



PUNALU'U AHUPUA'A FARMS

Punalu'u Stream Restoration Project

October 11, 2022

Project of



KAMEHAMEHA SCHOOLS®

Punalu'u Stream Restoration



PROJECT PURPOSE

- Restore Stream & Floodplain Processes
- Protect Cultural & Natural Resources
- Increase Community Engagement
- Conduct 'Āina-based Learning

Punalu'u May 2022

October 2022 Updates

Access into the Valley

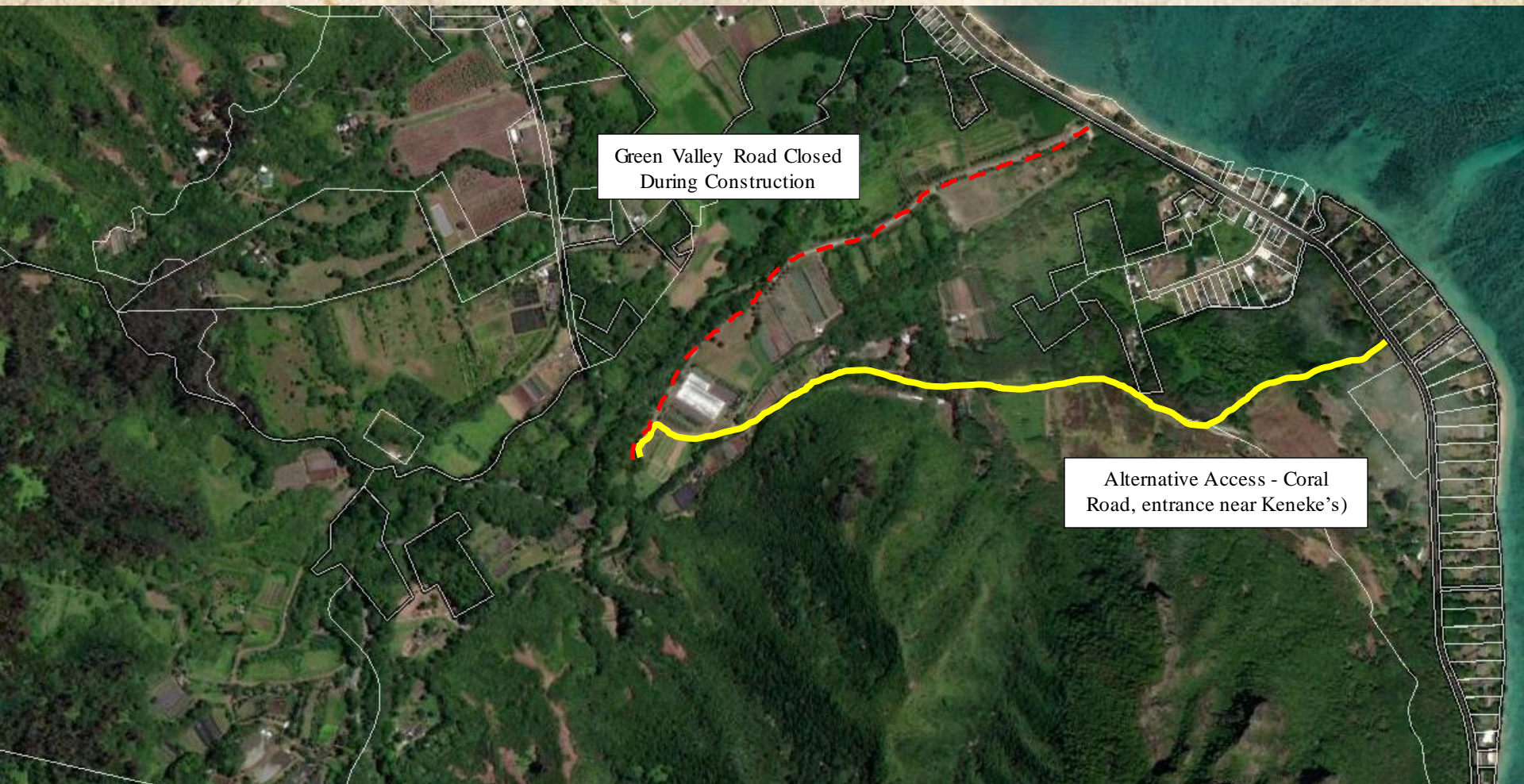
- Green Valley Road closed on Monday, October 3 for primary access into the valley due to construction.
- Alternative access is provided via Coral Road, entrance near Keneke's.
- Safety is our priority at the site and number 1 concern



October 2022 Updates

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October 2022 Updates

Best Management Practices Implemented

- Our contractor, Goodfellow Bros, installed mandated erosion control measures that include nearly 6 miles of silt fencing around the perimeter of working areas. This fencing may be visible from Kamehameha Highway in places.
- We also shored up the existing front entrance with additional cobble and gravel material to help control mud and sediment from vehicles leaving the site. No excavated material will leave the site.



October 2022 Updates

Ground Disturbance Starting

- Last week, we started with major earthwork including grading near the Estuary component of the project.



October 2022 Updates



October 2022 Updates

Coconut Rhinoceros Beetle (CRB)

- The State of Hawai'i CRB Taskforce visiting Punalu'u on October 6 to inspect the project area for CRB.
- This was due to concerns brought up at the Punalu'u Community Association meeting about CRB being present in Lā'ie and Hau'ula.
- The Taskforce did not detect any CRB in Punalu'u but did provide BMPs to our contractor and KS staff.



Other Updates

Water quality

- To prevent adverse impact to water quality, special protective curtains will be in place in designated areas of the stream corridor. Frequent water quality testing by a third-party firm will also be conducted. The project will shut down when water quality is not within permit-regulated limits and will not resume until the quality is within the established approved limits.

Potential impacts

- The surrounding neighborhood will hear some construction-related noise throughout the workday, which will be between the hours of 7 a.m. and 5 p.m. The initial excavation area will be near the estuary on the front portion of the property and so we expect constructed-related noise on the Kahana side of the project.



Punalu'u Stream Restoration

CONTACT INFORMATION:

Project Website:

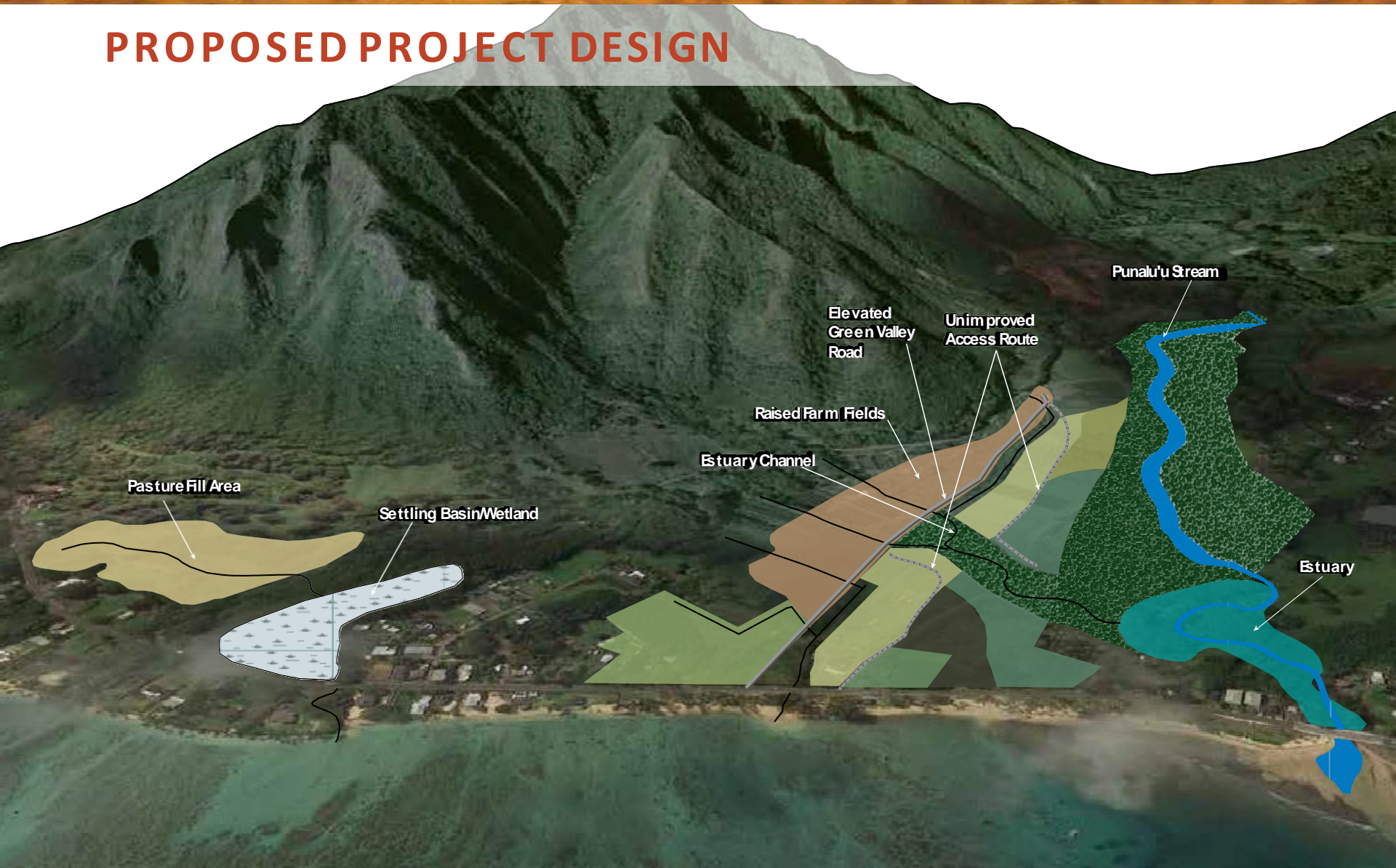
www.ksbe.edu/aina/punaluu/stream_restoration/

Email:

punaluu@ksbe.edu

Punalu'u Stream Restoration

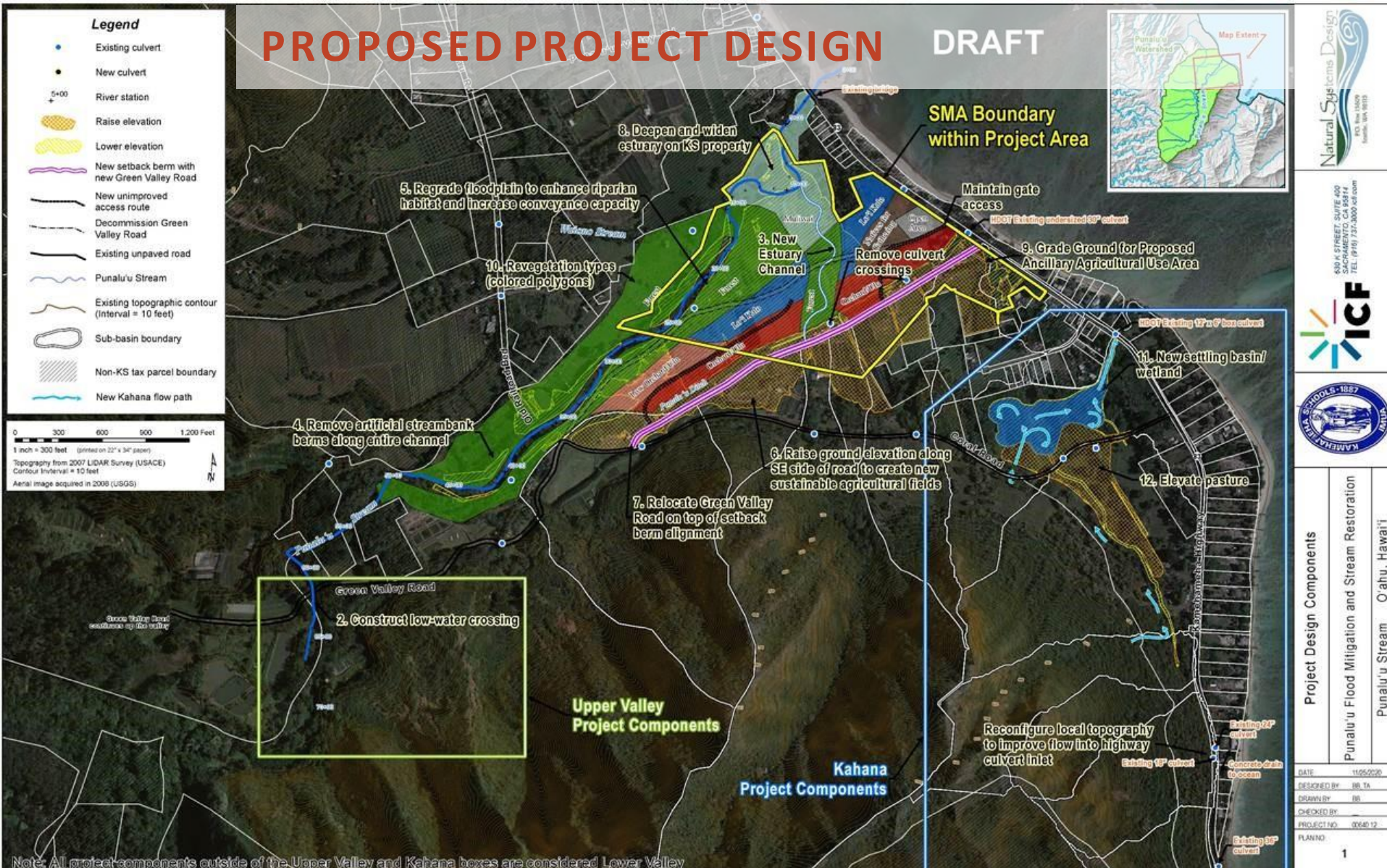
PROPOSED PROJECT DESIGN





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DRAFT



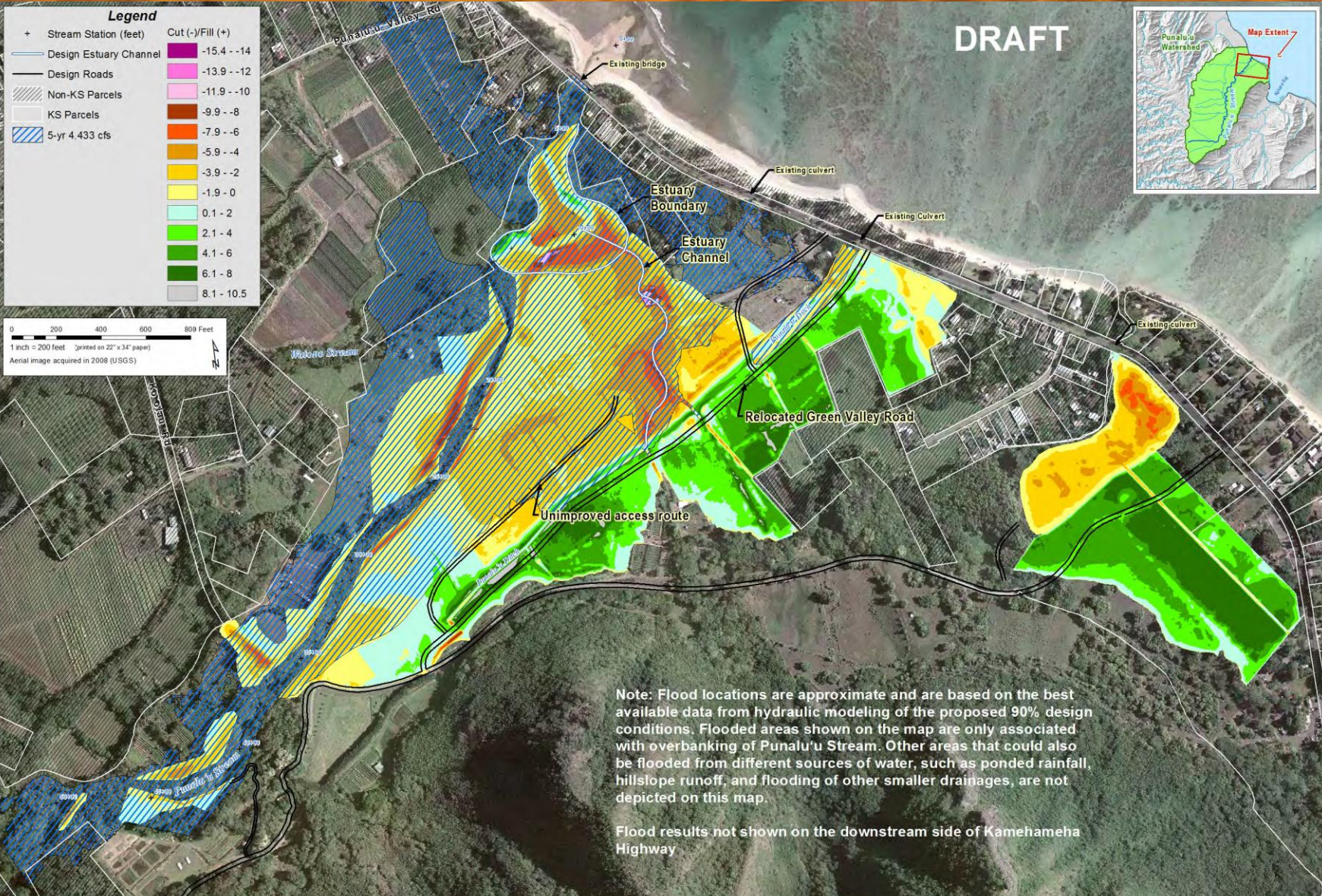
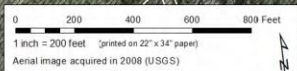
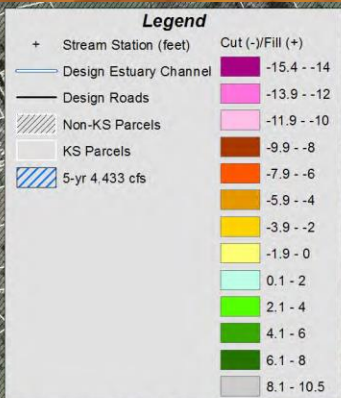
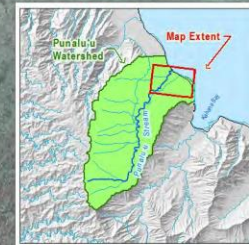
Punalu'u Stream Restoration

PROJECT CONSTRUCTION

- Estimated duration 18 to 24 months
- Project segmented and sequenced to minimize impact
- Work within high water mark restricted to USACE work periods & conditions
- Constant monitoring to avoid adverse impacts
- Erosion and sediment controls
- No work during rain and high stream flows
- Immediate work stop if adverse water quality issues are observed
- Archaeological monitoring required

Punalu'u Stream Restoration

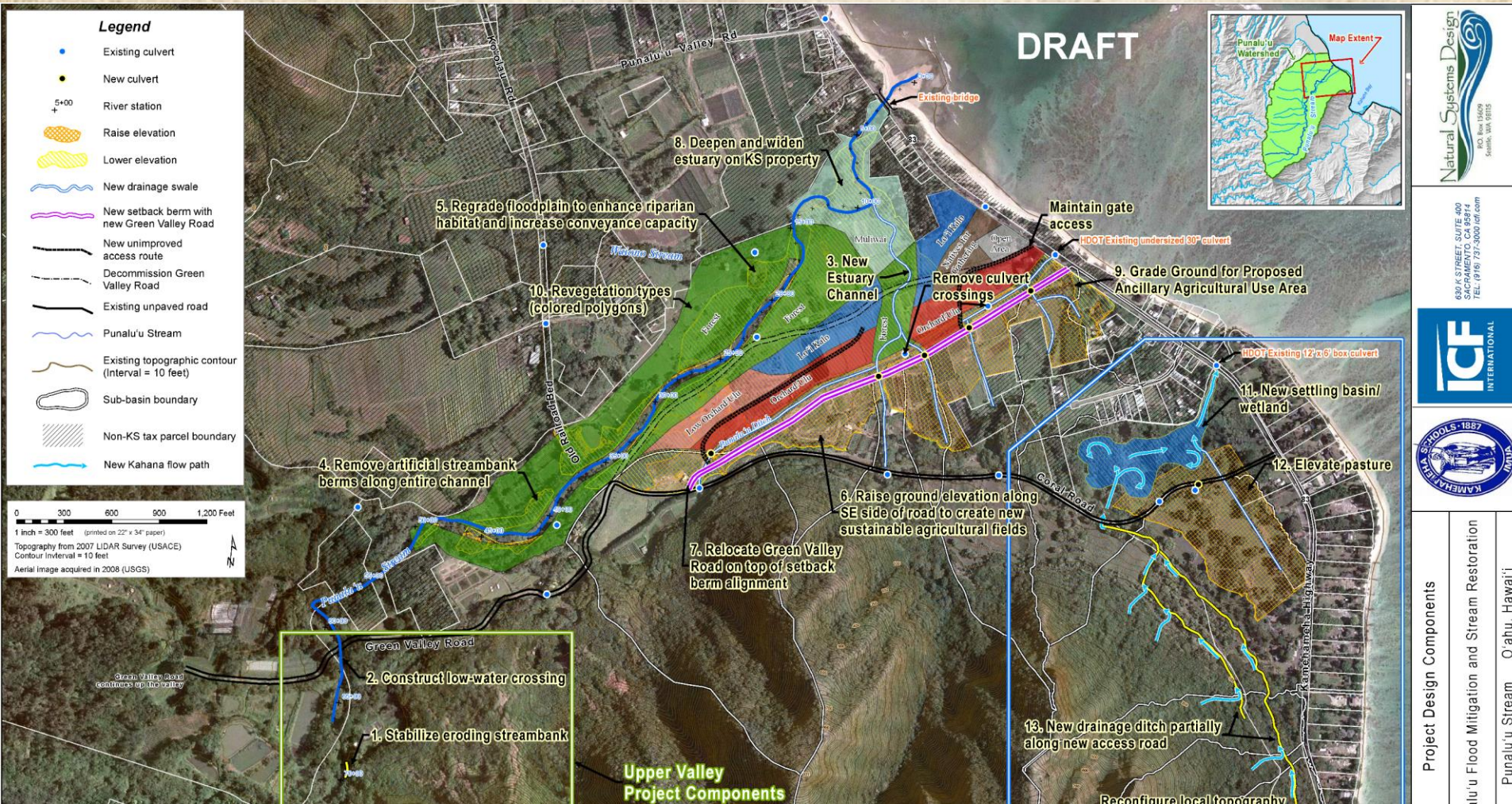
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Note: Flood locations are approximate and are based on the best available data from hydraulic modeling of the proposed 90% design conditions. Flooded areas shown on the map are only associated with overbanking of Punalu'u Stream. Other areas that could also be flooded from different sources of water, such as ponded rainfall, hillslope runoff, and flooding of other smaller drainages, are not depicted on this map.

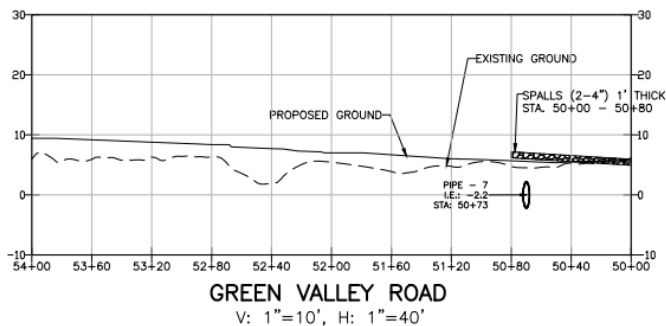
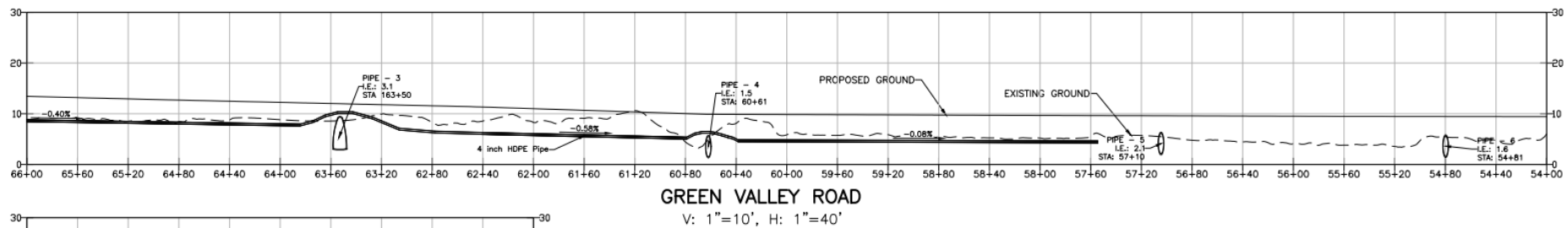
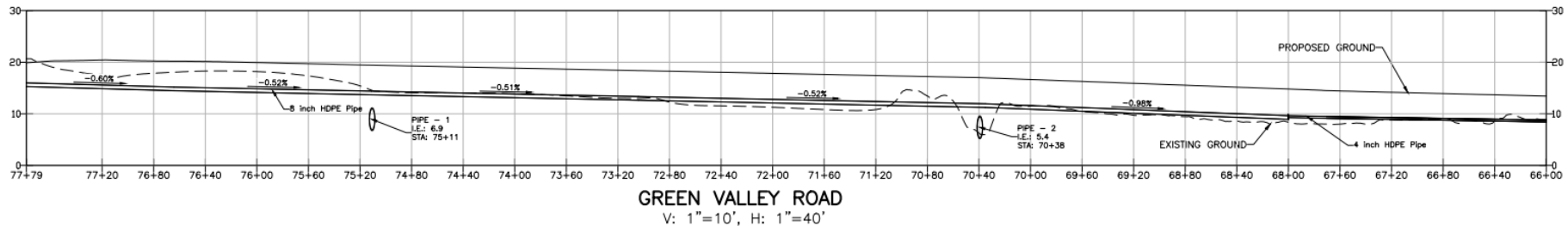
Flood results not shown on the downstream side of Kamehameha Highway

Punalu'u Stream Restoration



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Proposed New Green Valley Road (Main Access Road)



GREEN VALLEY ROAD CONTROL POINTS				
STA.	ELEVATION	NORTHING	EASTING	CROSS SECTION
50+00	0.00	148798.8	1680789.0	
51+00	7.39	148718.6	1680729.7	
52+00	8.31	148645.0	1680662.4	G-G
53+00	8.58	148578.4	1680587.8	
54+00	9.43	148518.1	1680508.0	H-H
55+00	9.47	148458.3	1680427.9	
56+00	9.52	148399.5	1680347.0	I-I
57+00	9.60	148342.0	1680265.2	
58+00	9.67	148284.6	1680183.3	J-J
59+00	9.76	148227.2	1680101.4	

GREEN VALLEY ROAD CONTROL POINTS				
STA.	ELEVATION	NORTHING	EASTING	CROSS SECTION
60+00	9.85	148169.8	1680019.6	K-K
61+00	10.20	148115.5	1679935.6	
62+00	11.00	148063.2	1679850.4	L-L
63+00	11.68	148018.7	1679761.1	
64+00	12.24	147978.6	1679669.6	M-M
65+00	12.81	147933.4	1679580.3	
66+00	13.43	147888.3	1679491.1	N-N
67+00	14.05	147843.1	1679401.9	
68+00	14.80	147792.0	1679316.6	O-O
69+00	15.72	147726.9	1679240.7	

GREEN VALLEY ROAD CONTROL POINTS				
STA.	ELEVATION	NORTHING	EASTING	CROSS SECTION
70+00	16.65	147661.8	1679164.9	P-P
71+00	17.32	147602.1	1679084.8	
72+00	17.83	147545.3	1679002.5	Q-Q
73+00	18.35	147488.5	1678920.2	
74+00	18.85	147425.3	1678842.7	R-R
75+00	19.36	147361.9	1678765.4	
76+00	19.94	147307.1	1678681.8	S-S
77+00	20.33	147247.7	1678602.2	
77+80.8	19.85	147170.5	1678591.9	

Map of Lower Punalu'u

