

STANDARD PLANS SUMMARY

FED.ROAD DIST.NO.	STATE	FED.AID PROJ.NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	(STP-099-1(17)	1997	2	13

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 Instgllation)	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 Guardrail	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

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

09/01/87

03/06/87

DATE

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 STANDARD PLANS 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 TO STANDARD PLANS
REVISED STANDARD PLANS 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 STANDARD PLANS D-01, TE-09,
TE-40, TE-50, TE-51, TE-57, TE-59,
TE-61, TE-63 & TE-64.

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD PLANS SUMMARY

WILIKINA DRIVE
TRAFFIC SIGNALS AT LAKEVIEW CIRCLE
FED. AID PROJECT NO. STP-099-1(17)

DATE: JAN.,1997

SHEET NO. 1 OF 1 SHEETS

GENERAL NOTES

1. The scope of work for this project consists of installing a new traffic signal system with appurtenances and interconnection, pavement striping and markings, 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, and Subsection 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 all public traffic and pedestrian.
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 all public traffic and pedestrian.
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. 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.

GENERAL NOTES FOR TRAFFIC CONTROL PLAN

1. The Contractor shall make minor adjustments at intersections, driveways, bridges, structures, etc., to fit field conditions.
2. Cones or delineators shall be extended to a point where they are visible to approaching traffic.
3. Traffic control devices shall be installed such that the sign or device farthest from the work area shall be placed first. The others then be placed progressively toward the work area.
4. Regulatory and warning signs within the construction zone that are in conflict with the traffic control plans shall be removed or covered. All signs shall be restored upon completion of the work.
5. Flaggers and/or police officers shall be in sight of each other or in direct communication at all times.
6. When required by the issuing office, the Contractor shall install a flashing arrow signal as shown on the traffic control plans.
7. All traffic lanes shall be a minimum of ten (10) feet wide.
8. All construction warning signs shall be promptly removed or covered whenever the message is not applicable or not in use.
9. The backs of all signs used for traffic control shall be appropriately covered to preclude the display of inapplicable sign messages (i.e., when signs have messages on both faces).
10. The Contractor shall remove all traffic control devices no longer needed at the end of each day's work or as soon as the work is completed, to permit free and safe passage of public traffic. Removal shall be in the reverse order of installation. Replace existing faded or obliterated pavement markings that are necessary for safe traffic flow in the construction area with temporary or permanent markings before opening the roadway to public traffic each day.
11. Replace permanent pavement markings and traffic signs upon completion of each phase of work.

MARKING, STRIPING, AND SIGNING NOTES

1. Layout of pavement markings and striping shall be done by the Contractor and approved by the Engineer prior to any installation work.
2. Existing pavement markings and striping not incorporated in the final traffic pattern shall be removed as directed by the Engineer. The removal of the existing pavement markings shall not be paid for separately but shall be considered incidental to the various pavement marking items.
3. Raised pavement markers shall not be installed within crosswalks.
4. Final locations of all signs shall be approved by the Engineer prior to any installation work.
5. Existing signs not shown on these plans shall remain as posted unless otherwise directed by the Engineer. Removal and disposal of existing signs and/or posts as designated on these plans or directed by the Engineer shall not be paid for and shall be considered incidental to the various signing items.
6. Final locations of all Stop Lines shall be approved by the Engineer prior to installation.
7. All pavement striping shall be as noted on the Legend or plans.
8. All preformed pavement marking tapes over existing pavement shall be applied with an approved primer as recommended by the tape manufacturer and as approved by the Engineer. The primer shall be allowed to dry to the tacky stage prior to tape application.
9. Stop signs indicated to be removed shall be removed after the traffic signal system is operational.
10. Removal of Existing Delineators, Signs, and Posts as directed by the Engineer shall be considered incidental to the various signing items.
11. Existing signs that are to be replaced shall not be removed until new signs are installed as replacements, or the messages are no longer necessary.
12. Backing for all new regulatory and warning signs shall not be spliced.
13. All sign panels shall conform to Section 621 of Special Provisions and the latest editions and amendments of the following FHWA publications:
a. "Manual on Uniform Traffic Control Devices for Streets and Highways" (MUTCD)
b. "Standard Highway Signs"
c. "Standard Alphabets for Highways Signs"
14. All new and relocated signs and markers installed on pipe post or light standard are to be mounted with band brackets and steel braces.
15. The Contractor shall erect at the beginning of the project and at the end of the project advance construction warning signs as indicated on the plans or as directed by the Engineer for the duration of the highway project and shall be maintained by the Contractor. These signs shall be placed in addition to the required traffic control signs called for in Section 645 – Traffic Control.

ELECTRICAL & MAINTENANCE SERVICES DIVISION NOTES

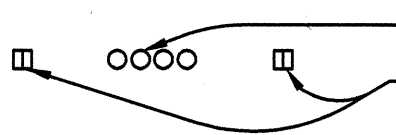
1. The Contractor shall be responsible for damages to existing street lighting, and all damages to these facilities shall be repaired by the Contractor at his cost in accordance with the requirements of the City and County of Honolulu.
2. The street lighting systems shall remain operational during construction. Any relocation or changeover required shall be approved by the Electrical & Maintenance Services Division, Department of Transportation Services, and performed and paid for by the Contractor.
3. The Contractor shall notify the Electrical & Maintenance Services Division, Department of Transportation Services, three (3) working days prior to commencing work on the traffic signal system. (Phone: 523-4589).
4. The Contractor shall notify the joint pole committee two (2) weeks in advance of any relocation of utility pole(s) that may be necessary.

TRAFFIC NOTES FOR WORK ON CITY & COUNTY STREETS

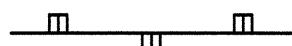
1. A permit shall be obtained from the Department of Transportation Services before work on any portion of a public street or highway may begin.
2. The Contractor shall provide, install, and maintain all necessary signs and other protective facilities, which shall conform with the "Hawaii Administration Rules Governing the Use of Traffic Control Devices at Work Sites on or Adjacent to Public Streets and Highways" adopted by the Director of Transportation, and the current U.S. Federal Highway Administration's "Manual on Uniform Traffic Control Devices for Streets and Highways, Part VI – Traffic Controls for Street and Highway Construction and Maintenance Operations."
3. Work on any city street area may be performed only between the hours of 8:30 a.m. and 3:30 p.m., Monday through Friday, unless otherwise permitted by the Department of Transportation Services.
4. During working hours, the Contractor shall provide two lanes for through traffic. On streets too narrow to make this practicable, the Contractor may work on one half of the roadway, keeping one lane open to traffic and alternating the flow of traffic. During non-working hours, all trenches shall be covered with a safe, non-skid bridging material and all lanes shall be open to traffic.
5. As required by the Department of Transportation Services, the Contractor shall provide off-duty police officers to control the flow of traffic.
6. Pedestrian walkways shall be maintained in passable condition or other facilities for pedestrians shall be provided. Passage between walkways at intersections shall likewise be provided.
7. Driveways shall be kept open unless the owners of the property using these rights-of-way are otherwise provided for satisfactorily.
8. The Contractor shall reference to the approval of the Department of Transportation Services, all existing traffic signs, posts, and pavement markings prior to the commencement of construction. The Contractor shall replace or repair all traffic signs, posts, and pavement markings disturbed by his activities. The Contractor shall notify the Department of Transportation Services at 523-4029 one (1) week prior to any work on signs, posts, and pavement markings.
9. No material and/or equipment shall be stockpiled or otherwise stored within street rights-of-way except at locations designated in writing and approved by the Department of Transportation Services.
10. The State Department of Transportation shall ensure that the Contractor installs the construction traffic control devices in accordance with the MUTCD and Hawaii Administration Rules as specified in Traffic Note #2.

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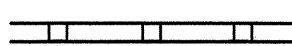
LEGEND – PAVEMENT MARKERS AND SIGNS




4 each Type A Raised Pavement Markers and 1 each Type C Raised Pavement Markers @ 40'-0" o.c.




8" White Stripe with Type C Raised Pavement Markers @ 20'-0" o.c. (Tape, Type I or Thermoplastic Extrusion)




4" Double Solid Yellow with Type D Raised Pavement Markers @ 20'-0" o.c. (Tape, Type I)




4" Yellow Edge Stripe with Type H Raised Pavement Markers @ 40'-0" o.c. (Tape, Type II)




4" White Edge Stripe with Type C Raised Pavement Markers @ 40'-0" o.c. (Tape, Type II or Thermoplastic Extrusion)



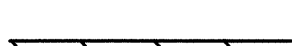
4" Double Solid White Stripes with Type C Raised Pavement Markers @ 20'-0" o.c. (Tape, Type I or Thermoplastic Extrusion)



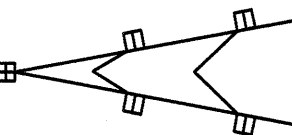
Lane Change Restriction Marking
4 each Type A Raised Pavement Markers
Type C Raised Pavement Markers @ 20'-0" o.c.
4" White Stripe (Tape, Type I or Thermoplastic Extrusion)



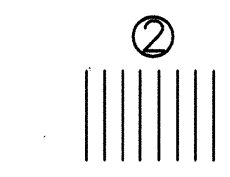
4" White Guide Lines (Tape, Type III or Thermoplastic Extrusion except for bus bays)




Transverse Median Marking (Tape, Type II)




Channelizing Island or Deceleration Lane Gore (Tape, Type II or Thermoplastic Extrusion)



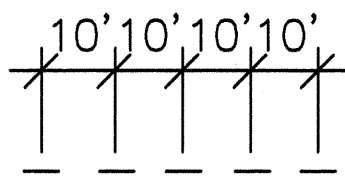
Crosswalk and Stop Line. All Stop Lines shall be 10'-0" from Crosswalk unless otherwise noted. The circled number indicates the number of lanes for payment (Tape, Type III or Thermoplastic Extrusion)



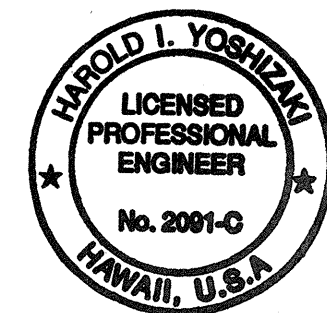
Pavement Arrow (Tape, Type III or Thermoplastic Extrusion)



Pavement Word (Tape, Type III or Thermoplastic Extrusion)



Extension of Edge Line, 4" Wide x 2'-0" Long White Stripe @ 10'-0" o.c. (Tape, Type III or Thermoplastic Extrusion)



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
Harold I. Yoshizaki
SHIMABUKURO, ENDO & YOSHIZAKI, INC.
1126 12th Avenue
Honolulu, Hawaii 96816

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

NOTES

WILIKINA DRIVE
TRAFFIC SIGNALS AT LAKEVIEW CIRCLE
FED. AID PROJECT NO. STP-099-1(17)

DATE: JAN., 1997

WATER NOTES

1. Unless otherwise specified, all materials and construction of water system 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 are 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. At the electrical/signal ductline water crossings, adjust all electrical/signal ductline elevations to maintain 6" vertical clear separation from all water lines (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 water line systems and nearest electrical/signal ductlines paralleling the water system at no cost to the Board of Water Supply.
8. Maintain 3'-0" min. horizontal clear separation between street 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.
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.

SEWER NOTES

1. All sewer construction shall be performed in accordance with the City's Standard Specifications, September 1986, the Department of Public Works Standard Details, September 1984, current city practices and Revised Ordinances of Honolulu, 1990, as amended, and the Design Standards of the Department of Wastewater Management, Vol. 1, July 1993.
2. The Contractor shall notify the Construction Section, Department of Wastewater Management, at 527-5820 or 523-4345 to arrange for inspection services and submit four sets of approved construction plans seven days prior to commencement of sewer work. The Contractor shall pay for all inspection costs.
3. The underground pipes, cables, or ductlines known to exist by the Engineer from his search of records are indicated on the Plans. The Contractor shall verify the location and depth of the facilities and exercise proper care in excavating the area. The Contractor shall be responsible and shall pay for all damaged utilities.
4. The Contractor shall be responsible for maintaining continuous sewer service to all affected areas during construction.
5. The Contractor shall be responsible for any sewage spills caused during construction. The Contractor shall notify the State Department of Health and utilize appropriate sampling and analyzing procedures. The Contractor shall be responsible for all public notification and press releases.

CONSTRUCTION NOTES

1. All construction work shall be done in accordance with these plans, all applicable sections of the Standard Specifications for Road and Bridge Construction, dated 1994 as amended, of the State Highways Division, Department of Transportation, and the project's Special Provisions, unless otherwise specified.
2. The Contractor shall provide, install, and maintain all necessary signs, lights, flares, temporary guardrails, barricades, markers, cones, and other protective facilities and shall take all necessary precautions for the protection and for the convenience and safety of public traffic. All such protective facilities and precautions to be taken shall conform with the "Rules and Regulations Governing the Use of Traffic Control Devices at Work Sites On or Adjacent to Public Streets and Highways" adopted by the Highway Coordinator and the U.S. Federal Administration's "Manual on Uniform Traffic Control Devices for Streets and Highways, Part VI - Traffic Controls for Highway Construction and Maintenance Operations," dated 1988, and amendments.
3. Full compensation for all additional materials and labor, not specifically shown or called for which are necessary to complete the construction of the project, shall be considered incidental to the various contract items in the Proposal and no additional compensation will be allowed therefor.
4. The underground pipes, cables, or ductlines known to exist by the Engineer from his search of records are indicated on the Plans. The Contractor shall verify the location and depth of the facilities and exercise proper care in excavating in the area.
5. The Contractor shall remove all silt and debris resulting from his work and deposited in drainage facilities, roadways, and other areas. The costs incurred for any necessary remedial action by the Engineer shall be payable by the Contractor.
6. The Contractor, at his own expense, shall keep the project area and surrounding area from dust nuisance. The work shall be in conformance with the Air Pollution Control Standards and Regulations of the State Department of Health.
7. All saw cutting work shall be considered incidental to other items of work in the Proposal.
8. Pedestrian walkways shall be maintained in passable condition or other facilities for pedestrians shall be provided. Passage between walkways at intersections shall likewise be provided.
9. Driveways shall be kept open unless the owner(s) of the property using these rights-of-way are otherwise provided for satisfactorily.
10. No material and/or equipment shall be stockpiled or otherwise stored within roadway right-of-way except at locations designated and approved in writing by the Engineer.
11. 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.

PUBLIC WORKS NOTES (CITY & COUNTY OF HONOLULU)

1. All construction work shall be done in accordance with the Standard Specifications for Public Works Construction, September 1986, and Standard Details for Public Works Construction, September 1984, as amended, of the Department of Public Works, City and County of Honolulu and the Counties of Kauai, Maui, and Hawaii.
2. The underground pipes, cables, or ductlines known to exist by the Engineer from his search of records are indicated on the plans. The Contractor shall verify the locations and depths of the facilities and exercise proper care in excavating in the area. Wherever connections of new utilities to existing utilities are shown on the plans, the Contractor shall expose the existing lines at the proposed connections to verify their locations and depths prior to excavation for the new lines.
3. No Contractor shall perform any construction activity so as to cause falling rocks, soil or debris in any form to fall, slide or flow onto adjoining properties, streets or natural watercourses. Should such violations occur, the costs incurred for any remedial action by the Chief Engineer shall be payable by the Contractor.
4. The Contractor shall be responsible for conformance with the applicable provisions of Chapter 54, Water Quality Standards, and Chapter 55, Water Pollution Control, of Title 11, Administrative Rules of the State Department of Health.
5. The Contractor shall notify the Construction Section, Division of Engineering, Department of Public Works at 527-6311 to arrange for inspectional services and submit three (3) sets of approved Construction Plans seven (7) days prior to commencement of construction work.

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. Please refer to our request number _____.
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. Sheet piling 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, Waiwai/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 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 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.

15	6 - 2"	1-Type 1, Ground Wire 1-Type 1 7-Type 2 1-Type 3 3-Type 7 Spare
14		1 - Type 3, Overhead Construction Messenger Cable

FED.ROAD DIST. NO.	STATE	FED.AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-099-1(17)	1997	4	13

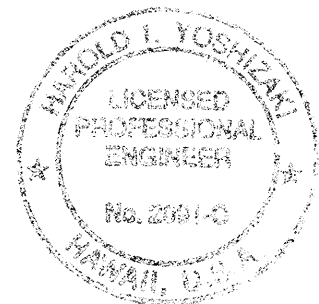
NOTES:

1. All cables and elements of grounding system shall be new.
2. All conduits shall be new except where noted otherwise.
3. Type 2 and Type 5 cables between signal face and TSPB are not called out on the intersection plan, but shall be furnished and installed in sufficient numbers and lengths as required.
4. Type 5 cables shall be incidental to installation of signal faces.

CONDUIT AND CABLE SCHEDULE		
Designation	PVC Conduits	Cables
1	3 - 2"	1 - Type 1, Ground Wire 2 - Type 2 2 - Type 7
2	5 - 2"	1 - Type 1, Ground Wire 5 - Type 2 1 - Type 3 1 - Type 7
3	1 - 2"	1 - Type 2
4	3 - 2"	1 - Type 1, Ground Wire 3 - Type 2 1 - Type 3
5	3 - 2"	1 - Type 1, Ground Wire 2 - Type 2 1 - Type 3
6	3 - 2"	1 - Type 1, Ground Wire 2 - Type 2 Spare
7	3 - 2"	1 - Type 1, Ground Wire 1 - Type 2 Spare
8	2 - 2"	1 - Type 1, Ground Wire Spare
9	1 - 2"	2 - Type 2
10	3 - 2"	1 - Type 1, Ground Wire 2 - Type 2 Spare
11	3 - 2"	1 - Type 1, Ground Wire 2 - Type 2 1 - Type 7
12	1 - 2"	1 - Type 6 (3 # 6), Ground Wire
13	7 - 2"	1 - Type 1, Ground Wire 1 - Type 1 7 - Type 2 1 - Type 3 1 - Type 6 (3 # 6) 3 - Type 7 Spare

APPROVED:

9/22/96
DATE
9/22/96
DATE
CHIEF, DIVISION OF PLANNING & SERVICE CONTROL, D.W.W.M.
(FOR SEWER WORK WITHIN PUBLIC R/W ONLY)



THIS WORK WAS RECORDED BY ME UP
UNLESS NOT SPECIFICALLY
Harold L. Yoshizaki
1122 15th Avenue
Honolulu, Hawaii 96813

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

NOTES

WLIKINA DRIVE
TRAFFIC SIGNALS AT LAKEVIEW CIRCLE
FED. AID PROJECT NO. STP-099-1(17)

SCALE: DATE: JAN., 1997

SHEET NO. 2 OF 2 SHEETS