

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7801A-01-98	2000	3	14

GENERAL NOTES

- THE WAIALAE AVENUE IMPROVEMENTS CONSISTS OF LANDSCAPING AND AUTOMATIC IRRIGATION ALONG THE CURBSIDE, WITHIN THE MEDIAN AND AT BOTH THE EAST AND WEST ENDS OF THE ROADWAY UNDER THE EXISTING H-1 FREEWAY. THE DESIGN INCORPORATES GROUTED RUBBLE PAVING, MOSS ROCK BOULDERS, GRAVEL MAINTENANCE STRIPS PAVING, PALMS, SHRUBS, VINES AND GROUNDCOVERS.
- THE CONTRACT DOCUMENTS INCLUDE:
 - LANDSCAPE PLANS.
 - IRRIGATION PLANS.
 - HAWAII STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND PUBLIC WORKS CONSTRUCTION, (1994).
 - SPECIAL PROVISIONS, PROPOSAL, CONTRACT AND BOND.

BE AWARE THAT THE HAWAII STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND PUBLIC WORKS CONSTRUCTION, (1994) IS INCLUDED BY REFERENCE ONLY AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR UNDERSTANDING AND COMPLETING ALL WORK IN ACCORDANCE TO THE REQUIREMENTS SET FORTH IN THIS DOCUMENT, EXCEPT WHERE AMENDED IN THE SPECIAL PROVISIONS.

- VERIFICATION OF EXISTING CONDITIONS
 - BASE INFORMATION FOR THIS PROJECT INCLUDING BUT NOT LIMITED TO ROADWAY ALIGNMENT, STATION POINTS, SURFACE DRAINAGE AND UTILITIES ARE FROM A TOPOGRAPHIC SURVEY MAP PROVIDED BY ENGINEERS SURVEYORS HAWAII, INC. AND AS-BUILT PLANS PROVIDED BY THE STATE. NO GUARANTEE OF THE BASE INFORMATION EITHER EXPRESSED OR IMPLIED IS MADE.
 - THE CONTRACTOR SHALL VERIFY EXISTING SITE CONDITIONS INCLUDING BUT NOT LIMITED TO ALL UTILITIES AND UNDERGROUND STRUCTURES PRIOR TO COMMENCING WORK. DAMAGE TO ANY EXISTING UTILITIES CAUSED BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT THEIR EXPENSE. NOTIFY THE ENGINEER IMMEDIATELY OF ANY EXISTING UTILITIES AND UNDERGROUND STRUCTURES NOT IDENTIFIED ON PLANS.
- CLEARING AND GRUBBING

PRIOR TO ANY PLANTING OPERATIONS ALL PLANTING AREAS SHALL BE CLEARED AND GRUBBED ACCORDING TO THE SPECIFICATIONS. SEE SECTION 201 CLEARING AND GRUBBING.
- COORDINATE AND COOPERATE WITH OTHER TRADES TO ENABLE WORK TO PROCEED AS RAPIDLY AND EFFICIENTLY AS POSSIBLE.
- KEEP ALL AREAS CLEAN, NEAT AND ORDERLY AT ALL TIMES. KEEP ALL PAVED AREAS CLEAN.
- EXISTING GRADES AND DRAINAGE SWALES SHALL NOT BE ALTERED BY THE PLANTING OPERATION. NOTIFY THE ENGINEER IMMEDIATELY OF ANY GRADING AND DRAINAGE PROBLEMS ENCOUNTERED IN THE FIELD.
- VERIFY THAT THE EXISTING DRAINAGE SYSTEM IS 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.
- THE CONTRACTOR AT HIS OWN EXPENSE, SHALL KEEP THE PROJECT AREA AND SURROUNDING AREA FREE FROM DUST NUISANCE. THE WORK SHALL BE IN CONFORMANCE WITH THE AIR POLLUTION CONTROL STANDARDS AND REGULATIONS OF THE STATE DEPARTMENT OF HEALTH.
- VERIFY AND CHECK ALL DIMENSIONS AND DETAILS SHOWN ON THE DRAWINGS PRIOR TO THE START OF CONSTRUCTION, AND ANY DISCREPANCY SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION.
- 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. NONCOMPLIANCE WITH THIS SUBSECTION MAY BE GROUNDS FOR REJECTION OF BID.
- 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.
- THE CONTRACTOR SHALL NOTIFY IN WRITING, THE OAHU TRANSIT SERVICES, INC. ROADS SUPERVISIONS OFFICE MIDDLE ST., HON., HI 96819 (PH. #848-4571) SEVEN (7) DAYS PRIOR TO ANY TRENCHING OPERATIONS ACROSS THE TRAVELWAY.
- THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL NECESSARY SIGNS, LIGHTS, BARRICADES, MARKERS, CONES, AND OTHER PROTECTIVE FACILITIES AND SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION AND FOR THE CONVENIENCES AND SAFETY OF PUBLIC TRAFFIC. ALL SUCH PROTECTIVE FACILITIES AND PRECAUTIONS TO BE TAKEN 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 HIGHWAYS ADMINISTRATION'S MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, PART IV- TRAFFIC CONTROLS FOR STREETS AND HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS CURRENT EDITION.

- AT THE END OF EACH DAYS WORK, THE CONTRACTOR SHALL REMOVE ALL EQUIPMENT AND OTHER OBSTRUCTIONS TO PERMIT FREE AND SAFE PASSAGE OF PUBLIC TRAFFIC.
- THE CONTRACTOR SHALL OBSERVE AND COMPLY WITH ALL FEDERAL, STATE, LOCAL LAWS REQUIRED FOR THE PROTECTION OF PUBLIC HEALTH AND SAFETY AND ENVIRONMENTAL QUALITY.
- THE CONTRACTOR SHALL PROVIDE FOR ACCESS TO AND FROM ALL EXISTING SIDE STREETS AND DRIVEWAYS AT ALL TIMES.

PLANTING NOTES

- PROVIDE A 6" LAYER OF IMPORTED SCREENED SOIL OVER ALL PLANTING AREAS. (SEE SECTION 617 OF SPECIFICATIONS).
- BACKFILL MIX SHALL CONSIST OF THREE (3) PARTS OF IMPORTED SCREENED SOIL TO ONE (1) PART ORGANIC SOIL AMENDMENTS (SEE SPECIFICATIONS). ADD ONE (1) POUND OF 10-30-10 FERTILIZER TO ONE (1) CUBIC YARD OF BACKFILL MIX. MIX THOROUGHLY ON PROJECT SITE PRIOR TO ANY PLANTING OPERATIONS.
- PLANTING TABLETS FOR TREES, PALMS, SHRUBS AND VINES SHALL BE AS FOLLOWS:

A) FIELD SPECIMEN	12 TABLETS
B) 25 GALLON	8 TABLETS
C) 15 GALLON	5 TABLETS
D) 5 GALLON	3 TABLETS
E) 3 GALLON	2 TABLETS
F) 1 GALLON	1 TABLET

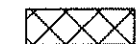
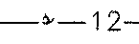
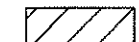
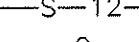



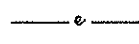

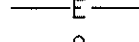


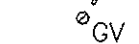










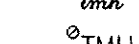







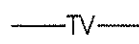

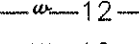
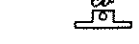
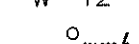

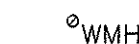

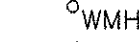

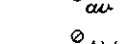


















USE AGRIFORM TABLETS 20-10-5, 21 GRAM SIZE.

- GROUNDCOVER SHALL BE PLANTED UNDER ALL PALMS AND SHRUBS (UNLESS OTHERWISE NOTED ON PLANS).
- QUANTITIES SHOWN ON PLANT LIST ARE FOR REFERENCE ONLY. VERIFY ACTUAL QUANTITIES AS SHOWN ON PLAN.

IRRIGATION NOTES

- REFER TO IRRIGATION SPECIFICATIONS SECTION 616 PRIOR TO START OF WORK. CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ALL MATERIALS, SCHEDULING, PRODUCTS, WARRANTIES AND METHODS FOR EXECUTION OF WORK WHICH MAY NOT BE INDICATED WITHIN THE DRAWING.
- IRRIGATION SYSTEMS SHOWN ON THE DRAWINGS ARE DIAGRAMMATIC AND ARE SUBJECT TO ADJUSTMENTS DUE TO UNANTICIPATED FIELD CONDITIONS. UNLESS OTHERWISE NOTED, LOCATE ALL SPRINKLER HEADS, VALVES AND PIPES WITHIN PLANTING AREAS.
- THE IRRIGATION SYSTEM DESIGN IS BASED ON A MINIMUM STATIC WATER PRESSURE OF 55 PSI AT THE POINT OF CONNECTION. NOTIFY PROJECT ENGINEER IF PRESSURE IS LESS THAN 55 PSI OR GREATER THAN 100 PSI.
- CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF THE INSTALLATION OF ALL SLEEVES, MAINS AND LATERALS UNDER PAVEMENT AND SHALL ASSURE THAT THESE ITEMS ARE LAID PRIOR TO THE PLACEMENT OF PAVEMENT.
- VERIFY UTILITY LOCATIONS BEFORE TRENCHING. CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE TO UTILITIES.
- INSTALL SPRINKLER HEADS 6" AWAY FROM WALKWAYS, DRIVEWAYS AND STRUCTURES, UNLESS OTHERWISE SPECIFIED ON THE PLANS. FLEX RISERS SHALL BE USED ON ALL SHRUB HEADS ON RISERS. ADJUST LOCATIONS OF ALL SPRINKLER HEADS TO OBTAIN HEAD TO HEAD COVERAGE. ADJUST FLOW CONTROL TO MINIMIZE MISTING.
- THE CONTRACTOR, TOGETHER WITH THE ENGINEER AND THE STATE'S REPRESENTATIVE SHALL PROGRAM THE IRRIGATION AUTOMATIC CONTROLLER TO ACCOMMODATE THE LANDSCAPE AND SITE REQUIREMENTS, AND SHALL INSTRUCT THE REPRESENTATIVE ON THE OPERATION OF THE COMPLETE SYSTEM.
- THE CONTRACTOR SHALL FURNISH THE STATE WITH TWO (2) SETS OF REPRODUCIBLE 'AS-BUILT' PLANS.

LEGEND

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|---------------------------------------------------------------------------------------|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
|  | Reconstruction Areas |  | Existing Sewer Line |
|  | Leveling Areas |  | New 12" Sewer Line |
|  | Cold Planing Areas |  | Existing Sewer Manhole |
|  | Resurfacing Limits |  | Adjusted Sewer MH Frame/Cover |
|  | Existing Electrical Line |  | New Sewer Manhole |
|  | New Electrical Line |  | Existing 6" Gas Line |
|  | Existing Joint Pole |  | New 6" Gas Line |
|  | Existing Power Pole |  | Existing Gas Valve Box |
|  | Existing Electric Manhole |  | Adjusted Gas Valve Box |
|  | Adjusted Elec. MH Frame/Cover |  | New Gas Valve Box |
|  | New Electric Manhole |  | Existing Gas Manhole |
|  | Existing Telephone Line |  | Adjusted Gas MH Frame/Cover |
|  | New Telephone Line |  | New Gas Manhole |
|  | Existing Telephone Pole |  | Existing Monument |
|  | Existing Telephone Manhole |  | Adjusted Monument |
|  | Adjusted Tele. MH Frame/Cover |  | New Monument |
|  | New Telephone Manhole |  | Existing 24" Drain Line |
|  | Existing Signal Corps Line |  | New 24 " RCP Drain Line |
|  | Existing TV Cable |  | Existing Storm Drain Manhole |
|  | New TV Cable |  | Adjusted Storm Drain MH Frame/Cover |
|  | Existing 12" Water Line |  | New Storm Drain Manhole |
|  | New 12" Water Line |  | Existing Grated Drop Inlet |
|  | Existing Water Manhole |  | Existing Catch Basin |
|  | Adjusted Water MH Frame/Cover |  | Existing Traffic Sign |
|  | New Water Manhole |  | Existing Highway Lighting Standard |
|  | Existing Water Air Valve | | |
|  | Adjusted Water Air Valve | | |
|  | New Water Air Valve | | |
|  | Existing Water Valve Box | | |
|  | Adjusted Water Valve Box | | |
|  | New Water Valve Box | | |
|  | Existing Water Meter | | |
|  | Adjusted Water Meter | | |
|  | New Water Meter | | |
|  | Existing Fire Hydrant | | |
|  | New Fire Hydrant | | |



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

[Signature]

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES AND LEGEND

WAIALAE AVENUE LANDSCAPE IMPROVEMENTS
VICINITY OF KAHALA MALL
PROJECT NO. 7801A-01-98

SCALE: AS SHOWN DATE: NOVEMBER 1999

SHEET NO. 3 OF 14 SHEETS