

GRADING NOTES

- All grading work shall be done in accordance with Chapter 14, Articles 13, 14, 15 and 16, as related to grading, soil erosion and sediment control, of the Revised Ordinances of Honolulu, 1990, as amended.
- Adequate provisions shall be made to prevent surface waters from damaging the cut face of an excavation or the sloped surfaces of a fill. Furthermore, adequate provisions shall be made to prevent sediment-laden runoff from leaving the site.
- No grading work shall be done on Saturdays, Sundays and holidays at any time without prior notice to the Director, D.P.P., provided such grading work is also in conformance with Hawaii Administrative Rules, Chapter 11-43, "Community Noise Control for Oahu."
- The limits of the area to be graded shall be flagged before the commencement of the grading work.
- All grading operations shall be performed in conformance with the applicable provisions of the Water Pollution Control and Water Quality Standards contained in Hawaii Administrative Rules, Chapter 11-55, "Water Pollution Control" and Chapter 11-54, "Water Quality Standards" and if applicable, the NPDES permit for the project.
- Where applicable and feasible the measures to control erosion and other pollutants shall be in place before any earth moving phase of the grading is initiated.
- If the grading work involves contaminated soil, then all grading work shall be done in conformance with applicable state and federal requirements.
- Noncompliance to any of the above requirements shall mean immediate suspension of all work, and remedial work should commence immediately. All costs incurred shall be billed to the Permittee. Furthermore, violators shall be subjected to administrative, civil and/or criminal penalties.
- Temporary cut slopes will be made near existing structures located along the property lines. The excavation and structures shall be continually observed by the contractor for movements and construction methods adjusted accordingly. The permanent slope protection shall be constructed as soon as practicable.
- All slopes and exposed areas shall be sodded or planted as soon as final grades have been established. Planting shall not be delayed until all grading work has been completed. Grading to final grade shall be continuous, and any area within which work has been interrupted or delayed shall be planted.
- Fills on slopes steeper than 5:1 shall be keyed.
- The city shall be informed of the location of the borrow/disposal site for the project when the application for a grading permit is made. The borrow/disposal site must also fulfill the requirements of the grading ordinance.
- Temporary erosion controls shall not be removed before permanent erosion controls are in-place and established.
- For bench mark, see General Plan.
- Building Permit for retaining walls shall be obtained prior to commencement of grading work on site.

PUBLIC TRANSIT DIVISION (DTS) NOTE

The Contractor shall notify Oahu Transit Services, Inc., (OTS-THEBUS Contractor), Ed Sniffen (848-4571) or Lowell Tom (848-4578), two weeks prior to construction, informing them of location, scope of work, proposed closure of any street or traffic lanes, and the need to relocate any bus stops.

ENVIRONMENTAL PROTECTION NOTES

- In accordance with Chapter 11-60.1, Air Pollution Control, Title 11, State Administrative Rules, the Contractor shall be responsible for ensuring that effective control measures are provided to minimize or prevent any visible dust emission caused by the construction work from impacting the surrounding areas, including the off-site roadways used to enter/exit the project. These measures include, but are not limited to the use of water wagons, sprinkler systems, dust fences, etc.
- In accordance with Chapter 11-55, Water Pollution Control and Chapter 11-54, Water Quality Standards, Title 11, State Administrative Rules, the Contractor shall be responsible for ensuring that the Best Management Practice (BMP) to minimize or prevent the discharge or sediments, debris, and other water pollutant into state waters is provided.
- In accordance with Chapter 11-58, Solid Waste Management Control, Title 11, State Administrative Rules, the Contractor shall be responsible for ensuring that grub material, demolition waste and construction waste generated by the project are disposed of in a manner or at a site approved by the State Department of Health. Disposal of any of these wastes by burning is prohibited.
- The Contractor shall be responsible for complying with all applicable permits from the Department of Health including but not limited to National Pollution Discharge Elimination system (NPDES) permits for hydrostatic test and dewatering discharges prior to commencing construction.
- The Contractor shall take necessary measures to protect the existing spring(s) within or near the wetland area at all times. The existing spring(s) shall not be buried or damaged in any way and shall be retained in its original condition upon completion of construction activities. The approximate locations of spring(s) as identified by Army Corps. of Engineers are indicated in the plans.

TEMPORARY DUST CONTROL NOTES

- The graded or project site that is cleared of vegetation shall be kept damp.
- The graded or project site that is cleared of vegetation shall be kept damp for seven (7) days a week. At the end of each day, the site shall be sufficiently dampened so that the site will remain moistened during the night.
- The Contractor shall conduct his operations so that excavation, embankment, and imported material shall be dampened to prevent dust problems.
- In applying for a grading permit, the Contractor shall submit plans, schedules and/or written measures which provides for dust control. The dust control measures shall contain positive statements which requires actions or work that prevent dust problems. No permits will be issued unless the County is assured that dust problems will be minimized.
- Dust control measures shall be considered incidental to the various contract items.

TEMPORARY EROSION CONTROL MEASURES

- Sediment control devices shall be installed around all existing drain inlets. The Contractor shall maintain these devices throughout the construction of the project.
- Temporary vegetative cover shall be planted within a period of 30 calendar days after the site has been graded or bared of vegetation or if final grading of the site will be suspended for more than 30 calendar days. Temporary vegetative cover shall consist of 40 lbs. - common rye grass seed per acre, 400 lbs. per acre of 10-10-10 or equivalent fertilizer worked into seed bed before planting. Planting and maintenance of grass shall conform to the "Standard Specifications for Public Works Construction", September 1986.uction", September 1986.

- Maintenance, cleaning and correction of temporary erosion and sediment control devices requested by the Engineer during construction shall be done by the Contractor at no cost to the County or Owner.

TRAFFIC NOTES FOR WORK ON CITY & COUNTY STREETS

- The Contractor shall obtain a permit from the Department of Transportation Services before work on any portion of a public street or highway may begin. Construction Traffic Control Plans approved by the Department of Transportation Services and/or the Department of Planning and Permitting must be provided when applying for the permit.
- 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 Highways Administration's "Manual on Uniform Traffic Control Devices for Streets and Highways(MUTCD), Part VI - Traffic Controls for Street and Highway Construction and Maintenance Operations."
- Work on any City street area may be performed only between the hours of 8:30 a.m. to 3:30 p.m., Monday through Friday, unless otherwise permitted by the Department of Transportation Services.
- During working hours, the Contractor shall provide for through 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.
- As required by the Department of Transportation Services, the Contractor shall provide off-duty police officers to control the flow of traffic.
- Where pedestrian walkways exist, they shall be maintained in passable condition or other facilities for pedestrians shall be provided. Passage between walkways at intersections shall likewise be provided.
- Driveways shall be kept open unless the owners of the property using these rights-of-way are otherwise provided for satisfactorily.
- Contractor shall reference to the approval of the Department of Transportation Services and the Department of Planning and Permitting, 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 Planning and Permitting at 527-5087 one (1) week prior to any work to be done on signs, posts and pavement markings.
- 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.
- The Engineer shall ensure that the Contractor installs the construction traffic control devices in accordance with the MUTCD and the Hawaii Administration rules as specified in Traffic Note #2.
- All traffic control sign locations to be verified by the Engineer.
- See Construction Phasing Notes, Details, and Legend Sheet for additional traffic control notes.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-03-97	2000	5	110

PERMANENT EROSION CONTROL MEASURES

- Permanent drainage system (see plans and specifications).
- Unless indicated otherwise, the Contractor shall grass the entire project site, except paved areas, with bermuda grass sprigs or by hydromulching with bermuda grass seeds. The grass shall be planted, fertilized, and maintained in accordance with the "Hawaii Standard Specifications for Road, Bridge, and Public Works Construction," 1994.
- The Contractor shall grass all exposed areas that have been constructed to final grades within a period of 30 calendar days.

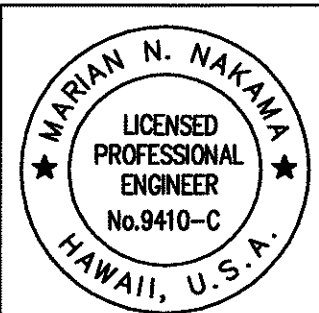
SEWER NOTES (Private - State of Hawaii Jurisdiction and responsibility)

- All sewer construction shall be performed in accordance with the "Design Standards of the Department of Wastewater Management", Volume 1, July 1993, and "Standard Details for Public Works Construction", Sept. 1984 and "Standard Specifications for Public Works Construction." Sept. 1986, Department of Public Works, City and County of Honolulu, and Revised Ordinances of Honolulu.
- Crushed rock cradle is permitted where soil is stable. In areas of unstable soil, the Engineer will determine the pipe supports required.
- Location of existing sewer mains and appurtenances shown on the plans are approximate only. The exact location shall be verified in the field. The Contractor shall be responsible and shall pay for all damaged utilities.
- The Contractor shall be responsible for any sewage spills caused during construction. The Contractor shall notify the State Dept. of Health and utilize appropriate sampling and analyzing procedures. The Contractor shall be responsible for all public notification and press releases.

APPROVED:

M. J. [Signature] 5/4/00  
Chief, Civil Engineering Branch <sup>WT</sup> Date  
Department of Planning & Permitting  
City & County of Honolulu

[Signature] 5/21/00  
Chief, Traffic Review Branch Date  
Department of Planning & Permitting  
City & County of Honolulu  
(For work within City R/W only)



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

CONSTRUCTION NOTES

KEAAHALA ROAD WIDENING  
KAHEKILI HIGHWAY TO PO'OKELA STREET  
State Project No. HWY-0-03-97

Scale: As shown Date: April 2000  
SHEET NO. C-5 OF C-55 SHEETS