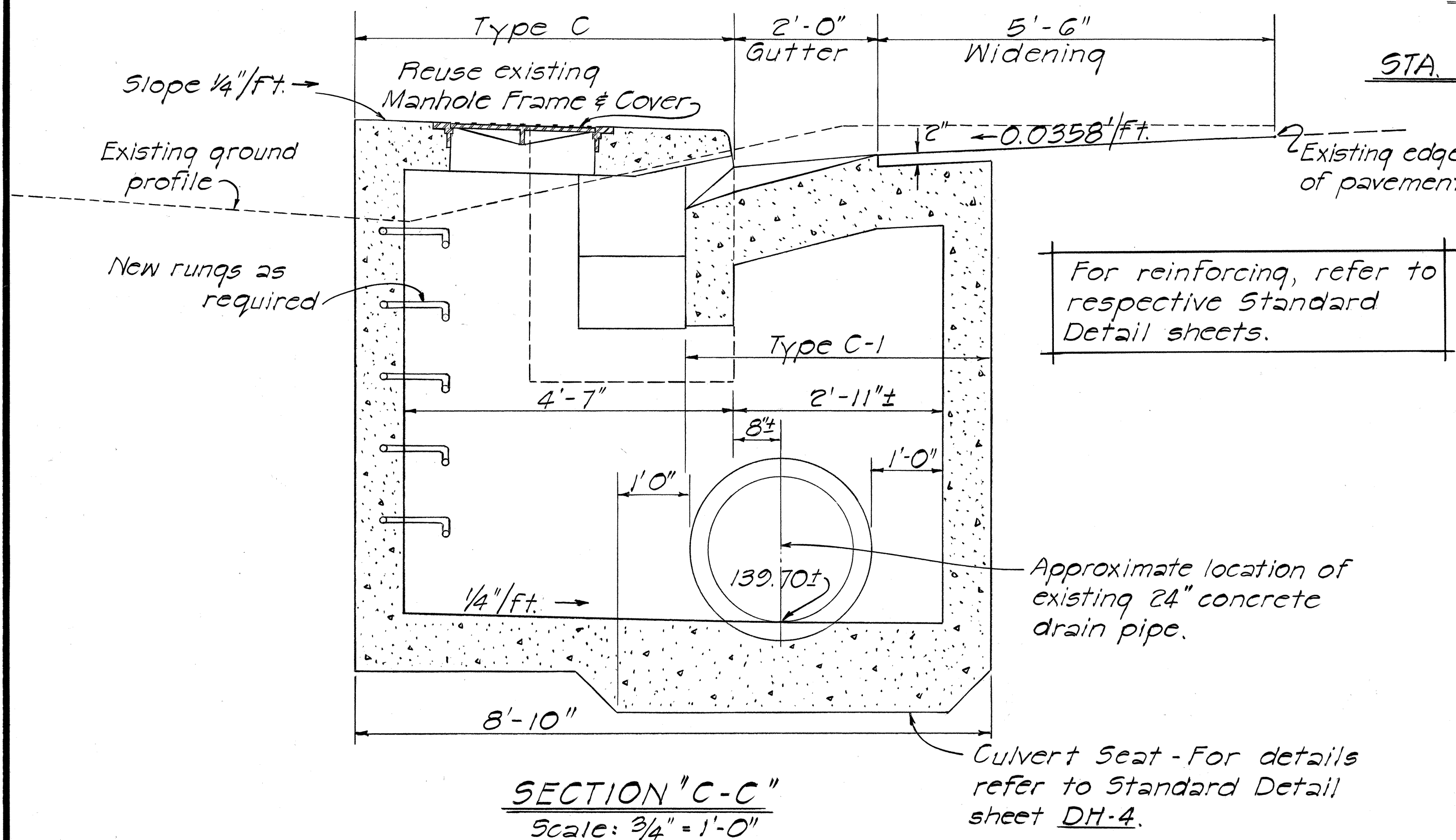
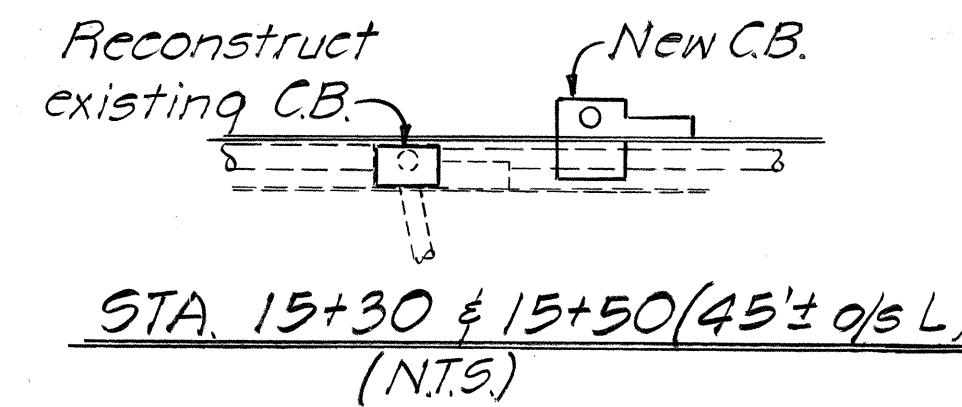
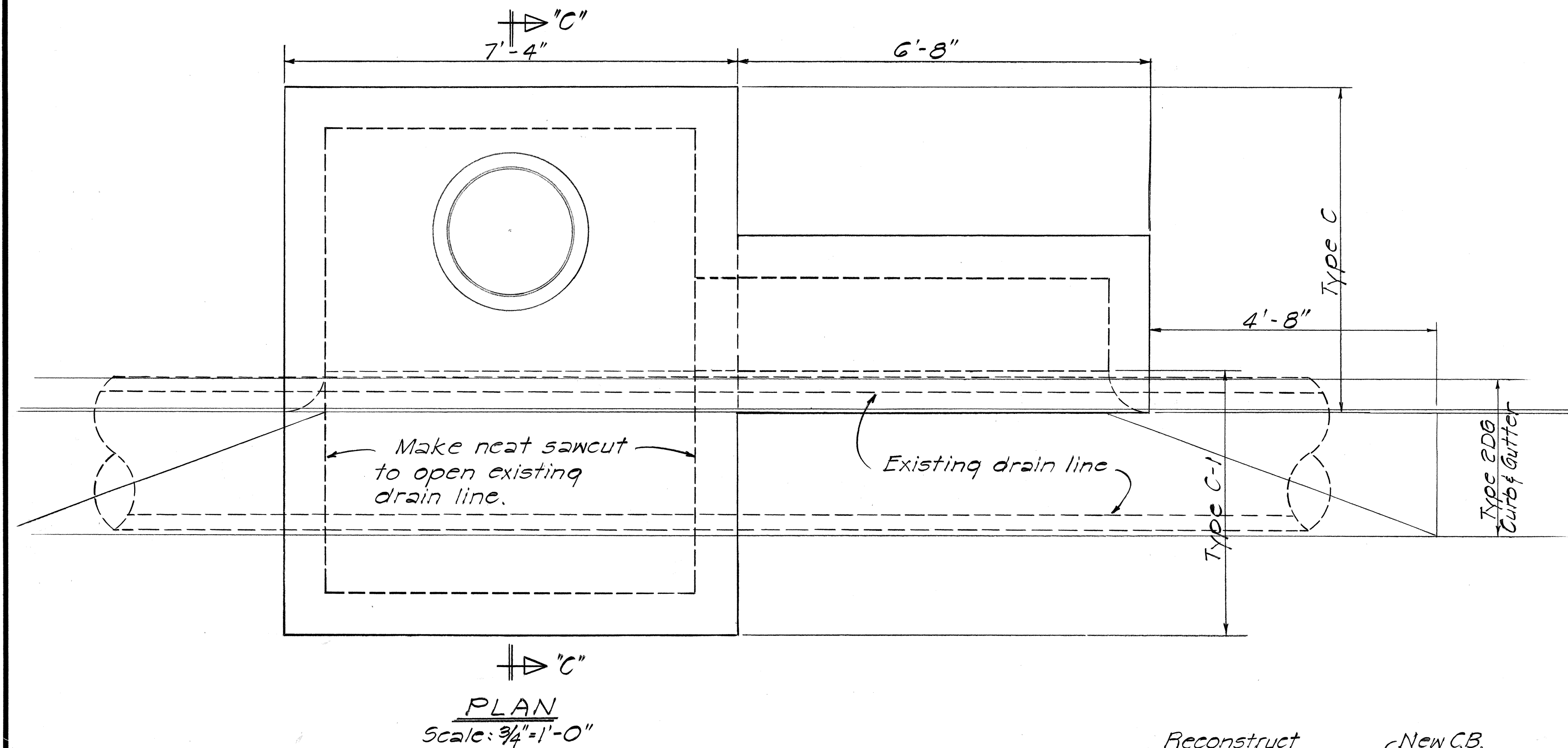


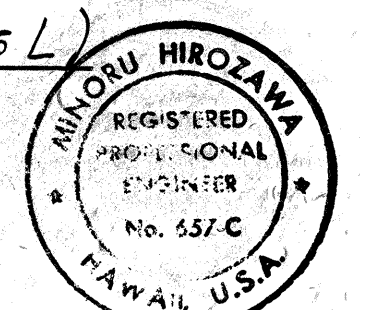
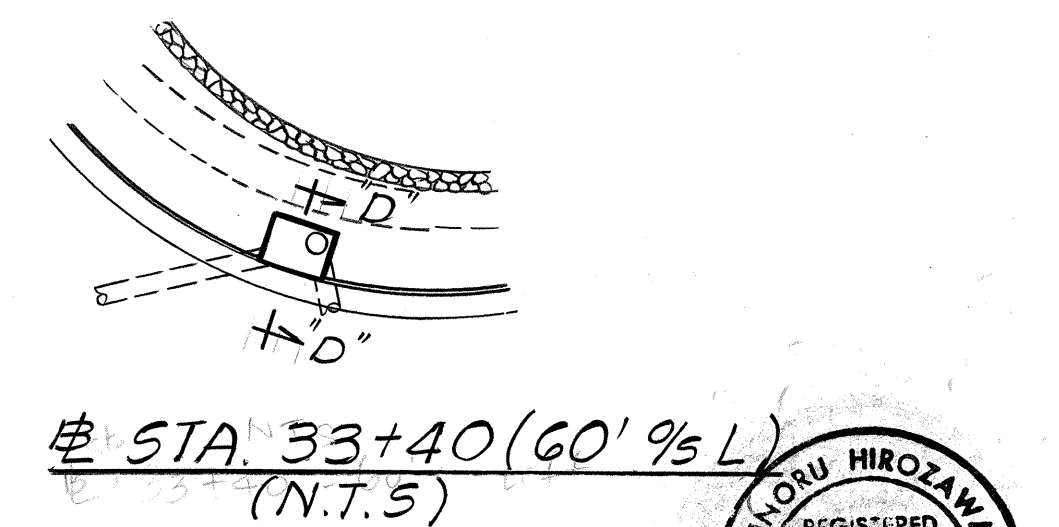
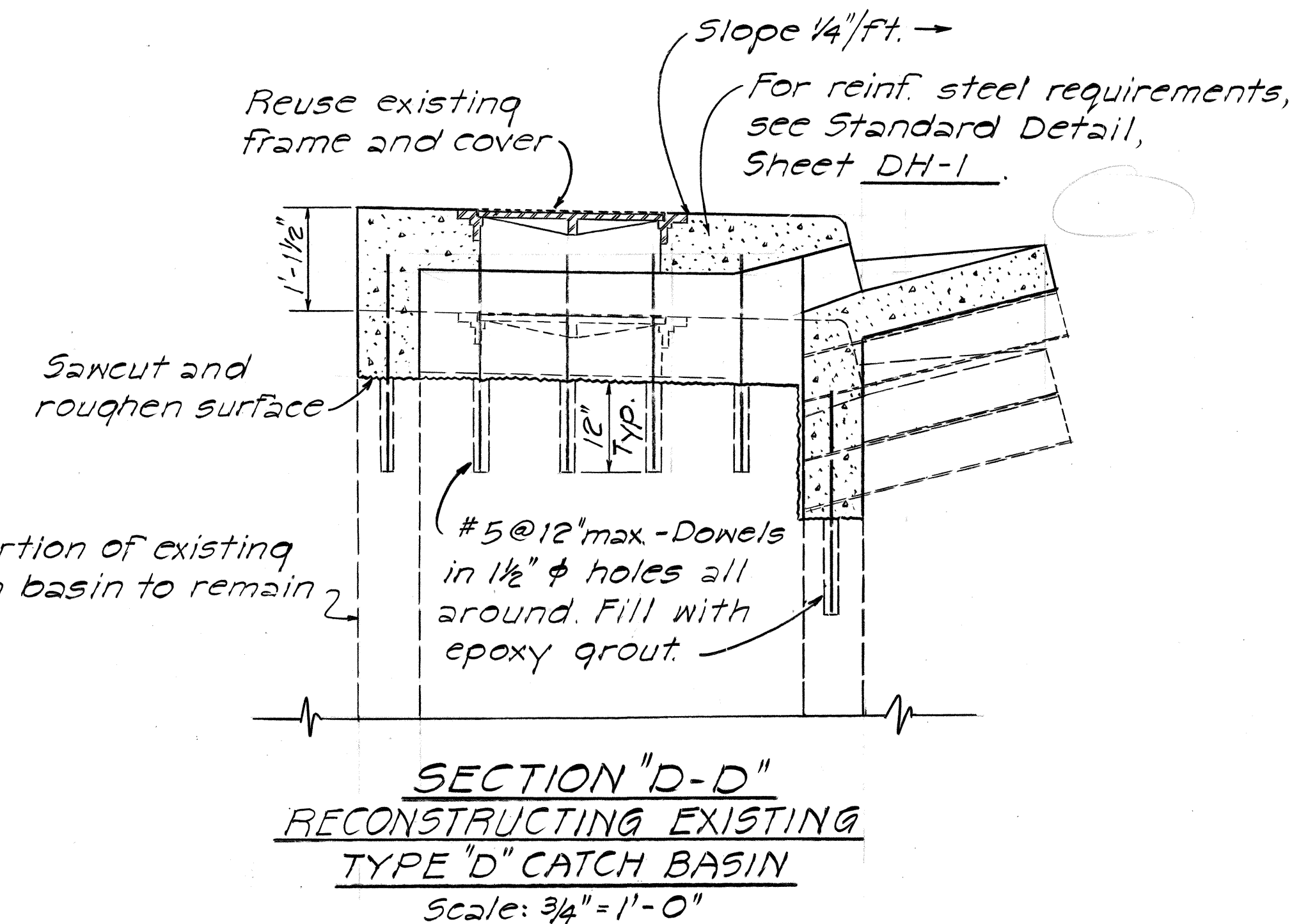
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-063-1(17)	1984	71	156

DRAINAGE NOTES:

- Existing drainage system will be functional at all times during construction. Contractor is to furnish materials, equipment, labor, tools and incidentals necessary to accomplish maintenance of flow, the cost of which shall be incidental to the various contract items.
- Demolishing and removing a portion of the existing structure shall not be paid for separately, but shall be considered incidental to the various contract items.
- Culverts within the catch basins shall be cut flush with the inside face of the wall. Above work shall be considered incidental to the various contract items.
- Manhole Rungs (12"oc.) are required when "H" is greater than 4 feet 6 inches. Only one rung (16" from the bottom) is required if "H" is 4 feet 6 inches or less. Manhole Rungs shall be considered incidental to catch basins.
- Location of Cast Iron Frame and Cover for drain manholes or catch basins shall be determine by the Engineer in the field.
- Contractor shall verify the location of all culverts in the field. Any culvert damaged during construction shall be repaired or replaced by the contractor at his expense.
- 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 1½ inches. After installing dowels, the voids shall be filled with epoxy grout as directed by the Engineer. Above work shall be considered incidental to the various contract items.
- Concrete for drain manholes and catch basins shall be Class "A".
- Concrete gutter aprons shall be considered as part of structure.
- Existing cast iron frame and covers shall be cleaned and painted before installation. Above work shall be considered incidental to the various contract items.
- Existing cast iron frame and covers not to be reused shall be cleaned and painted before returning to the Oahu District Baseyard at 727 Kakoi Street.



COMBINATION TYPE C & C-1 CATCH BASIN - STA. 15+50
Scale: 3/4" = 1'-0"



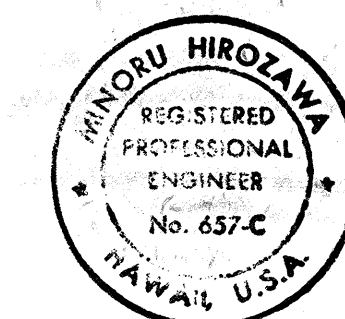
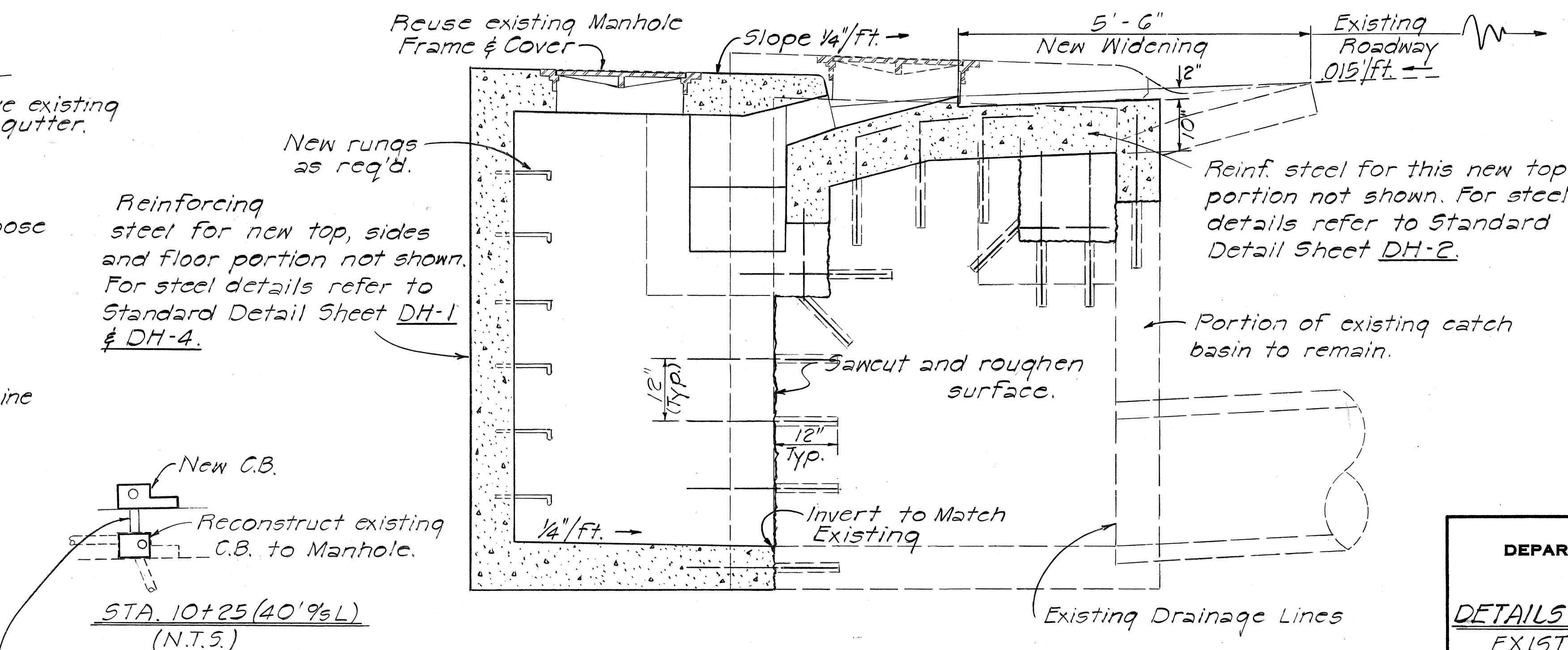
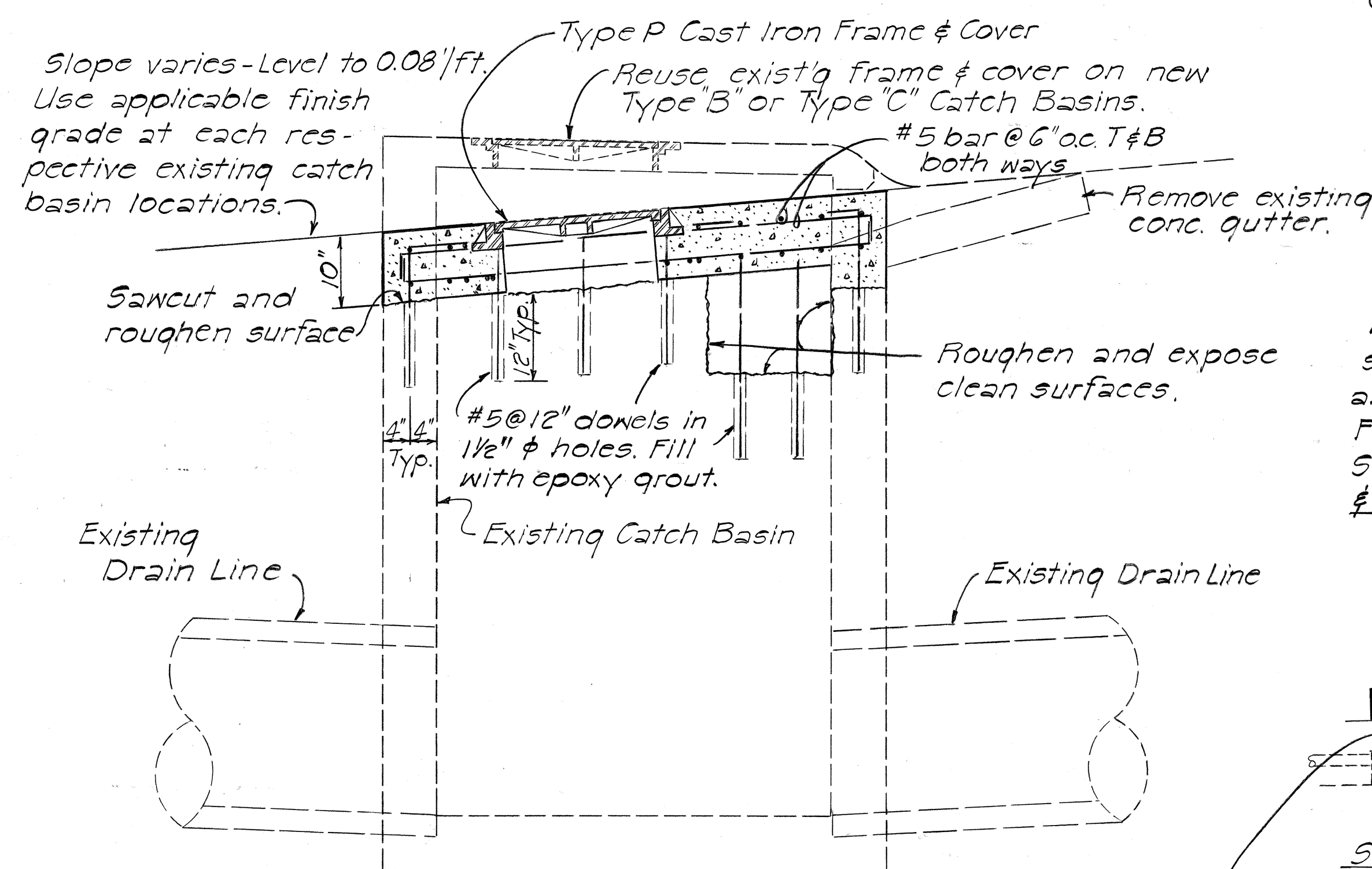
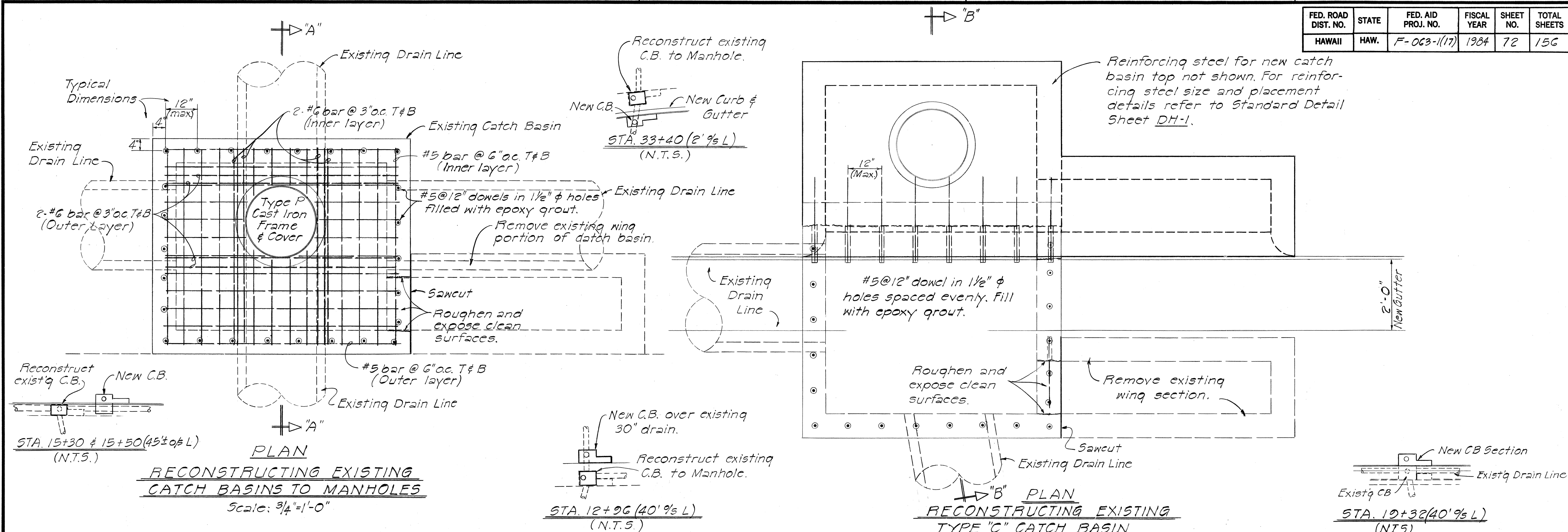
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
M. Hirozawa
Signature

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CATCH BASIN DETAILS

LIKELIKE HIGHWAY IMPROVEMENTS
KAM IV ROAD TO VICINITY OF KALIHI STREET
F.A. PROJ. NO. F-063-1(17)
Scale as shown
SHEET NO. 1 OF 2 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-063-1(17)	1984	72	156



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
 Signature: *M. Hirozawa*

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

DETAILS FOR RECONSTRUCTING EXISTING CATCH BASINS

LIKELIKE HIGHWAY IMPROVEMENTS
 KAM IV ROAD TO VICINITY OF KALIHI STREET
 F.A. PROJ. NO. F-063-1(17)
 Scale as shown

SHEET NO. 2 OF 2 SHEETS