STANDARD PLANS SUMMARY

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	99C-01-00	2002	2	21

STANDARD PLAN NO.	TITLE	DATE
B-01	Notes and Miscellaneous Details	07/01/86
B-02		
B-03	Typical Structure Excavation and Backfill Pay Limits	07/01/8
B-04		
B-05		
B-06	Concrete Box Girder	07/01/8
B-07	Concrete Box Girder	07/01/8
B-08	Concrete Box Girder	07/01/8
B-09		
B-10		
B-11		
B-12	Prestressed Concrete Piles	r07/16/9
B-13	Prestressed Concrete Piles	r07/16/9

D-01	Chain Link Fence With Toprail	r03/06/87
D-02	Chain Link Fence Without Toprail	r07/26/90
D-03	Wire Fence With Metal Posts	07/01/86
D-04	Typical Details of Curbs and/or Gutters	07/01/86
D-05	Typical Details of Reinforced Concrete Drop Driveway	07/01/86
D-06	Centerline and Reference Survey Monument	07/01/86
D-07	Street Survey Monument	07/01/86
D-08	Landscaping Shrub and Tree Planting	07/01/86
D-09	Field Office	07/01/86
D-10	Field Office	07/01/86
D-11	Project Site Laboratory	07/01/86
D-12	Project Site Laboratory	07/01/86
D-13	Field Office & Project Site Laboratory	07/01/86

H-01	Type A. B. C and D Catch Basin	07/01/86
H-02	Type A1, B1, C1 and D1 Catch Basin	07/01/86
H-03	Type A2, B2, C2 and D2 Catch Basin	07/01/86
H-04	Typical Reinforcing Details for Catch Basins	07/01/86
H-05	Type A. B and C Storm Drain Manhole	07/01/86
H-06	Type D and E Storm Drain Manhole	07/01/86
H-07	Type F Storm Drain Manhole	07/01/86
H-08	Catch Basin and Manhole Casting	07/01/86
H-09	Type A-9 and A-9P Frames and Grates	07/01/86
H-10	Type A-9B Frames and Grates	07/01/86
H-11	Type 61614 and 61214 Grated Drop Inlet	07/01/86
H-12	Type 61616 Grated Drop Inlet	07/01/86
H-13	61214, 61614 & 61616 Steel Frames and Grates	07/01/86
H-14	61214B Steel Frame and Grates	07/01/86
H-15	61614B Steel Frame and Grates	07/01/86
H-16	Concrete and Cement Rubble Masonry Structures	r10/16/90
H-17	Inlet Structures	r10/16/90
H-18	Flared End Section for Culverts	07/01/86
H-19	Outlet Structures	r02/15/91
H-20	Concrete Spillway Inlet	07/01/86
H-21	18" Slotted C.M.P. Drain	07/01/86
H-22	C.M.P. Coupling Details Standard Joint	r10/16/90
H-23	Hat Shaped Coupling Band	r10/16/90
	·	

STANDARD PLAN NO.	TITLE	DATE
TE-01 •	Miscellaneous Sign Details	07/01/8
TE-02 ●	Galvanized Flanged Channel Sign Post Mounting	07/01/8
TE-03 ●	Galvanized Square Tube Sign Post Mounting	07/01/8
TE-04 ●	Regulatory Signs	r09/01/8
TE-05 ●	Warning Signs	07/01/8
TE-06 ●	Miscellaneous Signs	r11/03/89
TE-07	Reserved	07/01/8
TE-08 ●	Construction Signs	r09/01/8
TE-09	Miscellaneous Intersection Signs	r03/06/8
TE-10	Reserved	07/01/8
TE-11	Bike Route Sign and Supplementary Plates	07/01/8
TE-12	State Route Marker and Auxiliary Markers	07/01/8
TE-13	Interstate Route Marker	07/01/8
TE-14	State Route Marker and Border Detail for Guide Signs	07/01/8
TE-15	Route Marker Assemblies	07/01/8
TE-16 ●	Miscellaneous Reflector Markers	07/01/8
TE-17	Type II Object Markers	07/01/8
TE-18	Mileposts	07/01/8
TE-19	Reserved	07/01/8
TE-20	Overhead Sign Supports	07/01/8
TE-21	Overhead Sign Support, Box Truss Type, Aluminum	07/01/8
TE-22	Foundation Details and Schedules	07/01/8
TE-23	Supports for Ground Mounted Guide Sign	r11/03/8
TE-24	Breakaway Sign Supports for Ground Mounted Guide Signs	07/01/8
TE-25	Laminated Aluminum Sign Panels (Overhead)	07/01/8
TE-26	Laminated Aluminum Sign Panels (Ground Mounted)	07/01/8
TE-27	Solid Aluminum Extruded Sign Panel and Accessory Details	07/01/8
TE-28	Guide Signs Luminaire Mountings	07/01/8
TE-29	Reserved	07/01/8
TE-30	Raised Pavement Markers and Striping	r05/09/9
TE-31	Miscellaneous Pavement Markings	r05/09/9
TE-32	Miscellaneous Pavement Markings	r05/09/9
TE-33	Miscellaneous Pavement Markings	r11/03/8
TE-34	Reserved	07/01/8
TE-35	Pavement Alphabets, Numbers & Symbols	07/01/8
TE-36	Pavement Alphabets, Numbers & Symbols	07/01/8
TE-37	Reserved	07/01/8
TE-38 ●	Traffic Signal System, Miscellaneous Details	r11/03/8
TE-39 ●	Traffic Signal System, Miscellaneous Details	07/01/8
TE-40 ●	Loop Detectors	r11/03/8
TE-41	Pullboxes	07/01/8
TE-42	Type III Traffic Signal Standard	07/01/8
TE-43	Concrete Pullbox (2' x 3')	07/01/8
TE-44	Reserved	07/01/8

TE-45		
	Reserved	07/01/86
TE-46	Reserved	07/01/86
TE-47	Reserved	07/01/86
TE-48	Reserved	07/01/86
TE-49	Reserved	07/01/86
TE-50	Metal Guardrail	r03/06/87
TE-51	Metal Guardrail	r09/01/87
TE-52	Metal Guardrail with Rubrail	r11/03/89
TE-53	Metal Guardrail with Rubrail at Obstruction	r09/01/87
TE-54	Beam Type Guardrail with Rubrail at Obstruction (Shoulder Installation)	r11/03/89
TE-55	Metal Guardrail Connection to Concrete Barrier	r11/03/89
TE-56	Concrete Barrier Transition	07/01/86
TE-57	Guardrail Type 3, Thrie Beam	r11/03/89
TE-57A	Guardrail Type 3, Modified Thrie Beam	11/03/89
TE-58	Approach End Flare, One & Two Way Roadway	07/01/86
TE-59	Trailing End Flare, One & Two Way Roadway	r11/03/89
TE-60	Anchor Block Details	07/01/86
TE-61	Breakaway Cable Terminal (BCT)	r11/03/89
TE-62	Breakaway Cable Terminal (BCT)	r09/01/87
TE-63	Guardrail Type 4 (Rigid Barrier)	r09/01/87
TE-64	Portable Concrete Barrier	r11/03/89
TE-65	Guardrail Type 4. Miscellaneous	r09/01/87
TE-66	Barricades	07/01/86
TE-67	Delineation & Pavement Markings at Bridges	07/01/86
TE-68	Wheelchair Ramps	r07/18/94
TE-69	Wheelchair Ramps	r07/18/94

NOTE:

STANDARD PLANS APPLICABLE TO THIS PROJECT ARE INDICATED BY A " ● " NEXT TO THE STANDARD PLAN NO. (FOR EXAMPLE: D-O7 ●)

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

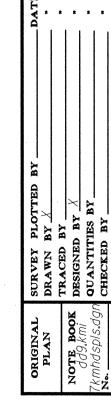
STANDARD PLANS SUMMARY

KAMEHAMEHA HIGHWAY
Intersection Improvements at
Kamananui Road

Proj. No. 99C-01-00

Date: Sept., 2001

SHEET No. 1 OF 1 SHEETS



GENERAL NOTES

- 1. The scope of work for this project consists of installation of a traffic signal system and appropriate signage and pavement markings.
- 2. The Contractor is reminded of the requirements of Subsection 108.01 Subletting of Contract, which requires him to perform work amounting to not less than 50 percent of the total contract cost less deductible items. Non-compliance with this Subsection may be grounds for rejection of bid.
- 3. The Contractor's attention is directed to the following Sections of the Special Provisions: Subsection 107.13 Public Convenience and Safety; Subsection 107.21 Contractor's Responsibility For Utility Property And Services; and Section 645 -Traffic Control.
- 4. At the end of each day's work, the Contractor shall remove all equipment and other obstructions to permit free and safe passage of public traffic.
- 5. The existence and location of underground utilities, manholes, monuments and structures as shown on the plans are from the latest available data but the accuracy is not guaranteed. The encountering of other obstacles during the course of work is possible. The Contractor shall be held liable for any damages incurred to the existing facilities and/or improvements as a result of his operations.
- 6. The exact locations and limits or areas to be filled with leveling course, reconstructed and cold planed shall be determined in the field by the Engineer.
- 7. The Contractor shall notify in writing, the Oahu Transit Services, Inc. Roads Supervision Office, 811 Middle St., Hon., HI 96819 (ph. #848-4571) seven (7) days prior to any paving operations.
- 8. The Contractor shall notify the Engineer in writing, two (2) weeks prior to starting paving operations.
- 9. The Contractor shall remove and dispose of all existing raised pavement markers and traffic tapes prior to the overlaying of Asphalt Concrete. This work shall be considered incidental to pay items under Section 623 Traffic Signal System.
- 10. Smooth riding connections shall be constructed at all limits of resurfacing, including the beginning and end of project, connecting approaches, side streets and driveways as shown on the plans and/or as directed by the Engineer.
- 11. Dressing of shoulder, sidewalk and bus turnout shall consist of clearing, grubbing, grading, reshaping and compacting the unpaved shoulders with suitable material as shown on the plans and/or as directed by the Engineer. This work shall be considered incidental to the various contract items.
- 12. Existing drainage system will be functional at all times during construction. The Contractor is to furnish materials, equipment, labor, tools and incidentals necessary to maintain flow. This work shall be considered incidental to various contract items.

<i>13</i> .	Earth swale	shall be gi	raded to	drain.	This work	shall
	be considered	d incidenťa	al to the	various	contract it	ems.

- 14. The contractor shall provide for access to and from all existing side streets at all times.
- 15. All saw cutting work shall be considered incidental to pay items under Section 623 Traffic Signal System.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR		TOTAL SHEETS
HAWAII	HAW.	99C-01-00	2002	0	0

<u>LEGEND</u>

,			
	Reconstruction Areas	—_A—12—	Existing Sewer (Force Main-Army) Line
	Leveling Areas		New 12" Sewer Line
	Cold Planing Areas	_	Existing Sewer Manhole
 	Resurfacing Limits	<i></i>	Adjusted Sewer MH Frame/Cover
	•		New Sewer Manhole
——e—	Existing Electrical Line	v	Existing 6" Gas Line
E	New Electrical Line		New 6" Gas Line
$^{\circ}$ j $_{P}$	Existing Joint Pole	°gv	Existing Gas Valve Box
°pp	Existing Power Pole	0,	Adjusted Gas Valve Box
0 0	Existing Electric Manhole		New Gas Valve Box
°EMH	Adjusted Elec. MH Frame/Cover	<i>d</i>	Existing Gas Manhole
•EMH	New Electric Manhole	GMH	Adjusted Gas MH Frame/Cover
	Existing Telephone Line	•GMH	New Gas Manhole
—— <i>T</i> ——	New Telephone Line	©mon.	Existing Monument
$^{\circ}tp$	Existing Telephone Pole	MON.	Adjusted Monument
U	Existing Telephone Manhole	MON.	New Monument
	Adjusted Tele. MH Frame/Cover		Existing 24" Drain Line
	New Telephone Manhole	24" RCP	New 24 " RCP Drain Line
, ,,,,	Existing Signal Corps Line	°sdmh	Existing Storm Drain Manhole
	New Signal Corps Line		Adjusted Storm Drain MH Frame/Cover
	Existing TV Cable		New Storm Drain Manhole
	New TV Cable	∃gdi	Existing Grated Drop Inlet
	Existing 12" Water Line	cb 	Existing Catch Basin
W 12	New 12" Water Line	þ	Existing Traffic Sign
$^{\circ}wm\hbar$	Existing Water Manhole		Existing Highway Lighting Standard
[™] WMH	Adjusted Water MH Frame/Cover		
	New Water Manhole		
°av	Existing Water Air Valve		
AV	Adjusted Water Air Valve		
•AV	New Water Air Valve		
°wv	Existing Water Valve Box		
°wv	Adjusted Water Valve Box		
•wv	New Water Valve Box		
$\neg wm$	Existing Water Meter		
™WM	Adjusted Water Meter		

New Water Meter

New Fire Hydrant

Existing Fire Hydrant

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

GENERAL NOTES AND LEGEND

KAMEHAMEHA HIGHWAY
Intersection Improvements at
Kamananui Road
Project No. 99C-01-00

SHEET No. 1 OF 1 SHEETS

NAL SURVEY PLOTTED BY DATE DATE TRACED BY λ TRACED BY λ SOOK DESIGNED BY λ OUANTITIES BY CHECKED BY λ CHECKED BY λ .

....

WATER POLLUTION AND EROSION CONTROL NOTES:

A. GENERAL:

- 1. The Contractor is reminded of the requirements of Section 209 Water Pollution and Erosion Control, in the "Hawaii Standard Specifications for Road, Bridge and Public Works Construction". Section 209 describes but is not limited to: submittal requirements; scheduling of a water pollution and erosion control conference with the Engineer; construction requirements; method of measurement; and basis of payment.
- 2. The Contractor shall follow the guidelines in the "Best Mangement Practices Manual for Construction Sites in Honolulu", dated May 1999 in developing, installing and maintaining the Best Management Practices (BMP) for the project.
- 3. The Engineer may assess liquidated damages of up to \$25,000 for non-compliance of each BMP requirement and each requirement stated in Section 209, for every day of non-compliance. There is no maximum limit on the amount assessed per day.
- 4. The Engineer will deduct the cost from the progress payment for all citations received by the Department for non-compliance, or the Contractor shall reimburse the State for the full amount of the outstanding cost incurred by the State.

B. WASTE DISPOSAL:

1. Waste Materials

All waste materials shall be collected and stored in a securely lidded metal dumpster. The dumpster shall meet all local and State solid waste management regulations. All trash and construction debris from the site shall be deposited in the dumpster. The dumpster shall be emptied a minimum of twice per week or as often as is deemed necessary. No construction waste materials shall be buried onsite. The Contractor's supervisory personnel shall be instructed regarding the correct procedure for waste disposal. Notices stating these practices shall be posted in the office trailer and the Contractor shall be responsible for seeing that these procedures are followed.

2. Hazardous Waste

All hazardous waste materials shall be disposed of in the manner specified by local or State regulations or by the manufacturer. The Contractor's site personnel shall be instructed in these practices and shall be responsible for seeing that these practices are followed.

3. Sanitary Waste

All sanitary waste shall be collected from the portable units a minimum of once per week, or as required.

- C. EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES:
- 1. All control measures shall be inspected at least once each week and following any rainfall event of 0.5 inches or greater.
- 2. All measures shall be maintained in good working order. If repair is necessary, it shall be initiated within 24 hours after the inspection.
- 3. Built-up sediment shall be removed from silt fence when it has reached one-third the height of the fence.
- 4. Silt screen or fence shall be inspected for depth of sediment, tears, to verify that the fabric is securely attached to the fence posts or concrete slab and to verify that the fence posts are firmly in the ground.
- 5. Temporary and permanent seeding and planting shall be inspected for bare spots, washouts and healthy growth.
- 6. A maintenance inspection report shall be made promptly after each inspection by the Contractor.
- 7. The Contractor shall select a minimum of three personnel who shall be responsible for inspections, maintenance and repair activities and filling out the inspection and maintenance report.
- 8. Personnel selected for the inspection and maintenance responsibilities shall receive training from the Contractor. They shall be trained in all the inspection and maintenance practices necessary for keeping the erosion and sediment controls used onsite in good working order.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	99C-01-00	2002	4	21

D. GOOD HOUSEKEEPING BEST MANAGEMENT PRACTICES:

1. Materials Pollution Prevention Plan

a. Applicable materials or substances listed below are expected to be present onsite during construction. Other materials and substances not listed below shall be added to the inventory.

Concrete

Fertilizers

Detergents

Petroleum Based Products

Paints (enamel and latex) Metal Studs Cleaning Solvents Wood

Tar

Masonry Block

- b. Material Management Practices shall be used to reduce the risk of spills or other accidental exposure of materials and substances to storm water runoff. An effort shall be made to store only enough product as is required to do the job.
- c. All materials stored onsite shall be stored in a neat, orderly manner in their appropriate containers and if possible under a roof or other enclosure.
- d. Products shall be kept in their original containers with the original manufacturer's label.
- e. Substances shall not be mixed with one another unless recommended by the manufacturer.
- f. Whenever possible, a product shall be used up completely before disposing of the container.
- q. Manufacturer's recommendations for proper use and disposal shall be followed.
- h. The Contractor shall conduct a daily inspection to ensure proper use and disposal of materials onsite.

2. Hazardous Material Pollution Prevention Plan

- a. Products shall be kept in original containers unless they are not resealable.
- b. Original labels and material safety data sheets (MSDS) shall be retained.
- c. Surplus products shall be disposed of according to manufacturers' instructions
- or local and State recommended methods.

3. Onsite and Offsite Product Specific Plan

- a. The following product specific practices shall be followed onsite:
 - 1) Petroleum Based Products:

All onsite vehicles shall be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Petroleum products shall be stored in tightly sealed containers which are clearly labeled. Any asphalt substances used onsite shall be applied according to the manufacturer's recommendation.

2) Fertilizers:

Fertilizers used shall be applied only in the minimum amounts recommended by the manufacturer. Once applied, fertilizer shall be worked into the soil to limit exposure to storm water. Storage shall be in a covered shed. The contents of any partially used bags of fertilizer shall be transferred to a sealable plastic bin to avoid spills.

3) Paints:

All containers shall be tightly sealed and stored when not required for use. Excess paint shall not be discharged to the highway drainage system but shall be properly disposed of according to manufacturers' instructions or State and local regulations.

4) Concrete Trucks:

Concrete trucks shall be allowed to wash out or drum wash water only at a designated site. Water shall not be discharged in the highway drainage system or waters of the United States. The Contractor shall contact Drinking Water Branch, Department of Health at 586-4258 to receive permission to designate a disposal site. The Contractor shall clean disposal site as required or as requested by the Owner's representative.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

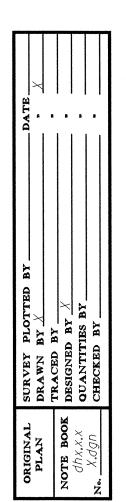
WATER POLLUTION # EROSION CONTROL NOTES

KAMEHAMEHA HIGHWAY
Intersection Improvements at
Kamananui Road

Scale: None Date: Sept., 2001

SHEET No. 1 OF 2 SHEETS

7



WATER POLLUTION AND EROSION CONTROL NOTES: -Cont.

- D. GOOD HOUSEKEEPING BEST MANAGEMENT PRACTICES: -Cont.
 - b. Offsite Vehicle Tracking:

A stabilized construction entrance shall be provided to help reduce vehicle tracking of sediments. The paved street adjacent to the site entrance shall be cleaned daily or as required to remove any excess mud, cold planed materials, dirt or rock tracked from the site. Dump trucks hauling material from the construction site shall be covered with a tarpaulin.

- 4. Spill Control Plan
 - a. A spill prevention plan shall be posted to include measures to prevent and clean up each spill.
- b. The Contractor shall be the spill prevention and cleanup coordinator. The Contractor shall designate at least three site personnel who shall receive spill prevention and cleanup training. These individuals shall each become responsible for a particular phase of prevention and cleanup. The names of responsible spill personnel shall be posted in the material storage area and in the office trailer onsite.
- c. Manufacturers' recommended methods for spill cleanup shall be clearly posted and site personnel shall be made aware of the procedures and the location of the information and cleanup supplies.
- d. Materials and equipment necessary for spill cleanup shall be kept in the material storage area onsite.
- e. All spills shall be cleaned up immediately after discovery.
- f. The spill area shall be kept well ventilated and personnel shall wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- g. Spills of toxic hazardous material shall be reported to the appropriate State or local government agency, regardless of the size.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	99C-01-00	2002	5	21

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

<u>WATER POLLUTION \$ EROSION CONTROL NOTES</u>

KAMEHAMEHA HIGHWAY
Intersection Improvements at
Kamananui Road
Project No. 99C-01-00

Scale: None

SHEET No. 2 OF 2 SHEET

