shall be initiated within one (1) year of the approval of such use, in accordance with construction plans that have been signed by the chairperson or an authorized representative, and shall be completed within three (3) years of the approval of such use. The permittee shall notify the department in writing when construction activity is initiated and when it is completed;
6. All representations relative to mitigation set forth in the accepted environmental assessment and management plan for the proposed use are incorporated as conditions of the permit;

7. An *Archaeological Monitoring Plan* as described in this report will be submitted to SHPD for final review and acceptance **prior** to beginning the proposed land use activities;
8. The permittee understands and agrees that the permit does not convey any vested right(s) or exclusive privilege;
9. In issuing the permit, the department and board have relied on the information and data that the permittee has provided in connection with the permit application. If, subsequent to the issuance of the permit such information and data prove to be false, incomplete, or inaccurate, this permit may be modified, suspended, or revoked, in whole or in part, and the department may, in addition, institute appropriate legal proceedings;
10. When provided or required, potable water supply and sanitation facilities shall have the approval of the department of health and the county department of water supply;
11. Provisions for access, parking, drainage, fire protection, safety, signs, lighting, and changes on the landscape shall be provided;
12. Where any interference, nuisance, or harm may be caused, or hazard established by the use, the permittee shall be required to take measures to minimize or eliminate the interference, nuisance, harm, or hazard;
13. Obstruction of public roads, trails, lateral shoreline access, and pathways shall be avoided or minimized. If obstruction is unavoidable, the permittee shall provide alternative roads, trails, lateral beach access, or pathways acceptable to the department;
14. Except in case of public highways, access roads shall be limited to a maximum of two lanes;
15. During construction, appropriate mitigation measures shall be implemented to minimize impacts to off-site roadways, utilities, and public facilities;
16. Cleared areas shall be revegetated, in accordance with landscaping guidelines provided in this chapter, within thirty days unless otherwise provided for in a plan on file with and approved by the department;
17. Use of the area shall conform to the program of an appropriate soil and water conservation district or plan approved by and on file with the department, where applicable;
18. Specific Best Management Practices (BMP) outlined in the Final Environmental Assessment (FEA), **Exhibit 9**, and throughout this staff report shall be utilized during all phases of the proposed project;
19. The permittee shall obtain a county building or grading permit or both for the use prior to final construction plan approval by the department;

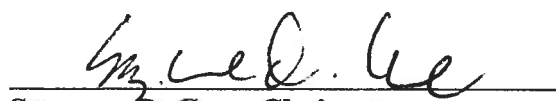
20. For all landscaped areas, landscaping and irrigation shall be contained and maintained within the property, and shall under no circumstances extend seaward of the shoreline as defined in section 205A-1, HRS;
21. The introduction of invasive plant species is prohibited;
22. Artificial light from exterior lighting fixtures, including but not limited to floodlights, uplights, or spotlights used for decorative or aesthetic purposes, shall be prohibited if the light directly illuminates or is directed to project across property boundaries toward the shoreline and ocean waters, except as may be permitted pursuant to section 205A-71, HRS. All exterior lighting shall be shielded to protect the night sky;
23. The permittee acknowledges that the approved work shall not hamper, impede, or otherwise limit the exercise of traditional, customary, or religious practices of native Hawaiians in the immediate area, to the extent the practices are provided for by the Constitution of the State of Hawaii, and by Hawaii statutory and case law;
24. Other terms and conditions as prescribed by the chairperson; and
25. Failure to comply with any of these conditions shall render a permit void under HAR, chapter 13-5, as determined by the chairperson or board.

Respectfully submitted,

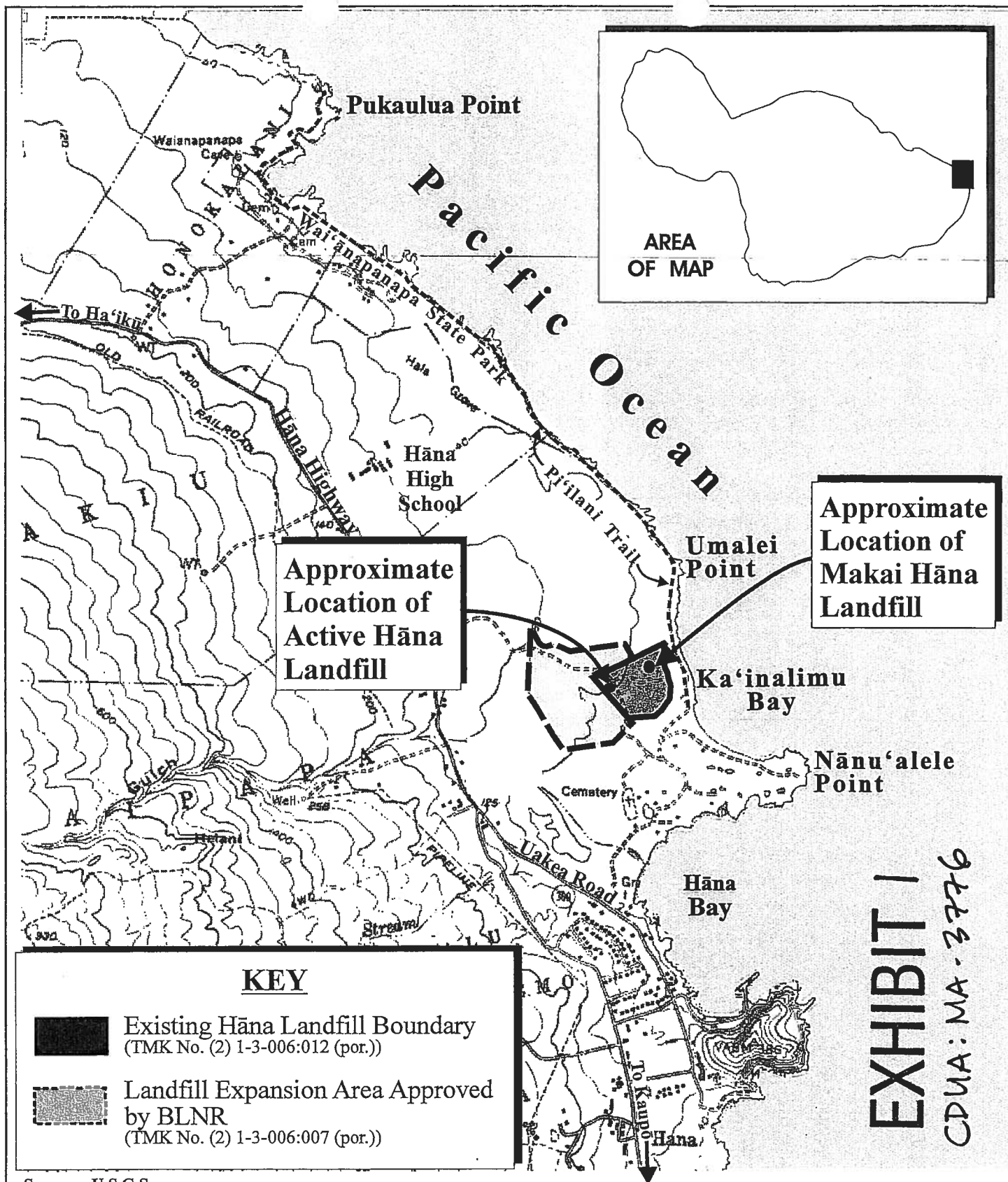


Alex J. Roy, M.Sc., Staff Planner
Office of Conservation and Coastal Lands

Approved for submittal:



Suzanne D. Case, Chairperson
Board of Land and Natural Resources



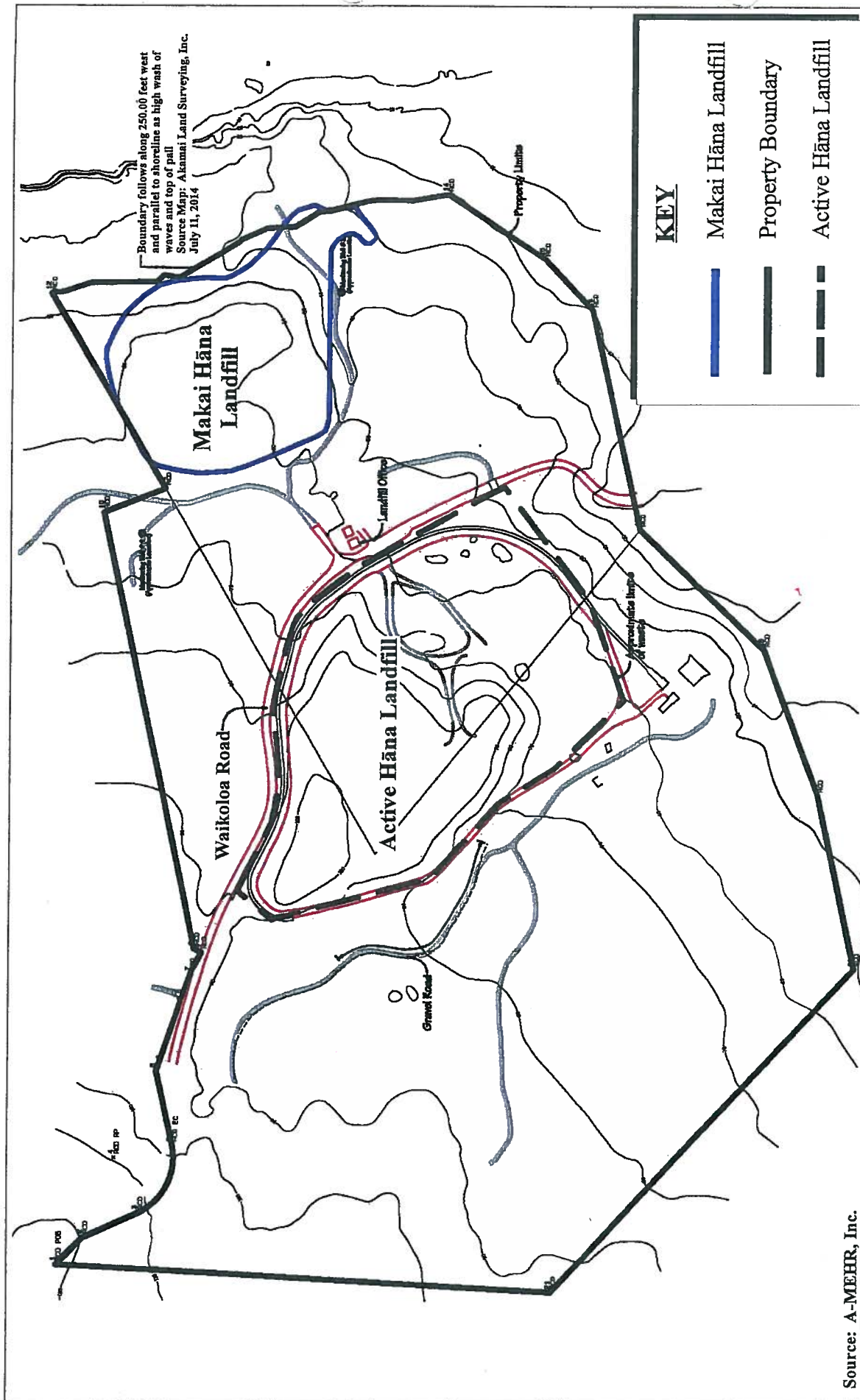
Source: U.S.G.S.

Proposed Makai Hāna Landfill Clean-Up and Closure Regional Location Map

0 500 1000 2000
Feet



MUNEKIYO HIRAGA



Source: A-MEHR, Inc.

Proposed Makai Hāna Landfill Clean-Up and Closure Site Location Map

NOT TO SCALE

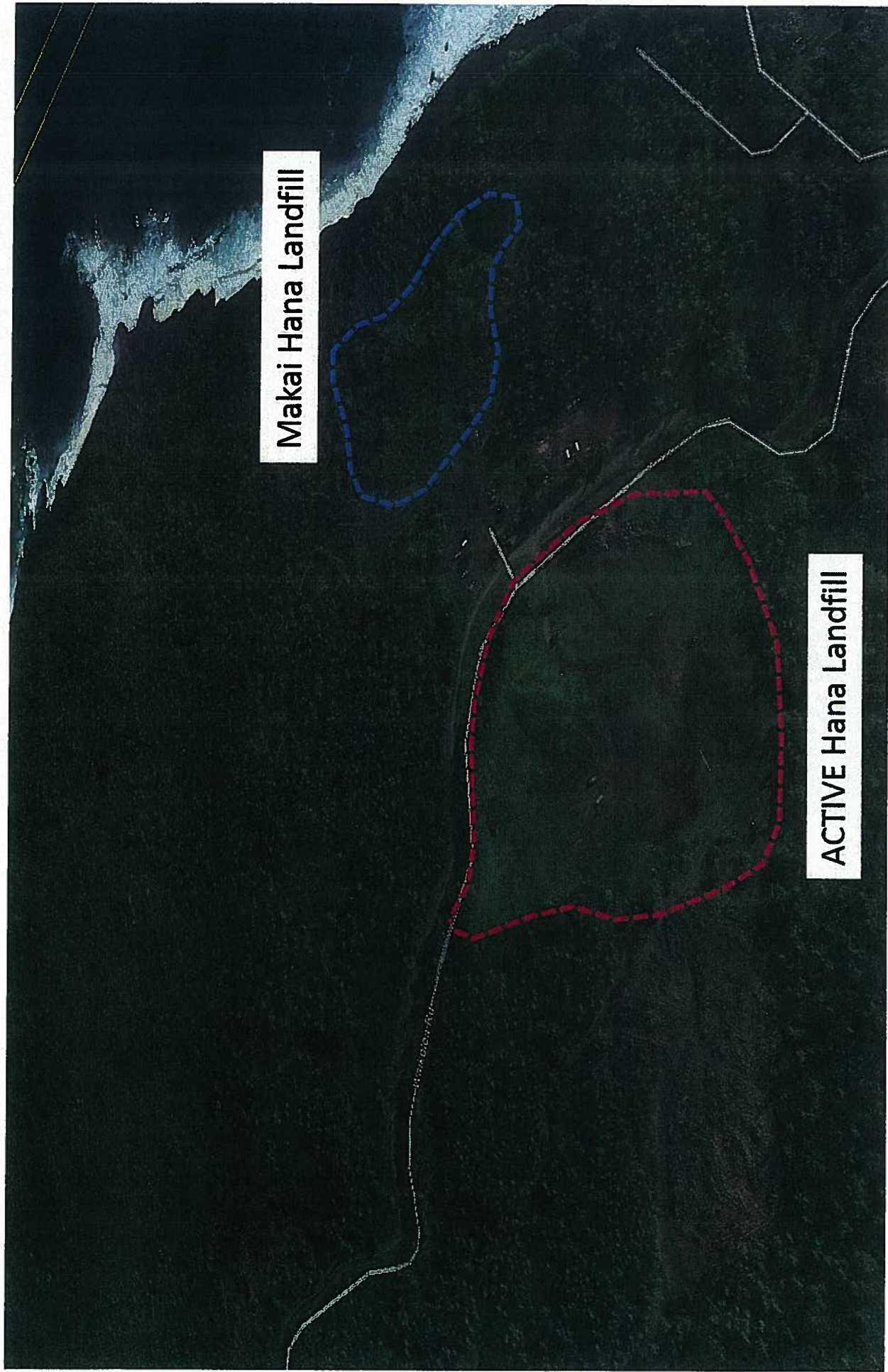


EXHIBIT 2



Prepared for: County of Maui, Department of Environmental Management

CDUA: MA-3776



Makai Hana Landfill

ACTIVE Hana Landfill

EXHIBIT 3 CDUA: MA-3776

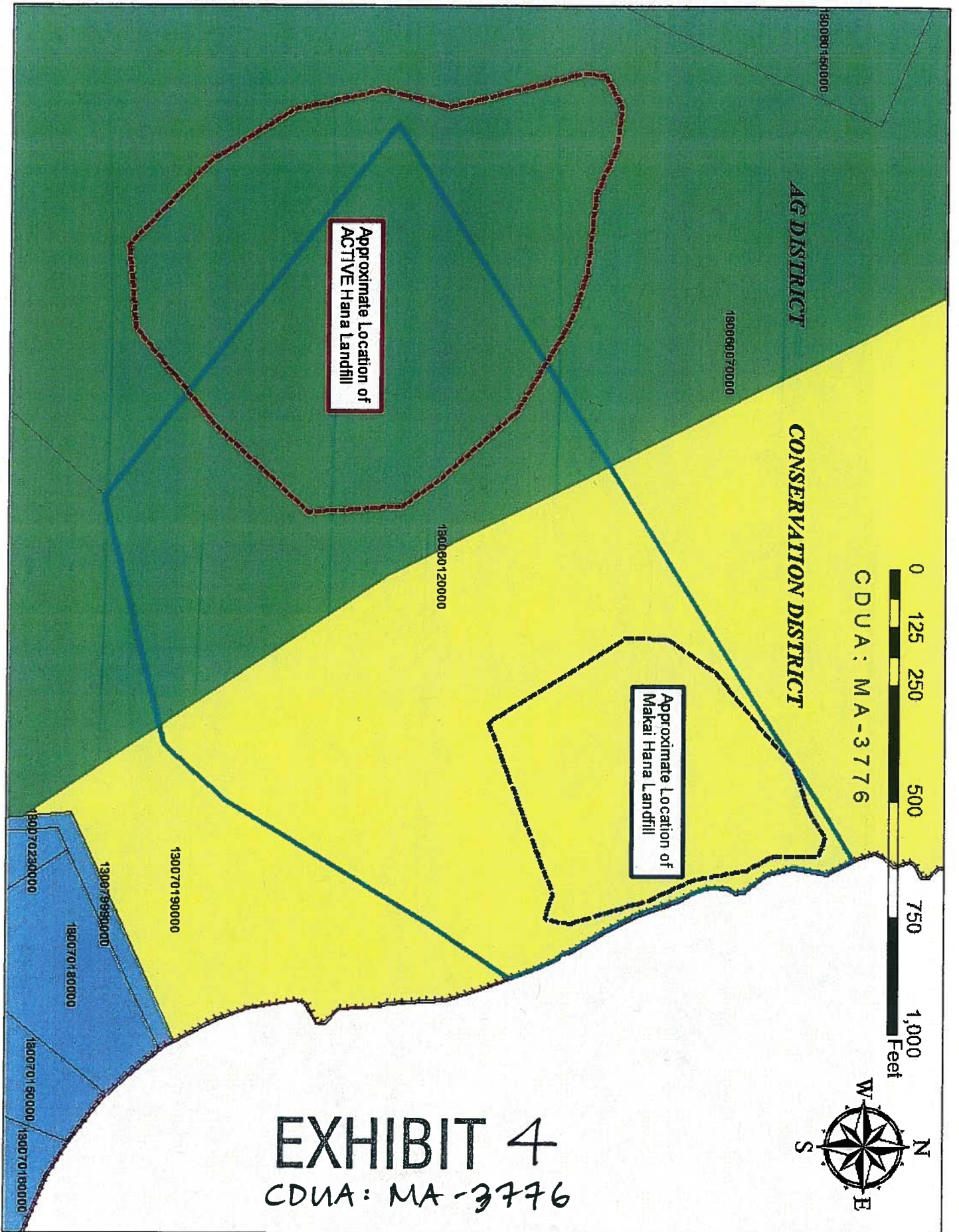


EXHIBIT 4
CDUA: MA-3776

VIEW FROM WAIKOLOA ROAD LOOKING SOUTH-EAST; EXISTING STRUCTURES FOR THE HANA LANDFILL

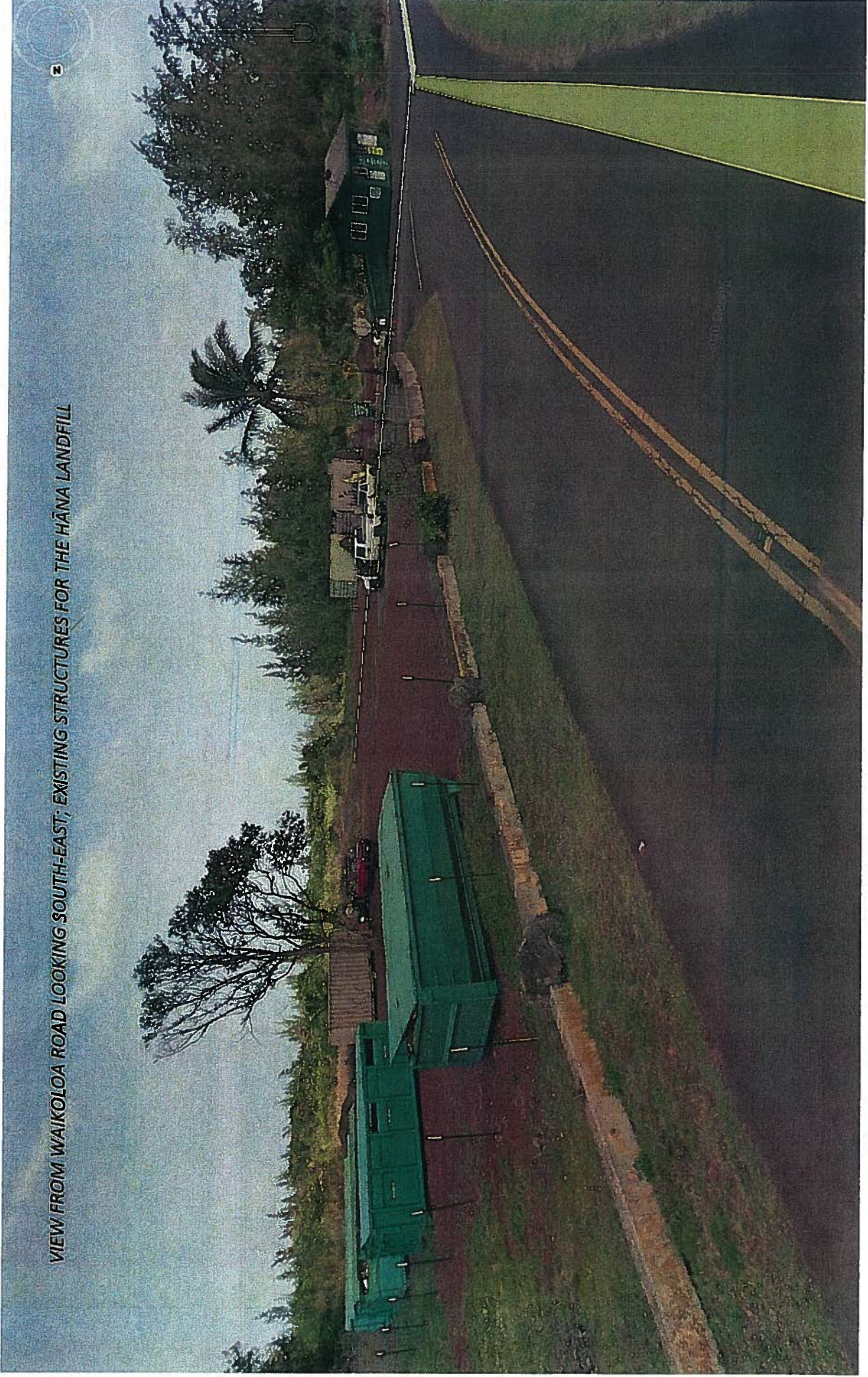


EXHIBIT 5 CDUA: MA-3776

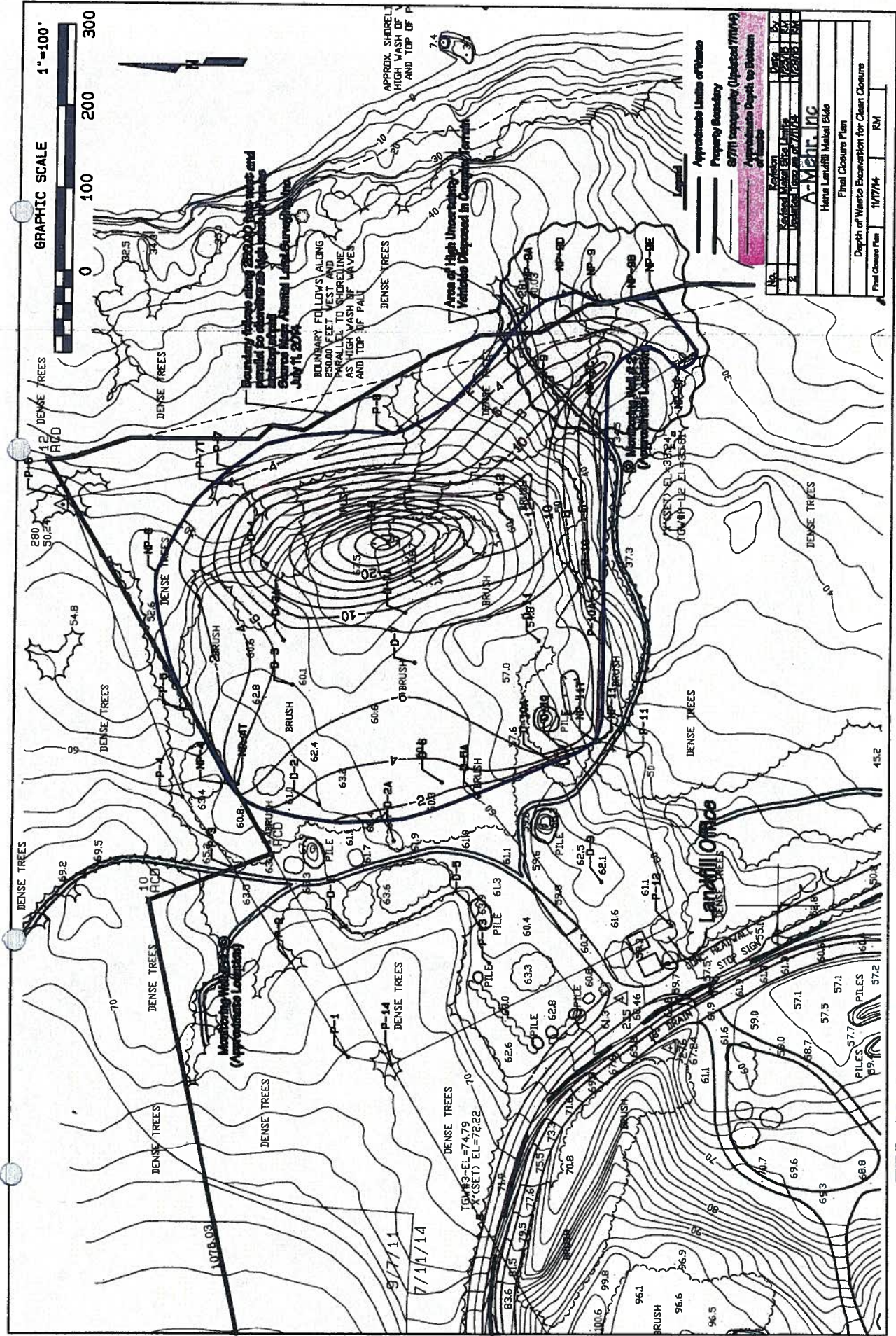
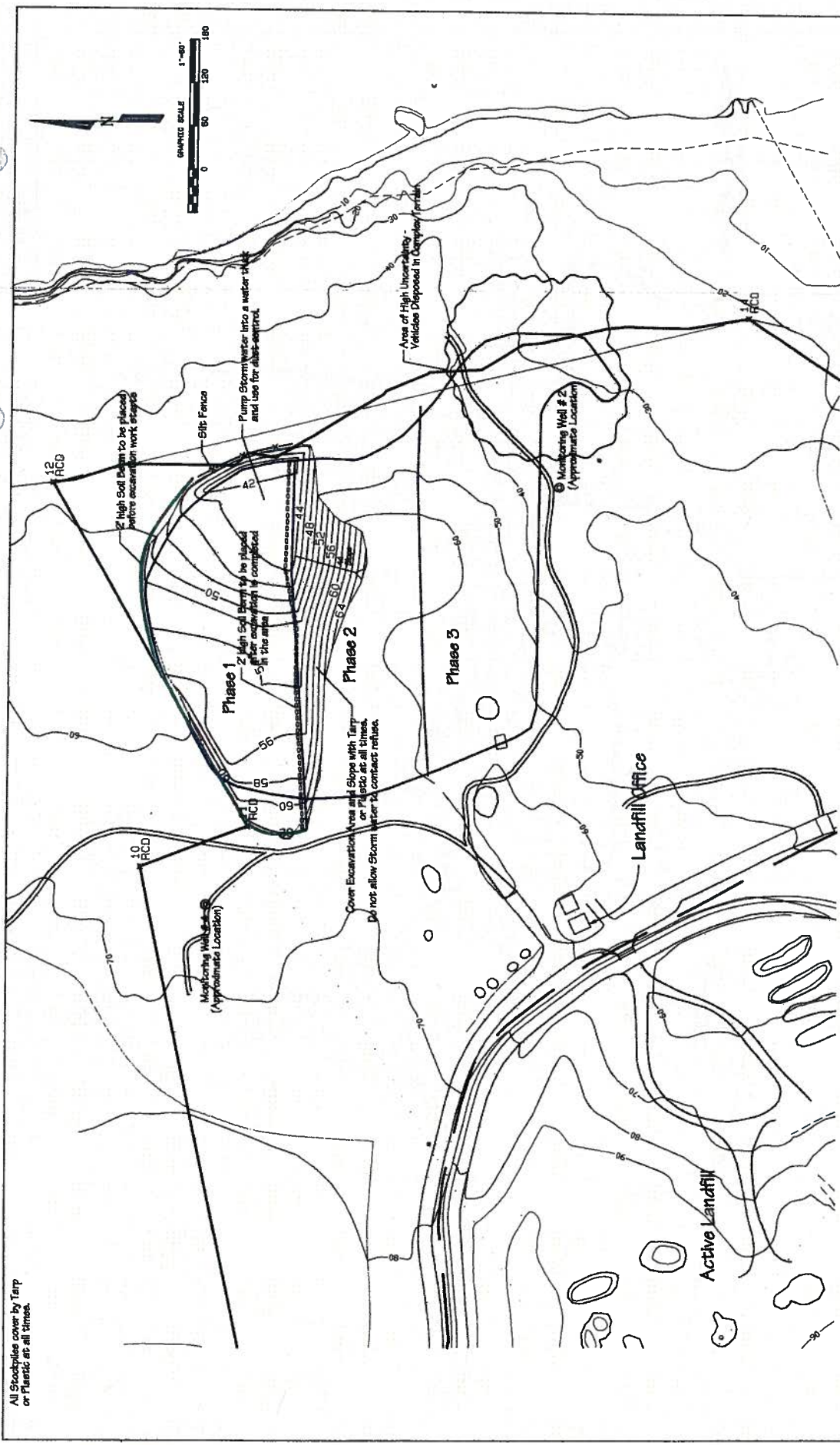


EXHIBIT 6 CDWA: MA-3776



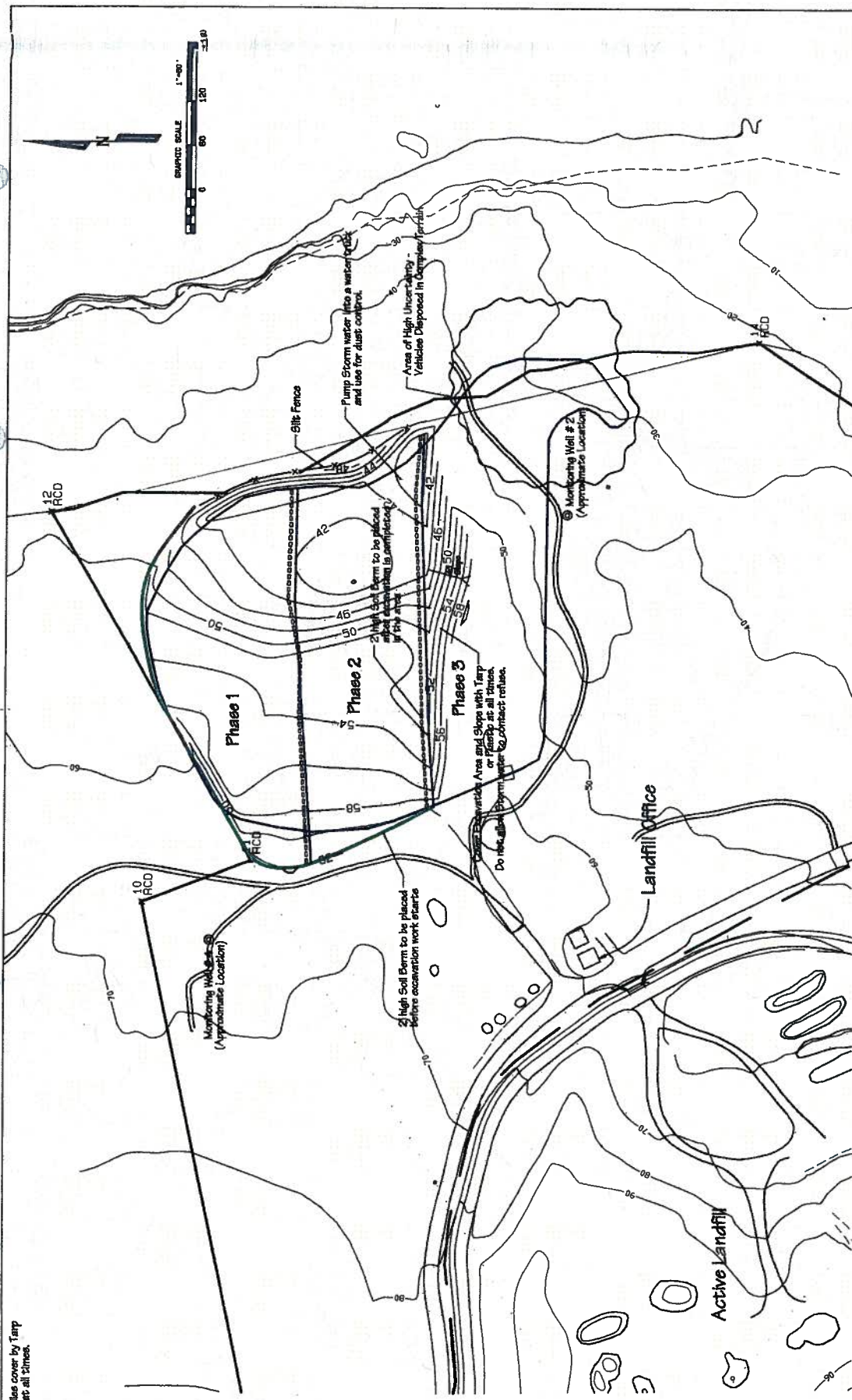
- Legend**
- Approximate Limits of Waste
 - Property Boundary
 - 5/20/75 Topography
 - Proposed Excavation Grades
 - Temporary Slope Grades

EXHIBIT 7

CDWA: MA-3776

Estimated Excavation Quantities
 Refuse = 24,765 cy
 Soil = 3,435 cy
 Average depth of excavation = 8 feet

A-Mehr, Inc.	
Malden High Landfill	
Flushing Plan	
Phase 1 Clean-Up and Closure	RM
Flushing Plan #1	6/9/76



All Stockpiles cover by tarp or plastic at all times.

- Legend
- Approximate Limits of Waste
 - Property Boundary
 - 2020/15 Topography
 - Proposed Excavation Grades
 - Temporary Slope Grades

EXHIBIT 7A

CDUA : MA - 3776

Estimated Excavation Quantities
 Refuse = 31,565 cy
 Soil = 3,465 cy
 Average depth of excavation = 11 feet

A-Mehr, Inc.	
Metal Haul Landfill	
Phasing Plan	
Phasing Item 1	RM
Phasing Item 2	RM

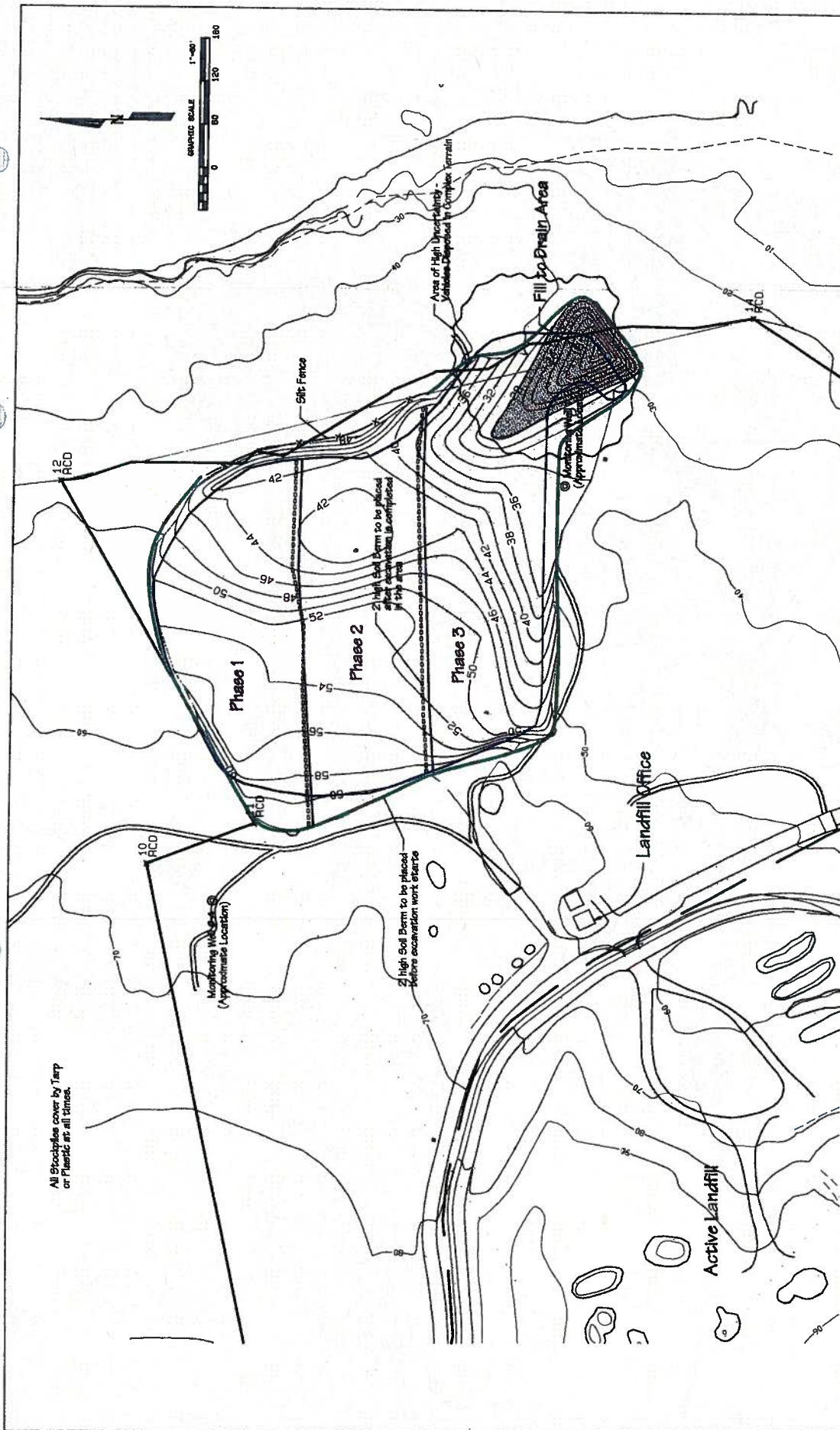


EXHIBIT 7B

CDUA: MA-3776

Estimated Excavation Quantities
 Refuse = 32,870 cy
 Soil = 5,455 cy
 Average depth of excavation = 9 feet

A-Mehr, Inc.	Phase 1	RM
Malcolm H. Hine Landfill	Phase 2	RM
Phase 3	Phase 4	RM
Phase 5	Phase 6	RM
Phase 7	Phase 8	RM
Phase 9	Phase 10	RM
Phase 11	Phase 12	RM
Phase 13	Phase 14	RM
Phase 15	Phase 16	RM
Phase 17	Phase 18	RM
Phase 19	Phase 20	RM
Phase 21	Phase 22	RM
Phase 23	Phase 24	RM
Phase 25	Phase 26	RM
Phase 27	Phase 28	RM
Phase 29	Phase 30	RM
Phase 31	Phase 32	RM
Phase 33	Phase 34	RM
Phase 35	Phase 36	RM
Phase 37	Phase 38	RM
Phase 39	Phase 40	RM
Phase 41	Phase 42	RM
Phase 43	Phase 44	RM
Phase 45	Phase 46	RM
Phase 47	Phase 48	RM
Phase 49	Phase 50	RM
Phase 51	Phase 52	RM
Phase 53	Phase 54	RM
Phase 55	Phase 56	RM
Phase 57	Phase 58	RM
Phase 59	Phase 60	RM
Phase 61	Phase 62	RM
Phase 63	Phase 64	RM
Phase 65	Phase 66	RM
Phase 67	Phase 68	RM
Phase 69	Phase 70	RM
Phase 71	Phase 72	RM
Phase 73	Phase 74	RM
Phase 75	Phase 76	RM
Phase 77	Phase 78	RM
Phase 79	Phase 80	RM
Phase 81	Phase 82	RM
Phase 83	Phase 84	RM
Phase 85	Phase 86	RM
Phase 87	Phase 88	RM
Phase 89	Phase 90	RM
Phase 91	Phase 92	RM
Phase 93	Phase 94	RM
Phase 95	Phase 96	RM
Phase 97	Phase 98	RM
Phase 99	Phase 100	RM

U.S. Fish and Wildlife Service
Recommended Standard Best Management Practices

The U.S. Fish and Wildlife Service recommends that the measures below be incorporated into projects to minimize the degradation of water quality and minimize the impacts to fish and wildlife resources.

1. Turbidity and siltation from project-related work shall be minimized and contained within the vicinity of the site through the appropriate use of effective silt containment devices and the curtailment of work during adverse tidal and weather conditions.
2. Dredging/filling in the marine environment shall be scheduled to avoid coral spawning and recruitment periods and sea turtle nesting and hatching periods.
3. Dredging and filling in the marine/aquatic environment shall be designed to avoid or minimize the loss special aquatic site habitat (beaches, coral reefs, wetlands, etc.) and the function of such habitat shall be replaced.
4. All project-related materials and equipment (dredges, barges, backhoes, etc.) to be placed in the water shall be cleaned of pollutants prior to use.
5. No project-related materials (fill, revetment rock, pipe, etc.) should be stockpiled in the water (intertidal zones, reef flats, stream channels, wetlands, etc.) or on beach habitats.
6. All debris removed from the marine/aquatic environment shall be disposed of at an approved upland or ocean dumping site.
7. No contamination (trash or debris disposal, non-native species introductions, attraction of non-native pests, etc.) of adjacent habitats (reef flats, channels, open ocean, stream channels, wetlands, beaches, forests, etc.) shall result from project-related activities. This shall be accomplished by implementing a litter-control plan and developing a Hazard Analysis and Critical Control Point Plan (HACCP – see <http://www.haccp-nrm.org/Wizard/default.asp>) to prevent attraction and introduction of non-native species.
8. Fueling of project-related vehicles and equipment should take place away from the water and a contingency plan to control petroleum products accidentally spilled during the project shall be developed. Absorbent pads and containment booms shall be stored on-site, if appropriate, to facilitate the clean-up of accidental petroleum releases.
9. Any under-layer fills used in the project shall be protected from erosion with stones (or core-loc units) as soon after placement as practicable.
10. Any soil exposed near water as part of the project shall be protected from erosion (with plastic sheeting, filter fabric etc.) after exposure and stabilized as soon as practicable (with native or non-invasive vegetation matting, hydroseeding, etc.).

EXHIBIT 9
CDUA : MA - 3776