

STANDARD PLANS SUMMARY

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7101A-01-00	2001	2	19

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

ORIGINAL PLAN

NOT FOR CONSTRUCTION

DATE

DESIGNED BY

CHECKED BY

QUANTITIES BY

REVISIONS

DESIGNED BY

CHECKED BY

QUANTITIES BY

REVISIONS

07/18/94	REVISED TE-68 & TE-69
02/15/91	REVISED H-19
10/16/90	REVISED H-16, H-17, H-22 & H-23
07/26/90	REVISED D-02
07/16/90	REVISED B-12, B-13
05/09/90	REVISED TE-30, TE-31 & TE-32
11/03/89	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
09/01/87	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
03/06/87	REVISED D-01, TE-09, TE-40, TE-50, TE-51, TE-57, TE-59, TE-61, TE-63 & TE-64
DATE	REVISION

NOTE:
STANDARD PLANS APPLICABLE TO THIS PROJECT ARE INDICATED BY A " ● " NEXT TO THE STANDARD PLAN NO. (FOR EXAMPLE: D-07 ●)

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

STANDARD PLANS SUMMARY

FARRINGTON HIGHWAY IMPROVEMENTS

Waialeale Road to Aniani Place

Project No. 7101A-01-00

Date: July, 2000

SHEET No. 1 OF 1 SHEETS

GENERAL NOTES

1. The scope of work for this project consists of relocating a traffic signal; lengthening existing left turn storage lanes; demolishing and removing of concrete pad and island; and constructing sidewalks and curb ramps. The Gas Company will be doing work in connection with this project.
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. The Contractor shall submit a site-specific Best Management Practice (BMP) to the Engineer at least 14 days prior to the start of construction. The cost of BMP submittals shall not be paid for separately, but shall be considered incidental to the various contract items.
5. 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.
6. 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.
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 Asphalt Concrete Pavement and will not be paid for separately.
10. Smooth riding connections shall be constructed at all limits of construction 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.

13. Earth swale shall be graded to drain. This work shall be considered incidental to the various contract items.
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 Asphalt Concrete Pavement.
16. The Contractor shall exercise all appropriate safety precautions when performing work in the vicinity of the abandoned 8" Navy gasoline line between # Sta. 90+14 and # Sta. 97+14. The Contractor shall assume that the line contains leaded aviation gasoline. The Contractor shall perform work on or around the abandoned pipeline only under the guidance of an NFPA Certified Gas-Free Engineer or Marine Chemist. The employment of the Gas-Free Engineer or Marine Chemist shall be considered incidental to the various contract items.
17. 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.
18. If the work changes the grade, the Contractor shall adjust (flush to finish grade) all manhole, pullbox and handhole frames and covers, including those not in contract. If not in contract this work will be considered incidental to the various contract items.
19. The exact pavement widening or areas shall be determined in the field by the Engineer.
20. The Contractor shall demolish and dispose all existing curb, curb & gutter, asphalt pavement and sidewalk as indicated on the plans. This work shall be considered incidental to their respective bid items.
21. Prior to the placement of new aggregate subbase course, the existing subbase shall be compacted to a relative compaction greater than or equal to 95%.
22. Provide smooth transition where new sidewalk construction meets the existing grade or sidewalk.
23. Hydromulch graded or exposed areas within the median according to Special Provision Section 641 - Hydro-Mulch Seeding.

HAWAIIAN ELECTRIC COMPANY (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 Technical Division (543-5654) located at 820 Ward Avenue, 4th floor, two (2) weeks prior to starting construction. Please refer to our request number at this time
4. For verification of underground lines or for assistance in supporting and protecting these lines, the Contractor shall call HECO's Underground Division at 543-7871 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, cave-ins, 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 543-4223 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 if 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 tha 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 Contracor 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 548-7961.
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, including but not limited to reasonable attorney's fees and costs 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 based upon the sole negligence of HECO.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7101A-01-00	2001	3	19

LEGEND

- ^opp— Existing Power Pole
- ^t— Existing Telephone Line
- ^{tv}— Existing TV Cable
- ^w—12— Existing 12" Water Line
- ^owmh— Existing Water Manhole
- ^owv— Existing Water Valve Box
- ^owrm— Existing Water Meter
- ^ofh— Existing Fire Hydrant
- ^s—12— Existing Sewer Line
- ^osmh— Existing Sewer Manhole
- ^{ng}—8— Existing 8" Navy Gas Line
- ^g—6— Existing 6" Gas Line
- ^ogmh— Existing Gas Manhole
- ^omon— Existing Monument
- ^d--24--- Existing 24" Drain Line
- ^dmh--- Existing Storm Drain Manhole
- ^gdi— Existing Grated Drop Inlet
- ^{cb}— Existing Catch Basin
- ^p— Existing Traffic Sign
- ^ols— Existing Highway Lighting Standard

ABBREVIATION

- # BASELINE
- ep Existing Edge of Pavement
- EP New Edge of Pavement
- R/W Existing Right-of-Way Line

ORIGINAL PLAN	DATE
NOTED	BY
DESIGNED BY	BY
QUANTITIES BY	BY
CHECKED BY	BY

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES AND LEGEND

FARRINGTON HIGHWAY IMPROVEMENTS

Waialeale Road to Aniani Place

Project No. 7101A-01-00

Scale: None Date: July, 2000

SHEET No. 1 OF 1 SHEETS

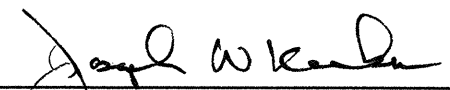
BOARD OF WATER SUPPLY (BWS) NOTES

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7101A-01-00	2001	C.O.3S-1	19

1. Unless otherwise specified, all material and construction of water sysytem facilities and appurtenances shall be in accordance with 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 of 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 measures 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 undertaken within a period of two years.
6. At the electrical/signal ductlines water crossings, adjust all electrical/signal ductline elevations to maintain 6" vertical clear separation from all waterlines (12" clear for all electrical/signal ductline structures larger than 16") at no cost to the Board of Water Supply.
7. Maintain 3'-0" min. horizontal clear separation between all waterline systems and nearest electrical/signal ductlines paralleling the water system at no cost to the Board of Water Supply.
8. Maintain 3'-0" horizontal clear separation between sreet light/traffic signal, standards (including any modular units) and the nearest water system. Contractor shall field verify for any conflicts at each street light/traffic signal standard location. Where conflicts occur, the Contractor shall coordinate with the project engineer to revise the street light/traffic signal standard to provide the required clearances at no cost to the BWS.
9. The Contractor shall notify BWS Planning and Engineering Division, Construction Section, one week prior to commencing work on the water system. Phone No. 527-5205.
10. 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.
11. Prior to any excavating, the Contractor shall verify in the field the location of existing water mains and appurtenances.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTES BOOK	DRAWN BY	2-5-98
009.km	BY	
009.km	QUANTITIES BY	
009.km	CHECKED BY	

APPROVED BY:


PRINCIPAL EXECUTIVE, MAINTENANCE UNIT
BOARD OF WATER SUPPLY
CITY AND COUNTY OF HONOLULU

6/15/02
DATE

6/7/02 Added sheet to the original contract plans.

DATE REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

UTILITY NOTES

FARRINGTON HIGHWAY IMPROVEMENTS

Waikale Road to Aniani Place

Project No. 7101A-01-00

Scale: None Date: July, 2000

SHEET No. 1 OF 1 SHEETS

C.O.3S-1