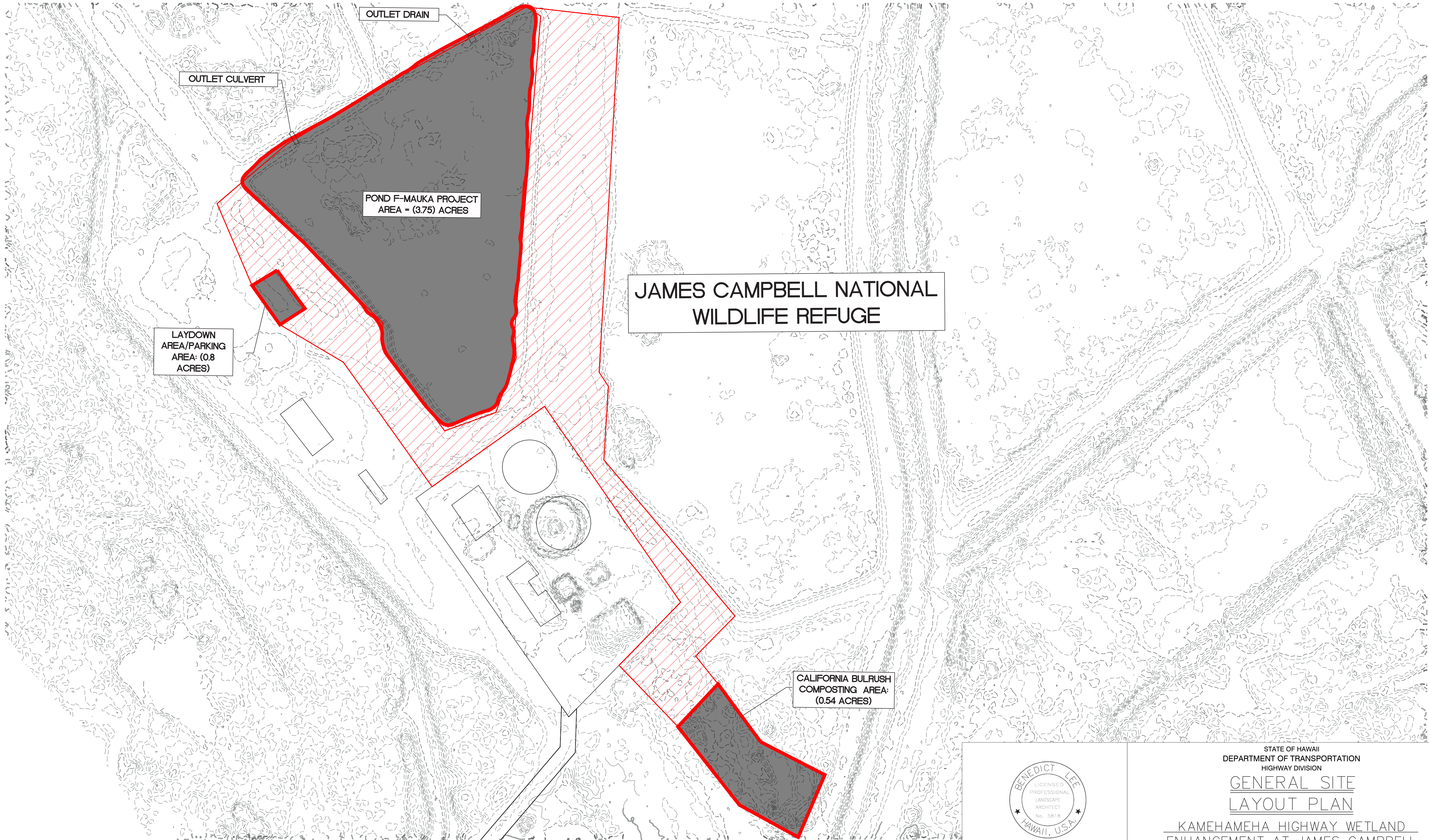


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-083-1(085)	2026	2	16



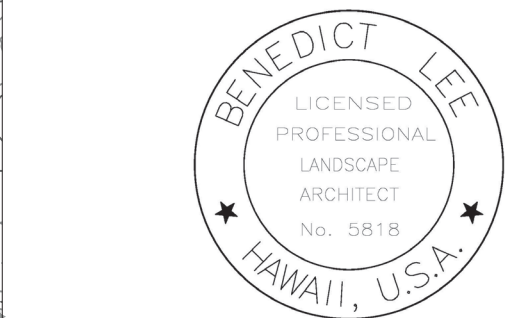
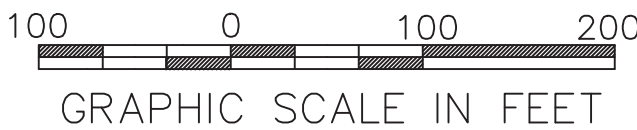
ORIGINAL PLAN	SURVEY PLOTTED BY	_____	DATE	_____
	DRAWN BY	_____		_____
	TRACED BY	_____		_____
	DESIGNED BY	_____		_____
	QUANTITIES BY	_____		_____
NOTEBOOK NO. _____	CHECKED BY	_____		_____

LEGEND:

- AREA OF POTENTIAL EFFECTS
- TRANSVERSE/MOBILITY AREA

GENERAL SITE LAYOUT PLAN

Scale: 1"=100'



Signature: [Handwritten Signature] APRIL 30, 2026

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION

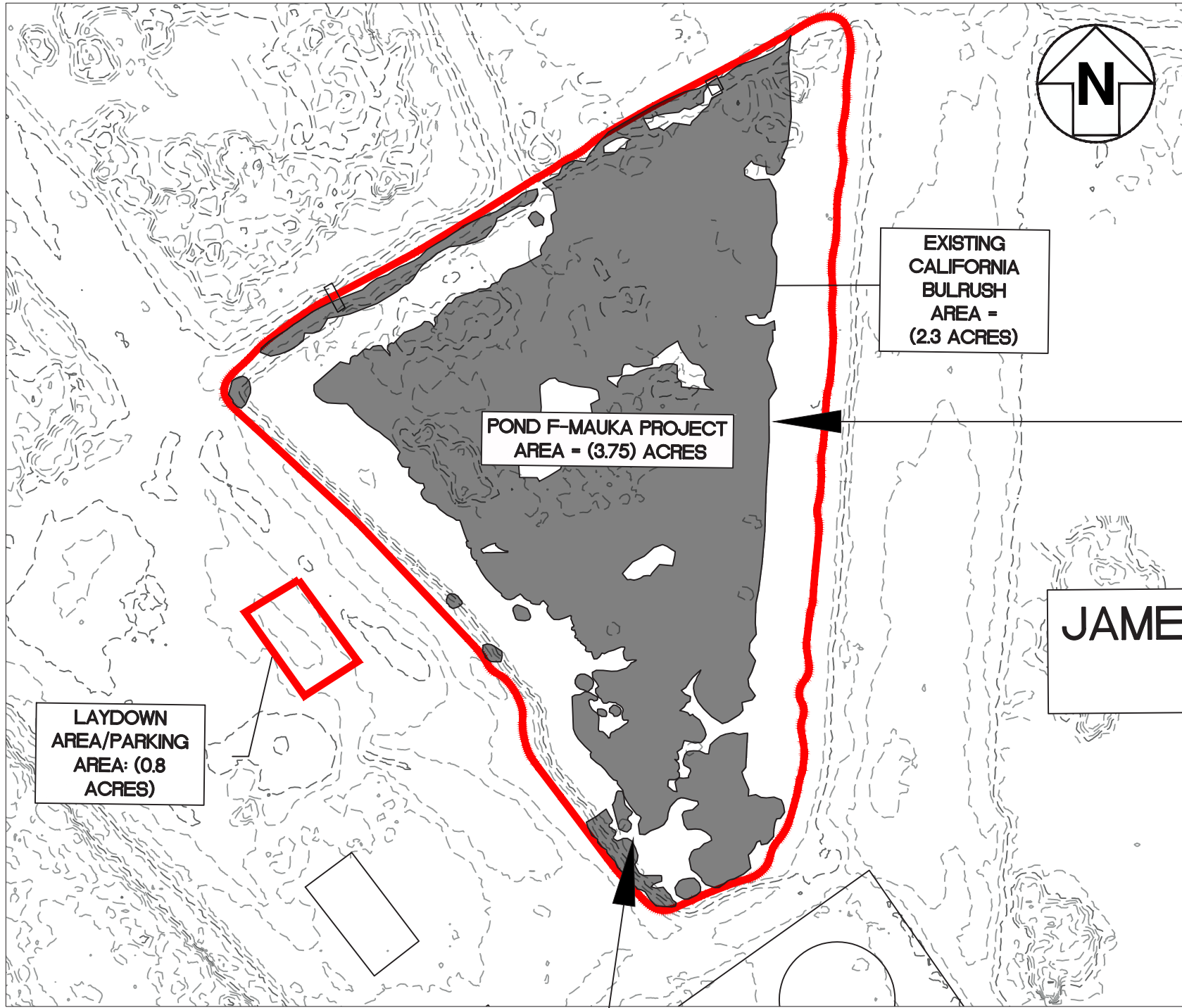
GENERAL SITE
LAYOUT PLAN

KAMEHAMEHA HIGHWAY WETLAND
ENHANCEMENT AT JAMES CAMPBELL
NATIONAL WILDLIFE REFUGE

FEDERAL-AID PROJECT NO. STP-083-1(085)
Scale: As Noted Date: November 2025

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-083-1(085)	2026	3	16

CURRENT DISTRIBUTION OF CALIFORNIA BULRUSH
AT POND F-MAUKA



The view of Pond F-Mauka looking west shows an infestation of California bulrush to the right of the open water area, where the bulrush was previously removed.



The view of Pond F-Mauka looking northeast show extensive infestations of California bulrush (the tall sedge visible in the photo) throughout much of the pond.

ORIGINAL PLAN	SURVEY PLOTTED BY	_____	DATE	_____
	DRAWN BY	_____	"	_____
	TRACED BY	_____	"	_____
	DESIGNED BY	_____	"	_____
	QUANTITIES BY	_____	"	_____
NOTEBOOK NO.	CHECKED BY	_____	"	_____

BENEDICT LEE

LICENSED PROFESSIONAL LANDSCAPE ARCHITECT

No. 5818

HAWAII, U.S.A.

APRIL 30, 2026

SIGNATURE

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION

DISTRIBUTION OF CALIFORNIA BULRUSH

KAMEHAMEHA HIGHWAY WETLAND
ENHANCEMENT AT JAMES CAMPBELL
NATIONAL WILDLIFE REFUGE

FEDERAL-AID PROJECT NO. STP-083-1(085)

Scale: As Noted

Date: November 2025

SHEET No. 3 OF 16 SHEETS

GENERAL NOTES:

- ### HISTORICAL PRESERVATION NOTES:

1. Should historic remains such as artifacts, burials, concentrations of shell or charcoal be encountered during construction activities, work shall cease immediately in the immediate vicinity of the find, and the find shall be protected from further damage in accordance with the stipulations set forth in 36 CFR 800.13. The Contractor shall cordon off the area and immediately notify the Planning Department at (808) 270-7735 and the State Historic Preservation Division at (808) 692-8015, who will assess the significance of the find and recommend the appropriate mitigation measures, if necessary. In addition, if human burials are found, the Contractor shall immediately notify the City and County of Honolulu Police Department.

Pond F—Mauka provides habitat for the federally listed endangered waterbirds aeo (*Himantopus mexicanus knudseni*), alae keokeo (*Fulica alai*), alae ula (*Gallinula chloropus sandvicensis*), and koloa maoli (*Anas wyvilliana*). The following minimization and avoidance measures must be followed at all times during project implementation in addition to guidance from JCNWR Biologists. Inform all project personnel about the presence of endangered species on site.

1. The Contractor shall take care to avoid unnecessary disturbance to waterbirds at JCNWR at all times.
2. Project activities at Pond F–Mauka should be minimized to the greatest extent possible during the main nesting and fledging season for listed Hawaiian waterbird species (March through August).
3. A biological monitor that is familiar with the species' biology will conduct Hawaiian waterbird nest surveys where appropriate habitat occurs within the vicinity of the proposed project site prior to project initiation. Surveys will be repeated again within three days of project initiation and after any subsequent delay of work of three or more days (during which the birds may attempt to nest).
4. If endangered waterbirds are encountered during the project, general avoidance measures to minimize disturbance of the birds should be implemented. These include reduced speed limits, maintaining interaction buffers (see below), and the education of contractor staff regarding the presence of the species.
5. If an active nest and/or brood is found within Pond F–Mauka, the following should occur:
 - The USFWS Biologist should be contacted immediately for further guidance.
 - A 100-foot (30-m) buffer around all active nests and/or broods should be created and maintained until the chicks/ducklings have fledged. Activities that could alter behavior and/or alter habitat should be avoided.
 - A biological monitor that is familiar with the species' biology will be present on the project site during all construction or earth moving activities until the chicks/ducklings fledge to ensure that Hawaiian waterbirds and nests are not adversely impacted.

PUBLIC HEALTH, SAFETY, AND CONVENIENCE NOTES

1. Please note that the project area is the entire area that the contractor has been granted access to and includes Pond F—Mauka, the Punamano Unit, the laydown and parking area, and the California bulrush composting area.
2. The Contractor shall observe and comply with all Federal, State, and local laws required for the protection of public health and safety and environmental quality.
3. The Contractor is to comply with the directions of the State of Hawaii Occupational Safety and Health Law (HIOSH).

SHEET No. 4 OF 16 SHEETS

SHEET No. 5 OF 16 SHEETS

WATER POLLUTION AND EROSION CONTROL NOTES (CONT.):

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-083-1(085)	2026	7	16

E. PERMIT REQUIREMENTS:

1. The calculated land disturbance area for this project based on the construction plans is 3.7 acres not including Contractor Staging and Storage areas. If the total of the disturbed area and the Contractor Staging and Storage area is one acre or greater, the Contractor shall obtain the NPDES Construction Activities Permit using HDOT's latest SWPPP template. See Hawaii Administrative Rules Chapter 11–55, Appendix C for the definition of land disturbance. The Contractor shall be responsible for obtaining the required NPDES Construction Activities Permit and complying with the requirements of HAR 11–55 including, but not limited to:

a. Deadlines for initiating and completing initial stabilization

b. Increased inspection frequency and installation of rain gauge if applicable

c. Deadlines to initiate and complete repairs to BMPs

d. Reporting requirements and corrective action reports
2. Comply with all applicable State and Federal Permit conditions.

F. SITE–SPECIFIC BMP REQUIREMENTS:

Each BMP below is referenced to the corresponding section of the current HDOT Construction Best Management Practices Field Manual and appropriate Supplemental Sheets. The Manual may be obtained from the HDOT Statewide Stormwater Management Program Website at <http://www.stormwaterhawaii.com/resources/contractorsand–consultants/> under Construction Best Management Practices Field Manual. Supplemental BMP sheets are located at <http://www.stormwaterhawaii.com/resources/contractors–and–consultants/storm–water–pollution–prevention–plan–swppp/> under Concrete Curing and Irrigation Water.

The requirements for Water Pollution, Dust, and Erosion Control submittals are included in Section 209 of the Hawaii Standard Specifications for Road and Bridge Construction dated 2005 and applicable Special Provisions. A list of pollutant sources and corresponding BMP used to mitigate the pollutants are included in Section 209 of the Special Provisions under Appendix A.

Follow the requirements below:

1. Protect all Drainage Inlets receiving runoff from disturbed areas (SC–1).
2. Contain on–site runoff using Perimeter Sediment Controls

a. SC–7 Silt Fence or Filter Fabric Fence

b. SC–2 Vegetated Filter Strips and Buffers

c. SC–6 Compost Filter Berm/Sock

d. SC–8 Sandbag Barrier

e. SC–9 Brush or Rock Filter
3. Control offsite runoff from entering construction area

a. EC–3 Run–On Diversion

b. EC–5 Earth Dike, Swales, and Ditches
4. Incorporate applicable Site Management BMP

a. SM–1 Construction BMP Training

b. SM–2 Material Storage and Handling

c. SM–3 Stockpile Management

d. SM–6 Solid Waste Management

e. SM–7 Sanitary Waste Management

f. SM–9 Hazardous Materials and Waste Management

g. SM–10 Spill Prevention and Control

h. SM–11 Vehicle and Equipment Cleaning

i. SM–12 Vehicle and Equipment Maintenance

j. SM–13 Vehicle and Equipment Refueling

k. SM–14 Scheduling

l. SM–15 Location of Potential Sources of Sediment

m. SM–16 Staging Area

n. SM–17 Preservation of Existing Vegetation

o. SM–19 Dust Control
5. Contain pollutants within the Construction Staging/Storage Area BMP with applicable Perimeter Sediment Controls and Site Management BMP. Include a Stabilized Construction Entrance/Exit (SC–11) for all areas which exit onto a paved street. Restrict vehicle access to these points.
6. Manage Concrete Waste including installing a Concrete Washout Area (SM–4) and properly disposing of Concrete Curing Water (California Stormwater BMP Handbook NS–12 Concrete Curing).
7. Remove saw cut slurry and hydrodemolition water from the site by vacuuming. Provide storm drain protection and/or perimeter sediment controls during saw cutting and hydrodemolition work.

ORIGINAL PLAN	SURVEY PLOTTED BY	_____	DATE	_____
	DRAWN BY	_____	"	_____
	TRACED BY	_____	"	_____
	DESIGNED BY	_____	"	_____
	QUANTITIES BY	_____	"	_____
NOTEBOOK NO.	CHECKED BY	_____	:	_____

BENEDICT LEE

LICENSED PROFESSIONAL LANDSCAPE ARCHITECT

No. 5818

HAWAII, U.S.A.



SIGNATURE

APRIL 30, 2026

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION

WATER POLLUTION & EROSION CONTROL NOTES

KAMEHAMEHA HIGHWAY WETLAND
ENHANCEMENT AT JAMES CAMPBELL
NATIONAL WILDLIFE REFUGE

FEDERAL–AID PROJECT NO. STP–083–1(085)

Scale: As Noted

Date: November 2025

SHEET No. 7 OF 16 SHEETS

SURVEY PLOTTED BY _____ DATE _____
DRAWN BY _____
TRACED BY _____
DESIGNED BY _____
QUANTITIES BY _____
CHECKED BY _____

ORIGINAL
PLAN

NOTEBOOK
NO. _____

Sequence of Work

Invasive Plant Removal General Notes

- During the first year, Pond F–Mauka will be dewatered by USFWS and between September and February (non–breeding season for endangered waterbirds) the 2.3 acre area of California bulrush should be excavated to a depth of up to 1 foot using an appropriately size excavator (<40,000 pounds) and transported to the composting area site at JCNWR. U.S. Army Corps of Engineers permitting requirements specify that California bulrush must be excavated one scoop at a time and loaded directly onto trucks for transport to the composting area. Stockpiling of excavated material or grading within the excavated area of Pond F–Mauka is not permitted at any time. All excavated areas must be free of plant debris in preparation for planting.
- Control invasive plant regrowth every three months, for up to five days per quarter, for one year following the excavation of the California bulrush using approved glyphosate formulations for wetland habitats, with Engineer approval. Pond F–Mauka must be 100% free of California bulrush and other invasive plant species, including vegetation and seedlings, before the end of the project period.
- It is anticipated that backpack sprayers will be used to treat any plants of California bulrush that reestablish at the project site. The herbicide application method is subject to approval by the Engineer.
- All plant removal and control must follow approved methods, as specified, and be coordinated with the Engineer.
- The engineer must provide approval of the California bulrush removal and site preparation before commencing planting at Pond F–Mauka.

Targeted Invasive Plant List			
Scientific Name	Common Name	Control Method	Treatment
<i>Schoenoplectus californicus</i>	California bulrush	Herbicide application	Glyphosate

Planting Notes

- To ensure the genetic integrity of existing wild populations, propagation material for restoration plantings should be sourced from wetlands on windward Oahu within the vicinity of JCNWR.
- The Landscape Contractor shall supply plants in 1–gallon pots or larger as specified in the plant species selection table. Plants shall be undamaged, sound, healthy, vigorous and free of disease and insect infestation. Plants not conforming to these requirements on delivery to the project and at the end of the plant establishment period will be rejected.
- Notify Engineer 30 calendar days prior to planting operations for approval of all plant material at place of growth. All plant material not approved by the Engineer will be subject to rejection.
- The planting locations indicated on the plan are approximate and should be adjusted in the field as necessary to maintain the planting density outlined in the plant material list.
- Prior to planting, all planting locations (general groupings) shall be staked out by the Contractor for approval by the Engineer.
- Create planting holes large enough for the root ball using handheld tools (spades or motorized augers), minimizing soil removal. Backfill with native soil, ensuring the root ball is level with the soil surface. Plantings will be inspected by the Engineer. Plants not at proper depth will be rejected.
- Planting should occur between November and February of the contract’s second year, outside the endangered waterbirds’ breeding season. Timing will be coordinated with the Engineer based on seasonal rainfall patterns. The USFWS will rewater the pond once planting is complete and after the contractor has coordinated with the JCNWR Refuge Manager. The Refuge Manager, Dr. Joshua Ream, can be contacted at 808–291–6258 or joshua_ream@fws.gov.
- Conduct infill planting to replace dead or unhealthy plants between November and February of the contract’s third year.
- Begin maintenance within 14 days of planting, then monthly for six months. Thereafter, maintain quarterly for the rest of the contract. Check all follow–up plantings within 14 days and maintain them quarterly thereafter.
- Outplant survival must exceed 75% by the start of the wet season (November–March) in Year 4. If not, the contractor must conduct infill planting to meet this threshold. Native wetland plant cover of the total area of Pond F–Mauka must reach at least 40% by the end of the 90–day maintenance period and before project turnover.
- The Contractor shall be solely responsible for the complete removal and damages resulting from the introduction via planting of any plant species listed on the Hawaii Department of Agriculture ”Noxious Weed Rules” as defined in the Statute, Hawaii Administrative Rules 4:66:1 or the ’Federal Noxious Weed List’ as defined in Title 7 of the Code of Federal Regulation (CFR), Parts 360 and 361.
- Existing native plants on–site, both within Pond F–Mauka and the wider JCNWR, must not be disturbed. The Contractor must replace any that are killed or removed during planting, with no additional payment.
- Work will occur only during daylight hours. No night work or lighting is allowed.

Monitoring and data sharing

- In February 2028, the contractor will establish 15 photo points and fifteen 16 × 16–foot (5 × 5–meter) vegetation plots within Pond F–Mauka and the reference site at the Punamano Unit JCNWR (30 photo points and plots in total), in consultation with the Engineer and USFWS. These points and plots will be randomly selected and recorded with a GPS. The photo points and plots at Pond F–Mauka will be monitored annually in February for the rest of the contract, while the photo points and the vegetation plots at the reference site will be monitored once following establishment. The contractor will provide the Engineer with data from the monitoring of the photo points and plots annually.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-083-1(085)	2026	8	16

BENEDICT LEE

LICENSED PROFESSIONAL LANDSCAPE ARCHITECT

No. 5818

HAWAII, U.S.A.



SIGNATURE

APRIL 30, 2026

EXPIRATION OF LICENSE

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION

PLANTING NOTES

KAMEHAMEHA HIGHWAY WETLAND
ENHANCEMENT AT JAMES CAMPBELL
NATIONAL WILDLIFE REFUGE

FEDERAL–AID PROJECT NO. STP–083–1(085)

Scale: As Noted

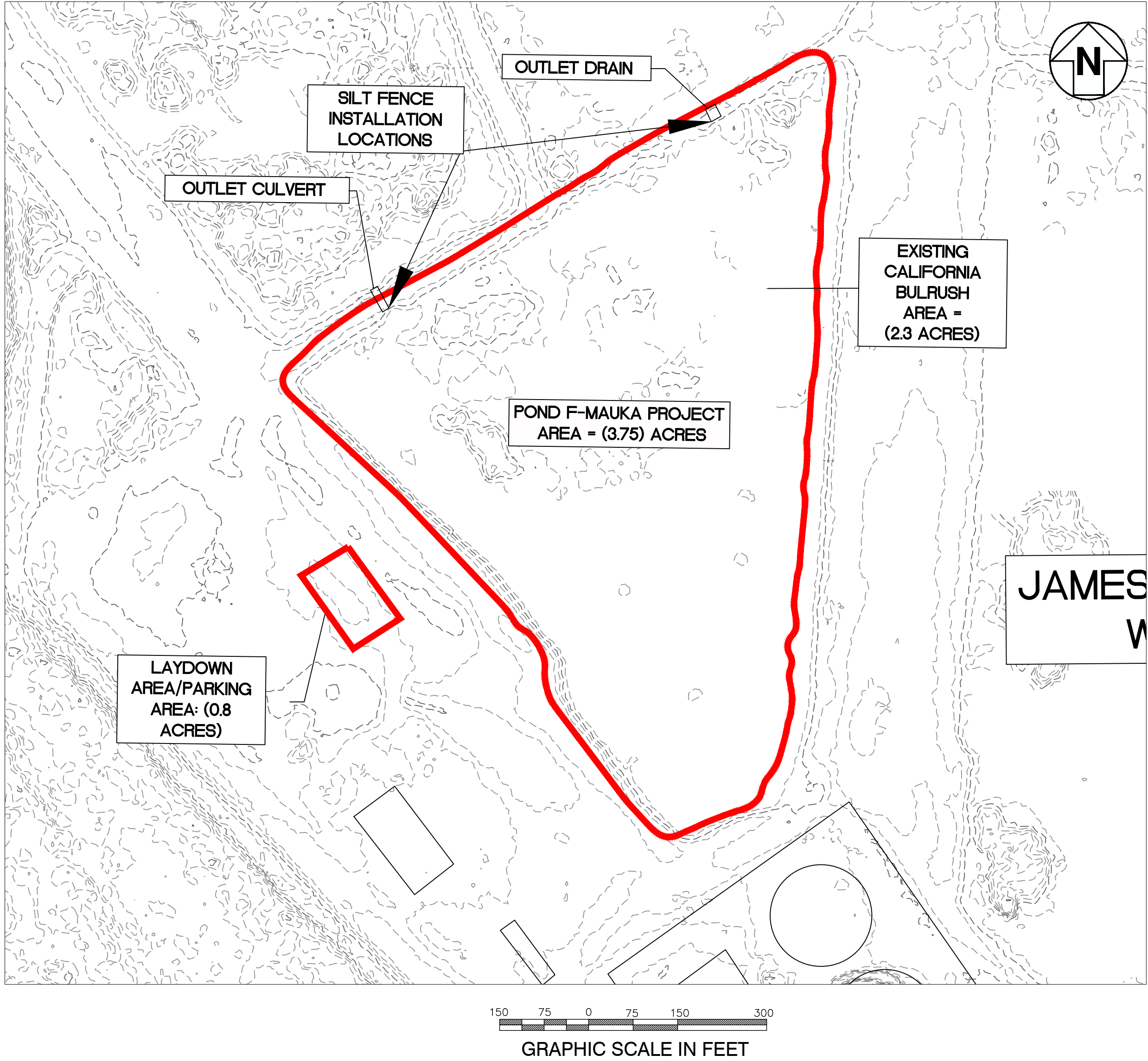
Date: November 2025

SHEET No. 8 OF 16 SHEETS

ORIGINAL PLAN	SURVEY PLOTTED BY _____	DATE _____
	DRAWN BY _____	" "
	TRACED BY _____	" "
	DESIGNED BY _____	" "
	QUANTITIES BY _____	" "
NOTEBOOK NO. _____	CHECKED BY _____	" "

BEST MANAGEMENT PRACTICES (BMP) NOTES

1. The Contractor shall follow installation and implementation requirements for stabilized construction entrances/exits as outlined in the State of Hawaii Department of Transportation Highways Division, Construction Best Management Practices Field Manual, Chapter 2 Erosion Control.
2. The Contractor shall install temporary silt fences at the locations shown on the plan to the right prior to work.
3. Unless indicated otherwise in the special provisions or proposal, payment for planting under this item, other than that specified for landscaping, shall not be paid for directly, but shall be considered incidental to and included in the prices bid for planting.
4. All BMPs shall not be removed until all permanent erosion controls are in place and established.
5. The Contractor shall inspect and clean the temporary silt fences after each storm event.
6. Ensure all existing drainage facilities are protected from dirt and debris in storm water runoff related to construction activities.
7. Sediment and Erosion Control BMP measures shown in Contract Documents are minimum BMP requirements and do not constitute an acceptable and/or complete Sediment Control Plan. The Contractor shall incorporate additional BMPs based upon their means and methods considering site conditions and construction sequence in accordance with the Contract Documents including applicable permit document requirements. Cost shall be included in Pay Item 209.0100, Installation, Maintenance, Monitoring, and Removal of BMP.



RECOMMENDED LOCATIONS OF EROSION CONTROL DEVICES

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-083-1(085)	2026	9	16

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STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAY DIVISION

BEST MANAGEMENT PRACTICES

KAMEHAMEHA HIGHWAY WETLAND

ENHANCEMENT AT JAMES CAMPBELL

NATIONAL WILDLIFE REFUGE

FEDERAL-AID PROJECT NO. STP-083-1(085)

Scale: As Noted

Date: November 2025

SURVEY PLOTTED BY _____ DATE _____

DRAWN BY _____

TRACED BY _____

DESIGNED BY _____

QUANTITIES BY _____

CHECKED BY _____

ORIGINAL PLAN

NOTEBOOK NO. _____

PLANT SCHEDULE AREA A

SYMBOL	CODE	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	QTY
	CU	CLADIUM JAMAICENSE	UKI GRASS	1 GAL.	24" o.c.	586
	CJ	CYPERUS JAVANICUS	AHU AWA	1 GAL.	24" o.c.	180
	CL	CYPERUS LAEVIGATUS	MAKALOA	1 GAL.	24" o.c.	1,274
	EI	ELEOCHARIS CALVA	KOHEKOHE	1 GAL.	24" o.c.	166
	ST	SCHOENOPLECTUS TABERNAEMONTANI	KALUHA	1 GAL.	24" o.c.	780

PLANT SCHEDULE AREA B

SYMBOL	CODE	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	QTY
	CU	CLADIUM JAMAICENSE	matc	1 GAL.	24" o.c.	770
	CJ	CYPERUS JAVANICUS	AHU AWA	1 GAL.	24" o.c.	224
	CL	CYPERUS LAEVIGATUS	MAKALOA	1 GAL.	24" o.c.	1,138
	EI	ELEOCHARIS CALVA	KOHEKOHE	1 GAL.	24" o.c.	196
	ST	SCHOENOPLECTUS TABERNAEMONTANI	KALUHA	1 GAL.	24" o.c.	681

PLANT SCHEDULE AREA C

SYMBOL	CODE	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	QTY
	CU	CLADIUM JAMAICENSE	UKI GRASS	1 GAL.	24" o.c.	420
	CJ	CYPERUS JAVANICUS	AHU AWA	1 GAL.	24" o.c.	172
	CL	CYPERUS LAEVIGATUS	MAKALOA	1 GAL.	24" o.c.	915
	EI	ELEOCHARIS CALVA	KOHEKOHE	1 GAL.	24" o.c.	154
	ST	SCHOENOPLECTUS TABERNAEMONTANI	KALUHA	1 GAL.	24" o.c.	392

TOTAL PLANTS

SYMBOL	CODE	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	QTY
GROUND COVERS						
	CU	CLADIUM JAMAICENSE	UKI GRASS	1 GAL.	24" o.c.	3,225
	CJ	CYPERUS JAVANICUS	AHU'AWA	1 GAL.	24" o.c.	1,220
	CL	CYPERUS LAEVIGATUS	MAKALOA	1 GAL.	24" o.c.	6,263
	EI	ELEOCHARIS CALVA	KOHEKOHE	1 GAL.	24" o.c.	1,098
	ST	SCHOENOPLECTUS TABERNAEMONTANI	KALUHA	1 GAL.	24" o.c.	3,150

PLANT SCHEDULE AREA D

SYMBOL	CODE	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	QTY
	CU	CLADIUM JAMAICENSE	UKI GRASS	1 GAL.	24" o.c.	562
	CJ	CYPERUS JAVANICUS	AHU AWA	1 GAL.	24" o.c.	174
	CL	CYPERUS LAEVIGATUS	MAKALOA	1 GAL.	24" o.c.	856
	EI	ELEOCHARIS CALVA	KOHEKOHE	1 GAL.	24" o.c.	168
	ST	SCHOENOPLECTUS TABERNAEMONTANI	KALUHA	1 GAL.	24" o.c.	479

PLANT SCHEDULE AREA E

SYMBOL	CODE	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	QTY
	CU	CLADIUM JAMAICENSE	UKI GRASS	1 GAL.	24" o.c.	527
	CJ	CYPERUS JAVANICUS	AHU AWA	1 GAL.	24" o.c.	282
	CL	CYPERUS LAEVIGATUS	MAKALOA	1 GAL.	24" o.c.	1,214
	EI	ELEOCHARIS CALVA	KOHEKOHE	1 GAL.	24" o.c.	232
	ST	SCHOENOPLECTUS TABERNAEMONTANI	KALUHA	1 GAL.	24" o.c.	440

PLANT SCHEDULE AREA F

SYMBOL	CODE	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	QTY
	CU	CLADIUM JAMAICENSE	UKI GRASS	1 GAL.	24" o.c.	360
	CJ	CYPERUS JAVANICUS	AHU AWA	1 GAL.	24" o.c.	188
	CL	CYPERUS LAEVIGATUS	MAKALOA	1 GAL.	24" o.c.	866
	EI	ELEOCHARIS CALVA	KOHEKOHE	1 GAL.	24" o.c.	182
	ST	SCHOENOPLECTUS TABERNAEMONTANI	KALUHA	1 GAL.	24" o.c.	378

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-083-1(085)	2026	10	16

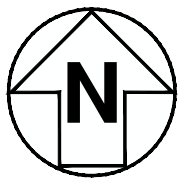
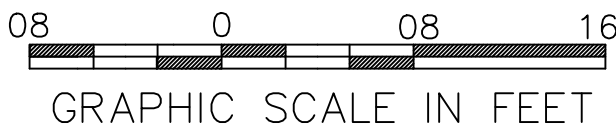
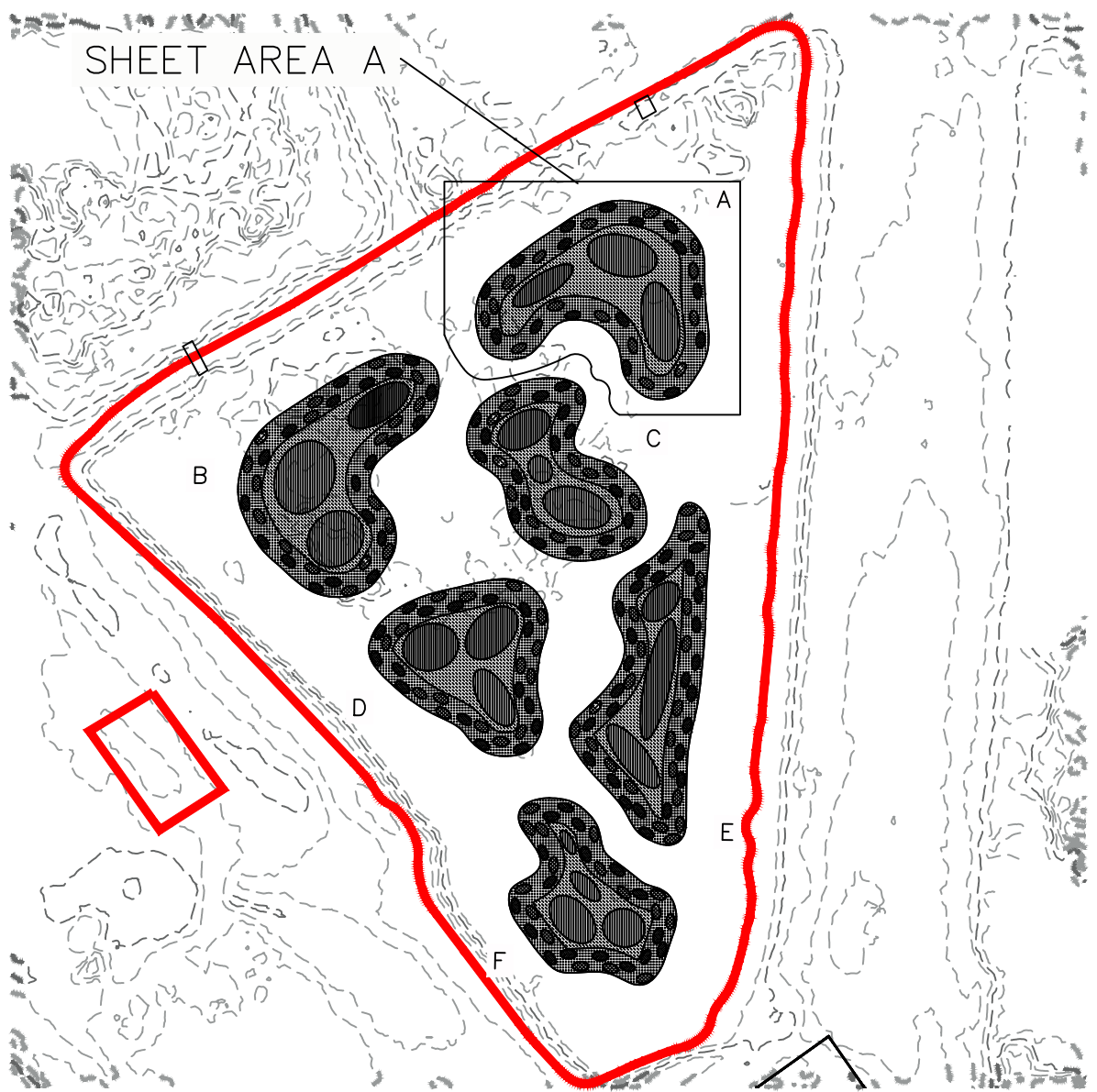
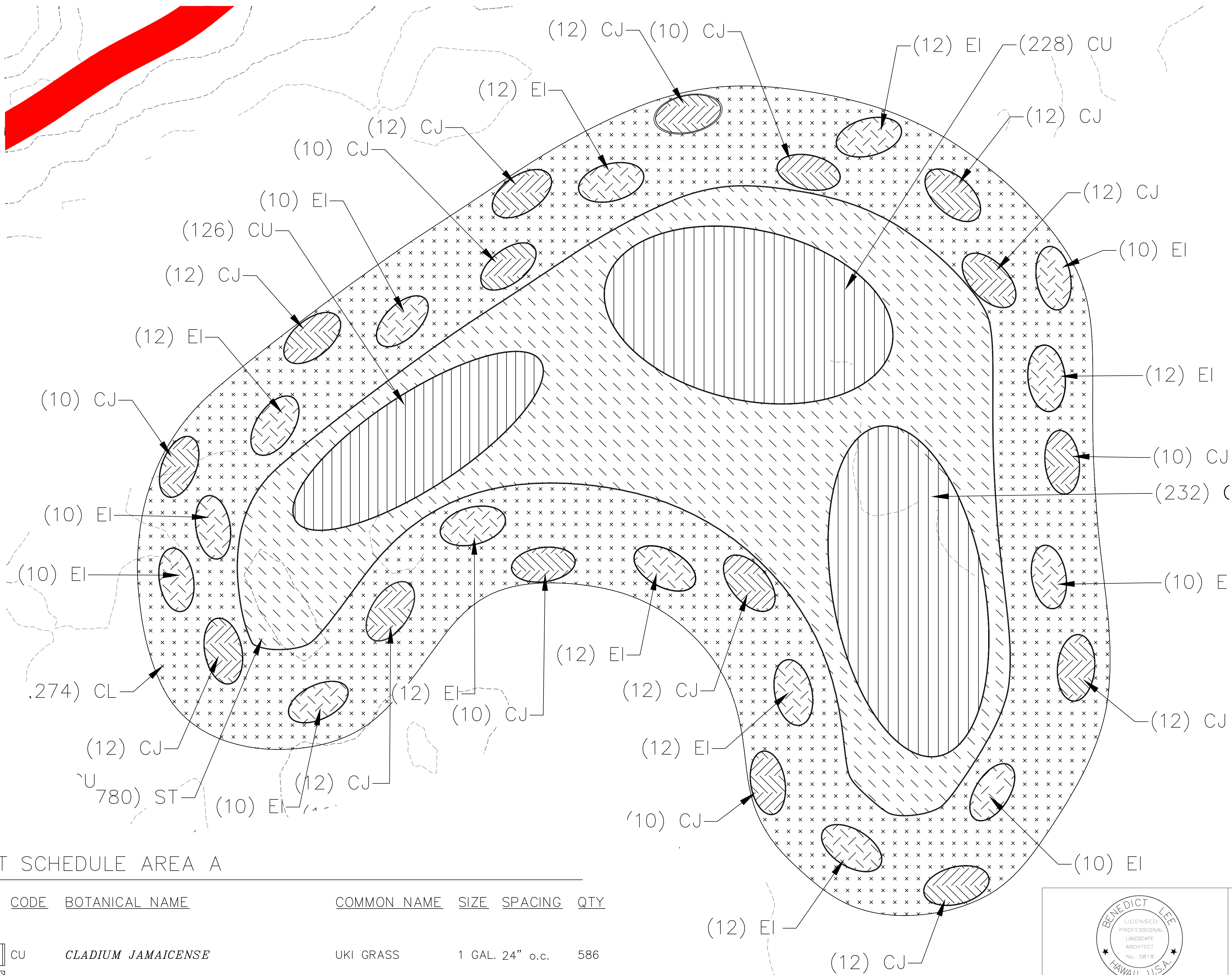
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION

PLANTING SCHEDULE
KAMEHAMEHA HIGHWAY WETLAND
ENHANCEMENT AT JAMES CAMPBELL
NATIONAL WILDLIFE REFUGE
PROJECT NO. STP-083-1(085)
Scale: As Noted Date: November 2025

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-083-1(085)	2026	11	16



ORIGINAL PLAN	SURVEY PLOTTED BY _____	DATE _____
	DRAWN BY _____	_____
	TRACED BY _____	_____
	DESIGNED BY _____	_____
NOTEBOOK NO. _____	QUANTITIES BY _____	_____
	CHECKED BY _____	_____

PLANT SCHEDULE AREA A

SYMBOL	CODE	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	QTY
	CU	CLADIUM JAMAICENSE	UKI GRASS	1 GAL. 24" o.c.		586
	CJ	CYPERUS JAVANICUS	AHU AWA	1 GAL. 24" o.c.		180
	CL	CYPERUS LAEVIGATUS	MAKALOA	1 GAL. 24" o.c.		1,274
	EI	ELEOCHARIS CALVA	KOHEKOHE	1 GAL. 24" o.c.		166
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BENEDICT LEE

LICENSED PROFESSIONAL LANDSCAPE ARCHITECT

No. 5818

HAWAII, U.S.A.

SIGNATURE

APRIL 30, 2026

EXPIRATION OF LICENSE

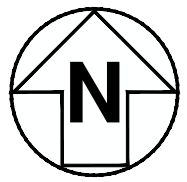
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION

PLANTING PLAN AREA A
KAMEHAMEHA HIGHWAY WETLAND
ENHANCEMENT AT JAMES CAMPBELL
NATIONAL WILDLIFE REFUGE
FEDERAL-AID PROJECT NO. STP-083-1(085)

Scale: 1" = 10' Date: November 2025

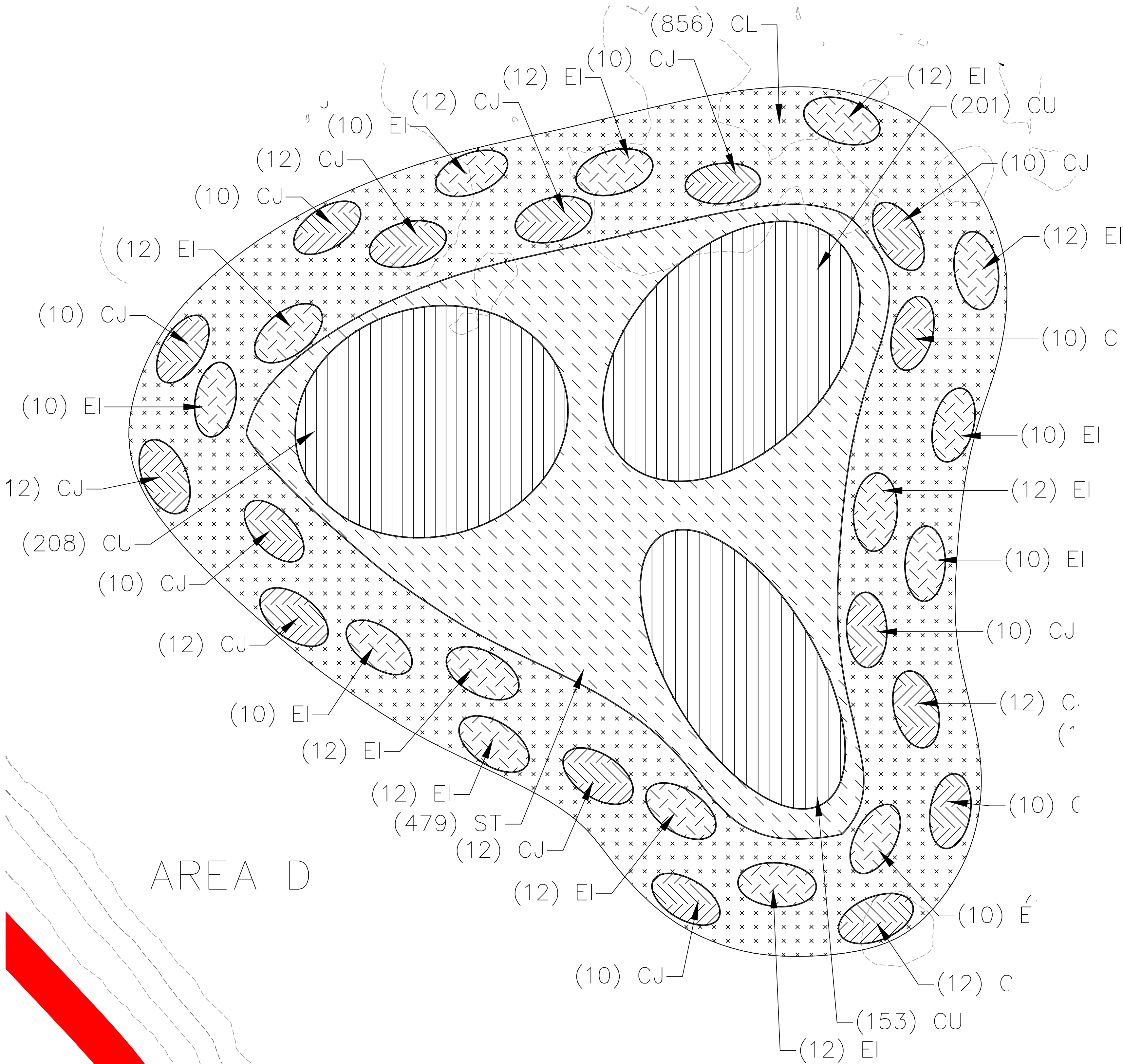
SHEET No. 11 OF 16 SHEETS



<u>SYMBOL</u>	<u>CODE</u>	<u>BOTANICAL NAME</u>	<u>COMMON NAME</u>	<u>SIZE</u>	<u>SPACING</u>	<u>QTY</u>
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  SIGNATURE	STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAY DIVISION
	<u>PLANTING PLAN AREA B</u> <u>KAMEHAMEHA HIGHWAY WETLAND</u> <u>ENHANCEMENT AT JAMES CAMPBELL</u> <u>NATIONAL WILDLIFE REFUGE</u> <u>FEDERAL-AID PROJECT NO. STP-083-1(085)</u>
EXPIRATION OF LICENSE THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.	Scale: 1" = 10' Date: November 2025

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-083-1(085)	2026	14	16



PLANT SCHEDULE AREA D

SYMBOL	CODE	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	QTY
	CU	CLADIUM JAMAICENSE	UKI GRASS	1 GAL.	24" o.c.	562
	CJ	CYPERUS JAVANICUS	AHU AWA	1 GAL.	24" o.c.	174
	CL	CYPERUS LAEVIGATUS	MAKALOA	1 GAL.	24" o.c.	856
	EI	ELEOCHARIS CALVA	KOHEKOHE	1 GAL.	24" o.c.	168
	ST	SCHOENOPLECTUS TABERNAEMONTANI	KALUHA	1 GAL.	24" o.c.	479



SURVEY PLOTTED BY _____ DATE _____

DRAWN BY _____

TRACED BY _____

DESIGNED BY _____

QUANTITIES BY _____

CHECKED BY _____

ORIGINAL PLAN

NOTEBOOK NO. _____

B. Lee . APRIL 30, 2026

SIGNATURE EXPIRATION OF LICENSE

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION

PLANTING PLAN AREA D

KAMEHAMEHA HIGHWAY WETLAND
ENHANCEMENT AT JAMES CAMPBELL
NATIONAL WILDLIFE REFUGE

FEDERAL-AID PROJECT NO. STP-083-1(085)

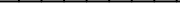
Scale: 1" = 10' Date: November 2025

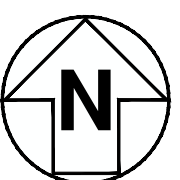
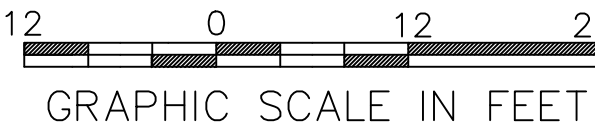
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-083-1(085)	2026	15	16



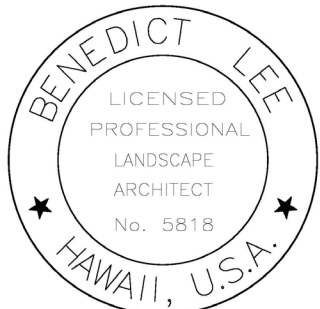
PLANT SCHEDULE AREA E

<u>SYMBOL</u>	<u>CODE</u>	<u>BOTANICAL NAME</u>	<u>COMMON NAME</u>	<u>SIZE</u>	<u>SPACING</u>	<u>QTY</u>
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	CU	<i>CLADIUM JAMAICENSE</i>	UKI GRASS	1 GAL.	24" o.c.	527
	CJ	<i>CYPERUS JAVANICUS</i>	AHU AWA	1 GAL.	24" o.c.	282
	CL	<i>CYPERUS LAEVIGATUS</i>	MAKALOA	1 GAL.	24" o.c.	1,214
	EI	<i>ELEOCHARIS CALVA</i>	KOHEKOHE	1 GAL.	24" o.c.	232
	ST	<i>SCHOENOPLECTUS TABERNAEMONTANI</i>	KALUHA	1 GAL.	24" o.c.	440



ORIGINAL PLAN	SURVEY PLOTTED BY _____ DATE _____
NOTEBOOK NO. _____	DRAWN BY _____ " _____
	TRACED BY _____ " _____
	DESIGNED BY _____ " _____
	QUANTITIES BY _____ " _____
	CHECKED BY _____ " _____



 . APRIL 30, 2026

SIGNATURE EXPIRATION OF LICENSE

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OR UNDER MY SUPERVISION.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION

PLANTING PLAN AREA E

KAMEHAMEHA HIGHWAY WETLAND
ENHANCEMENT AT JAMES CAMPBELL
NATIONAL WILDLIFE REFUGE

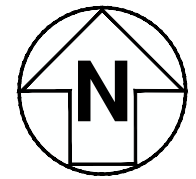
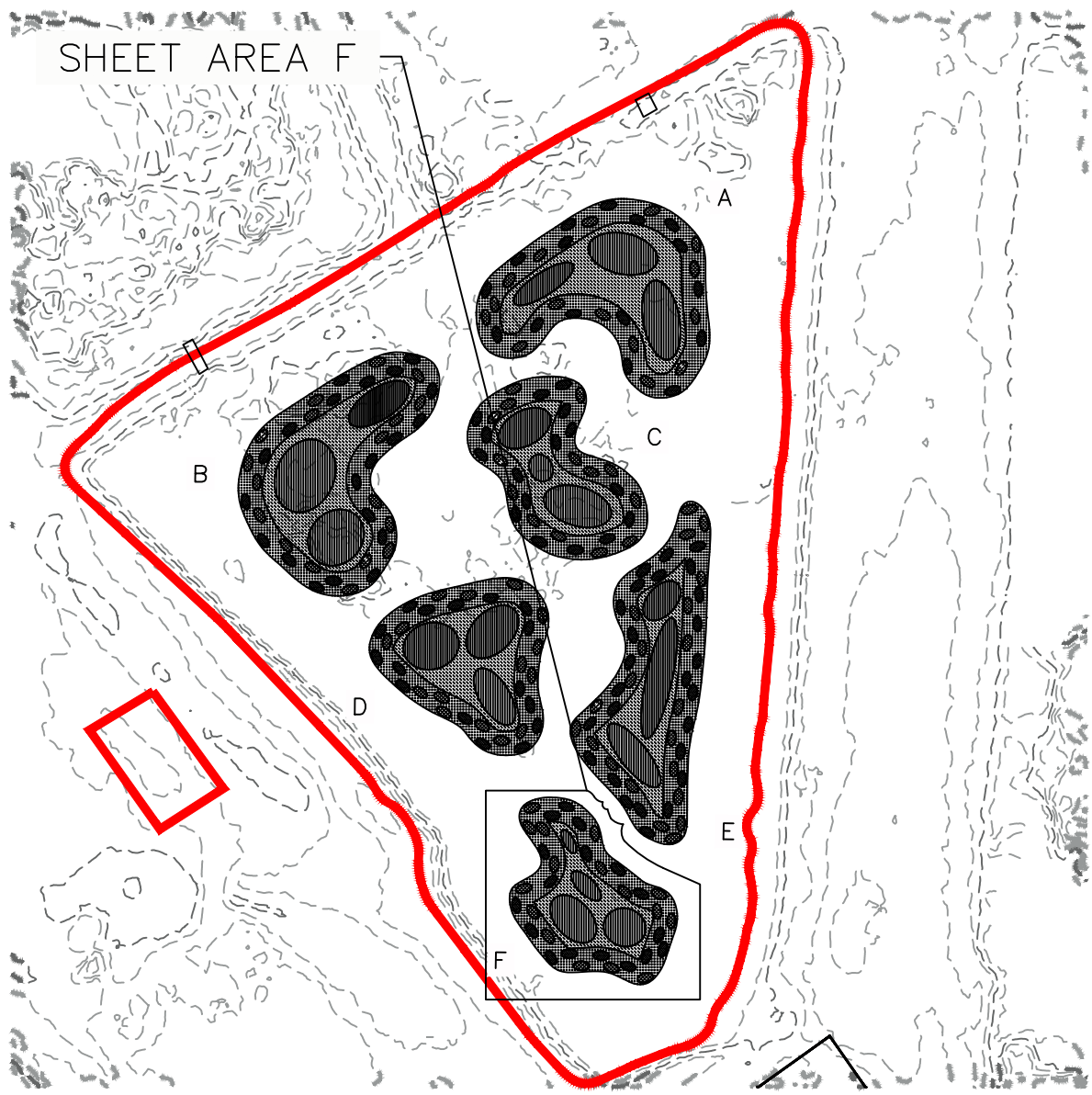
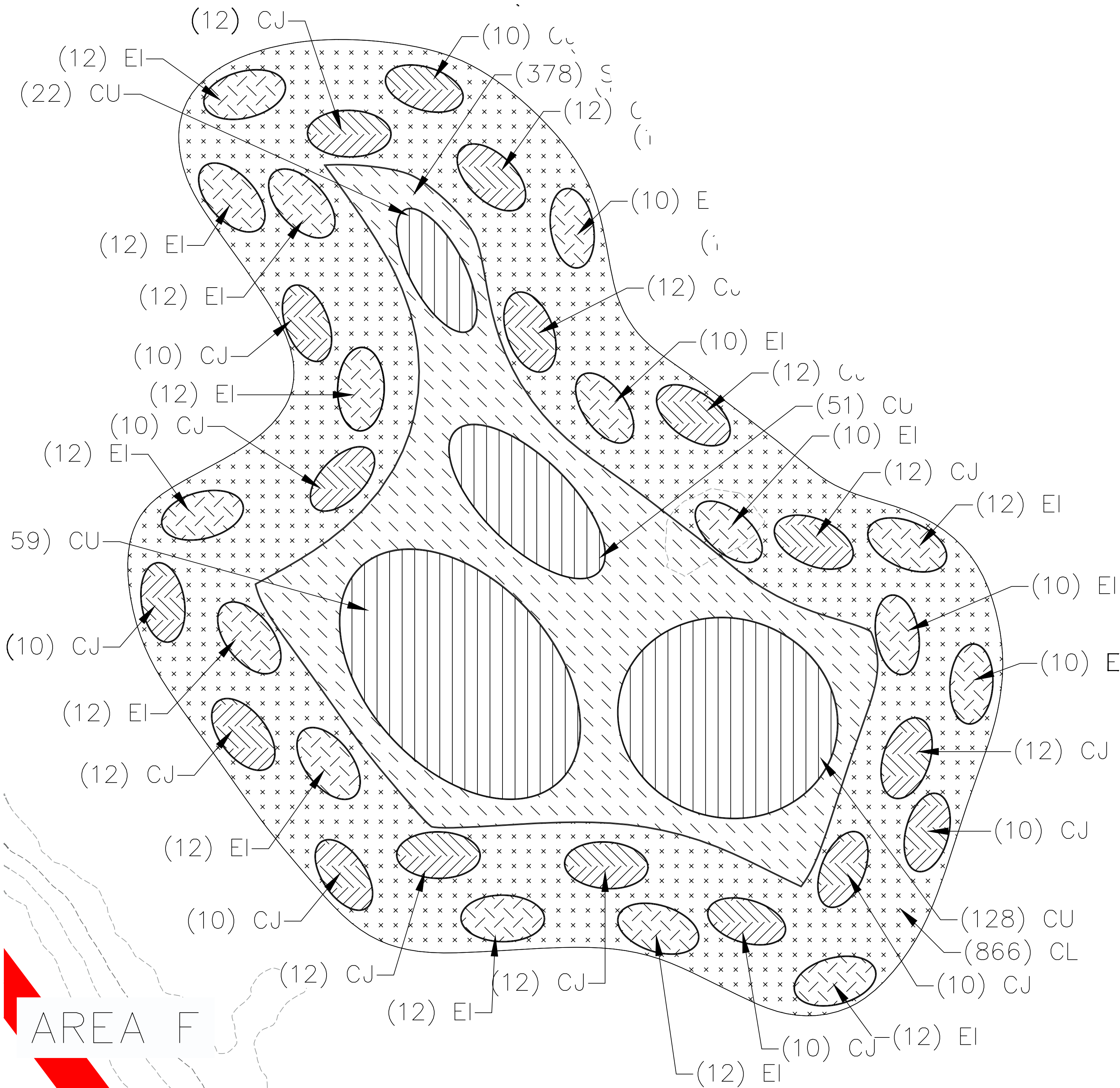
FEDERAL-AID PROJECT NO. STP-083-1(085)

Scale: 1" = 12' Date: November 2025

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-083-1(085)	2026	16	16

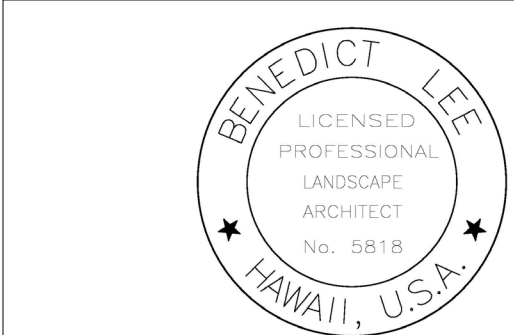
PLANT SCHEDULE AREA F

SYMBOL	CODE	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	QTY
	CU	CLADIUM JAMAICENSE	UKI GRASS	1 GAL.	24" o.c.	360
	CJ	CYPERUS JAVANICUS	AHU AWA	1 GAL.	24" o.c.	188
	CL	CYPERUS LAEVIGATUS	MAKALOA	1 GAL.	24" o.c.	866
	EI	ELEOCHARIS CALVA	KOHEKOHE	1 GAL.	24" o.c.	182
	ST	SCHOENOPLECTUS TABERNAEMONTANI	KALUHA	1 GAL.	24" o.c.	378



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	" "
	TRACED BY	" "
	DESIGNED BY	" "
	QUANTITIES BY	" "
NOTEBOOK NO.	CHECKED BY	

AREA F



SIGNATURE: [Signature]
EXPIRATION OF LICENSE: APRIL 30, 2026
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION
PLANTING PLAN AREA F
KAMEHAMEHA HIGHWAY WETLAND
ENHANCEMENT AT JAMES CAMPBELL
NATIONAL WILDLIFE REFUGE
FEDERAL-AID PROJECT NO. STP-083-1(085)

Scale: 1" = 10' Date: November 2025