

GENERAL NOTES:

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1. The scope of work for this project includes: demolition of existing asphalt concrete curb, drain intake, reinforced concrete pipe, concrete driveway, grouted rubble paving, cement rubble masonry wall, concrete headwall, and guardrail; construction of drain manholes, grated drop inlets, cement rubble masonry walls, grouted rubble paving, dumped riprap, and asphalt concrete curb; installation of guardrail and drainline; grading; grassing; and various appurtenant and incidental work.
2. Construction and restoration of all existing highway facilities within State highway right-of-way shall be done in accordance with all applicable sections of the current "Standard Specifications For Road and Bridge Construction" and the Project Plans and Special Provisions.
3. 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 tone for all utility lines before starting any work. The Contractor shall be held liable for any damages incurred to the existing facilities and/or improvements as a result of his operations.
4. Smooth riding connections shall be constructed at the limits of roadway resurfacing, including the beginning and end of project, connecting approaches, side streets and driveways as shown on the plans and/or as directed by the Engineer.
5. All saw cutting work shall be considered incidental to Roadway Excavation. The Contractor shall clean up any cuttings and shall not wash down material into the storm drain or sewer systems.
6. All work specified in the contract but not listed separately in the proposal schedule shall be considered incidental to other various contract items and shall not be paid for separately.
7. All work to remove temporary facilities by the Contractor shall be considered incidental to the various contract items in the proposal.

NOTIFICATION:

8. The Contractor shall obtain a Permit to Perform Work Upon State Highways from the Maui District Engineer, State Highways, at 650 Palapala Drive, prior to commencement of work within the State's highway right-of-way.
9. The Permit to Perform Work Upon State Highways may be revoked because of default in any of the following, but not limited to, conditions:
 - a. Work performed before or after permitted hours.
 - b. Failure to maintain roadway surfaces in a smooth and safe condition.
 - c. Failure to clean up construction debris generated from project work.
 - d. Failure to provide proper traffic control.
 - e. Failure to replace damaged pavement markings and signs.

Any revocation of the permit shall be at the Contractor's expense and no additional cost to the State and no additional contract time will be added.

10. The Contractor shall notify the Engineer in writing, two (2) weeks prior to starting paving operations.
11. The Contractor shall notify the Maui Fire Department, Ambulance, and the Police Department, two (2) weeks prior to commencing any work. The Contractor shall inform the above agencies of the location and scope of work, proposed closure of any street or traffic lanes.
12. The Contractor shall inform the State Highways' Permit Office (873-3535) at least two (2) days prior to closing any lanes or performing any trench restoration work. This work shall include any backfilling and compacting of trench material; placing and compacting of base course material; and any paving operations. Any trench restoration work performed by the Contractor that is not witnessed by a State Representative will be required to be removed and restored with a State Representative present. All restoration work will be at the Contractor's expense.
13. In the event any artifacts or human remains are uncovered during construction operations, the Contractor shall immediately suspend work and notify the Maui Police Department, the State Department of Land and Natural Resources-Historic Preservation Division (243-4640), and the State's Engineer.

PRECAUTION:

14. The Contractor shall exercise care to minimize damages to existing highway and roadway improvements. All damages shall be repaired by the Contractor, at his expense, to the satisfaction of the Engineer.
15. The Contractor shall exercise care when performing work in or adjacent to the State highway right-of-way. Damages to the existing facilities shall be immediately reported to the respective utility company, private owner, and/or County/City/State agency. The repair work shall be done at the Contractor's expense.
16. Contractor shall take proper precautions when working near overhead lines.

WORK EXECUTION:

17. Work may be performed only between the hours of 7:00 a.m. to 3:30 p.m., Monday through Friday, except holidays, unless otherwise permitted by the Engineer. During work hours, only one lane of traffic shall be closed, unless otherwise approved in writing by the Engineer.
18. No material and/or equipment shall be stockpiled or otherwise stored within the Highway Right-of-Way except at locations designated in writing and approved by the Engineer.
19. The Contractor shall reference, to the satisfaction of the Engineer, all existing traffic signs, posts & pavement markings prior to the commencement of construction. The Contractor shall replace or repair all traffic signs, posts & pavement markings disturbed by his activities, at his expense, unless directed otherwise by the Engineer or his representative.

20. All regulatory, guide and construction signs and barricades shall have a high intensity reflective background. Portable concrete barriers shall be reflectorized in accordance with the "Standard Plans", State of Hawaii, Department of Transportation.
21. All traffic control devices including: signs, barricades, vertical panels, drums, warning lights, arrow boards, changeable message signs, cones, delineators and markers shall conform to the American Traffic Safety Services Association (ATSSA) "Quality Standard for Work Zone Traffic Control Devices" dated 2003, and the MUTCD. Compliance with these requirements shall be as described in Section 645 - Work Zone Traffic Control.
22. The Contractor shall provide, install, and maintain all necessary signs, lights, flares, markers, barricades, cones, and other protective facilities, and shall take all necessary precautions for the protection, convenience, and safety of public traffic. All such protective facilities and precautions to be taken shall conform with the "Administrative Rules of Hawaii 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 "Manual on Uniform Traffic Control Devices, Part VI - Temporary Traffic Control and NCHRP350.
23. All construction signs shall be left in place until all construction items have been completed unless otherwise directed by the Engineer. The Contractor shall obtain prior approval from the Engineer to remove construction signs.
24. After the project is completed, the Contractor shall restore grades and ground cover within the project limits and surrounding areas affected by the project to a condition equal or better than the existing condition prior to construction.

ACCESS:

25. Driveways shall be kept open unless the owners of the properties using these rights-of-way are otherwise provided for satisfactorily.
26. The minimum clearance around fire hydrants, utility poles, light standard, or any other obstruction shall be 3'-0".

TRENCHING:

27. The Contractor shall take a profile along the centerline of the proposed utility trench both before commencing trench excavation work and after trench has been repaved. Profiles shall be submitted to the District Engineer and shall used to verify the roadway surface has been restored to its original condition or smoother.
28. Unless otherwise noted, no trench shall be opened more than 300 feet in advance of installed and tested pipeline and/or ductline.
29. The Contractor shall provide an adequate and safe non-skid bridging material, including shoring, over trenches in pavement areas. The bridging shall be able to support all types of vehicular traffic.

30. The Contractor will make every effort to minimize the use and the duration of use of steel plates. All steel plates shall have a non-skid surface. The State may require the backfilling of patches of trenches due to the excessive usage of steel plates.
31. Temporary cold mix trench patches will be permitted in any given area for a maximum duration of two weeks, and shall be a minimum of 2-inches thick. All temporary patches shall be placed over properly placed and compacted backfill and base course layers. The Contractor shall be responsible for maintaining all temporary patches and to make repairs to unsatisfactory patches within 24 hours.
32. At the end of each day's work, the Contractor shall remove all equipment and other obstructions to permit free and safe passage of traffic.
33. Existing drainage systems will be functional at all times during construction. The Contractor shall furnish materials, equipment, labor, tools and incidentals necessary to accomplish maintenance and control of flow. The cost shall be incidental to the various Contract Items.
34. When excavation is adjacent to or beneath existing utility structures or facilities, the Contractor shall protect existing structures and/or facilities with beams, struts, or underpinning while excavating beneath them to ensure no movement to utility structures or facilities.
35. The contractor shall brace all utility poles near the drainline during his operations.
36. Before digging near any utility facilities the Contractor shall call Hawaii's One-Call Center at 1-866-423-7287.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	377A-01-11	2014	3	28

DATE	_____
SURVEY PLOTTED BY	_____
DRAWN BY	_____
CHECKED BY	_____
DESIGNED BY	_____
NOTED BY	_____
QUANTITIES BY	_____
CHECKED BY	_____
ORIGINAL PLAN	_____
NOTE BOOK	_____
No.	_____



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Russell M. Araki
RMA, INC.
d/b/a PARK ENGINEERING
APRIL 30, 2014
LIC. EXP. DATE

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
GENERAL NOTES	
KEKAULIKE AVENUE Drainage Improvements Mile Post 7.6 to Mile Post 7.9 PROJECT NO. 377A-01-11	
Scale: As Shown	Date: September 2013
SHEET No. 11 OF 12 SHEETS	

GENERAL NOTES (CONTINUED):

DRAINAGE:

37. The Contractor shall verify the locations of all existing culverts and utilities in the field. Any existing culverts and utilities damaged during construction shall be repaired or replaced by the Contractor at his own expense.
38. Only non-pneumatic type of drill as approved by the Engineer will be permitted for drilling holes in concrete. Where indicated on Plans, the approximate diameter of drilled holes for installation of dowels shall be 7/8"Ø, and voids after installing dowels shall be filled with non-gaseous, non-shrink epoxy grout. Locate existing rebars before drilling and drill holes so they miss the existing rebars.
39. The existing drainage system and longitudinal drainage along the highway will be maintained and be functional at all times during construction. The Contractor shall furnish materials, equipment, labor, tools and incidentals necessary to maintain flow. This work shall be considered incidental to the various contract items.
40. The Contractor shall remove all silt and debris deposited in drainage facilities, on roadways and in other areas resulting from his work. The costs incurred for any necessary remedial action by the Engineer shall be payable by the Contractor.

GRADING NOTES:

1. All grading work shall be done in accordance with Chapter 20.08 Soil Erosion & Sedimentation Control of the Maui County Code, 1980, as amended, and Soils Report by Geolabs, Inc., dated April 29, 2009.
2. No Contractor shall perform any grading operation 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 violation occur, the Contractor may be cited and the Contractor shall immediately make all remedial actions necessary.
3. 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 contained in the Hawaii Administrative Rules, Title 11, Chapter 60.1, "Air Pollution Control".
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 locations and depths of the facilities and exercise proper care in excavating in the area. Wherever connections of new utilities are shown on the plans, the Contractor shall expose the existing lines at the proposed connections to verify their locations and depth prior to excavation for the new lines.
5. 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.
6. 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.
7. Fills on slopes steeper than 5:1 shall be keyed.
8. The State 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.

9. No grading work shall be done on Saturdays, Sundays and holidays at any time without prior notice to the Engineer, provided such grading work is also in conformance with the community noise control standards contained in the Hawaii Administrative Rules, Title 11, Chapter 46, "Community Noise Control".
10. The limits of the area to be graded shall be flagged before the commencement of the grading work.
11. All grading operations shall be performed in conformance with the applicable provisions of the water quality and water pollution control standards contained in Hawaii Administrative Rules, Title 11, Chapter 54, "Water Quality Standards" and Title 11, Chapter 55 "Water Pollution Control" and if applicable, the NPDES permit for the project.
12. 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. The Contractor shall incorporate the measures described in the "Water Pollution and Erosion Control" notes.
13. Temporary erosion controls shall not be removed before permanent erosion controls are in-place and established.
14. Temporary Erosion Control Procedures shall be submitted for approval prior to application for grading permit.
15. If the grading work involves contaminated soil, then all grading work shall be done in conformance with applicable State and Federal requirements.
16. Non-compliance to any of the above requirement shall mean immediate suspension of all work, and the remedial work shall commence immediately. All costs incurred shall be billed to the violator. Furthermore, violators shall be subjected to administrative, civil and/or criminal penalties.
17. All grading and construction work shall implement measures to ensure that the discharge of pollutants from the construction site will be reduced to the maximum extent practicable and will not cause or contribute to an exceedance of water quality standards.
18. For Benchmarks, see Sheets C1.1.

WATER NOTES:

1. The Contractor/Utility Company shall contact the Department of Water Supply at phone no. 270-7340 one (1) week prior to commencement of work.
2. The Contractor/Utility Company shall be responsible to verify the exact depth and location of existing waterlines in the project area prior to commencement of work and shall meet with the Department of Water Supply personnel out in the field to help locate the existing waterlines in the project area if necessary.
3. Maintain a minimum of three (3) feet clear horizontal separation between existing waterlines and installed utilities.
4. Maintain a minimum of six (6) inches clear vertical separation between existing waterlines and installed utilities at all crossings.

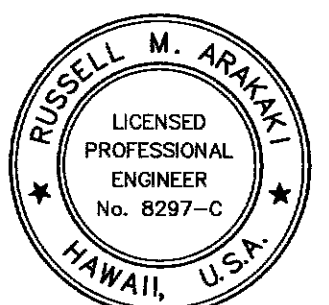
NOTES FOR WORK WITHIN CONSTRUCTION PARCEL NOS. 1 AND 2:

1. The Contractor shall visit the site prior to submitting a bid to observe and verify the existing conditions. Any discrepancies shall be brought to the attention of the Engineer for clarification.
2. The Contractor shall notify the Engineer in writing and provide a construction schedule for all work within private property at least 14 calendar days prior to performing any work within the construction parcels. The Engineer will notify the private property owner(s) of the proposed improvements and construction schedule.
3. In addition to the trees identified on the plans to be removed, the Contractor shall remove and dispose up to two (2) Eucalyptus tree(s) or other trees identified by the Engineer that are located within the construction parcels. All trees to be removed shall be cut at existing ground (tree roots to remain) using a power tool. The cost to remove and dispose of the additional trees will not be paid for separately but shall be considered incidental to Item No. 201.0100 - Clearing and Grubbing.
4. The Contractor may widen the driveway/access road at T.M.K.: 2-2-012: 012 as required to accommodate the construction vehicles and equipment. Widening of the driveway/access road includes but is not limited to clearing, grubbing, compacting the subgrade, installing geotextile fabric, 3" to 6" Course Aggregate and #2 Crushed Rock Aggregate or other aggregate material acceptable to the Engineer, repairing, maintaining, and restoring the widened driveway/access road to its original condition or better and to the satisfaction of the Engineer. This work will not be paid for separately but shall be considered incidental to various items in the Contract.
5. All disturbed landscape areas resulting from the Contractor's operations, as determined by the Engineer, shall be restored by the Contractor to its original condition or better and to the satisfaction of the Engineer. The Contractor's work to restore all disturbed landscape areas shall include but is not limited to the following:
- A. Clear and grub all disturbed landscape areas. The cost for clearing and grubbing will be paid for under Item No. 201.0100 - Clearing and Grubbing.
- B. Install imported planting soil over the cleared and grubbed areas. The cost to install imported planting soil will be paid for under Item No. 617.0100 - Imported Planting Soil.
- C. Apply Common Bermuda grass (Cynodon dactylon) seed and mulch over the prepared and accepted surfaces. The cost to apply seeded mulch will be paid for under Item No. 641.0100 - Hydro-mulch Seeding.
- D. Install erosion control matting to stabilize the disturbed areas upon completion and acceptance of the hydro-mulch seeding. Installation of the erosion control matting shall be in accordance with the manufacturer's recommendations and as shown in the typical details on the plans. The cost to install the erosion control matting will be paid for under Item No. 663.0100 - Erosion Control Matting.
- E. Install a temporary irrigation system for the establishment of the grass. The Contractor shall be responsible to obtain and pay for water to be used for irrigation. The cost to install, maintain, repair and remove the temporary irrigation system upon completion of the plant establishment period will be paid for under Item No. 616.0200 - Temporary Irrigation System.

6. Any damages to existing improvements to remain as a result of the Contractor's operations, as determined by the Engineer, shall be repaired, restored or replaced to its original condition or better and to the satisfaction of the Engineer. The Contractor shall be responsible to pay for the cost to repair, restore or replace all damaged improvements at no additional cost to the State.

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HAWAII	HAW.	377A-01-11	2014	4	28

SURVEY PLOTTED BY	DATE
DESIGNED BY	
NOTED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Russell M. Araki APRIL 30, 2014
Lic. Exp. Date
dbs PARK ENGINEERING

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES

KEKAULIKE AVENUE
Drainage Improvements
Mile Post 7.6 to Mile Post 7.9
PROJECT NO. 377A-01-11

Scale: As Shown Date: September 2013

SHEET No. N2 OF N2 SHEETS