INTRO APPENDIX A
United States Army Garrison Hawaii (USAG-HI) Facility Maps

Halawa

AMR_Storm_Sewer_Discharge_Points		
discharge_i	FirstGeographicCoordin	SecondGeographicCoordin
AMR-001	-157:55:17.121	21:21:32.440
AMR-002	-157:54:56.620	21:21:29.700
AMR-003	-157:54:54.731	21:21:39.264
AMR-004	-157:54:54.729	21:21:39.284
AMR-005	-157:54:54.710	21:21:39.307
AMR-006	-157:54:54.556	21:21:39.304
AMR-007	-157:54:48.200	21:21:34.227
AMR-008	-157:54:46.660	21:21:33.787
AMR-009	-157:54:44.601	21:21:33.748
AMR-010	-157:54:43.157	21:21:32.686
AMR-011	-157:54:42.643	21:21:33.334
AMR-012	-157:54:49.831	21:21:35.571
AMR-013	-157:54:49.823	21:21:35.644
AMR-014	-157:54:49.765	21:21:35.726
AMR-015	-157:54:49.689	21:21:35.815
AMR-016	-157:54:49.564	21:21:35.870
AMR-017	-157:54:38.311	21:21:30.959
AMR-018	-157:54:41.004	21:21:32.118
AMR-019	-157:54:36.578	21:21:33.922
AMR-020	-157:54:31.075	21:21:29.662
AMR-021	-157:54:38.682	21:21:38.486
AMR-022	-157:54:38.622	21:21:40.782
AMR-023	-157:54:38.292	21:21:40.536
AMR-024	-157:54:29.874	21:21:38.324
AMR-025	-157:54:29.740	21:21:40.300
AMR-026	-157:54:29.797	21:21:40.478
AMR-027	-157:54:28.527	21:21:31.907
AMR-028	-157:54:27.415	21:21:32.652
AMR-029	-157:54:27.214	21:21:33.226
AMR-030	-157:54:27.791	21:21:34.662
AMR-031	-157:54:29.603	21:21:37.381
AMR-032	-157:54:29.633	21:21:40.571
AMR-033	-157:54:06.847	21:21:41.249
AMR-034	-157:54:50.172	21:21:57.017
AMR-035	-157:54:49.409	21:22:00.804
AMR-036	-157:54:45.521	21:22:02.109
AMR-037	-157:54:36.272	21:21:56.993
AMR-038	-157:54:40.073	21:21:59.966
AMR-039	-157:54:32.735	21:21:57.737
AMR-040	-157:54:26.697	21:21:54.228
AMR-042	-157:54:26.580	21:21:57.832
AMR-043	-157:54:17.072	21:21:53.715

PIIKEA PLACE
KUKUI DRIVE
JASMINE PLACE
BOWER PLACE
HIBISCUS
HIBISCUS STREET
JUSTICIA DRIVE
GREVILLEA PLACE
ABELIA PLACE
EUCALYPTUS PL
PONCIANA PL
ALIAMANU DRIVE
KUKUI DRIVE
HALUPA STREET
MOLEHU DRIVE
ALIAMANU DRIVE
OLIVE PLACE
OLIVE STREET
KOA PLACE
SHOWER
MOANALUA ROAD
VALLEY VIEW LOOP
ALIAMANU DRIVE
CYCLOPOS PLACE
BOUGAINVILLEA LOOP
KOBASHIGAWA ST
CRATER RIM ROAD
PUAHUKA ST
FLAME LN
RIM LOOP
KUKUI LN
ACACIA LN
CENTER ST
OKAMURA ST
CORAL ST
CORAL LN
RIM LP
POMELAIKI ST
ALIAMANU DRIVE
STREET
KUKILA STREET
OLINO
HALOA DRIVE
SALT LAKE
BOULEVARD
BOUGAINVILLE DRIVE
ISREAL HI LN
HAWTHORNE PL
CIGAR LN
POTATO LN
MACADAMIA LN
MAMANE LN
MAMANE PL
Shinsyoji(Hi)
Lahaina Kong
SANDALWOOD LANE
BALSA LN
TAMARIND LANE
JULIE LN
MAGNOLIA LN
MAHOGANY LANE
MAHOGANY PL
ULEI LN
KAYA LN
UREA LANE
NUHOU WAY
SKYVIEW LOOP
HIM LANE
KAUPAKA ST
NOHOKU ST
GOLD ST
CROSSANDRA ST
KOU LN
IRONWOOD LP
KAUILA LN
BOUGAINVILLEA
CALAMONDIN WAY
MOKU LN
ALIA DR
ALIAMANU DRIVE
KUKUI LN
GUM LN
TECOMA LN
BAMBOO LN
KUKUI LN
KUMIA DRIVE
KUILEI LN
CROTON ST
HONEYSUCKLE LN
OLEANDER LN
PAPERBARK LN
GARDENIA LN
KOBASHIGAWA ST
BEGONIA LP
BEGONIA LP
KOU LN
KAUILA LN
ALIA DR
ALIAMANU DRIVE
CALAMONDIN WAY
AMR-001
AMR-002
AMR-003
AMR-004
AMR-005
AMR-006
AMR-007
AMR-008
AMR-009
AMR-010
AMR-011
AMR-012
AMR-013
AMR-014
AMR-015
AMR-016
AMR-017
AMR-018
AMR-019
AMR-020
AMR-021
AMR-022
AMR-023
AMR-024
AMR-025
AMR-026
AMR-027
AMR-028
AMR-029
AMR-030
AMR-031
AMR-032
AMR-033
AMR-034
AMR-035
AMR-036
AMR-037
AMR-038
AMR-039
AMR-040
AMR-042
AMR-043

DRAINAGE CANAL/
SETTLING BASIN

Legend

- storm_sewer_discharge_point
- storm_sewer_headwall_point
- storm_sewer_inlet_point
- storm_sewer_junction_point
- storm_sewer_culvert_line
- storm_sewer_headwall_line
- storm_sewer_inlet
- storm_sewer_line
- storm_sewer_open_drainage_line/grass_swale
- streams
- storm_sewer_drainage_basin_area
- Industrial_Facilities

ALIAMANU MILITARY RESERVATION

N

0 250 500 750 1000
Feet

SYMBOL	DATE	DESCRIPTION	BY	CHK'D	APP
		REVISIONS			

DIRECTORATE OF PUBLIC WORKS
U. S. ARMY GARRISON, HAWAII

DESIGNED: DATE
DRAWN BY: DATE
SCALE:

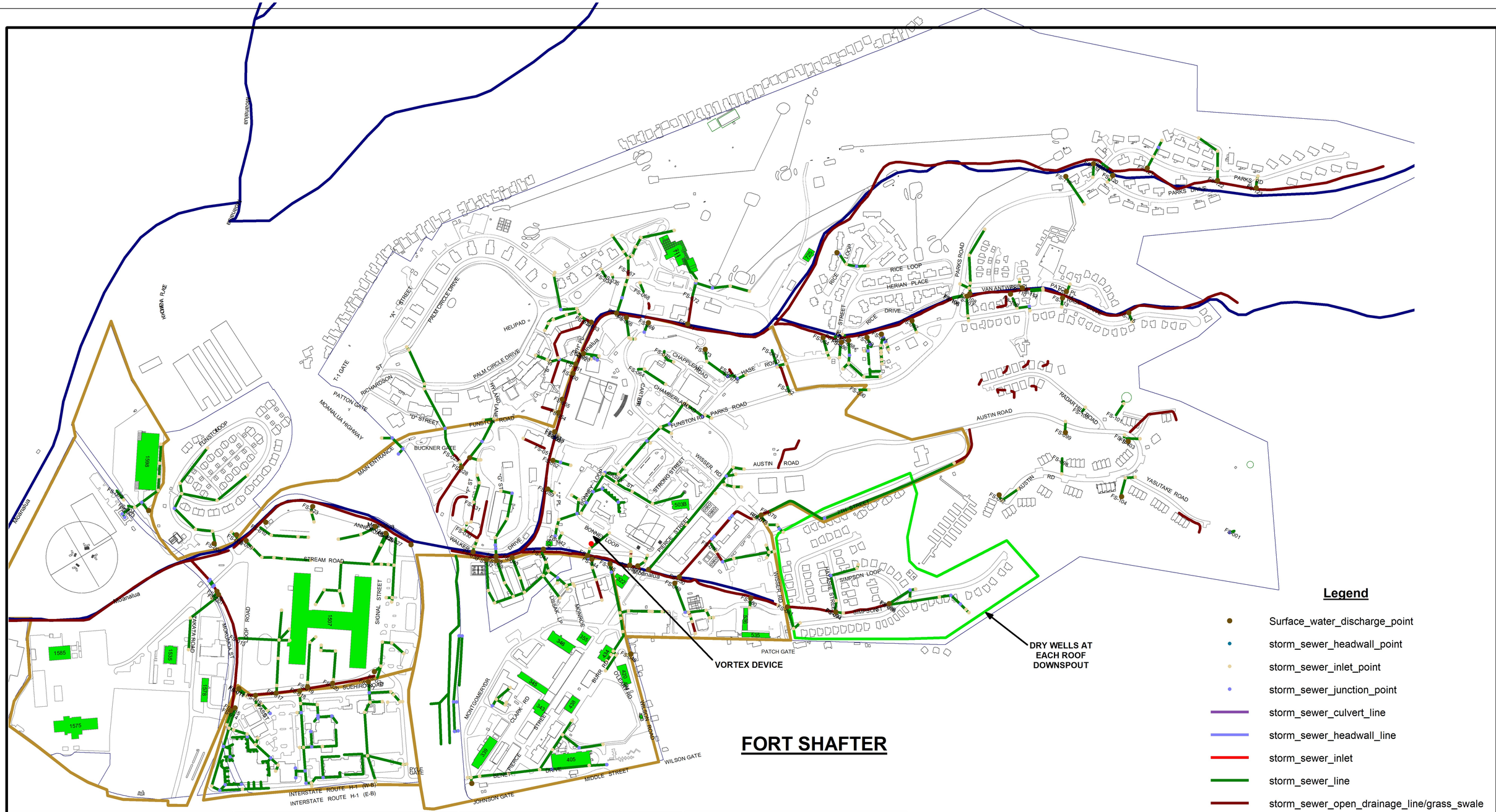
STORM SEWER PLAN AND INDUSTRIAL FACILITIES
ALIAMANU MILITARY RESERVATION
PROJECT NO.

CHECKED: ARCH, CIVIL, MECH, ELEC, FIRE, ENVIRON, AREA ENGR

APPROVED: DATE
DIRECTOR

SUBMITTED BY: DATE
APPROVAL RECOMMENDED BY: DATE
SHT. OF SHTS
DRAWING NO.

FEBRUARY 2011



FORT SHAFTER

Legend

- Surface_water_discharge_point
- storm_sewer_headwall_point
- storm_sewer_inlet_point
- storm_sewer_junction_point
- storm_sewer_culvert_line
- storm_sewer_headwall_line
- storm_sewer_inlet
- storm_sewer_line
- storm_sewer_open_drainage_line/grass_swale
- streams
- storm_sewer_drainage_basin_area
- Industrial_Facilities

0 250 500 750 1000
Feet

FS_Storm_Sewer_Discharge_Points

discharge_i	FirstGeographicCoordin	SecondGeographicCoordin
FS-001	-157:52:23.675	21:20:57.331
FS-002	-157:53:32.487	21:20:23.215
FS-003	-157:53:31.133	21:20:22.541
FS-004	-157:53:31.269	21:20:22.734
FS-005	-157:53:24.648	21:20:23.358
FS-006	-157:53:22.913	21:20:20.696
FS-007	-157:53:22.733	21:20:20.491
FS-008	-157:53:23.642	21:20:24.487
FS-009	-157:53:22.904	21:20:24.562
FS-010	-157:53:22.544	21:20:25.813
FS-011	-157:53:18.271	21:20:15.921
FS-012	-157:53:18.256	21:20:15.985
FS-013	-157:53:19.990	21:20:18.849
FS-014	-157:53:17.890	21:20:14.473
FS-015	-157:53:17.900	21:20:14.778
FS-016	-157:53:16.966	21:20:16.099
FS-017	-157:53:15.842	21:20:17.020
FS-018	-157:53:14.508	21:20:17.861
FS-019	-157:53:14.204	21:20:18.388
FS-020	-157:53:12.781	21:20:19.373
FS-021	-157:53:10.647	21:20:20.618
FS-022	-157:53:10.272	21:20:21.133
FS-023	-157:53:20.164	21:20:28.690
FS-024	-157:53:15.529	21:20:29.652
FS-025	-157:53:14.671	21:20:29.572
FS-026	-157:53:14.637	21:20:29.571
FS-027	-157:53:13.999	21:20:29.613
FS-028	-157:53:12.489	21:20:35.767
FS-029	-157:53:13.501	21:20:36.242
FS-030	-157:53:10.101	21:20:32.327
FS-031	-157:53:10.477	21:20:34.139
FS-032	-157:53:10.222	21:20:48.181
FS-033	-157:53:09.590	21:20:48.198
FS-034	-157:53:10.457	21:20:51.244
FS-035	-157:53:09.985	21:20:51.439

FS_Storm_Sewer_Discharge_Points

discharge_i	FirstGeographicCoordin	SecondGeographicCoordin
FS-036	-157:53:08.899	21:20:31.303
FS-037	-157:53:07.779	21:20:31.359
FS-038	-157:53:07.329	21:20:31.885
FS-039	-157:53:07.137	21:20:31.642
FS-040	-157:53:06.308	21:20:32.302
FS-041	-157:53:04.681	21:20:33.538
FS-042	-157:53:04.151	21:20:34.946
FS-043	-157:53:01.861	21:20:35.077
FS-044	-157:53:01.409	21:20:34.768
FS-045	-157:53:00.246	21:20:35.151
FS-046	-157:52:58.933	21:20:35.721
FS-047	-157:52:58.438	21:20:35.912
FS-048	-157:52:55.840	21:20:30.696
FS-049	-157:52:55.621	21:20:36.147
FS-050	-157:52:55.590	21:20:36.654
FS-051	-157:53:08.168	21:20:39.543
FS-052	-157:53:07.285	21:20:39.139
FS-053	-157:53:08.106	21:20:40.814
FS-054	-157:53:08.483	21:20:42.063
FS-055	-157:53:08.701	21:20:42.910
FS-056	-157:53:08.069	21:20:40.662
FS-057	-157:53:07.806	21:20:40.664
FS-058	-157:53:07.833	21:20:40.769
FS-059	-157:53:06.566	21:20:37.340
FS-060	-157:53:09.133	21:20:44.719
FS-061	-157:53:09.214	21:20:45.325
FS-062	-157:53:09.275	21:20:46.111
FS-063	-157:53:09.074	21:20:46.200
FS-064	-157:53:05.263	21:20:47.069
FS-065	-157:53:08.512	21:20:49.645
FS-066	-157:53:07.756	21:20:49.568
FS-067	-157:53:09.337	21:20:52.426
FS-068	-157:53:07.640	21:20:51.630
FS-069	-157:53:06.298	21:20:50.056
FS-070	-157:53:04.316	21:20:48.936

FS_Storm_Sewer_Discharge_Points

discharge_i	FirstGeographicCoordin	SecondGeographicCoordin
FS-071	-157:53:03.867	21:20:51.364
FS-072	-157:53:04.556	21:20:53.030
FS-073	-157:53:01.934	21:20:50.378
FS-074	-157:52:59.738	21:20:50.017
FS-075	-157:52:59.354	21:20:49.808
FS-076	-157:52:54.799	21:20:39.575
FS-077	-157:52:52.859	21:20:42.774
FS-078	-157:52:52.705	21:20:42.753
FS-079	-157:52:52.370	21:20:43.362
FS-080	-157:52:50.502	21:20:37.762
FS-081	-157:52:47.985	21:20:38.431
FS-082	-157:52:55.629	21:20:50.936
FS-083	-157:52:57.857	21:20:52.501
FS-084	-157:52:55.230	21:20:54.883
FS-085	-157:52:54.510	21:20:55.284
FS-086	-157:52:53.964	21:20:55.194
FS-087	-157:52:53.975	21:20:55.702
FS-088	-157:52:53.568	21:20:55.539
FS-089	-157:52:52.508	21:20:56.281
FS-090	-157:52:51.198	21:20:53.116
FS-091	-157:52:51.786	21:20:56.961
FS-092	-157:52:50.414	21:20:58.691
FS-093	-157:52:44.970	21:20:39.801
FS-094	-157:52:44.929	21:20:39.773
FS-095	-157:52:41.961	21:20:42.008
FS-096	-157:52:41.906	21:20:41.953
FS-097	-157:52:39.103	21:20:51.671
FS-098	-157:52:36.581	21:20:55.829
FS-099	-157:52:37.336	21:20:57.429
FS-100	-157:52:37.006	21:20:59.161
FS-101	-157:52:34.842	21:21:00.050
FS-102	-157:52:33.584	21:20:59.046
FS-103	-157:52:33.173	21:20:58.985
FS-104	-157:52:31.725	21:20:55.554
FS-105	-157:52:48.730	21:21:01.348

FS_Storm_Sewer_Discharge_Points

discharge_i	FirstGeographicCoordin	SecondGeographicCoordin
FS-106	-157:52:48.754	21:21:01.397
FS-107	-157:52:47.854	21:21:01.776
FS-108	-157:52:47.799	21:21:02.047
FS-109	-157:52:45.122	21:21:03.215
FS-110	-157:52:45.036	21:21:04.068
FS-111	-157:52:44.263	21:21:04.290
FS-112	-157:52:44.323	21:21:04.365
FS-113	-157:52:42.139	21:21:04.878
FS-114	-157:52:42.102	21:21:05.453
FS-115	-157:52:37.524	21:21:06.143
FS-116	-157:52:46.195	21:21:11.883
FS-117	-157:52:44.929	21:21:13.549
FS-118	-157:52:44.426	21:21:13.815
FS-119	-157:52:43.951	21:21:13.757
FS-120	-157:52:43.406	21:21:13.426
FS-121	-157:52:41.552	21:21:15.045
FS-122	-157:52:36.891	21:21:16.646
FS-123	-157:52:34.305	21:21:17.467

SYMBOL	DATE	DESCRIPTION	BY	CHK'D	APP
		REVISIONS			

DIRECTORATE OF PUBLIC WORKS
U.S. ARMY GARRISON, HAWAII

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SCALE:

STORM SEWER PLAN AND INDUSTRIAL FACILITIES
FORT SHAFTER
PROJECT NO.

CHECKED: ARCH, CIVIL, MECH, ELEC, FIRE, ENVIRON, AREA ENGR

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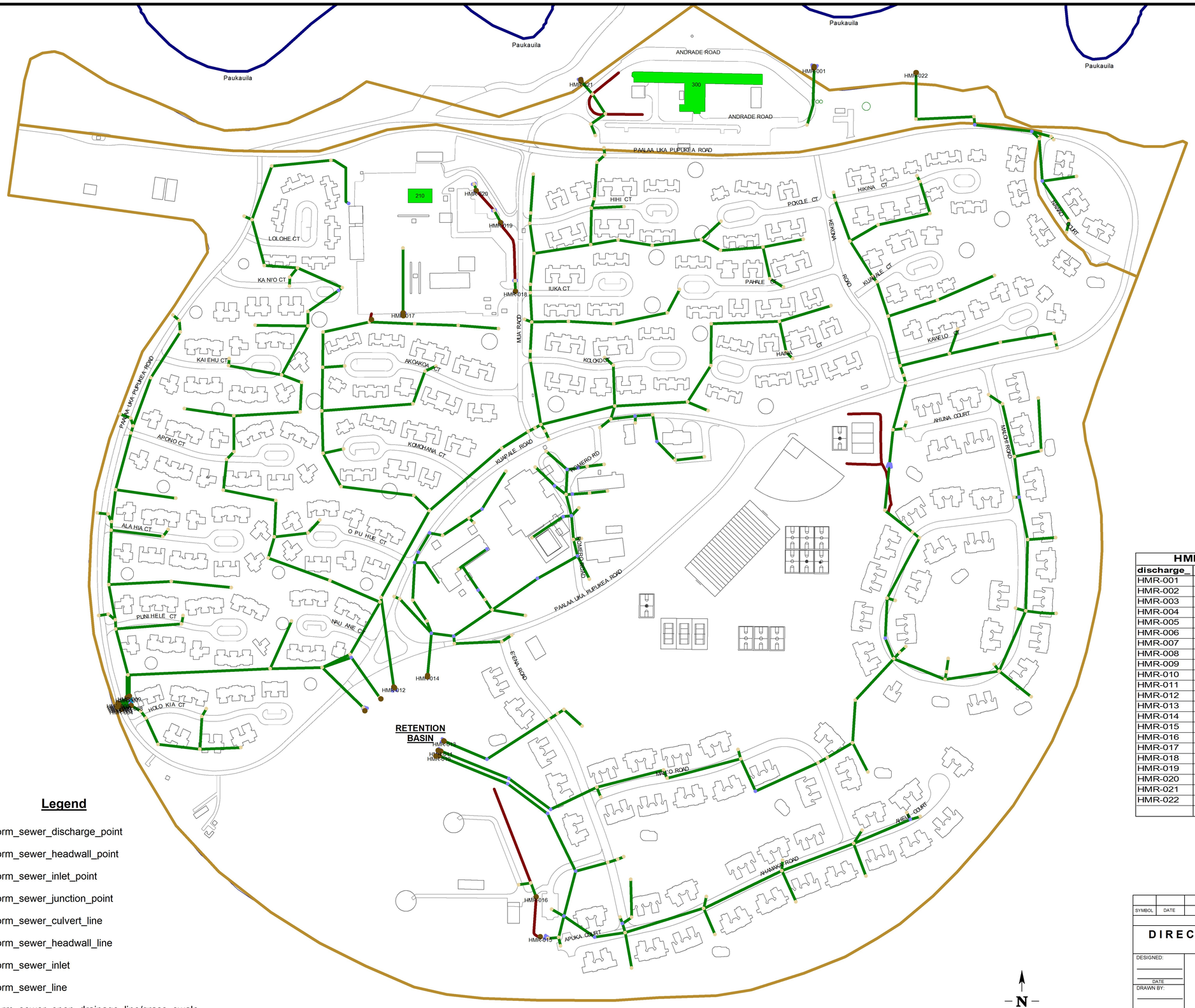

Legend

- storm_sewer_discharge_point
- storm_sewer_headwall_point
- storm_sewer_inlet_point
- storm_sewer_junction_point
- storm_sewer_culvert_line
- storm_sewer_headwall_line
- storm_sewer_inlet
- storm_sewer_line
- storm_sewer_open_drainage_line/grass_swale
- streams
- storm_sewer_drainage_basin_area
- Industrial_Facilities

HELEMANO MILITARY RESERVATION

HMR_Storm_Sewer_Discharge_Points

discharge_	FirstGeographicCoordi	SecondGeographicCoordi
HMR-001	-158:01:01.424	21:32:25.996
HMR-002	-158:01:29.651	21:32:01.703
HMR-003	-158:01:29.621	21:32:01.646
HMR-004	-158:01:29.587	21:32:01.583
HMR-005	-158:01:29.715	21:32:01.823
HMR-006	-158:01:29.684	21:32:01.766
HMR-007	-158:01:29.353	21:32:02.038
HMR-008	-158:01:29.189	21:32:01.729
HMR-009	-158:01:29.260	21:32:02.086
HMR-010	-158:01:16.670	21:31:59.818
HMR-011	-158:01:16.592	21:31:59.996
HMR-012	-158:01:18.511	21:32:02.437
HMR-013	-158:01:16.458	21:32:00.374
HMR-014	-158:01:17.138	21:32:02.882
HMR-015	-158:01:12.548	21:31:52.933
HMR-016	-158:01:12.719	21:31:54.449
HMR-017	-158:01:18.131	21:32:16.683
HMR-018	-158:01:13.563	21:32:17.499
HMR-019	-158:01:14.165	21:32:20.115
HMR-020	-158:01:15.158	21:32:21.331
HMR-021	-158:01:10.891	21:32:25.487
HMR-022	-158:00:57.274	21:32:25.826

SYMBOL	DATE	DESCRIPTION	BY	CHK'D	APP
		REVISIONS			

DIRECTORATE OF PUBLIC WORKS
U.S. ARMY GARRISON, HAWAII

DESIGNED: ____ DATE
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SCALE:

STORM SEWER PLAN AND INDUSTRIAL FACILITIES
HELEMANO MILITARY RESERVATION
PROJECT NO.

CHECKED: ARCH, CIVIL, MECH, ELEC, FIRE, ENVIRON, AREA ENGR

APPROVED: DATE
DIRECTOR

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DRAWING NO.

FEBRUARY 2011

SCHOFIELD BARRACKS

STORM SEWER DISCHARGE POINTS		
swtdis_id	FirstGeographicCoordinat	SecondGeographicCoordinate
SCHB001	-158:02:52.887	21:28:58.006
SCHB002	-158:02:54.926	21:28:59.194
SCHB003	-158:02:57.481	21:28:59.395
SCHB004	-158:02:59.568	21:29:00.028
SCHB005	-158:03:00.393	21:29:00.778
SCHB006	-158:03:00.462	21:29:00.468
SCHB007	-158:03:05.812	21:28:58.071
SCHB008	-158:03:12.963	21:29:02.683
SCHB009	-158:03:18.581	21:29:01.379
SCHB010	-158:03:22.568	21:29:01.905
SCHB011	-158:03:23.288	21:29:02.617
SCHB012	-158:04:03.448	21:29:09.088
SCHB013	-158:04:16.141	21:29:15.323
SCHB014	-158:04:25.125	21:29:14.368
SCHB015	-158:04:29.036	21:29:15.568
SCHB016	-158:04:40.138	21:29:16.322
SCHB017	-158:05:08.594	21:29:07.241
SCHB018	-158:05:05.721	21:29:24.612
SCHB019	-158:05:05.889	21:29:24.498
SCHB020	-158:05:25.758	21:29:01.742
SCHB021	-158:05:28.741	21:29:02.442
SCHB022	-158:05:54.056	21:29:16.831
SCHB023	-158:05:44.964	21:29:20.303
SCHB025	-158:05:20.312	21:29:20.021
SCHB026	-158:05:14.555	21:29:20.610
SCHB027	-158:05:13.096	21:29:21.043
SCHB028	-158:04:59.682	21:29:30.485
SCHB029	-158:04:46.747	21:29:41.486
SCHB030	-158:04:45.779	21:29:41.976
SCHB031	-158:04:43.741	21:29:43.112
SCHB033	-158:04:34.474	21:30:20.851
SCHB034	-158:04:38.966	21:30:20.791

STORM SEWER DISCHARGE POINTS		
swtdis_id	FirstGeographicCoordinat	SecondGeographicCoordinate
SCHB035	-158:04:33.964	21:30:05.775
SCHB036	-158:04:36.881	21:30:01.255
SCHB037	-158:04:42.479	21:29:44.693
SCHB038	-158:04:26.204	21:30:20.087
SCHB039	-158:02:43.614	21:29:33.525
SCHB040	-158:02:57.023	21:29:39.287
SCHB041	-158:02:36.664	21:29:25.158
SCHB042	-158:02:36.035	21:29:24.968
SCHB043	-158:02:36.795	21:29:25.407
SCHB044	-158:02:38.745	21:29:31.850
SCHB045	-158:04:37.108	21:29:51.624
SCHB046	-158:04:36.245	21:29:56.839
SCHB047	-158:04:32.154	21:29:57.966
SCHB048	-158:04:30.618	21:29:59.642
SCHB049	-158:04:28.876	21:30:01.832
SCHB050	-158:04:24.719	21:30:02.959
SCHB051	-158:04:22.761	21:30:02.730
SCHB052	-158:04:07.859	21:30:12.373
SCHB053	-158:04:08.148	21:30:13.959
SCHB054	-158:03:51.344	21:30:19.768
SCHB055	-158:03:42.441	21:30:20.464
SCHB056	-158:03:38.338	21:30:18.266
SCHB057	-158:03:36.163	21:30:15.799
SCHB058	-158:03:35.013	21:30:08.771
SCHB059	-158:03:29.305	21:30:08.273
SCHB060	-158:03:27.529	21:30:05.715
SCHB061	-158:03:27.267	21:30:04.431
SCHB062	-158:03:26.036	21:30:00.993
SCHB063	-158:03:26.030	21:30:01.325
SCHB064	-158:03:21.425	21:29:54.588
SCHB065	-158:03:16.538	21:29:55.586
SCHB066	-158:03:18.516	21:29:52.707
SCHB067	-158:03:12.674	21:29:57.552
SCHB068	-158:03:12.051	21:29:56.461
SCHB069	-158:03:27.601	21:28:59.856
SCHB070	-158:03:26.019	21:29:51.190

MAJOR SPILL
10/18/2008
(25-30 GAL, POL)

RETENTION BASIN

RETENTION BASIN

STRYKER BRIGADE MOTOR POOL INLET PROTECTION

RETENTION BASIN

DPW SHOP COMPLEX INLET PROTECTION

MAJOR SPILL
2/2/2009
(35-40 GAL, POL)

MAJOR SPILL
8/20/2009
(25 GAL, POL)

RETENTION BASIN

Legend

- storm_sewer_discharge_point
- storm_sewer_headwall_point
- storm_sewer_inlet_point
- storm_sewer_junction_point
- storm_sewer_culvert_line
- storm_sewer_headwall_line
- storm_sewer_inlet
- storm_sewer_line
- storm_sewer_open_drainage_line/grass_swale
- streams
- storm_sewer_drainage_basin_area
- Industrial_Facilities

N

0 400 800 1200 1600
Feet

SYMBOL	DATE	DESCRIPTION	BY	CHK'D	APP
		REVISIONS			

DIRECTORATE OF PUBLIC WORKS
U. S. ARMY GARRISON, HAWAII

DESIGNED: DATE
DRAWN BY: DATE
SCALE:

STORM SEWER PLAN AND INDUSTRIAL FACILITIES
SCHOFIELD BARRACKS
PROJECT NO.

CHECKED: ARCH, CIVIL, MECH, ELEC, FIRE, ENVIRON, AREA ENGR

APPROVED: DATE
DIRECTOR

SUBMITTED BY: DATE
APPROVAL RECOMMENDED BY: DATE
SHT. OF SHTS
DRAWING NO.

FEBRUARY 2011

East Range Storm Sewer Discharge Points		
discharge_	FirstGeographicCoordi	SecondGeographicCoordi
ER-001	-158:01:38.452	21:29:09.443
ER-002	-158:01:26.604	21:29:13.235
ER-003	-158:01:17.899	21:29:19.130
ER-004	-158:01:02.232	21:29:18.034
ER-005	-158:00:59.270	21:29:18.083
ER-006	-158:00:49.211	21:29:20.488
ER-007	-158:00:37.057	21:29:09.733
ER-008	-158:00:40.999	21:29:16.989
ER-009	-158:00:25.630	21:29:15.508
ER-010	-158:00:13.774	21:29:21.709
ER-011	-158:00:07.969	21:29:59.897
ER-012	-158:00:06.431	21:29:58.569

Legend

- storm_sewer_discharge_point
- storm_sewer_headwall_point
- storm_sewer_inlet_point
- storm_sewer_junction_point
- storm_sewer_culvert_line
- storm_sewer_headwall_line
- storm_sewer_inlet
- storm_sewer_line
- storm_sewer_open_drainage_line/grass_swale
- streams
- storm_sewer_drainage_basin_area
- Industrial_Facilities

ER-001 ER-002 ER-003 ER-004 ER-005 ER-006 ER-007 ER-008 ER-009 ER-010 ER-011 ER-012

WAAF-104 WAAF-105

VARIOUS BMPs
(SEE FLOW CHART)

ROSE STREET
LEILEHUA STREET
WALKER AVENUE
HIGGINS ROAD
WARHINGFIELD RD.
LAUHALA ROAD
KAMEHAMEHA HWY.
KAROPCZ COURT
CLEAR ZONE
Waikele

Kilkii

T-6003

6038 6036 6037 6041 6040 6042 6043 6045 6023 6024 6027 6015 6450B 6450A 6465 6467 6468 6469 6470 6471 6472 6473 6474 6475 6476 6477 6478 6479 6480 6481 6482 6483 6484 6485 6486 6487 6488 6489 6490 6491 6492 6493 6494 6495 6496 6497 6498 6499 6500 6501 6502 6503 6504 6505 6506 6507 6508 6509 6510 6511 6512 6513 6514 6515 6516 6517 6518 6519 6520 6521 6522 6523 6524 6525 6526 6527 6528 6529 6530 6531 6532 6533 6534 6535 6536 6537 6538 6539 6540 6541 6542 6543 6544 6545 6546 6547 6548 6549 6550 6551 6552 6553 6554 6555 6556 6557 6558 6559 6560 6561 6562 6563 6564 6565 6566 6567 6568 6569 6570 6571 6572 6573 6574 6575 6576 6577 6578 6579 6580 6581 6582 6583 6584 6585 6586 6587 6588 6589 6590 6591 6592 6593 6594 6595 6596 6597 6598 6599 6600 6601 6602 6603 6604 6605 6606 6607 6608 6609 6610 6611 6612 6613 6614 6615 6616 6617 6618 6619 6620 6621 6622 6623 6624 6625 6626 6627 6628 6629 6630 6631 6632 6633 6634 6635 6636 6637 6638 6639 6640 6641 6642 6643 6644 6645 6646 6647 6648 6649 6650 6651 6652 6653 6654 6655 6656 6657 6658 6659 6660 6661 6662 6663 6664 6665 6666 6667 6668 6669 6670 6671 6672 6673 6674 6675 6676 6677 6678 6679 6680 6681 6682 6683 6684 6685 6686 6687 6688 6689 6690 6691 6692 6693 6694 6695 6696 6697 6698 6699 6700 6701 6702 6703 6704 6705 6706 6707 6708 6709 6710 6711 6712 6713 6714 6715 6716 6717 6718 6719 6720 6721 6722 6723 6724 6725 6726 6727 6728 6729 6730 6731 6732 6733 6734 6735 6736 6737 6738 6739 6740 6741 6742 6743 6744 6745 6746 6747 6748 6749 6750 6751 6752 6753 6754 6755 6756 6757 6758 6759 6760 6761 6762 6763 6764 6765 6766 6767 6768 6769 6770 6771 6772 6773 6774 6775 6776 6777 6778 6779 6780 6781 6782 6783 6784 6785 6786 6787 6788 6789 6790 6791 6792 6793 6794 6795 6796 6797 6798 6799 6800 6801 6802 6803 6804 6805 6806 6807 6808 6809 6810 6811 6812 6813 6814 6815 6816 6817 6818 6819 6820 6821 6822 6823 6824 6825 6826 6827 6828 6829 6830 6831 6832 6833 6834 6835 6836 6837 6838 6839 6840 6841 6842 6843 6844 6845 6846 6847 6848 6849 6850 6851 6852 6853 6854 6855 6856 6857 6858 6859 6860 6861 6862 6863 6864 6865 6866 6867 6868 6869 6870 6871 6872 6873 6874 6875 6876 6877 6878 6879 6880 6881 6882 6883 6884 6885 6886 6887 6888 6889 6890 6891 6892 6893 6894 6895 6896 6897 6898 6899 6900 6901 6902 6903 6904 6905 6906 6907 6908 6909 6910 6911 6912 6913 6914 6915 6916 6917 6918 6919 6920 6921 6922 6923 6924 6925 6926 6927 6928 6929 6930 6931 6932 6933 6934 6935 6936 6937 6938 6939 6940 6941 6942 6943 6944 6945 6946 6947 6948 6949 6950 6951 6952 6953 6954 6955 6956 6957 6958 6959 6960 6961 6962 6963 6964 6965 6966 6967 6968 6969 6970 6971 6972 6973 6974 6975 6976 6977 6978 6979 6980 6981 6982 6983 6984 6985 6986 6987 6988 6989 6990 6991 6992 6993 6994 6995 6996 6997 6998 6999 7000 7001 7002 7003 7004 7005 7006 7007 7008 7009 7010 7011 7012 7013 7014 7015 7016 7017 7018 7019 7020 7021 7022 7023 7024 7025 7026 7027 7028 7029 7030 7031 7032 7033 7034 7035 7036 7037 7038 7039 7040 7041 7042 7043 7044 7045 7046 7047 7048 7049 7050 7051 7052 7053 7054 7055 7056 7057 7058 7059 7060 7061 7062 7063 7064 7065 7066 7067 7068 7069 7070 7071 7072 7073 7074 7075 7076 7077 7078 7079 7080 7081 7082 7083 7084 7085 7086 7087 7088 7089 7090 7091 7092 7093 7094 7095 7096 7097 7098 7099 7100 7101 7102 7103 7104 7105 7106 7107 7108 7109 7110 7111 7112 7113 7114 7115 7116 7117 7118 7119 7120 7121 7122 7123 7124 7125 7126 7127 7128 7129 7130 7131 7132 7133 7134 7135 7136 7137 7138 7139 7140 7141 7142 7143 7144 7145 7146 7147 7148 7149 7150 7151 7152 7153 7154 7155 7156 7157 7158 7159 7160 7161 7162 7163 7164 7165 7166 7167 7168 7169 7170 7171 7172 7173 7174 7175 7176 7177 7178 7179 7180 7181 7182 7183 7184 7185 7186 7187 7188 7189 7190 7191 7192 7193 7194 7195 7196 7197 7198 7199 7200 7201 7202 7203 7204 7205 7206 7207 7208 7209 7210 7211 7212 7213 7214 7215 7216 7217 7218 7219 7220 7221 7222 7223 7224 7225 7226 7227 7228 7229 7230 7231 7232 7233 7234 7235 7236 7237 7238 7239 7240 7241 7242 7243 7244 7245 7246 7247 7248 7249 7250 7251 7252 7253 7254 7255 7256 7257 7258 7259 7260 7261 7262 7263 7264 7265 7266 7267 7268 7269 7270 7271 7272 7273 7274 7275 7276 7277 7278 7279 7280 7281 7282 7283 7284 7285 7286 7287 7288 7289 7290 7291 7292 7293 7294 7295 7296 7297 7298 7299 7300 7301 7302 7303 7304 7305 7306 7307 7308 7309 7310 7311 7312 7313 7314 7315 7316 7317 7318 7319 7320 7321 7322 7323 7324 7325 7326 7327 7328 7329 7330 7331 7332 7333 7334 7335 7336 7337 7338 7339 7340 7341 7342 7343 7344 7345 7346 7347 7348 7349 7350 7351 7352 7353 7354 7355 7356 7357 7358 7359 7360 7361 7362 7363 7364 7365 7366 7367 7368 7369 7370 7371 7372 7373 7374 7375 7376 7377 7378 7379 7380 7381 7382 7383 7384 7385 7386 7387 7388 7389 7390 7391 7392 7393 7394 7395 7396 7397 7398 7399 7400 7401 7402 7403 7404 7405 7406 7407 7408 7409 7410 7411 7412 7413 7414 7415 7416 7417 7418 7419 7420 7421 7422 7423 7424 7425 7426 7427 7428 7429 7430 7431 7432 7433 7434 7435 7436 7437 7438 7439 7440 7441 7442 7443 7444 7445 7446 7447 7448 7449 7450 7451 7452 7453 7454 7455 7456 7457 7458 7459 7460 7461 7462 7463 7464 7465 7466 7467 7468 7469 7470 7471 7472 7473 7474 7475 7476 7477 7478 7479 7480 7481 7482 7483 7484 7485 7486 7487 7488 7489 7490 7491 7492 7493 7494 7495 7496 7497 7498 7499 7500 7501 7502 7503 7504 7505 7506 7507 7508 7509 7510 7511 7512 7513 7514 7515 7516 7517 7518 7519 7520 7521 7522 7523 7524 7525 7526 7527 7528 7529 7530 7531 7532 7533 7534 7535 7536 7537 7538 7539 7540 7541 7542 7543 7544 7545 7546 7547 7548 7549 7550 7551 7552 7553 7554 7555 7556 7557 7558 7559 7560 7561 7562 7563 7564 7565 7566 7567 7568 7569 7570 7571 7572 7573 7574 7575 7576 7577 7578 7579 7580 7581 7582 7583 7584 7585 7586 7587 7588 7589 7590 7591 7592 7593 7594 7595 7596 7597 7598 7599 7600 7601 7602 7603 7604 7605 7606 7607 7608 7609 7610 7611 7612 7613 7614 7615 7616 7617 7618 7619 7620 7621 7622 7623 7624 7625 7626 7627 7628 7629 7630 7631 7632 7633 7634 7635 7636 7637 7638 7639 7640 7641 7642 7643 7644 7645 7646 7647 7648 7649 7650 7651 7652 7653 7654 7655 7656 7657 7658 7659 7660 7661 7662 7663 7664 7665 7666 7667 7668 7669 7670 7671 7672 7673 7674 7675 7676 7677 7678 7679 7680 7681 7682 7683 7684 7685 7686 7687 7688 7689 7690 7691 7692 7693 7694 7695 7696 7697 7698 7699 7700 7701 7702 7703 7704 7705 7706 7707 7708 7709 7710 7711 7712 7713 7714 7715 7716 7717 7718 7719 7720 7721 7722 7723 7724 7725 7726 7727 7728 7729 7730 7731 7732 7733 7734 7735 7736 7737 7738 7739 7740 7741 7742 7743 7744 7745 7746 7747 7748 7749 7750 7751 7752 7753 7754 7755 7756 7757 7758 7759 7760 7761 7762 7763 7764 7765 7766 7767 7768 7769 7770 7771 7772 7773 7774 7775 7776 7777 7778 7779 7780 7781 7782 7783 7784 7785 7786 7787 7788 7789 7790 7791 7792 7793 7794 7795 7796 7797 7798 7799 7800 7801 7802 7803 7804 7805 7806 7807 7808 7809 7810 7811 7812 7813 7814 7815 7816 7817 7818 7819 7820 7821 7822 7823 7824 7825 7826 7827 7828 7829 7830 7831 7832 7833 7834 7835 7836 7837 7838 7839 7840 7841 7842 7843 7844 7845 7846 7847 7848 7849 7850 7851 7852 7853 7854 7855 7856 7857 7858 7859 7860 7861 7862 7863 7864 7865 7866 7867 7868 7869 7870 7871 7872 7873 7874 7875 7876 7877 7878 7879 7880 7881 7882 7883 7884 7885 7886 7887 7888 7889 7890 7891 7892 7893 7894 7895 7896 7897 7898 7899 7900 7901 7902 7903 7904 7905 7906 7907 7908 7909 7910 7911 7912 7913 7914 7915 7916 7917 7918 7919 7920 7921 7922 7923 7924 7925 7926 7927 7928 7929 7930 7931 7932 7933 7934 7935 7936 7937 7938 7939 7940 7941 7942 7943 7944 7945 7946 7947 7948 7949 7950 7951 7952 7953 7954 7955 7956 7957 7958 7959 7960 7961 7962 7963 7964 7965 7966 7967 7968 7969 7970 7971 7972 7973 7974 7975 7976 7977 7978 7979 7980 7981 7982 7983 7984 7985 7986 7987 7988 7989 7990 7991 7992 7993 7994 7995 7996 7997 7998 7999 8000 8001 8002 8003 8004 8005 8006 8007 8008 8009 8010 8011 8012 8013 8014 8015 8016 8017 8018 8019 8020 8021 8022 8023 8024 8025 8026 8027 8028 8029 8030 8031 8032 8033 8034 8035 8036 8037 8038 8039 8040 8041 8042 8043 8044 8045 8046 8047 8048 8049 8050 8051 8052 8053 8054 8055 8056 8057 8058 8059 8060 8061 8062 8063 8064 8065 8066 8067 8068 8069 8070 8071 8072 8073 8074 8075 8076 8077 8078 8079 8080 8081 8082 8083 8084 8085 8086 8087 8088 8089 8090 8091 8092 8093 8094 8095 8096 8097 8098 8099 8100 8101 8102 8103 8104 8105 8106 8107 8108 8109 8110 8111 8112 8113 8114 8115 8116 8117 8118 8119 8120 8121 8122 8123 8124 8125 8126 8127 8128 8129 8130 8131 8132 8133 8134 8135 8136 8137 8138 8139 8140 8141 8142 8143 8144 8145 8146 8147 8148 8149 8150 8151 8152 8153 8154 8155 8156 8157 8158 8159 8160 8161 8162 8163 8164 8165 8166 8167 8168 8169 8170 8171 8172 8173 8174 8175 8176 8177 8178 8179 8180 8181 8182 8183 8184 8185 8186 8187 8188 8189 8190 8191 8192 8193 8194 8195 8196 8197 8198 8199 8200 8201 8202 8203 8204 8205 8206 8207 8208 8209 8210 8211 8212 8213 8214 8215 8216 8217 8218 8219 8220 8221 8222 8223 8224 8225 8226 8227 8228 8229 8230 8231 8232 8233 8234 8235 8236 8237 8238 8239 8240 8241 8242 8243 8244 8245 8246 8247 8248 8249 8250 8251 8252 8253 8254 8255 8256 8257 8258 8259 8260 8261 8262 8263 8264 8265 8266 8267 8268 8269 8270 8271 8272 8273 8274 8275 8276 8277 8278 8279 8280 8281 8282 8283 8284 8285 8286 8287 8288 8289 8290 8291 8292 8293 8294 8295 8296 8297 8298 8299 8300 8301 8302 8303 8304 8305 8306 8307 8308 8309 8310 8311 8312 8313 8314 8315 8316 8317 8318 8319 8320 8321 8322 8323 8324 8325 8326 8327 8328 8329 8330 8331 8332 8333 8334 8335 8336 8337 8338 8339 8340 8341 8342 8343 8344 8345 8346 8347 8348 8349 8350 8351 8352 8353 8354 8355 8356 8357 8358 8359 8360 8361 8362 8363 8364 8365 8366 8367 8368 8369 8370 8371 8372 8373 8374 8375 8376 8377 8378 8379 8380 8381 8382 8383 8384 8385 8386 8387 8388 8389 8390 8391 8392 8393 8394 8395 8396 8397 8398 8399 8400 8401 8402 8403 8404 8405 8406 8407 8408 8409 8410 8411 8412 8413 8414 8415 8416 8417 8418 8419 8420 8421 8422 8423 8424 8425 8426 8427 8428 8429 8430 8431 8432 8433 8434 8435 8436 8437 8438 8439 8440 8441 8442 8443 8444 8445 8446 8447 8448 8449 8450 8451 8452 8453 8454 8455 8456 8457 8458 8459 8460 8461 8462 8463 8464 8465 8466 8467 8468 8469 8470 8471 8472 8473 8474 8475 8476 8477 8478 8479 8480 8481 8482 8483 8484 8485 8486 8487 8488 8489 8490 8491 8492 8493 8494 8495 8496 8497 8498 8499 8500 8501 8502 8503 8504 8505 8506 8507 8508 8509 8510 8511 8512 8513 8514 8515 8516 8517 8518 8519 8520 8521 8522 8523 8524 8525 8526 8527 8528 8529 8530 8531 8532 8533 8534 8535 8536 8537 8538 8539 8540 8541 8542 8543 8544 8545 8546 8547 8548 8549 8550 8551 8552 8553 8554 8555 8556 8557 8558 8559 8560 8561 8562 8563 8564 8565 8566 8567 8568 8569 8570 8571 8572 8573 8574 8575 8576 8577 8578 8579 8580 8581 8582 8583 8584 8585 8586 8587 8588 8589 8590 8591 8592 8593 8594 8595 8596 8597 8598 8599 8600 8601 8602 8603 8604 8605 8606 8607 8608 8609 8610 8611 8612 8613 8614 8615 8616 8617 8618 8619 8620 8621 8622 8623 8624 8625 8626 8627 8628 8629 8630 8631 8632 8633 8634 8635 8636 8637 8638 8639 8640 8641 8642 8643 8644 8645 8646 8647 8648 8649 8650 8651 8652 8653 8654 8655 8656 8657 8658 8659 8660 8661 8662 8663 8664 8665 8666 8667 8668 8669 8670 8671 8672 8673 8674 8675 8676 8677 8678 8679 8680 8681 8682 8683 8684 8685 8686 8687 8688 8689 8690 8691 8692 8693 8694 8695 8696 8697 8698 8699 8700 8701 8702 8703 8704 8705 8706 8707 8708 8709 8710 8711 8712 8713 8714 8715 8716 8717 8718 8719 8720 8721 8722 8723 8724 8725 8726 8727 8728 8729 8730 8731 8732 8733 8734 8735 8736 8737 8738 8739 8740 8741 8742 8743 8744 8745 8746 8747 8748 8749 8750 8751 8752 8753 8754 8755 8756 8757 8758 8759 8760 8761 8762 8763 8764 8765 8766 8767 8768 8769 8770 8771 8772 8773 8774 8775 8776 8777 8778 8779 8780 8781 8782 8783 8784 8785 8786 8787 8788 8789 8790 8791 8792 8793 8794 8795 8796 8797 8798 8799 8800 8801 8802 8803 8804 8805 8806 8807 8808 8809 8810 8811 8812 8813 8814 8815 8816 8817 8818 8819 8820 8821 8822 8823 8824 8825 8826 8827 8828 8829 8830 8831 8832 8833 8834 8835 8836 8837 8838 8839 8840 8841 8842 8843 8844 8845 8846 8847 8848 8849 8850 8851 8852 8853 8854 8855 8856 8857 8858 8859 8860 8861 8862 8863 8864 8865 8866 8867 8868 8869 8870 8871 8872 8873 8874 8875 8876 8877 8878 8879 8880 8881 8882 8883 8884 8885 8886 8887 8888 8889 8890 8891 8892 8893 8894 8895 8896 8897 8898 8899 8900 8901 8902 8903 8904 8905 8906 8907 8908 8909 8910 8911 8912 8913 8914 8915 8916 8917 8918 8919 8920 8921 8922 8923 8924 8925 8926 8927 8928 8929 8930 8931 8932 8933 8934 8935 8936 8937 8938 8939 8940 8941 8942 8943 8944 8945 8946 8947 8948 8949 8950 8951 8952 8953 8954 8955 8956 8957 8958 8959 8960 8961 8962 8963 8964 8965 8966 8967 8968 8969 8970 8971 8972 8973 8974 8975 8976 8977 8978 8979 8980 8981 8982 8983 8984 8985 8986 8987 8988 8989 8990 8991 8992 8993 8994 8995 8996 8997 8998 8999 9000 9001 9002 9003 9004 9005 9006 9007 9008 9009 9010 9011 9012 9013 9014 9015 9016 9017 9018 9019 9020 9021 9022 9023 9024 9025 9026 9027 9028 9029 9030 9031 9032 9033 9034 9035 9036 9037 9038 9039 9040 9041 9042 9043 9044 9045 9046 9047 9048 9049 9050 9051 9052 9053 9054 9055 9056 9057 9058 9059 9060 9061 9062 9063 9064 9065 9066 9067 9068 9069 9070 9071 9072 9073 9074 9075 9076 9077 9078 9079 9080 9081 9082 9083 9084 9085 9086 9087 9088 9089 9090 9091 9092 9093 9094 9095 9096 9097 9098 9099 9100 9101 9102 9103 9104 9105 9106 9107 9108 9109 9110 9111 9112 9113 9114 9115 9116 9117 9118 9119 9120 9121 9122 9123 9124 9125 9126 9127 9128 9129 9130 9131 9132 9133 9134 9135 9136 9137 9138 9139 9140 9141 9142 9143 9144 9145 9146 9147 9148 9149 9150 9151 9152 9153 9154 9155 9156 9157 9158 9159 9160 9161 9162 9163 9164 9165 9166 9167 9168 9169 9170 9171 9172 9173 9174 9175 9176 9177 9178 9179 9180 9181 9182 9183 9184 9185 9186 9187 9188 9189 9190 9191 9192 9193 9194 9195 9196 9197 9198 9199 9200 9201 9202 9203 9204 9205 9206 9207 9208 9209 9210 9211 9212 9213 9214 9215 9216 9217 9218 9219 9220 9221 9222 9223 9224 9225 9226 9227 9228 9229 9230 9231 9232 9233 9234 9235 9236 9237 9238 9239 9240 9241 9242 9243 9244 9245 9246 9247 9248 9249 9250 9251 9252 9253 9254 9255 9256 9257 9258 9259 9260 9261 9262 9263 9264 9265 9266 9267 9268 9269 9270 9271 9272 9273 9274 9275 9276 9277 9278 9279 9280 9281 9282 9283 9284 9285 9286 9287 9288 9289 9290 9291 9292 9293 9294 9295 9296 9297 9298 9299 9300 9301 9302 9303 9304 9305 9306 9307 9308 9309 9310 9311 9312 9313 9314 9315 9316 9317 9318 9319 9320 9321 9322 9323 9324 9325 9326 9327 9328 9329 9330 9331 9332 9333 9334 9335 9336 9337 9338 9339 9340 9341 9342 9343 9344 9345 9346 9347 9348 9349 9350 9351 9352 9353 9354 9355 9356 9357 9358 9359 9360 9361 9362 9363 9364 9365 9366 9367 9368 9369 9370 9371 9372 9373 9374 9375 9376 9377 9378 9379 9380 9381 9382 9383 9384 9385 9386 9387 9388 9389 9390 9391 9392 9393 9394 9395 9396 9397 9398 9399 9400 9401 9402 9403 9404 9405 9406 9407 9408 9409 9410 9411 9412 9413 9414 9415 9416 9417 9418 9419 9420 9421 9422 9423 9424 9425 9426 9427 9428 9429 9430 9431 9432 9433 9434 9435 9436 9437 9438 9439 9440 9441 9442 9443 9444 9445 9446 9447 9448 9449 9450 9451 9452 9453 9454 9455 9456 9457 9458 9459 9460 9461 9462 9463 9464 9465 9466 9467 9468 9469 9470 9471 9472 9473 9474 9475 9476 9477 9478 9479 9480 9481 9482 9483 9484 9485 9486 9487 9488 9489 9490 9491 9492 9493 9494 9495 9496 9497 9498 9499 9500 9501 9502 9503 9504 9505 9506 9507 9508 9509 9510 9511 9512 9513 9514 9515 9516 9517 9518 9519 9520 9521 9522 9523 9524 9525 9526 9527 9528 9529 9530 9531 9532 9533 9534 9535 9536 9537 9538 9539 9540 9541 9542 9543 9544 9545 9546 9547 9548 9549 9550 9551 9552 9553 9554 9555 9556 9557 9558 9559 9560 9561 9562 9563 9564 9565 9566 9567 9568 9569 9570 9571 9572 9573 9574 9575 9576 9577 9578 9579 9580 9581 9582 9583 9584 9585 9586 9587 9588 9589 9590 9591 9592 9593 9594 9595 9596 9597 9598 9599 9600 9601 9602 9603 9604 9605 9606 9607 9608 9609 9610 9611 9612 9613 9614 9615 9616 9617 9618 9619 9620 9621 9622 9623 9624 9625 9626 9627 9628 9629 9630 9631 9632 9633 9634 9635 9636 9637 9638 9639 9640 9641 9642 9643 9644 9645 9646 9647 9648 9649 9650 9651 9652 9653 9654 9655 9656 9657 9658 9659 9660 9661 9662 9663 9664 9665 9666 9667 9668 9669 9670 9671 9672 9673 9674 9675 9676 9677 9678 9679 9680 9681 9682 9683 9684 9685 9686 9687 9688 9689 9690 9691 9692 9693 9694 9695 9696 9697 9698 9699 9700 9701 9702 9703 9704 9705 9706 9707 9708 9709 9710 9711 9712 9713 9714 9715 9716 9717 9718 9719 9720 9721 9722 9723 9724 9725 9726 9727 9728 9729 9730 9731 9732 9733 9734 9735 9736 9737 9738 9739 9740 9741 9742 9743 9744 9745 9746 9747 9748 9749 9750 9751 9752 9753 9754 9755 9756 9757 9758 9759 9760 9761 9762 9763 9764 9765 9766 9767 9768 9769 9770 9771 9772 9773 9774 9775 9776 9777 9778 9779 9780 9781 9782 9783 9784 9785 9786 9787 9788 9789 9790 9791 9792 9793 9794 9795 9796 9797 9798 9799 9800 9801 9802 9803 9804 9805 9806 9807 9808 9809 9810 9811 9812 9813 9814 9815 9816 9817 9818 9819 9820 9821 9822 9823 9824 9825 9826 9827 9828 9829 9830 9831 9832 9833 9834 9835 9836 9837 9838 9839 9840 9841 9842 9843 9844 9845 9846 9847 9848 9849 9850 9851 9852 9853 9854 9855 9856 9857 9858 9859 9860 9861 9862 9863 9864 9865 9866 9867 9868 9869 9870 9871 9872 9873 9874 9875 9876 9877 9878 9879 9880 9881 9882 9883 9884 9885 9886 9887 9888 9889 9890 9891 9892 9893 9894 9895 9896 9897 9898 9899 9900 9901 9902 9903 9904 9905 9906 9907 9908 9909 9910 9911 9912 9913 9914 9915 9916 9917 9918 9919 9920 9921 9922 9923 9924 9925 9926 9927 9928 9929 9930 9931 9932 9933 9934 9935 9936 9937 9938 9939 9940 9941 9942 9943 9944 9945 9946 9947 9948 9949 9950 9951 9952 9953 9954 9955 9956 9957 9958 9959 9960 9961 9962 9963 9964 9965 9966 9967 9968 9969 9970 9971 9972 9973 9974 9975 9976 9977 9978 9979 9980 9981 9982 9983 9984 9985 9986 9987 9988 9989 9990 9991 9992 9993 9994 9995 9996 9997 9998 9999 10000

N

0 400 800 1200 1600
Feet

SCHOFIELD BARRACKS EAST RANGE

SYMBOL	DATE	DESCRIPTION	BY	CHK'D	APP
		REVISIONS			

DIRECTORATE OF PUBLIC WORKS
U.S. ARMY GARRISON, HAWAII

DESIGNED: DATE
DRAWN BY: DATE
SCALE:

STORM SEWER PLAN

SCHOFIELD BARRACKS EAST RANGE

PROJECT NO.

CHECKED: ARCH, CIVIL, MECH, ELEC, FIRE, ENVIRON, AREA ENGR

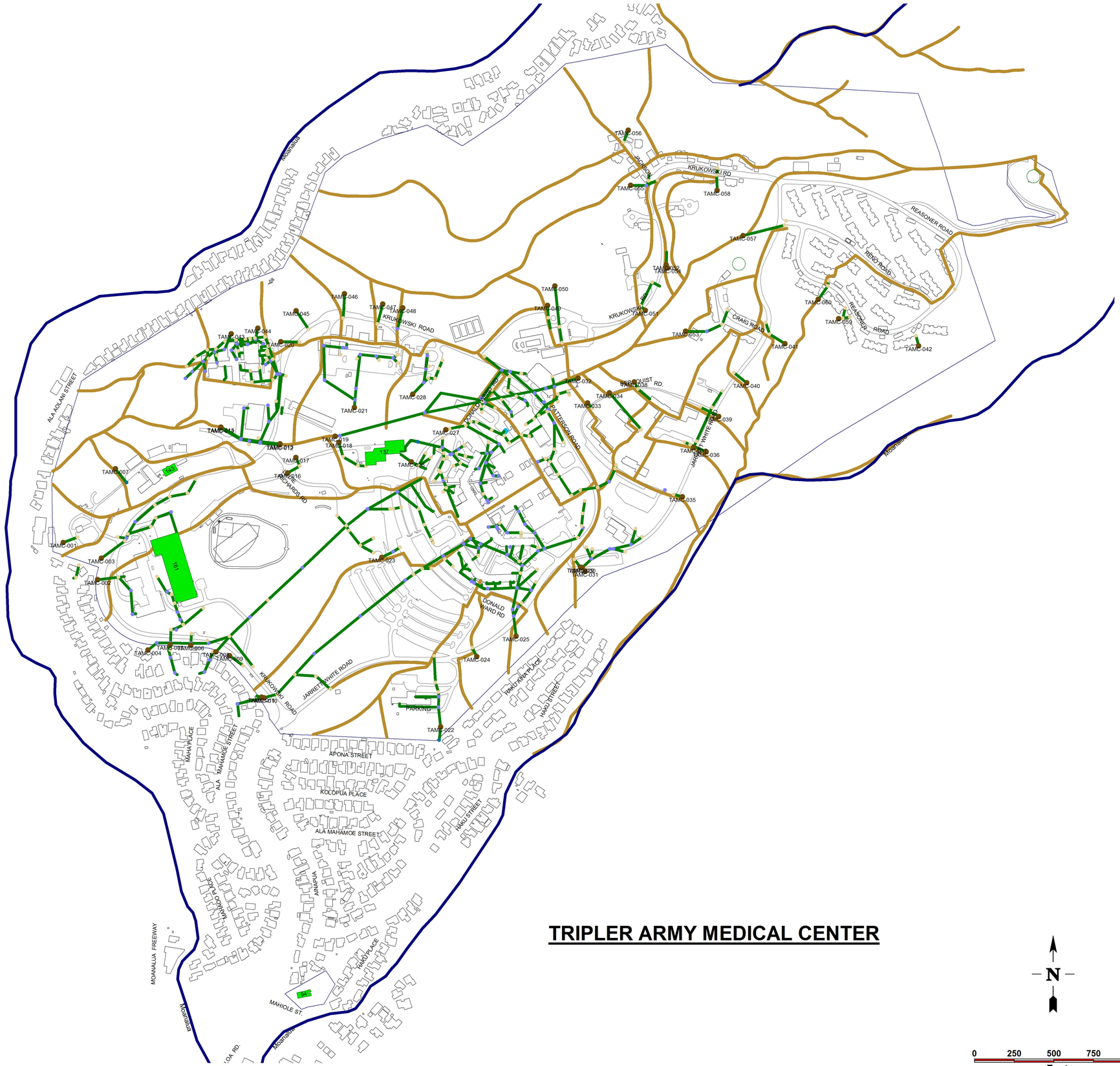
APPROVED: DATE
DIRECTOR

SUBMITTED BY: DATE
APPROVAL RECOMMENDED BY: DATE

SHT. OF SHTS

DRAWING NO.

FEBRUARY 2011



TAMC_STORM_SEWER_DISCHARGE_POINTS		
discharge_i	FirstGeographicCoordin	SecondGeographicCoordina
TAMC-001	-157:53:52.604	21:21:33.109
TAMC-002	-157:53:50.324	21:21:30.786
TAMC-003	-157:53:50.072	21:21:32.124
TAMC-004	-157:53:46.958	21:21:26.390
TAMC-005	-157:53:45.486	21:21:26.721
TAMC-006	-157:53:44.111	21:21:26.687
TAMC-007	-157:53:49.130	21:21:37.710
TAMC-008	-157:53:42.425	21:21:26.277
TAMC-009	-157:53:41.512	21:21:26.033
TAMC-010	-157:53:39.235	21:21:23.402
TAMC-011	-157:53:39.384	21:21:23.434
TAMC-012	-157:53:38.156	21:21:39.201
TAMC-013	-157:53:38.146	21:21:39.265
TAMC-014	-157:53:42.106	21:21:40.265
TAMC-015	-157:53:42.087	21:21:40.314
TAMC-016	-157:53:37.644	21:21:37.450
TAMC-017	-157:53:37.087	21:21:38.414
TAMC-018	-157:53:34.221	21:21:39.348
TAMC-019	-157:53:34.471	21:21:39.732
TAMC-020	-157:53:38.084	21:21:45.649
TAMC-021	-157:53:33.191	21:21:41.531
TAMC-022	-157:53:27.452	21:21:21.574
TAMC-023	-157:53:31.368	21:21:32.170
TAMC-024	-157:53:25.044	21:21:25.962
TAMC-025	-157:53:22.414	21:21:27.238
TAMC-026	-157:53:29.393	21:21:38.140
TAMC-027	-157:53:27.092	21:21:40.144
TAMC-028	-157:53:29.302	21:21:42.364
TAMC-029	-157:53:18.122	21:21:31.534
TAMC-030	-157:53:18.004	21:21:31.515
TAMC-031	-157:53:17.818	21:21:31.274
TAMC-032	-157:53:18.268	21:21:43.359
TAMC-033	-157:53:17.637	21:21:41.807
TAMC-034	-157:53:16.173	21:21:42.436
TAMC-035	-157:53:11.318	21:21:35.940
TAMC-036	-157:53:09.726	21:21:38.750
TAMC-037	-157:53:10.564	21:21:39.011
TAMC-038	-157:53:14.525	21:21:43.118
TAMC-039	-157:53:08.891	21:21:40.961
TAMC-040	-157:53:07.031	21:21:43.058
TAMC-041	-157:53:04.475	21:21:45.508
TAMC-042	-157:52:55.559	21:21:45.357
TAMC-043	-157:53:41.391	21:21:46.147
TAMC-044	-157:53:39.627	21:21:46.496
TAMC-045	-157:53:37.065	21:21:47.585
TAMC-046	-157:53:33.837	21:21:48.643
TAMC-047	-157:53:31.292	21:21:47.994
TAMC-048	-157:53:29.949	21:21:47.758
TAMC-049	-157:53:20.304	21:21:47.905
TAMC-050	-157:53:19.807	21:21:49.123
TAMC-051	-157:53:13.785	21:21:47.585
TAMC-052	-157:53:12.388	21:21:50.437
TAMC-053	-157:53:11.101	21:21:46.284
TAMC-054	-157:53:12.288	21:21:50.234
TAMC-055	-157:53:14.751	21:21:55.412
TAMC-056	-157:53:14.904	21:21:58.855
TAMC-057	-157:53:07.251	21:21:52.262
TAMC-058	-157:53:08.985	21:21:55.077
TAMC-059	-157:53:00.882	21:21:47.060
TAMC-060	-157:53:02.243	21:21:48.278

Legend

- tamc_storm_sewer_discharge_point
- storm_sewer_headwall_point
- storm_sewer_inlet_point
- storm_sewer_junction_point
- storm_sewer_culvert_line
- storm_sewer_headwall_line
- storm_sewer_inlet
- storm_sewer_line
- storm_sewer_open_drainage_line/grass_swale
- streams
- storm_sewer_drainage_basin_area
- Industrial_Facilities

TRIPLER ARMY MEDICAL CENTER

N

0 250 500 750 1000
Feet

SYMBOL	DATE	DESCRIPTION	BY	CHK'D	APP
		REVISIONS			

DIRECTORATE OF PUBLIC WORKS
U.S. ARMY GARRISON, HAWAII

DESIGNED: DATE
DRAWN BY: DATE
SCALE:

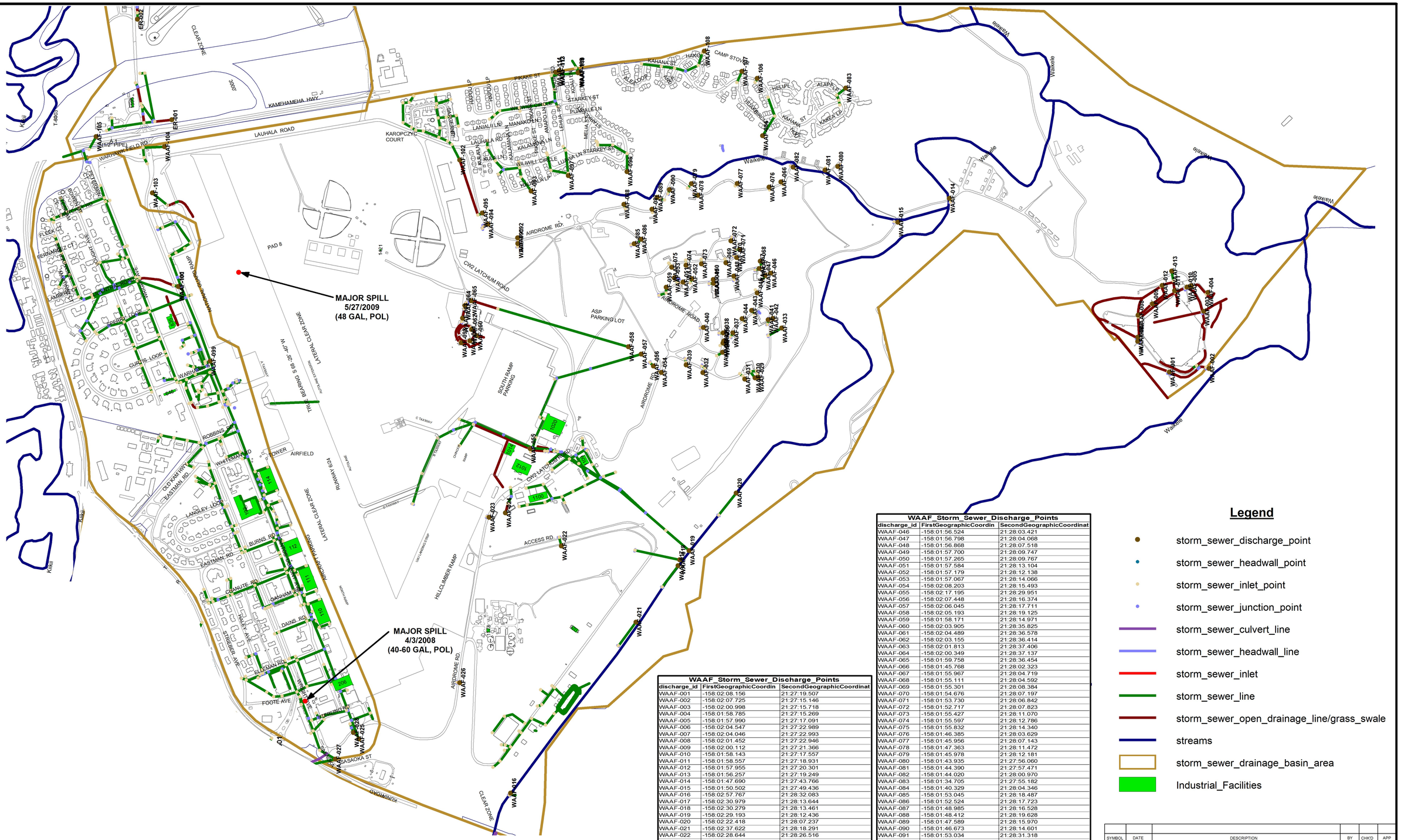
STORM SEWER PLAN AND INDUSTRIAL FACILITIES
TRIPLER ARMY MEDICAL CENTER
PROJECT NO.

CHECKED: ARCH, CIVIL, MECH, ELEC, FIRE, ENVIRON, AREA ENGR

APPROVED: DATE
DIRECTOR

SUBMITTED BY: DATE
APPROVAL RECOMMENDED BY: DATE
SHT. OF SHTS
DRAWING NO.

FEBRUARY 2011



WHEELER ARMY AIRFIELD

Legend

- storm_sewer_discharge_point
- storm_sewer_headwall_point
- storm_sewer_inlet_point
- storm_sewer_junction_point
- storm_sewer_culvert_line
- storm_sewer_headwall_line
- storm_sewer_inlet
- storm_sewer_line
- storm_sewer_open_drainage_line/grass_swale
- streams
- storm_sewer_drainage_basin_area
- Industrial_Facilities

WAAF_Storm_Sewer_Discharge_Points

discharge_id	FirstGeographicCoordin	SecondGeographicCoordinat
WAAF-001	-158:02:08.156	21:27:19.507
WAAF-002	-158:02:07.725	21:27:15.146
WAAF-003	-158:02:00.998	21:27:15.718
WAAF-004	-158:01:58.785	21:27:15.269
WAAF-005	-158:01:57.990	21:27:17.091
WAAF-006	-158:02:04.547	21:27:22.989
WAAF-007	-158:02:04.046	21:27:22.993
WAAF-008	-158:02:01.452	21:27:22.946
WAAF-009	-158:02:00.112	21:27:21.366
WAAF-010	-158:01:58.143	21:27:17.557
WAAF-011	-158:01:58.557	21:27:18.931
WAAF-012	-158:01:57.955	21:27:20.301
WAAF-013	-158:01:56.257	21:27:19.249
WAAF-014	-158:01:47.690	21:27:43.766
WAAF-015	-158:01:50.502	21:27:49.436
WAAF-016	-158:02:57.767	21:28:32.083
WAAF-017	-158:02:30.979	21:28:13.644
WAAF-018	-158:02:30.279	21:28:13.461
WAAF-019	-158:02:29.193	21:28:12.436
WAAF-020	-158:02:22.418	21:28:07.237
WAAF-021	-158:02:37.622	21:28:18.291
WAAF-022	-158:02:28.644	21:28:26.516
WAAF-023	-158:02:25.291	21:28:34.473
WAAF-024	-158:02:24.745	21:28:32.670
WAAF-025	-158:02:51.408	21:28:48.829
WAAF-026	-158:02:44.789	21:28:37.705
WAAF-027	-158:02:53.762	21:28:51.412
WAAF-028	-158:02:50.643	21:28:49.421
WAAF-029	-158:02:08.803	21:28:04.805
WAAF-030	-158:02:08.848	21:28:05.176
WAAF-031	-158:02:08.991	21:28:06.308
WAAF-032	-158:02:08.242	21:28:10.918
WAAF-033	-158:02:02.983	21:28:02.238
WAAF-034	-158:02:05.841	21:28:08.754
WAAF-035	-158:02:04.740	21:28:08.700
WAAF-036	-158:02:04.502	21:28:08.589
WAAF-037	-158:02:03.551	21:28:07.603
WAAF-038	-158:02:03.555	21:28:08.671
WAAF-039	-158:02:07.321	21:28:12.768
WAAF-040	-158:02:02.915	21:28:10.857
WAAF-041	-158:02:02.009	21:28:03.713
WAAF-042	-158:02:01.862	21:28:03.217
WAAF-043	-158:02:00.909	21:28:05.547
WAAF-044	-158:02:01.876	21:28:06.592
WAAF-045	-158:01:58.860	21:28:04.929

WAAF_Storm_Sewer_Discharge_Points

discharge_id	FirstGeographicCoordin	SecondGeographicCoordinat
WAAF-046	-158:01:56.524	21:28:03.421
WAAF-047	-158:01:56.798	21:28:04.068
WAAF-048	-158:01:56.868	21:28:07.518
WAAF-049	-158:01:57.700	21:28:09.747
WAAF-050	-158:01:57.265	21:28:09.767
WAAF-051	-158:01:57.584	21:28:13.104
WAAF-052	-158:01:57.179	21:28:12.138
WAAF-053	-158:01:57.067	21:28:14.066
WAAF-054	-158:02:08.203	21:28:15.493
WAAF-055	-158:02:17.195	21:28:29.951
WAAF-056	-158:02:07.448	21:28:16.374
WAAF-057	-158:02:06.045	21:28:17.711
WAAF-058	-158:02:05.193	21:28:19.125
WAAF-059	-158:01:58.171	21:28:14.971
WAAF-060	-158:02:03.905	21:28:35.825
WAAF-061	-158:02:04.489	21:28:36.578
WAAF-062	-158:02:03.155	21:28:36.414
WAAF-063	-158:02:01.813	21:28:37.406
WAAF-064	-158:02:00.349	21:28:37.137
WAAF-065	-158:01:59.758	21:28:36.454
WAAF-066	-158:01:45.768	21:28:02.323
WAAF-067	-158:01:55.967	21:28:04.719
WAAF-068	-158:01:55.111	21:28:04.592
WAAF-069	-158:01:55.301	21:28:08.384
WAAF-070	-158:01:54.676	21:28:07.197
WAAF-071	-158:01:53.730	21:28:06.842
WAAF-072	-158:01:52.717	21:28:07.823
WAAF-073	-158:01:55.427	21:28:11.070
WAAF-074	-158:01:55.597	21:28:12.786
WAAF-075	-158:01:55.832	21:28:14.340
WAAF-076	-158:01:46.385	21:28:03.629
WAAF-077	-158:01:45.956	21:28:07.143
WAAF-078	-158:01:47.363	21:28:11.472
WAAF-079	-158:01:45.978	21:28:12.181
WAAF-080	-158:01:43.935	21:27:56.060
WAAF-081	-158:01:44.390	21:27:57.471
WAAF-082	-158:01:44.020	21:28:00.970
WAAF-083	-158:01:34.705	21:27:55.182
WAAF-084	-158:01:40.329	21:28:04.346
WAAF-085	-158:01:53.045	21:28:18.487
WAAF-086	-158:01:52.524	21:28:17.723
WAAF-087	-158:01:48.985	21:28:16.528
WAAF-088	-158:01:48.412	21:28:19.628
WAAF-089	-158:01:47.589	21:28:15.970
WAAF-090	-158:01:46.673	21:28:14.601
WAAF-091	-158:01:53.034	21:28:31.318
WAAF-092	-158:01:52.350	21:28:31.332
WAAF-093	-158:01:46.843	21:28:29.853
WAAF-094	-158:01:50.738	21:28:34.631
WAAF-095	-158:01:49.442	21:28:35.224
WAAF-096	-158:01:44.553	21:28:19.291
WAAF-097	-158:01:45.025	21:28:25.752
WAAF-098	-158:02:04.733	21:28:37.546
WAAF-099	-158:02:06.898	21:29:05.223
WAAF-100	-158:01:58.111	21:29:08.727
WAAF-101	-158:01:58.080	21:29:08.723
WAAF-102	-158:01:43.188	21:28:37.728
WAAF-103	-158:01:47.071	21:29:11.600
WAAF-104	-158:01:41.630	21:29:10.271
WAAF-105	-158:01:40.444	21:29:17.799
WAAF-106	-158:01:33.573	21:28:04.932
WAAF-107	-158:01:32.737	21:28:06.617
WAAF-108	-158:01:30.360	21:28:10.775
WAAF-109	-158:01:32.925	21:28:24.669
WAAF-110	-158:01:32.846	21:28:24.593
WAAF-111	-158:01:32.851	21:28:24.620
WAAF-112	-158:01:32.762	21:28:26.760
WAAF-113	-158:01:32.688	21:28:26.773
WAAF-114	-158:01:32.847	21:28:27.136

SYMBOL	DATE	DESCRIPTION	BY	CHK'D	APP
		REVISIONS			

DIRECTORATE OF PUBLIC WORKS
U.S. ARMY GARRISON, HAWAII

DESIGNED: DATE
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STORM SEWER PLAN AND INDUSTRIAL FACILITIES
WHEELER ARMY AIRFIELD
PROJECT NO.

CHECKED:
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SHT. OF SHTS DRAWING NO.

FEBRUARY 2011