

# **ATTACHMENT B**

## **Listing of Kakaako District MS4 Storm Drainage Structures**

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List of HCDA Drainage Structures

Reference Map No.	Description	Location	Receiving State* Water Discharge Point	Approximate Drainage Area Identification on Reference Maps	Flow Rt. Q (cfs)	Estimated Coordinates		
						N	W	
1	1	CB K-11a	Mauka-ewa corner of South St/Ala Moana Blvd	HHCCH 001	A-72	3.7	21° 17' 58.9"	157° 51' 46.1"
2	1	CB P-1	Pohukaina St, mauka-ewa corner of Pohukaina/South	HCDA 36	A-33	5.1	21° 18' 4.3"	157° 51' 39.6"
3	1	30" RCP	Pohukaina St, between CB-P1 & 10'x8' box drain	HCDA 36	conduit only	17.8	21° 18' 4.1"	157° 51' 39.4"
4	1	36" RCP	Pohukaina St, between CB-Q1 & 10'x8' box drain	HCDA 36	conduit only	23.5	21° 18' 4.1"	157° 51' 39.4"
5	1	CB Q-1	Pohukaina St, mauka-diamond head corner of Pohukaina/South	HCDA 36	A-32	5.6	21° 18' 03"	157° 51' 38.4"
6	1	30" RCP	Pohukaina St, CB Q-1 to CB Q-3	HCDA 36	conduit only	11.5	21° 18' 03"	157° 51' 38.4"
7	1	CB Q-3	Pohukaina St, mauka side, between South & Keawe	HCDA 36	A-31	5.6	21° 18' 1.6"	157° 51' 37.1"
8	1	18" RCP	Pohukaina St, mauka, between DMH-D4 & CB-D3	HCDA 36	conduit only	7	21° 17' 59.9"	157° 51' 35.6"
9	1	CB D-3	Pohukaina St, mauka-diamond head corner of Pohukaina/Keawe	HCDA 36	B-64	7.1	21° 17' 59.9"	157° 51' 35.6"
10	1	36" RCP	Pohukaina St, between CB-D3 & CB-D1	HCDA 36	conduit only	14.3	21° 17' 58.1"	157° 51' 34.1"
11	1	CB D-1	Pohukaina St, mauka side, between Keawe & Coral	HCDA 36	F-65	7.2	21° 17' 58.1"	157° 51' 34.1"
12	1	36" RCP	Pohukaina St, between CB-D1 & DMH-A8 (14'x5' BD)	HCDA 36	conduit only	30.1	21° 17' 57.1"	21° 17' 33.2"
13	1	CB A-4	Pohukaina St, mauka-diamond head corner of Pohukaina/Coral	HCDA 36	B-66	3.8	21° 17' 56.6"	157° 51' 32.8"

\*See Attachment A2-A and A2-B for Map of Outfall  
n/d = Drain Manhole or Inline  
not avail = Not Currently Available

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Reference Map No.	Description	Location	Receiving State* Water Discharge Point	Approximate Drainage Area Identification on Reference Maps	Flow Rt. Q (cfs)	Estimated Coordinates		
						N	W	
14	2/2 DA	CB K-14	South St., makai-diamond head corner of South/Halekauwila	HCDA 36	2A	3.4	21° 18' 06.3"	157° 51' 35.4"
15	2/2 DA	CB K-15	South St, mauka-diamond head corner of South/Halekauwila	HCDA 36	2B	1.9	21° 18' 06.7"	157° 51' 34.8"
16	2/2 DA	CB K-17	South St, diamond head side between Halekauwila & Queen	HCDA 36	2C	4.9	21° 18' 07.7"	157° 51' 32.5"
17	2/2 DA	CB S-2	South St, makai-diamond head corner of South/Queen	HCDA 36	2D	4	21° 18' 08.4"	157° 51' 30.3"
18	2/2 DA	CB S-5	South St, makai-diamond head corner of South/Kawaiahao	HCDA 36	2E	3.6	21° 18' 09.8"	157° 51' 26.0"
19	2/2 DA	CB S-6	South St, mauka-diamond head corner of South/Kawaiahao	HCDA 36	2G	1.4	21° 18' 10.2"	157° 51' 24.7"
20	2/2 DA	CB S-7	South St, mauka-ewa corner of South/Kawaiahao	HCDA 36	2F	5.1	21° 18' 10.6"	157° 51' 10.6"
21	2/2 DA	CB S-10	South St, makai-ewa corner of South St/Kapiolani Blvd	HCDA 36	2L	6.4	21° 18' 12.3"	157° 51' 20.6"
22	2	DMH H-1	Kawaiahao St, mauka side, near Cooke St	HCDA 36	n/d	n/d	n/d	n/d
23	2	DMH H-2	Kawaiahao St, mauka side, near Curtis St	HCDA 36	n/d	n/d	n/d	n/d
24	2	48" RCP	Kawaiahao St, between DMH H-1 and CBs H-2 & H-3	HCDA 36	conduit only	24.8	21° 18' 3.1"	157° 51' 21.9"
25	2/2 DA	CB H-2	Kawaiahao St, mauka side, between Emily & Curtis	HCDA 36	2K	8.1	21° 18' 5.6"	157° 51' 23.1"
26	2/2 DA	CB H-3	Kawaiahao St, makai side, between Emily & Curtis	HCDA 36	2J	5.6	21° 18' 5.7"	157° 51' 23.6"
27	2	18" RCP	Kawaiahao St, between CBs H-2 and H-3	HCDA 36	conduit only		21° 18' 5.6"	157° 51' 23.2"
29	2	DMH H-3	Kawaiahao St, mauka side, at Emily	HCDA 36	n/d	n/d	n/d	n/d
30	2	42" RCP	Kawaiahao St, between CBs H-2 & H-3 and DMH H-4	HCDA 36	conduit only	10.9	21° 18' 5.6"	157° 51' 23.2"
31	2	DMH H-4	Kawaiahao St, mauka side, near Emily	HCDA 36	n/d	n/d	n/d	n/d
32	2	36" RCP	Kawaiahao St, between DMH H-4 and CBs H-4 & H-5	HCDA 36	conduit only	10.9	21° 18' 7.1"	157° 51' 24.0"
33	2/2 DA	CB H-4	Kawaiahao St, mauka side, between South & Emily	HCDA 36	2H	6.8	21° 18' 8.9"	157° 51' 24.7"
34	2/2 DA	CB H-5	Kawaiahao St, makai side, between South & Emily	HCDA 36	2I	4.1	21° 18' 8.8"	157° 51' 25.0"
35	2	18" RCP	Kawaiahao St, between CBs H-4 & H-5	HCDA 36	conduit only	4.1	21° 18' 8.9"	157° 51' 24.8"

\*See Attachment A2-A and A2-B for Map of Outfall  
n/d = Drain Manhole or Inline  
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**List of HCDA Drainage Structures**

Reference Map No.	Description	Location	Receiving State* Water Discharge Point	Approximate Drainage Area Identification on Reference Maps	Flow Rt. Q (cfs)	Estimated Coordinates		
						N	W	
<b>36</b>	3 and 3 DA	Open Channel/Double Box Culvert	Ewa Boundary of Ala Moana Wastewater Pump Station (WWPS) & John A. Burns School of Medicine (JABSOM), Ilalo St. to Kewalo Basin	HCDA 36	9-D and 9-E	2.2	21° 17' 41"	157° 52' 00"
<b>37</b>	4/4 DA	CB B-1a	Cooke St, diamond head side, between Ala Moana & Auahi	HCDA 36	B-1a	2.9	21° 17' 48.0"	157° 51' 38.4"
<b>38</b>	4/4 DA	CB B-1b	Cooke St, ewa side, between Ala Moana & Auahi	HCDA 36	B-1b	4.5	21° 17' 48.3"	157° 51' 38.8"
<b>39</b>	4/4 DA	CB B-1	Cooke St, makai-diamond head corner of Cooke/Auahi	HCDA 36	B-1	3.6	21° 17' 50.0"	157° 51' 35.9"
<b>40</b>	4/4 DA	CB B-3	Cooke St, makai-ewa corner of Cooke/Auahi	HCDA 36	B-3	4.5	21° 17' 50.3"	157° 51' 36.2"
<b>41</b>	4/4 DA	CB B-2	Cooke St, mauka-diamond head corner of Cooke/Auahi	HCDA 36	B-2	3.1	21° 17' 50.5"	157° 51' 35.3"
<b>42</b>	4/4 DA	CB B-4	Cooke St, mauka-ewa corner of Cooke/Auahi	HCDA 36	B-4	4.0	21° 17' 50.9"	157° 51' 35.5"
<b>43</b>	4/4 DA	CB B-5	Cooke St, diamond head side, between Cooke & Pohukaina	HCDA 36	B-5	4.2	21° 17' 52.5"	157° 51' 32.6"
<b>43a</b>	4/4 DA	CB B-6	Cooke St, ewa side, between Cooke & Pohukaina	HCDA 36	B-6	5.3	21° 17' 52.8"	157° 51' 32.9"
<b>44</b>	4/4 DA	CB B-7	Cooke St, makai-diamond head corner of Cooke/Pohukaina	HCDA 36	B-7	2.9	21° 17' 53.7"	157° 51' 31.1"
<b>45</b>	4/4 DA	CB B-10	Cooke St, mauka-diamond head corner of Cooke/Pohukaina	HCDA 36	B-10	2.8	21° 17' 54.2"	157° 51' 30.4"
<b>46</b>	4/4 DA	CB B-8	Pohukaina St, makai-ewa corner of Pohukaina/Cooke	HCDA 36	B-8	4.3	21° 17' 54.3"	157° 51' 31.3"
<b>47</b>	4/4 DA	CB B-9	Pohukaina St, mauka-ewa corner of Pohukaina/Cooke	HCDA 36	B-9	3.9	21° 17' 54.6"	157° 51' 31.0"

\*See Attachment A2-A and A2-B for Map of Outfall  
n/d = Drain Manhole or Inline  
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						N	W	
48	5/5 DA	CB B-11	Cooke St, ewa side, between Pohukaina and Halekauwila	HCDA 36	B-11	4.2	21° 17' 56.4"	157° 51' 28.9"
49	5/5 DA	CB A-9	Cooke St, mauka-ewa corner of Cooke/Halekauwila	HCDA 36	A-9	1.9	21° 17' 58.3"	21° 51' 27.5"
50	5	18" RCP	Cooke/Halekauwila intersection, CB A-9 to DMH A-10	HCDA 36	conduit only	1.9	21° 17' 58.1"	21° 51' 27.6"
51	5	12' x 8.5' BD	Cooke/Halekauwila intersection, DMH A-10 to DMH A-11	HCDA 36	conduit only	452.2	21° 17' 58.7"	21° 51' 26.9"
52	5	18" RCP	Cooke/Halekauwila intersection, CB A-10 to 12' x 8.5 BD	HCDA 36	conduit only	4.3	21° 17' 58.2"	21° 51' 27.4"
53	5	DMH A-12a	Ilaniwai @ Cooke	HCDA 36	n/d	n/d	21° 17' 59.2"	21° 51' 25.6"
54	5/5 DA	CB A-11	Cooke St, ewa side, @ Cooke/Ilaniwai intersection	HCDA 36	A-11	2.8	21° 17' 59.7"	21° 51' 25.8"
55	5/5 DA	CB A-13	Cooke St, mauka-diamond head corner of Cooke/Ilaniwai	HCDA 36	A-13	3	21° 17' 59.4"	21° 51' 25.4"
56	5/5 DA	CB A-14	Makai-diamond head corner of Cooke/Queen	HCDA 36	A-14	2	21° 18' 0.6"	21° 51' 23.6"
57	5/5 DA	CB A-15	Makai-ewa corner of Cooke/Queen	HCDA 36	A-15	4	21° 18' 1.1"	21° 51' 24.1"
58	5/5 DA	CB A-17	Mauka-diamond head corner of Cooke/Queen	HCDA 36	A-17	2.6	21° 18' 1.1"	21° 51' 23.2"
59	5/5 DA	CB A-16	Mauka-ewa corner of Cooke/Queen	HCDA 36	A-16	3.6	21° 18' 1.4"	21° 51' 23.5"
60	5/5 DA	CB A-18	Makai-diamond head corner of Cooke/Kawaiiahao	HCDA 36	A-18	3.2	21° 18' 2.1"	21° 51' 21.6"
61	5/5 DA	CB A-19	Makai-ewa corner of Cooke/Kawaiiahao	HCDA 36	A-19	3.5	21° 18' 2.6"	21° 51' 22.0"
62	5/5 DA	DMH A-16a	Mauka-diamond head corner of Cooke/Kawaiiahao	HCDA 36	A-16a	9.1	21° 18' 2.2"	21° 51' 21.3"
63	5/5 DA	CB F-2	Halekauwila St, makai side, between Ohe & Koula	HCDA 36	F-2	3.2	21° 17' 55.0"	21° 51' 25.7"

\*See Attachment A2-A and A2-B for Map of Outfall  
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						N	W	
64	5/5 DA	CB F-3	Halekauwila St, mauka side, between Ohe & Koula	HCDA 36	F-3	3.5	21° 17' 55.2"	21° 51' 25.3"
65	5	18" RCP	Halekauwila St, CB F-3 to CB F-2, near Koula	HCDA 36	conduit only	3.5	n/d	n/d
66	5	24" RCP	Halekauwila St, CB F-2 to DMH F-1, Koula to Cooke St	HCDA 36	conduit only	7.6	21° 17' 57.4"	21° 51' 27.2"
67	5	14' x 8.5' BD	Halekauwila St from Cooke to Coral	HCDA 36	conduit only	479.6	21° 17' 58.0"	21° 51' 27.8"
68	5/5 DA	CB A-8	Halekauwila St, makai-ewa corner Halekauwila/Cooke	HCDA 36	A-8	2.4	21° 17' 58.0"	21° 51' 27.8"
69	5/5 DA	CB A-6	Halekauwila St, makai-diamond head corner of Halekauwila/Coral	HCDA 36	A-6	5.4	21° 17' 59.6"	21° 51' 29.3"
70	5/5 DA	CB A-7	Halekauwila St, mauka-diamond head corner of Halekauwila/Coral	HCDA 36	A-7	7.2	21° 17' 59.8"	21° 51' 28.9"
71	5	18" RCP	Halekauwila St, CB A-7 to 14' x 8.5' BD, at Coral	HCDA 36	conduit only	7.2	21° 17' 59.6"	21° 51' 29.1"

\*See Attachment A2-A and A2-B for Map of Outfall  
n/d = Drain Manhole or Inline  
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							N	W
72	6	6' x 4' → 10' x 4' BD	Kamakee St from Kona to Queen	KBCCH 001	conduit only		n/d	n/d
73	6	CB N-8	Kamakee St, diamond head side, at Kona St	KBCCH 001	section 43	1.1	21° 17' 45.2"	21° 51' 0.0"
74	6	24" RCP	Kamakee St, CB N-8 to BD	KBCCH 001	conduit only	7.2	21° 17' 45.3"	21° 51' 0.4"
75	6	CB N-9	Kamakee St, ewa side, at Kona St	KBCCH 001	section 44	2.6	21° 17' 45.2"	21° 51' 0.6"
76	6	18" RCP	Kamakee St, CB N-9 to BD	KBCCH 001	conduit only	2.6	21° 17' 45.2"	21° 51' 0.4"
77	6	CB N-7a	Kamakee St, ewa side, between Kona & Waimanu	KBCCH 001	section 45	3.5	21° 17' 44.3"	21° 51' 1.4"
78	6	18" RCP	Kamakee St, CB N-7a to BD	KBCCH 001	conduit only	3.5	21° 17' 44.2"	21° 51' 1.2"
79	6	CB N-6	Kamakee St, diamond head side, between Kona & Waimanu	KBCCH 001	section 36	1.5	21° 17' 43.7"	21° 51' 2.7"
80	6	CB N-5d	Waimanu St, Ewa-mauka corner @ Kamakee	KBCCH 001	section 45	not avail	21° 17' 43.9"	21° 51' 2.5"
81	6	18" RCP	Waimanu St, CB N-5d to DMH N-5c	KBCCH 001	conduit only	not avail	21° 17' 43.7"	21° 51' 2.7"
82	6	DMH N-5c	Waimanu St, makai side @ Kamakee	KBCCH 001	n/d	n/d	n/d	n/d
83	6	36" RCP	Waimanu St, DMH N-5c to DMH N-5b	KBCCH 001	conduit only	not avail	21° 17' 43.5"	21° 51' 2.5"
84	6	DMH N-5b	Waimanu/Kamakee intersection	KBCCH 001	n/d	n/d	n/d	n/d
85	6	36" RCP	Kamakee St, DMH N-5b to CB N-5a	KBCCH 001	conduit only	16.1	21° 17' 43.3"	21° 51' 2.8"
86	6	CB N-5a	Kamakee St, ewa side, Makai of Waimanu St	KBCCH 001	section 46	2.8	21° 17' 43.3"	21° 51' 2.8"
87	6	36" RCP	Kamakee St, CB N-5a to BD	KBCCH 001	conduit only	18.9	21° 17' 43.1"	21° 51' 2.6"
88	6	CB N-4	Kamakee St, diamond head side, Makai of Waimanu St	KBCCH 001	section 40	1.4	21° 17' 43.0"	21° 51' 2.5"
89	6	CB N-3	Kawaiahao St, mauka-ewa corner of Kawaiahao/Kamakee	KBCCH 001	section 47	2.1	21° 17' 42.3"	21° 51' 4.5"
90	6	18" RCP	Kawaiahao St, CB N-3 to DMH	KBCCH 001	conduit only	2.1	21° 17' 42.2"	21° 51' 4.7"

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91	6	36" RCP	Kawaiahao St, DMH to DMH N-1 on BD	KBCCH 001	conduit only	8.1	21° 17' 41.8"	21° 51' 4.3"
92	6	CB N-2	Kamakee St, diamond head side, at Kawaiahao St	KBCCH 001	section 41	3	21° 17' 41.8"	21° 51' 4.1"
93	6	CB(a)	Kamakee St, ewa side, between Kawaiahao & Queen	KBCCH 001	section 49	1.4	21° 17' 40.8"	21° 51' 6.2"
94	6	CB(b)	Queen St, mauka side, fronting Kamakee Vista	KBCCH 001	section 50	1.5	21° 17' 41.1"	21° 51' 6.7"
95	6	CB E-1	Queen St, mauka side, between Cummins & Kamakee	KBCCH 001	section 55	5.3	21° 17' 43.7"	21° 51' 8.9"
96	6	CB D-2	Queen St, makai side, between Cummins & Kamakee	KBCCH 001	section 56	1.3	21° 17' 43.5"	21° 51' 9.2"
97	6	18" RCP	Queen St, CB E-1, D-2 to Kamakee St	KBCCH 001	conduit only	6.6	21° 17' 40.7"	21° 51' 6.4"
98	6	CB(c)	Kawaiahao St, makai side, adj. Kamakee Vista	KBCCH 001	section 54	1.9	21° 17' 43.6"	21° 51' 6.1"
99	6	CB(d)	Kawaiahao St, makai side, adj. Kamakee Vista near Kamakee St	KBCCH 001	section 48	2	21° 17' 42.1"	21° 51' 4.8"
100	6	30" RCP	Kawaiahao St, between two CB's above, adj. Kamakee Vista	KBCCH 001	conduit only	6	21° 17' 42.2"	21° 51' 4.7"

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						N	W	
104	8	DMH A-1	Queen Street Extension at Kamakee, makai side	KBCCH 001	n/d	0.18	21° 17' 39.9"	157° 51' 6.5"
105	8	18" RCP	Queen Street Extension, DMH A-1 to CB A-2, makai near Kamakee	KBCCH 001	conduit only	0.18	21° 17' 39.9"	157° 51' 6.5"
106	8	CB A-2	Queen Street Extension, makai side near Kamakee	KBCCH 001	B	0.18	21° 17' 39.7"	157° 51' 6.3"
107	8	CB B-1	Queen Street Extension, mauka side near Kamakee	KBCCH 001	A	0.54	21° 17' 40.1"	157° 51' 5.9"
108	8	24" RCP	Queen Street Extension, between CB B-1 & DMH B-2	KBCCH 001	conduit only	0.54	n/d	n/d
109	8	DMH B-2	Queen Street Extension, mauka side	KBCCH 001	n/d	n/d	n/d	n/d
110	8	24" RCP	Queen Street Extension, between DMH B-2 & CB C-1	KBCCH 001	conduit only	0.54	21° 17' 39.1"	157° 51' 4.9"
111	8	CB C-1	Queen Street Extension, mauka side	KBCCH 001	D	1.46	21° 17' 39.1"	157° 51' 4.9"
112	8	24" RCP	Queen Street Extension, between CB C-1 & CB C-2	KBCCH 001	conduit only	2.00	21° 17' 38.6"	157° 51' 5.3"
113	8	CB C-2	Queen Street Extension, makai side	KBCCH 001	C	1.00	21° 17' 38.6"	157° 51' 5.3"
114	8	30" RCP	Queen Street Extension, between CB C-2 & DMH D-1	KBCCH 001	conduit only	3.00	n/d	n/d
115	8	DMH D-1	Queen Street Extension, makai side	KBCCH 001	n/d	n/d	n/d	n/d
116	8	30" RCP	Queen Street Extension, between DMH D-1 & CB D-2	KBCCH 001	conduit only	3	21° 17' 37.9"	157° 51' 3.8"
117	8	CB D-2	Queen Street Extension, makai side	KBCCH 001	G	3.6	21° 17' 37.9"	157° 51' 3.8"
118	8	18" RCP	Queen Street Extension, between CB D-2 & CB E-1	KBCCH 001	conduit only	0.99	21° 17' 37.9"	157° 51' 3.8"
119	8	CB E-1	Queen Street Extension, mauka side	KBCCH 001	E,F	0.99	21° 17' 38.4"	157° 51' 3.6"
120	8	36" RCP	Queen Street Extension, between CB D-2 & DMH D-3	KBCCH 001	conduit only	7.59	n/d	n/d

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						N	W
121	8	DMH D-3	Queen Street Extension, makai side	KBCCH 001	n/d	n/d	n/d
122A	8	36" RCP	Queen Street Extension, between DMH D-3 & CB D-4	KBCCH 001	conduit only	7.59	21° 17' 37.8" 157° 51' 1.2"
122B	8	CB D-4	Queen Street Extension, makai side	KBCCH 001	G,H	3.71	21° 17' 37.8" 157° 51' 1.2"
123A	8	18" RCP	Queen Street Extension, between CB D-4 & CB F-1	KBCCH 001	conduit only	1.38	21° 17' 37.8" 157° 51' 1.2"
123B	8	CB F-1	Queen Street Extension, mauka side	KBCCH 001	J,K	1.38	21° 17' 38.3" 157° 51' 1.2"
124	8	36" RCP	Queen Street Extension, between CB D-4 & DMH D-5	KBCCH 001	conduit only	12.68	n/d n/d
125	8	DMH D-5	Queen Street Extension, makai side	KBCCH 001	n/d	n/d	n/d n/d
126	8	36" RCP	Queen Street Extension, between DMH D-5 & CB D-6	KBCCH 001	conduit only	12.68	n/d n/d
128	8	18" RCP	Queen Street Extension, between CB D-6 & CB G-1	KBCCH 001	conduit only	1.18	21° 17' 38.3" 157° 50' 59.0"
129	8	CB G-1	Queen Street Extension, mauka-ewa corner @ Waimanu intersection	KBCCH 001	L,M	1.18	21° 17' 38.3" 157° 50' 59.4"
130	8	36" RCP	Queen Street Extension, between CB D-6 & DMH D-7	KBCCH 001	conduit only	15.16	21° 17' 38.4" 157° 50' 58.4"
131	8	DMH D-7	Waimanu Street, makai side @ Queen Street Extn. intersection	KBCCH 001	n/d	n/d	21° 17' 38.4" 157° 50' 58.4"
132	8	18" RCP	Waimanu Street, between DMH D-7 & CB H-1	KBCCH 001	conduit only	2.25	
133	8	CB H-1	Waimanu Street, makai-diamond head corner @ Queen Street Extn. Intersection	KBCCH 001	O	2.25	21° 17' 38.9" 157° 50' 58.4"
134	8	36" RCP	Waimanu Street, between DMH D-7 & DMH D-8	KBCCH 001	conduit only	17.41	n/d n/d
135	8	DMH D-8	Waimanu Street, makai side	KBCCH 001	n/d	n/d	n/d n/d
136	8	36" RCP	Waimanu Street, between DMH D-8 & DMH D-9	KBCCH 001	conduit only	17.41	n/d n/d

\*See Attachment A2-A and A2-B for Map of Outfall  
n/d = Drain Manhole or Inline  
not avail = Not Currently Available

**List of HCDA Drainage Structures**

<u>Reference</u> Map No.	<u>Description</u>	<u>Location</u>	Receiving State* Water Discharge Point	Approximate Drainage Area Identification on Reference Maps	<u>Flow Rt. Q</u> (cfs)	Estimated Coordinates	
						N	W
137	8	DMH D-9	Waimanu Street, makai side	KBCCH 001	n/d	n/d	n/d
138	8	36" RCP	Waimanu Street, between DMH D-9 & CB J-2	KBCCH 001	conduit only	17.41	21° 17' 37.3" 157° 50' 55.0"
139	8	CB J-2	Waimanu Street, makai side	KBCCH 001	P	1.4	21° 17' 37.3" 157° 50' 55.0"
140	8	18" RCP	Waimanu Street, between CB J-2 & DMH J-1	KBCCH 001	conduit only	0.47	21° 17' 37.3" 157° 50' 55.0"
141	8	DMH J-1	Waimanu Street, makai side @ Pensacola Street intersection	KBCCH 001	n/d	n/d	21° 17' 37.5" 157° 50' 54.9"
142	8	36" RCP	Waimanu Street, connection from CB J-12 to double box culvert	KBCCH 001	conduit only	19.28	21° 17' 37.2" 157° 50' 54.8"

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**List of HCDA Drainage Structures**

Reference	Map No.	Description	Location	Receiving State* Water Discharge Point	Approximate Drainage Area Identification on Reference Maps	Flow Rt. Q (cfs)	Estimated Coordinates	
							N	W
143	9	24" RCP	Ahui Street, between Ilalo and Olomehani, Diamond Head side, DMH A-1 to CB A-2	KBCCH 002	conduit only	21.18	n/d	n/d
144	9/ 9 DA	CB A-2	Ahui Street, between Ilalo and Olomehani	KBCCH 002	A	0.58	21° 17' 36.7"	157° 51' 35.6"
145	9	24" RCP	Ahui Street, between Ilalo and Olomehani, CB A-2 to CB A-1	KBCCH 002	conduit only	12.63	21° 17' 36.7"	157° 51' 35.6"
146	9/ 9 DA	CB A-1	Ahui Street, Ewa side	KBCCH 002	B	0.58	21° 17' 36.8"	157° 51' 35.9"
147	9/ 9 DA	CB A-3	Ahui Street, Ewa side	KBCCH 003	Q	0.38	21° 17' 35.2"	157° 51' 36.8"
148	9	18" RCP	Ahui Street, CB A-3 to DMH A-1	KBCCH 003	conduit only	5.85	n/d	n/d
149	9	DMH A-1	Ahui Street, Ewa side	KBCCH 003	n/d	n/d	n/d	n/d
150	9	18" RCP	Ahui Street, DMH A-1 to CB A-4		conduit only	3.75	n/d	n/d
151	9/ 9 DA	CB A-4	Ahui Street Diamond Head side	KBCCH 003	R	0.53	21° 17' 34.5"	157° 51' 36.8"
152	9	24" RCP	Ahui Street, DMH A-1 to CB A-5	KBCCH 003	conduit only	9.6	21° 17' 32.5"	157° 51' 38.6"
153	9/ 9 DA	CB A-5	Ahui Street, Ewa-mauka corner @ Olomehani	KBCCH 003	L	0.77	21° 17' 32.5"	157° 51' 38.6"
154	9	24" RCP	Ahui Street, CB A-5 to DMH A-2, @ Olomehani	KBCCH 003	conduit only	10.37	n/d	n/d
155	9	DMH A-2	Ahui Street @ Olomehani	KBCCH 003	n/d	n/d	n/d	n/d
156	9	18" RCP	Ahui Street, DMH A-2 to CB A-7, @ Olomehani	KBCCH 003	conduit only	4.99	n/d	n/d
157	9/ 9 DA	CB A-7	Ahui Street, Ewa-makai corner @ Olomehani	KBCCH 003	M	1.01	21° 17' 31.9"	157° 51' 38.9"
158	9	42" RCP	Ahui Street, DMH A-2 to CB A-6, @ Olomehani	KBCCH 003	conduit only	48.5	21° 17' 31.8"	157° 51' 37.6"
159	9/ 9 DA	CB A-6	Ahui Street, Diamond Head side @ Olomehani	KBCCH 003	N	0.91	21° 17' 31.8"	157° 51' 37.6"
160	9	5' x 3' Box Culvert	Ahui Street, CB A-6 to DMH A-3	KBCCH 003	conduit only	54.79	n/d	n/d
161	9	48" RCP	Ahui Street, DMH A-3 to existing 48" RCP	KBCCH 003	conduit only	67.12	n/d	n/d

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**List of HCDA Drainage Structures**

Reference Map No.	Description	Location	Receiving State* Water Discharge Point	Approximate Drainage Area Identification on Reference Maps	Flow Rt. Q (cfs)	Estimated Coordinates		
						N	W	
162	9	24" RCP	Ahui Street, DMH A-3 to CB A-8	KBCCH 003	conduit only	12.33	n/d	n/d
163	9/ 9 DA	CB A-8	Ahui Street, Diamond Head side, near cul-de-sac	KBCCH 003	P	0.43	21° 17' 30.1"	157° 51' 39.7"
164	9	24" RCP	Ahui Street, CB A-8 to DMH A-4	KBCCH 003	conduit only	11.9	21° 17' 30.1"	157° 51' 39.7"
165	9	DMH A-4	Ahui Street @ cul-de-sac	KBCCH 003	n/d	n/d	n/d	n/d
166	9	18" RCP	Ahui Street, DMH A-4 to CB A-9, @ cul-de-sac	KBCCH 003	conduit only	7.58	n/d	n/d
167	9/ 9 DA	CB A-9	Ahui Street, Ewa side, @ cul-de-sac	KBCCH 003	O	0.48	21° 17' 29.8"	157° 51' 40.3"
168	9	42" RCP	Olomehani Street, DMH A-2 to CB C-1	KBCCH 003	conduit only	33.14	n/d	n/d
169	9/ 9 DA	CB C-1	Olomehani Street, makai side, between Ahui and Ohe	KBCCH 003	K	0.77	21° 17' 33.4"	157° 51' 40.8"
170	9	18" RCP	Olomehani Street, CB C-1 to CB C-2	KBCCH 003	conduit only	4.03	21° 17' 33.4"	157° 51' 40.8"
171	9/ 9 DA	CB C-2	Olomehani Street, mauka side, between Ahui and Ohe	KBCCH 003	S	0.77	21° 17' 33.7"	157° 51' 40.7"
172	9	36" RCP	Olomehani Street, CB C-1 to CB C-3	KBCCH 003	conduit only	19.84	21° 17' 33.4"	157° 51' 40.8"
173	9/ 9 DA	CB C-3	Olomehani Street @ Ohe	KBCCH 003	J	0.14	21° 17' 34.3"	157° 51' 42.0"
174	9	24" RCP	Olomehani Street, CB C-3 to DMH C-1	KBCCH 003	conduit only	2.35	21° 17' 34.3"	157° 51' 42.0"
175	9	DMH C-1	Olomehani Street, between Ohe and end	KBCCH 003	n/d	n/d	n/d	n/d
176	9	18" RCP	Olomehani Street, DMH C-1 to drain inlet 4	KBCCH 003	conduit only	1.39	n/d	n/d
177	9	24" RCP	Olomehani Street, DMH C-1 to CB C-4	KBCCH 003	conduit only	0.96	n/d	n/d
178	9/ 9 DA	CB C-4	Olomehani Street @ end of road	KBCCH 003	I	0.96	21° 17' 35.2"	157° 51' 43.8"
179	9	30" RCP	Olomehani Street, CB C-3 to CB B-5, @ Ohe	KBCCH 003	conduit only	10.82	21° 17' 34.3"	157° 51' 42.0"

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n/d = Drain Manhole or Inline  
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**List of HCDA Drainage Structures**

Reference Map No.	Description	Location	Receiving State* Water Discharge Point	Approximate Drainage Area Identification on Reference Maps	Flow Rt. Q (cfs)	Estimated Coordinates		
						N	W	
180	9/ 9 DA	CB B-5	Ohe Street, Ewa-mauka corner @ Olomehani	KBCCH 003	G	0.62	21° 17' 39.4"	157° 51' 42.0"
181	9	18" RCP	Ohe Street, CB B-5 to CB B-6	KBCCH 003	conduit only	0.34	21° 17' 34.4"	157° 51' 41.5"
182	9/ 9 DA	CB B-6	Ohe Street, Diamond Head-mauka corner @ Olomehani	KBCCH 003	H	0.34	21° 17' 34.4"	157° 51' 41.5"
183	9	24" RCP	Ohe Street, CB B-5 to DMH B-4	KBCCH 003	conduit only	9.86	21° 17' 39.4"	157° 51' 42.0"
184	9	DMH B-4	Ohe Street, near Olomehani	KBCCH 003	n/d	n/d	n/d	n/d
185	9	24" RCP	Ohe Street, DMH B-4 to DMH B-3	KBCCH 003	conduit only	9.86	n/d	n/d
186	9	DMH B-3	Ohe Street, between Olomehani and Ilalo	KBCCH 003	n/d	n/d	n/d	n/d
187	9	24" RCP	Ohe Street, DMH B-3 to DMH B-2	KBCCH 003	conduit only	9.86	n/d	n/d
188	9	DMH B-2	Ohe Street, between Olomehani and Ilalo	KBCCH 003	n/d	n/d	n/d	n/d
189	9	24" RCP	Ohe Street, DMH B-2 to CB B-3	KBCCH 003	conduit only	9.86	n/d	n/d
190	9/ 9 DA	CB B-3	Ohe Street, Ewa side, between Olomehani and Ilalo	KBCCH 003	F	1.97	21° 17' 37.3"	157° 51' 41.6"
191	9	24" RCP	Ohe Street, CB B-3 to CB B-4	KBCCH 003	conduit only	7.44	21° 17' 37.3"	157° 51' 41.6"
192	9/ 9 DA	CB B-4	Ohe Street, Diamond Head side, between Olomehani and Ilalo	KBCCH 003	E	1.34	21° 17' 39.9"	157° 51' 42.3"
193	9/ 9 DA	CB B-2	Ohe Street, Diamond Head-makai corner @ Ilalo	KBCCH 003	C	1.01	21° 17' 41.3"	157° 51' 41.1"
194	9	18" RCP	Ohe Street, CB B-2 to CB B-1	KBCCH 003	conduit only	1.01	21° 17' 41.3"	157° 51' 41.1"
195	9/ 9 DA	CB B-1	Ohe Street, Ewa-makai corner @ Ilalo	KBCCH 003	D	1.15	21° 17' 41.6"	157° 51' 41.6"
196	9	18" RCP	Ohe Street, CB B-1 to DMH B-1	KBCCH 003	conduit only	2.16	21° 17' 41.6"	157° 51' 41.6"
197	9	DMH B-1	Ilalo Street @ Ohe	KBCCH 003	n/d	n/d	n/d	n/d

\*See Attachment A2-A and A2-B for Map of Outfall  
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List of HCDA Drainage Structures

<u>Reference</u> Map No.	<u>Description</u>	<u>Location</u>	Receiving State* Water Discharge Point	Approximate Drainage Area Identification on Reference Maps	<u>Flow Rt. Q</u> (cfs)	Estimated Coordinates	
						N	W
10/10 <b>198</b> Overview	12'x4' Box DL BB	Between Ala Moana Park and Kewalo Basin Parking Lot	KBCCH 001	No Facilites within drainage area - only Kewalo Basin (public) Parking Lot and Conduit for CCH MS4	133.95	21° 17' 33.2"	157° 51' 17.2"

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