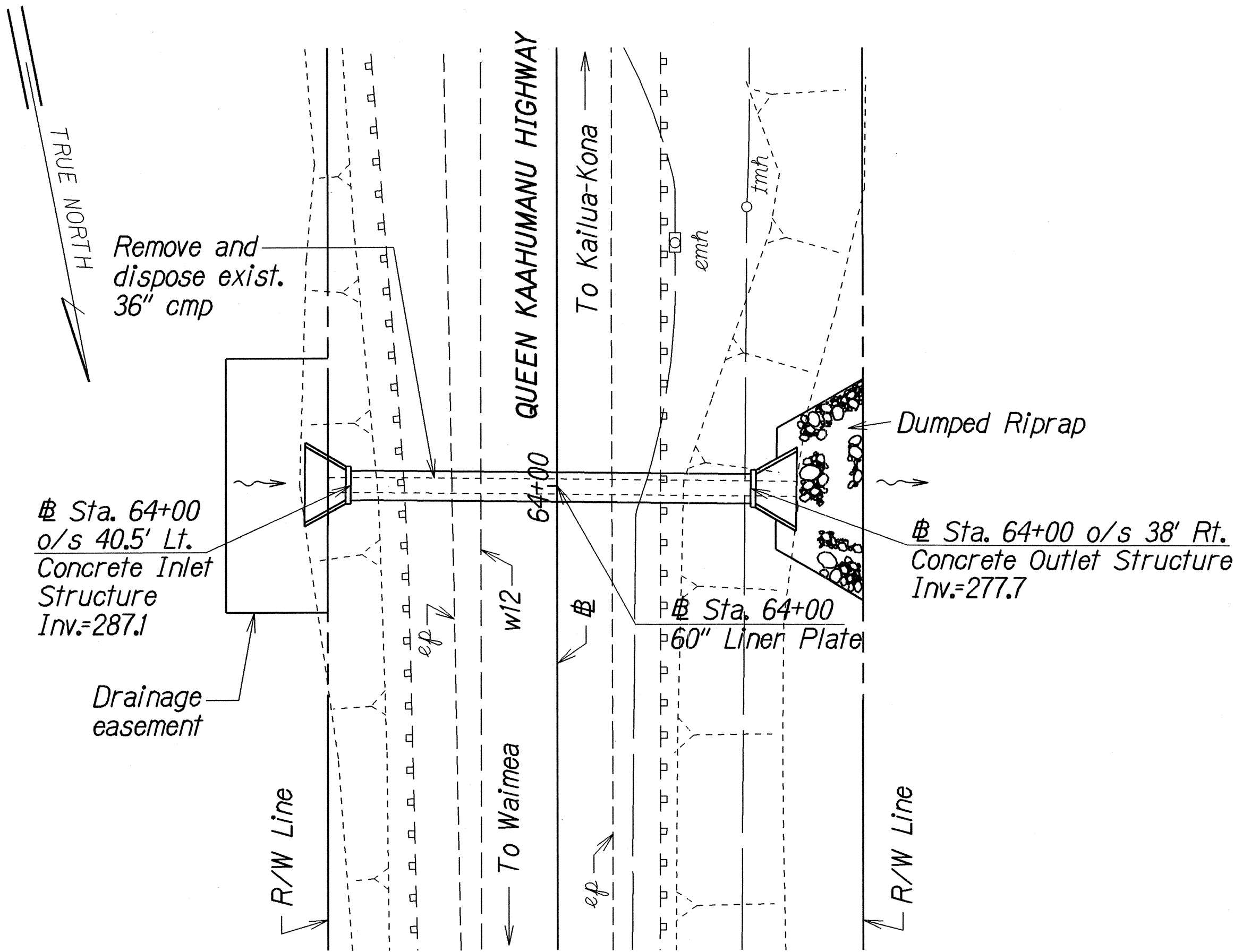


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-019-1(27)	2002	ADD 7	18



Sta. 64+00 o/s 40.5' Lt.
 Construct: Concrete Inlet Structure
 (For Details see Sht. No. H3)
 Install: 60" Liner Plate
 (For Profile see Sht. No. H2)

Sta. 64+00 o/s 38' Rt.
 Construct: Concrete Outlet Structure
 (For Typ. Details see Sht. No. H6)
 Dumped Riprap at Outlet Structure
 (For Details see Sht. No. H4)

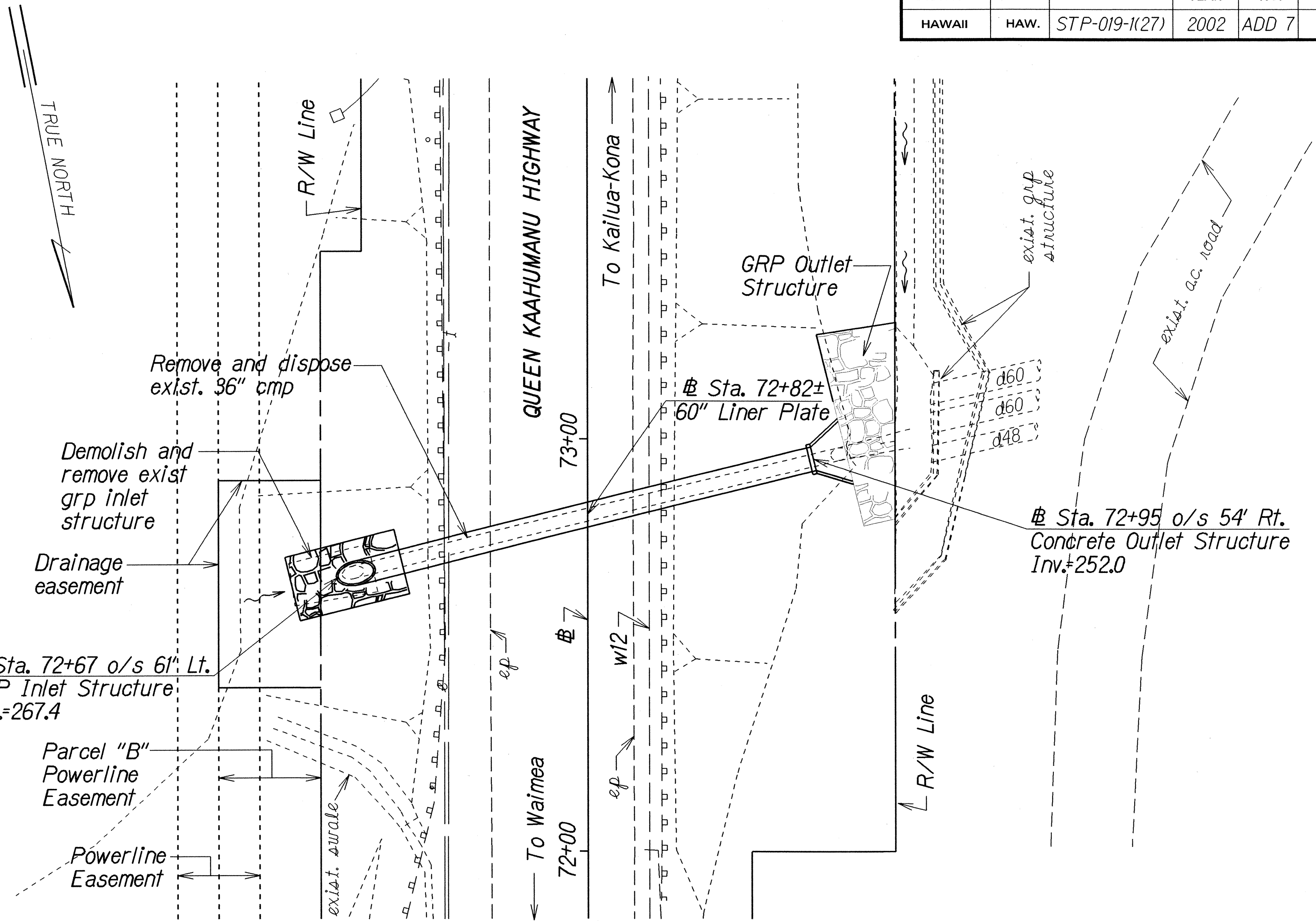
Estimated Quantities
 Structure Excavation = 9 C.Y.
 Class A Concrete = 8 C.Y.
 Reinforcing Steel = 550 Lb.
 60" Liner Plate = 81 L.F.

Estimated Quantities
 Structure Excavation = 9 C.Y.
 Class A Concrete = 8 C.Y.
 Reinforcing Steel = 550 Lb.
 Dumped Riprap = 53 C.Y.
 Permeable Separator = 100 S.Y.

PLAN AT # STA. 64+00

DRAINAGE NOTES

- Existing soil material in the vicinity of the proposed Liner Plates consists of sand, gravel, cobbles, and boulders.
- The Contractor shall verify the locations of all existing culverts and utilities in the field. Any existing utilities damaged during construction shall be repaired or replaced by the Contractor at no cost to the State.
- Demolishing, removing, and disposing existing 36" culverts shall not be paid for separately but shall be considered incidental to Item No. 657.1000 - 60" Liner Plate.
- Demolishing and removing existing grouted rubble paving structure shall not be paid for separately but shall be considered incidental to Item No. 612.0100 - Grouted Rubble Paving.
- Cutting 60" Liner Plate flush with grouted rubble paving and concrete structures shall not be paid for separately but shall be considered incidental to the 60" liner plate.
- Locate and expose the existing water, telephone, and electric lines, at their crossing with the 60-inch liner plate. Provide location, top and invert elevations, and dimensions to the Engineer. Installation of the 60-inch liner plate shall not commence without approval from the Engineer. This work shall not be paid for separately but shall be considered incidental to Item No. 657.1000 - 60-Inch Liner Plate, Sheet Thickness = 0.135 Inch.



Sta. 72+67 o/s 61' Lt.
 Remove and Dispose: Existing 36" CMP
 Construct: GRP Inlet Structure
 (For Details see Sht. No. H4)
 Install: 60" Liner Plate
 (For Profile see Sht. No. H2)

Estimated Quantities
 60" Liner Plate = 118 L.F.
 Grouted Rubble Paving = 17 C.Y.

Sta. 72+95 o/s 54' Rt.
 Construct: Concrete Outlet Structure
 (For Typ. Details see Sht. No. H6)
 GRP Outlet Structure
 (For Details see Sht. No. H5)

Estimated Quantities
 Structure Excavation = 9 C.Y.
 Class A Concrete = 8 C.Y.
 Reinforcing Steel = 550 Lb.
 Grouted Rubble Paving = 32 C.Y.

PLAN AT # STA. 72+82±

10/10/01 Added easements, revised drain notes

DATE REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE PLAN

QUEEN KAAHUMANU HWY. DRAINAGE IMPROVEMENTS

Vicinity of Mauna Kea Beach Hotel

Fed. Aid Project No. STP-019-1(27)

Scale: 1"=20'

Date: Feb. 2000

SHEET No. HI OF 6 SHEETS

ADD 7

ORIGINAL PLAN	DATE
DESIGNED BY	2/17/00
CHECKED BY	
APPROVED BY	
NOTED BY	