
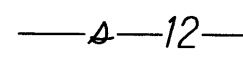
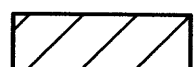
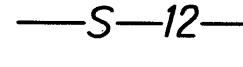

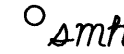


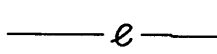

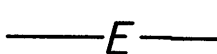
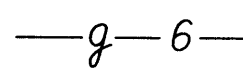

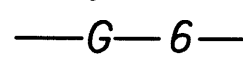

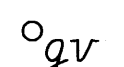





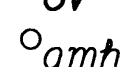
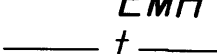










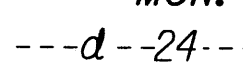
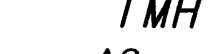
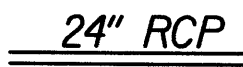
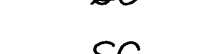
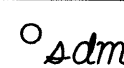


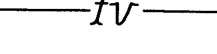
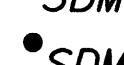
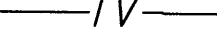










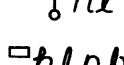

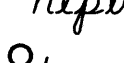









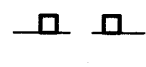






FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	11E-01-10M	2010	3	32

GENERAL NOTES

1. The scope of work for this project consists of removing existing guardrails and end terminals; installing new guardrails and end terminals; leveling and resurfacing of existing pavement; cold planing; installing milled and raised pavement markers rumble strips; and installing thermoplastic striping, markings and signs.
2. The Contractor is reminded of the requirements of Subsection 108.01 - Subletting of Contract, which requires him to perform work to not less than 30 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: Subsection 104.11 - Utilities and Services; Subsection 107.06 - Contractor's Duty Regarding Public Convenience and Section 645 - Work Zone 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 public traffic.
5. 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 the exact locations and depths of all underground facilities, either shown on or omitted from the plans, in areas where work, such as the placement of sign posts, traffic signal conduits, etc. may affect these properties. Toning shall be considered incidental to the various contract items and will not be paid for separately. The Contractor shall be held liable for any damages incurred to the existing facilities and/or improvements as a result of his operations.
6. The Contractor shall indemnify and be solely responsible for the protection of adjacent properties, utilities and existing structures from damages due to construction. Repairing any damage shall be at the Contractor's own expense, to the satisfaction of the Engineer.
7. 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 and will not be paid for separately.
8. Earth swale shall be graded to drain. This work shall be considered incidental to the various contract items.
9. Smooth riding connections shall be constructed at all limits of resurfacing, including the beginning and end of project, connecting approaches, side streets, walkways and driveways as shown on the plans and/or as directed by the Engineer. This work shall be considered incidental to asphalt concrete and will not be paid for separately.
10. The Contractor shall clean and remove any accumulation of aggregates along the roadside within 10 feet of the edge of pavement. This work shall be considered incidental to bulk of work or the various contract items and will not be paid separately.
11. Removal and disposal of existing curb and gutter, curb, sidewalk and asphalt concrete pavement, curb, sidewalk and any debris shall be considered incidental to their respective bid items.
12. All saw cutting work shall be considered incidental to Roadway Excavation or Asphalt Concrete or Various Contract Items or their respective bid items.
13. The Contractor shall provide and maintain for access to and from all existing driveways, sidewalks and ADA access routes and side streets and cross street at all times. This work shall be considered incidental to curb ramps, or sidewalk, or the various contract items and will not be paid for separately.
14. The Contractor shall provide and maintain a temporary pedestrian-safe and easily accessible route or detour with barricades in or near the work zone. This temporary route or detour shall be paved at least an inch of Asphalt Concrete Pavement, Mix No. V or steel and/or wood planks and shall be American With Disabilities Act (ADA) compliant [This is only applicable if existing surface is dirt and/or if existing surface is non-ADA compliant]. This work shall be incidental to curb ramps, or sidewalk, or the various contract items and will not be paid for separately.
15. 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, Mix No. IV and will not be paid for separately.
16. 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.
17. The location of 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.
18. All holes, depressions and wheel ruts shall be filled and compacted with asphalt concrete, Mix V, prior to resurfacing. This work shall be considered incidental to various contract items and will not be paid for separately.
19. Trimming and dressing of shoulder 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. Suitable materials shall include materials from roadway excavation, including topsoil, and if necessary, additional materials from borrow outside the limits of the right of way. This work shall be considered incidental to various contract items.
20. The Contractor shall provide, install, and maintain all necessary signs, lights, flares, barricades, markers, cones, and other protective facilities, and shall take 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 Highway Administration "Manual on Uniform Traffic Control Devices for Streets and Highways, Part VI - Standards and Guides for Traffic Controls for Street and Highway Construction, Maintenance, Utility and Incident Management Operations" and NCHRP 350.
21. Excess Cold-planed material shall remain the property of the State and delivered to State Highways, Ka'u Baseyard.

LEGEND

- | | | | |
|--|-------------------------------|---|-------------------------------------|
|  | Reconstruction Areas |  -A-12- | Existing Sewer Line |
|  | Leveling Areas |  -S-12- | New 12" Sewer Line |
|  | Cold Planing Areas |  -A _{mh} | Existing Sewer Manhole |
|  | Transition Limits |  -SMH | Adjusted Sewer MH Frame/Cover |
|  -e- | Existing Electrical Line |  -SMH | New Sewer Manhole |
|  -E- | New Electrical Line |  -g-6- | Existing 6" Gas Line |
|  -j _p | Existing Joint Pole |  -G-6- | New 6" Gas Line |
|  -p _p | Existing Power Pole |  -g _v | Existing Gas Valve Box |
|  -em _h | Existing Electric Manhole |  -GV | Adjusted Gas Valve Box |
|  -EMH | Adjusted Elec. MH Frame/Cover |  -GV | New Gas Valve Box |
|  -EMH | New Electric Manhole |  -g _{mh} | Existing Gas Manhole |
|  -t- | Existing Telephone Line |  -GMH | Adjusted Gas MH Frame/Cover |
|  -T- | New Telephone Line |  -GMH | New Gas Manhole |
|  -t _p | Existing Telephone Pole |  -mon. | Existing Monument |
|  -tm _h | Existing Telephone Manhole |  -MON. | Adjusted Monument |
|  -TMH | Adjusted Tele. MH Frame/Cover |  -MON. | New Monument |
|  -TMH | New Telephone Manhole |  -d--24-- | Existing 24" Drain Line |
|  -AC- | Existing Signal Corps Line |  -24" RCP | New 24 " RCP Drain Line |
|  -SC- | New Signal Corps Line |  -A _{dmh} | Existing Storm Drain Manhole |
|  -tv- | Existing TV Cable |  -SDMH | Adjusted Storm Drain MH Frame/Cover |
|  -TV- | New TV Cable |  -SDMH | New Storm Drain Manhole |
|  -w-12- | Existing 12" Water Line |  -g _{di} | Existing Grated Drop Inlet |
|  -W-12- | New 12" Water Line |  -cl | Existing Catch Basin |
|  -wm _h | Existing Water Manhole |  -sign | Existing Traffic Sign |
|  -WMH | Adjusted Water MH Frame/Cover |  -hl | Existing Highway Lighting Standard |
|  -WMH | New Water Manhole |  -tl _{pb} | Existing Highway Lighting Pullbox |
|  -av | Existing Water Air Valve |  -t _{ap} | Existing Traffic Signal Pole |
|  -AV | Adjusted Water Air Valve |  -TSP | New Traffic Signal Pole |
|  -AV | New Water Air Valve |  -tl _{pb} | Existing Traffic Signal Pullbox |
|  -wrv | Existing Water Valve Box |  -TSPB | Adjusted Traffic Signal Pullbox |
|  -WV | Adjusted Water Valve Box |  -TSPB | New Traffic Signal Pullbox |
|  -WV | New Water Valve Box |  -g | Existing Metal Guardrail |
|  -wm | Existing Water Meter |  -g | New Metal Guardrail |
|  -WM | Adjusted Water Meter | | |
|  -WM | New Water Meter | | |
|  -fh | Existing Fire Hydrant | | |
|  -FH | New Fire Hydrant | | |

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES AND LEGEND

MAMALAHOA HIGHWAY GUARDRAIL REPAIRS
Vicinity of Kahuku
Project No. 11E-01-10M

Scale: No Scale Date: May, 2010

SHEET No. 1 OF 1 SHEETS