

STANDARD PLANS SUMMARY

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	DE-0200(801)	1997	2	16

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	07/01/86
B-04		
B-05		
B-06	Concrete Box Girder	07/01/86
B-07	Concrete Box Girder	07/01/86
B-08	Concrete Box Girder	07/01/86
B-09		
B-10		
B-11		
B-12	Prestressed Concrete Piles	r07/16/90
B-13	Prestressed Concrete Piles	r07/16/90

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	07/01/86
TE-02	Galvanized Flanged Channel Sign Post Mounting	07/01/86
TE-03	Galvanized Square Tube Sign Post Mounting	07/01/86
TE-04	Regulatory Signs	r09/01/87
TE-05	Warning Signs	07/01/86
TE-06	Miscellaneous Signs	r11/03/89
TE-07	Reserved	07/01/86
TE-08	Construction Signs	r09/01/87
TE-09	Miscellaneous Intersection Signs	r03/06/87
TE-10	Reserved	07/01/86
TE-11	Bike Route Sign and Supplementary Plates	07/01/86
TE-12	State Route Marker and Auxiliary Markers	07/01/86
TE-13	Interstate Route Marker	07/01/86
TE-14	State Route Marker and Border Detail for Guide Signs	07/01/86
TE-15	Route Marker Assemblies	07/01/86
TE-16	Miscellaneous Reflector Markers	07/01/86
TE-17	Type II Object Markers	07/01/86
TE-18	Mileposts	07/01/86
TE-19	Reserved	07/01/86
TE-20	Overhead Sign Supports	07/01/86
TE-21	Overhead Sign Support, Box Truss Type, Aluminum	07/01/86
TE-22	Foundation Details and Schedules	07/01/86
TE-23	Supports for Ground Mounted Guide Sign	r11/03/89
TE-24	Breakaway Sign Supports for Ground Mounted Guide Signs	07/01/86
TE-25	Laminated Aluminum Sign Panels (Overhead)	07/01/86
TE-26	Laminated Aluminum Sign Panels (Ground Mounted)	07/01/86
TE-27	Solid Aluminum Extruded Sign Panel and Accessory Details	07/01/86
TE-28	Guide Signs Luminaire Mountings	07/01/86
TE-29	Reserved	07/01/86
TE-30	Raised Pavement Markers and Striping	r05/09/90
TE-31	Miscellaneous Pavement Markings	r05/09/90
TE-32	Miscellaneous Pavement Markings	r05/09/90
TE-33	Miscellaneous Pavement Markings	r11/03/89
TE-34	Reserved	07/01/86
TE-35	Pavement Alphabets, Numbers & Symbols	07/01/86
TE-36	Pavement Alphabets, Numbers & Symbols	07/01/86
TE-37	Reserved	07/01/86
TE-38	Traffic Signal System, Miscellaneous Details	r11/03/89
TE-39	Traffic Signal System, Miscellaneous Details	07/01/86
TE-40	Loop Detectors	r11/03/89
TE-41	Pullboxes	07/01/86
TE-42	Type III Traffic Signal Standard	07/01/86
TE-43	Concrete Pullbox (2' x 3')	07/01/86
TE-44	Reserved	07/01/86

STANDARD PLAN NO.	TITLE	DATE
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

SURVEY PLOTTED BY: _____ DATE: _____

DRAWN BY: _____

TRACED BY: _____

NOTES BOOK: _____

QUANTITIES BY: _____

CHECKED BY: _____

ORIGINAL PLAN: _____

DATE: _____

07/18/94
02/15/91
10/16/90
07/26/90
07/16/90
05/09/90
11/03/89

REVISOR
REVISED TE-68 & TE-69
REVISED H-19
REVISED H-16, H-17, H-22 & H-23
REVISED D-02
REVISED B-12, B-13
REVISED TE-30, TE-31 & TE-32
REVISED TE-06, TE-23, TE-30, TE-31, TE-32, TE-33, TE-38, TE-40, TE-52, TE-54, TE-55, TE-57, TE-59, TE-61, TE-64, TE-68 & TE-69, ADDED TE-57A
REVISED TE-04, TE-06, TE-08, TE-32, TE-51, TE-53, TE-54, TE-55, TE-57, TE-59, TE-62, TE-63, TE-65 & TE-69
REVISED D-01, TE-09, TE-40, TE-50, TE-51, TE-57, TE-59, TE-61, TE-63 & TE-64

09/01/87
03/06/87

DATE

REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD PLANS SUMMARY

FARRINGTON HIGHWAY IMPROVEMENTS

Fort Weaver Rd. Towards Waipahu High Sch.

Federal Aid Project No. DE-0200(801)

Date: FEB., 1997

SHEET No. 1 OF 1 SHEETS

GENERAL NOTES

1. The scope of work for this project consists of lengthing an existing left turn storage lane, installing wheelchair ramps, sidewalks, pavement marking, striping and signing.
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. 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. Locations of existing underground structures and utilities such as pipelines, conduits, cables, etc., manholes, monuments, and structures shown on plans are approximate only. It is not the intent of these plans to show the exact location of all underground utilities and structures. It is the responsibility of the Contractor to verify the locations of all existing utilities with the respective owners. Existing utilities damaged by the Contractor shall be repaired by the Contractor at his own cost.
6. Contractor shall provide for access to and from all existing side streets and driveways at all times.
7. Maintenance of traffic through the construction area shall be in accordance with part VI of the "Manual On Uniform Traffic Control Devices For Streets And Highways", Federal Highway Administration (1988) and as specified in the special provisions. The Contractor shall furnish and maintain adequate barricades, blinkers, construction signs, etc., for the safety of the motoring public.
8. The Contractor shall notify the Oahu Transit Services Inc. (OTS), Ed Sniffen, at 848-4571 or Lowell Tom at 848-4578 two weeks prior to beginning any work, informing them of location, scope of work, proposed closure of any street or traffic lanes, and the need to relocate any bus stop.
9. Smooth riding connections shall be constructed at all limits of construction as shown on the plans and/or as directed by the Engineer.
10. The exact limits of pavement lengthening areas shall be determined in the field by the Engineer.
11. All saw cutting work shall be considered incidental to Roadway Excavation.
12. Existing drainage system will be functional at all times during construction. Contractor is to furnish materials, equipment, labor, tools and incidentals necessary to accomplish maintenance of flow, the cost of which shall be considered incidental to the various contract items.
13. Earth swale shall be graded to drain. Earth swale shall not be paid for separately, but shall be considered incidental to the various contract items.
14. The Contractor shall adjust flush to finish grade all manhole, valve, pullbox, and handhole frames & covers, including those not shown on the plans, if there is a change in grade due to construction of the project. If the proposal does not show a contract item, the Engineer will consider them incidental to the various contract item.
15. All necessary permits for work within the jurisdiction of the City and County of Honolulu shall be obtained by the Contractor at his own cost.

16. 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.
17. The New Wheelchair Lift Pad located next to the Bus Stop is an extension of the Concrete Sidewalk and shall be constructed in the same manner as the Concrete Sidewalk and paid for under Concrete Sidewalk.
18. The Contractor shall demolish and remove all existing curb or curb & gutter as indicated on the plans. This work shall be considered incidental to the various curb & gutter contract items.

LEGEND

- ⊙_{mon.} Existing Monument
- ⊙_{ep} Existing Light Pole
- _{heth} Existing Hawaiian Electric Handhole
- _{hepb} Existing Hawaiian Electric Pullbox
- _{elug}— Existing Electric Line (underground)
- ⊙_{ip} Existing Telephone Pole
- _{itug}— Existing Telephone Line (underground)
- ⊙_{tmh} Existing Telephone Manhole
- _{hthh} Existing Telephone Handhole
- _{htpb} Existing Telephone Pullbox
- _{t/catv}— Existing Cable Line
- _{at&t}— Existing AT&T Line
- _{w-24"} Existing 24" Water Line
- ⊙_{wmh} Existing Water Manhole
- ⊙_{wv} Existing Water Valve Box
- ⊙_{av} Existing Water Air Valve
- ⊙_{fh} Existing Fire Hydrant
- _{d-24"} Existing 24" Drain Line
- ⊙_{admh} Existing Storm Drain Manhole
- ⊞_{gdi} Existing Grated Drop Inlet
- ct_{bas} Existing Catch Basin
- ⊙_{smh} Existing Sewer Manhole
- _{s-8"} Existing Sewer Line
- _{g-2"} Existing 2" Gas Line
- ⊙_{gmh} Existing Gas Manhole
- _{tspb} Existing Traffic Signal Pullbox
- ⊙_{tsp} Existing Traffic Signal Pole
- _{tsc}— Existing Traffic Signal Conduits
- ⊞ Existing Sign With 1 Post
- New Sign With 1 Post

8/26/97 Revised note no. 17 and added note no. 18.

DATE REVISION

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
GENERAL NOTES AND LEGEND	
FARRINGTON HIGHWAY IMPROVEMENTS	
Fort Weaver Rd. Towards Waipahu High Sch.	
Federal Aid Project No. DE-0200(801)	
Date: Feb., 1997	

SHEET No. 1 OF 1 SHEETS

ORIGINAL PLAN	SURVEY PLOTTED BY DATE 8/16/96
NOTED BACK FOR REVIEW	DRAWN BY E. A. H.
DESIGNED BY C. A. B.	TRACED BY
QUANTITIES BY	
CHECKED BY	

HECo NOTES

1. The location of HECo's overhead and underground facilities shown on the plans are from existing records with varying degrees of accuracy and are not guaranteed as shown. The Contractor shall exercise extreme caution whenever construction crosses or is in close proximity of underground lines and shall maintain adequate clearance when operating equipment within or under any overhead lines.
2. The Contractor shall comply with the State of Hawaii's Occupational Safety and Health Law (DOSH).
3. The Contractor shall obtain an excavation permit from HECo's Mapping and Records Division located at 820 Ward Avenue, 4th floor, two weeks prior to starting construction.
4. For verification of underground lines or for assistance in supporting and protecting these lines, the Contractor shall call HECo's Underground Division at 543-7345 a minimum of 72 hours in advance.
5. When trench excavation is adjacent to or beneath our existing structures or facilities, the Contractor is responsible for:
 - a. Sheeting and bracing the excavation to prevent slides, caveins, and settlements.
 - b. Protecting existing structures or facilities with beams, struts, or under-pinnings.
6. For pole bracing instructions, the Contractor shall call the HECo District Superintendent at (Koolau/261-6085, Waiau/543-4223, Ward/543-7745) a minimum of 72 hours in advance.
7. Any work required to relocate HECo facilities shall be done by HECo and the Contractor shall be responsible for all coordination, and for possible costs it applicable.
8. Should it become necessary to temporarily relocate any of HECo facilities to enable the Contractor to perform his work in a safe and expeditious manner in fulfilling his contract obligations, these temporary relocations will be done by HECo, or by the Contractor under HECo's supervision, with all costs borne by the Contractor.
9. Any unforeseen conflict that would result in the redesign or relocation (either temporary or permanent) of HECo's electrical facilities may be cause for lengthy delays. To avoid such delays, the Contractor must notify HECo of the conflict a minimum of 30 days prior to the start of construction.
10. Any damage to HECo's facilities will be reported immediately to HECo's Trouble Dispatcher at 543-7874.
11. All HECo overhead and underground facilities shall be protected at all times by the Contractor during construction. Costs for damages to HECo facilities shall be borne by the Contractor. This repair work shall be done by HECo, or by the Contractor under HECo's supervision.
12. The Contractor shall indemnify, defend and hold harmless HECo from and against all losses, damages, claims and actions, all expenses incidental to such losses, damages, claims or action, based upon or arising out of damage to property or injuries to persons, or other tortious acts caused or contributed to by Contractor or anyone acting under its direction or control or on its behalf; provided Contractor's indemnity shall not be applicable to any liability upon the sole negligence of HECo.

BOARD OF WATER SUPPLY NOTES

1. Unless otherwise specified, all materials and construction of water system facilities and appurtenances shall be in accordance with the STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, dated 1994, as amended, of the Hawaii Highways Division, Department of Transportation, and the City and County of Honolulu Board of Water Supply's "WATER SYSTEM STANDARDS" VOLUME 1, DATED 1985, THE "APPROVED MATERIAL LIST AND STANDARD DETAILS FOR WATER SYSTEM CONSTRUCTION", VOLUME 2, DATED 1985, THE "WATER SYSTEM EXTERNAL CORROSION CONTROL STANDARDS", VOLUME 3, DATED 1991, and all subsequent amendments and additions.
2. All plans approved by the Board of Water Supply are based solely on the adequacy of the water supply. All other features of the water system, such as lines, grades, fittings, drainage, etc., and other features if improvements shall not be the responsibility of the Board of Water Supply.
3. The existence and location of underground utilities and structures as shown on the plans are from the latest available data but is not guaranteed as to the accuracy or the encountering of other obstacles during the course of the work. The Contractor shall be responsible and pay for all damages to existing utilities. The Contractor shall not assume that where no utilities are shown, that none exist.
4. The Contractor shall be responsible for the protection of all water lines during construction. The Contractor shall be especially careful when excavating behind water lines, tees, and bends wherever there is a possibility of water line movement due to the removal of the supporting earth beyond the existing reaction blocks. The Contractor shall take whatever measure necessary to protect the water lines, such as constructing special reaction blocks (with BWS approval) and/or modifying his construction method.
5. Re-approval shall be required if this project is not under construction within a period of two years.
6. The Contractor shall notify BWS Planning and Engineering Division, Construction Section, one week prior to commencing work on the water system.
7. The Contractor shall verify all existing service lateral locations whether shown or not shown on plans prior to commencing with any of the work and shall not assume that where no services are shown none exist.
8. Prior to any excavating, the Contractor shall verify in the field the location of existing water mains and appurtenances.
9. Any adjustments to the existing water system required during construction to meet requirements of BWS Standards, whether shown on the plans or not, shall be done by the Contractor at no cost the Board.

APPROVED: Date: 3/3/97

[Signature]
Chief, Planning & Engineering, BWS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	DE-0200(801)	1997	4	16

CONSTRUCTION NOTES FOR GAS FACILITIES

1. BHP Gas Company gas pipelines in the project area are plastic coated and cathodically protected. The Contractor shall be extremely careful when working near the gas pipeline.
2. Written clearance must be obtained from BHP Gas Company, at least five working days prior to starting excavation near any of BHP Gas Company pipelines. Since pipeline locations on field maps are approximate, the Contractor, after obtaining written clearance, shall call BHP Gas Company, a minimum of five working days before starting excavation to arrange for field location of existing gas lines. The telephone number is 594-5575 during business hours, and 526-0066 after hours.
3. The Contractor shall notify BHP Gas Company, Distribution Department (594-5556) 24 hours prior to excavating and backfilling any pipeline.
4. For relocation of any gas pipeline, the Contractor shall notify BHP Gas Company five working day before starting work. The Contractor shall provide the necessary excavation and backfill, obtain traffic permits, and restore pavement, sidewalk, and other facilities. Any relocation of gas facilities shall be done by BHP Gas Company and paid for by the Contractor.
5. The Contractor shall excavate and backfill around the pipeline in the presence of a representative of BHP Gas Company. All backfill within 6 inches of any gas pipeline shall be select cushion material approved by BHP Gas Company.
6. The Contractor shall notify BHP Gas Company immediately after any damage has been caused to the existing gas pipelines, their coatings or their cathodic protection devices. The number to call is 594-5567 or 526-0066, 24 hours a day. The Contractor shall be liable for any damage to BHP Gas Company facilities. Repair work on such damage shall be performed by BHP Gas Company and paid for by the Contractor.
7. Minimum vertical and horizontal clearance between gas pipeline and other pipelines, conduits, or other structures shall be 12 inches. Adequate support and protection for gas pipelines exposed in the trench shall be provided by the Contractor and approved by BHP Gas Company.
8. The Contractor shall work in an expeditious manner in order to keep uncovered gas line exposure to a minimum.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	3/16/97
	NOTED BY	
	CHECKED BY	

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
GENERAL NOTES
FARRINGTON HIGHWAY IMPROVEMENTS Fort Weaver Rd. Towards Waipahu High Sch. Federal Aid Project No. DE-0200(801)
Date: Feb., 1997
SHEET No. 1 OF 1 SHEETS