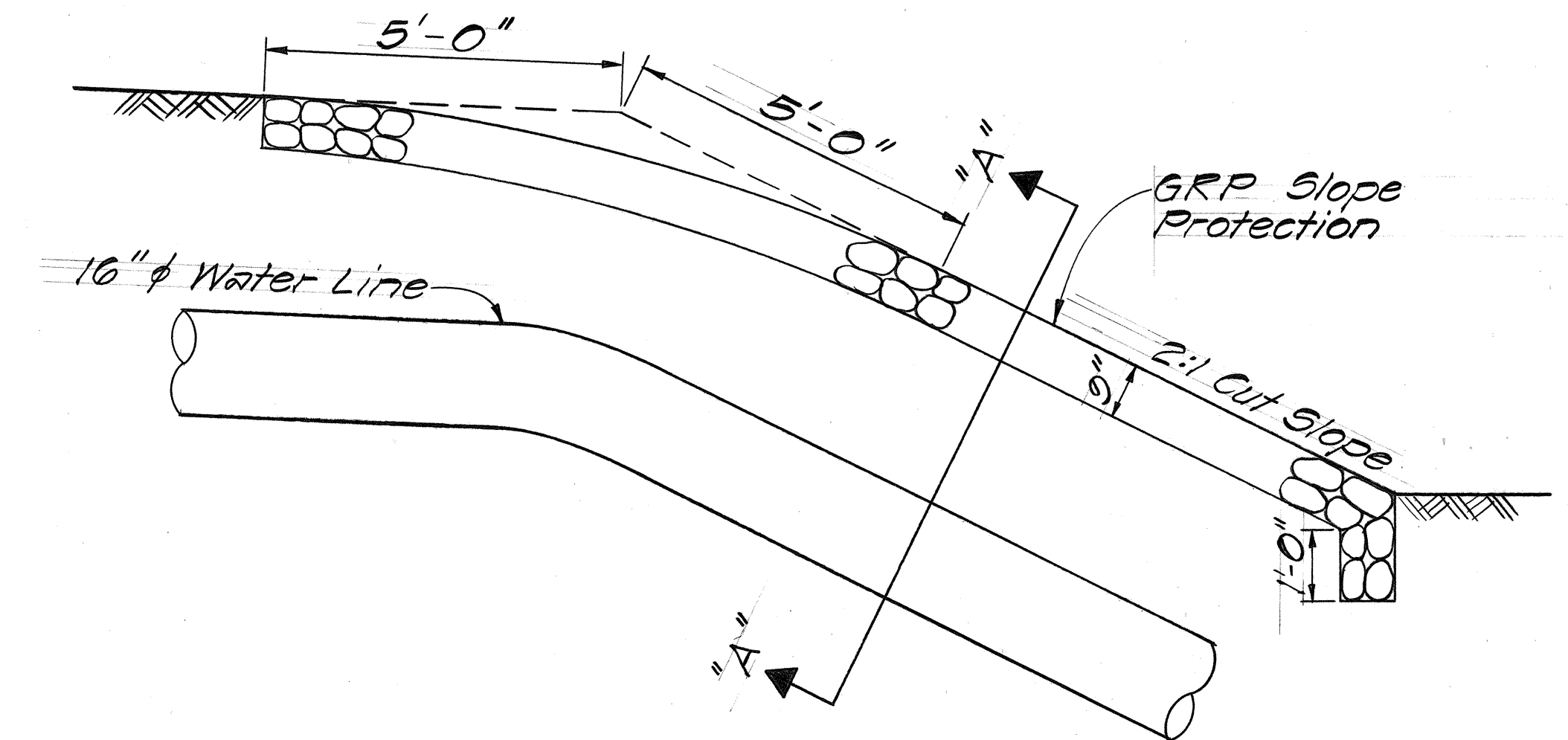


WATER NOTES

1. Unless otherwise specified, all materials and construction of water system facilities and appurtenances shall be in accordance with Section 624 of the Special Provision and the Standard Specifications for Road and Bridge Construction, dated 1976 as amended, of the Hawaii Highways Division, Department of Transportation.
2. The Contractor shall notify Maui County, Department of Water Supply in writing one week prior to commencing work on the water lines.
3. The new portion of both 16" and 12" water lines shall be cement lined Ductile Iron Pipe, thickness Class 2, mechanical joint or push-on joint.
4. Prior to excavating for the new water lines, the Contractor shall verify in the field the location of existing water lines and appurtenances. The Contractor shall hand expose the existing main to ascertain the actual location and grade of the main to be connected. All excavation work around existing water mains shall be by hand only.
5. The new water mains shall be installed, tested and placed in service prior to placing any fill or performing any work over or near the existing mains.
6. Discrepancies, if any, of alignments, grades, fittings, etc. shall not be the responsibility of the Department of Water Supply.
7. The existence and location of the water lines as shown on the plans are from the latest available data but are not guaranteed as to the accuracy or the encountering of other obstacle during the course of the work. The Contractor shall be responsible and shall pay for all damages to existing lines.
8. Wherever possible, continuous water service shall be provided on all lines during construction.
9. Concrete in reinforced concrete jacket, reaction blocks, test blocks, and water manholes shall be Class B.
10. The Contractor shall pressure test and chlorinate all water lines. The Department of Water Supply will assist the resident Engineer in coordinating and supervising this work.
11. Final connection to existing water lines will be done by Department of Water Supply.
12. Asterisk (*) indicates work to be performed by Department of Water Supply, County of Maui. Materials to be furnished by the Contractor.
13. Refer to Section 624.03 (Y) of the Special Provisions for Water System's Standard Details.

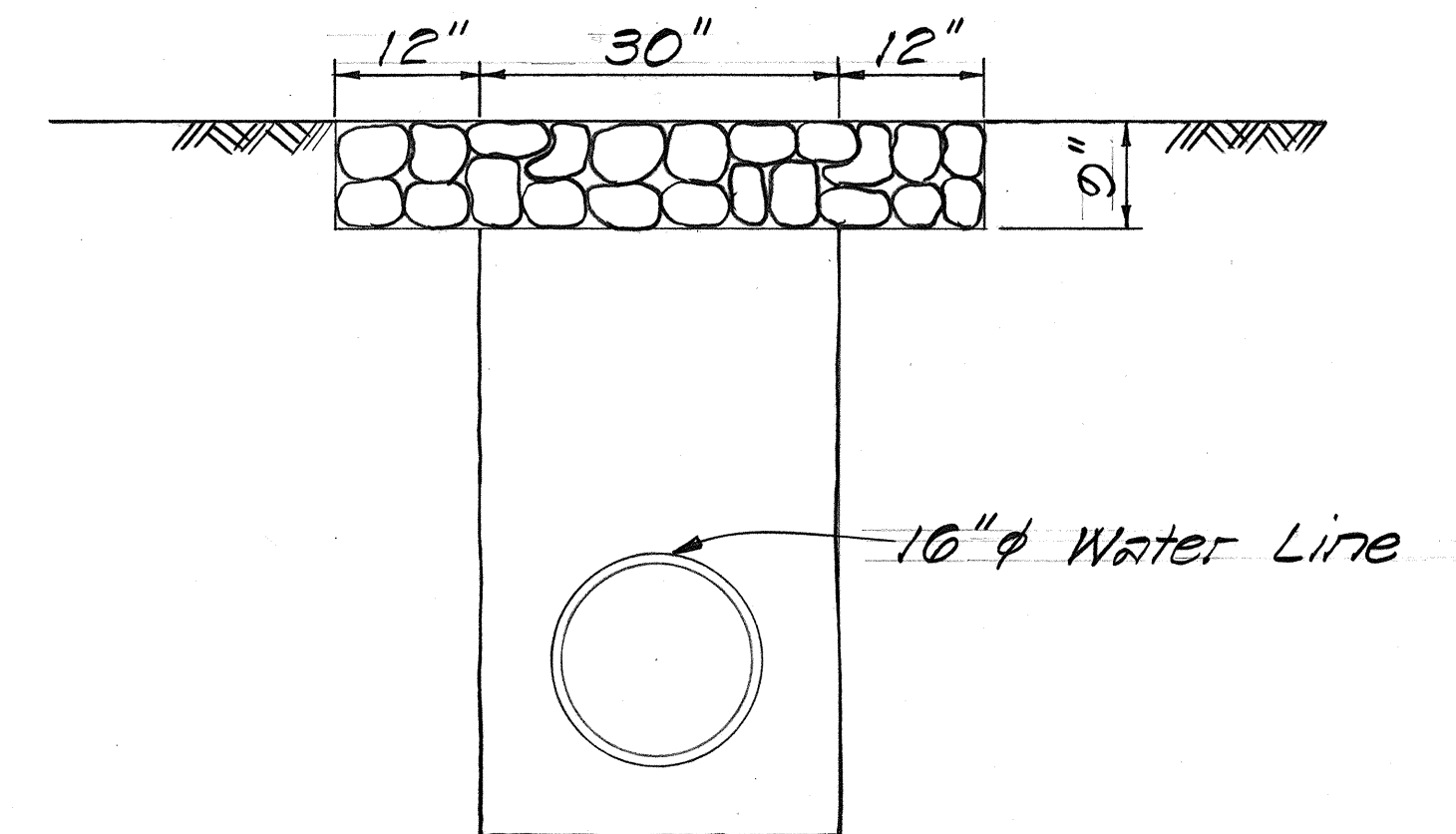
LEGEND

- ep Existing Electric or Telephone Pole to remain.
- wmh or Existing Water Manhole or Gate Valve.
- New Water Manhole
- w—12— Existing Water Line
- W—12— New Water Line
- ⊗ New Water Valve
- △ Concrete Reaction Block



PROFILE GRP SLOPE PROTECTION

Scale: 1/2" = 1'-0"



SECTION "A-A"

Scale: 3/4" = 1'-0"

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
TRACED BY		
DESIGNED BY		
CHECKED BY		
NO.		

APPROVED: *[Signature]* 1-18-78
DIRECTOR OF WATER SUPPLY DATE
COUNTY OF MAUI

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

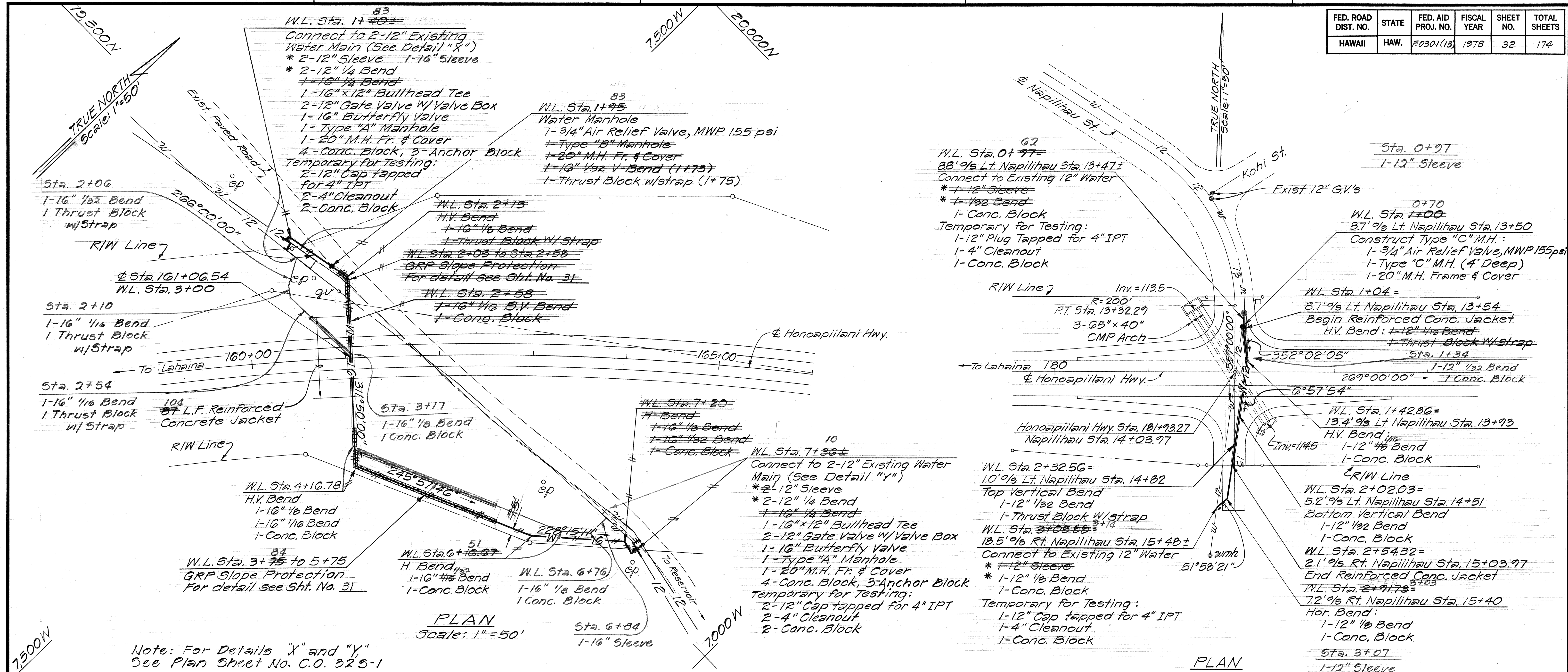
WATER NOTES
LEGEND AND DETAILS

HONOAPIILANI HIGHWAY
KAHANA TO ALAELOA
F.A. Proj. No. F-030-1(13)

Scale: As Shown Date: Dec., 1977

SHEET NO. 1 OF 4 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F0301(13)	1978	32	174



DATE	11/27/78
DESIGNED BY	ADD
TRACED BY	ADD
NOTED BY	ADD
CHECKED BY	ADD
ORIGINAL PLAN	ADD
NOTE BOOK	ADD
NO.	ADD

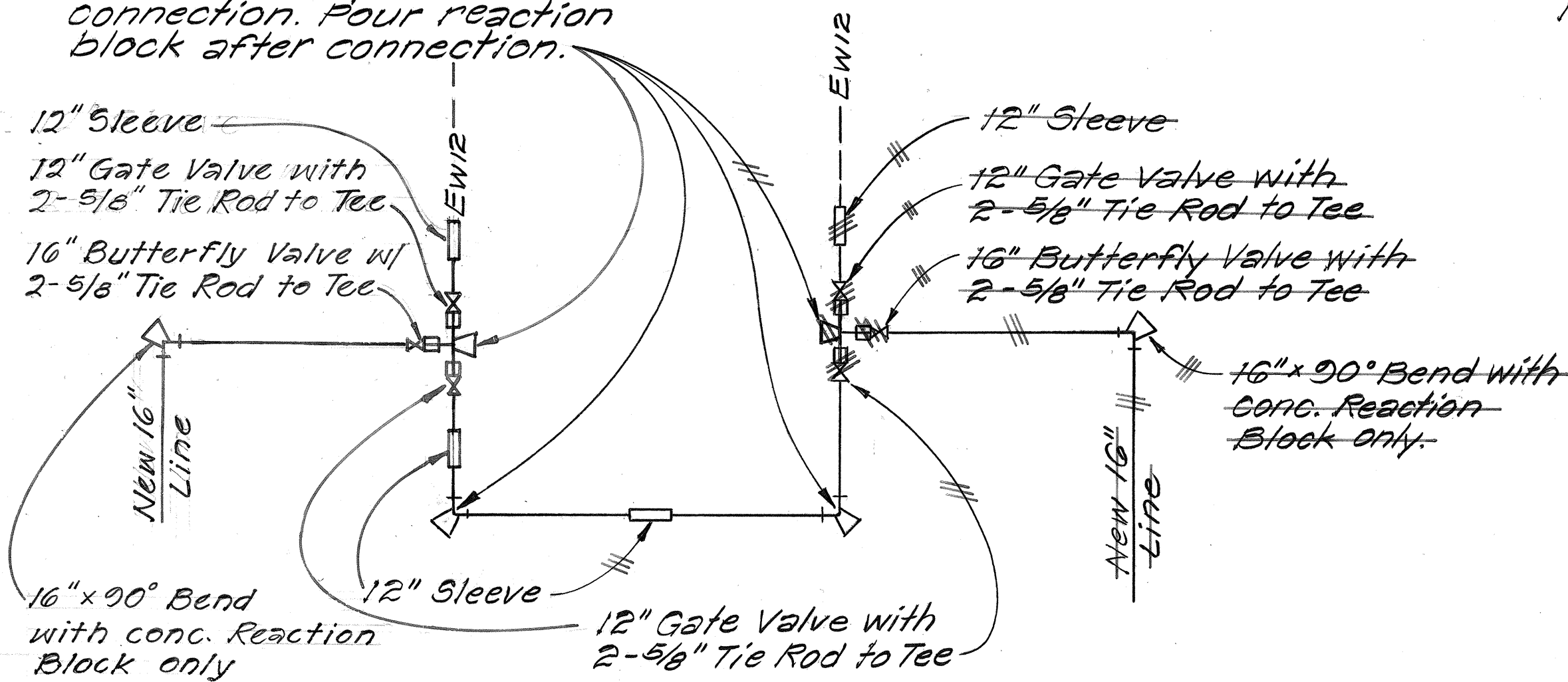
11/27/78	Added note and anchor blocks
DATE	REVISION

APPROVED: *[Signature]* 1-18-78
DIRECTOR OF WATER SUPPLY
COUNTY OF MAUI

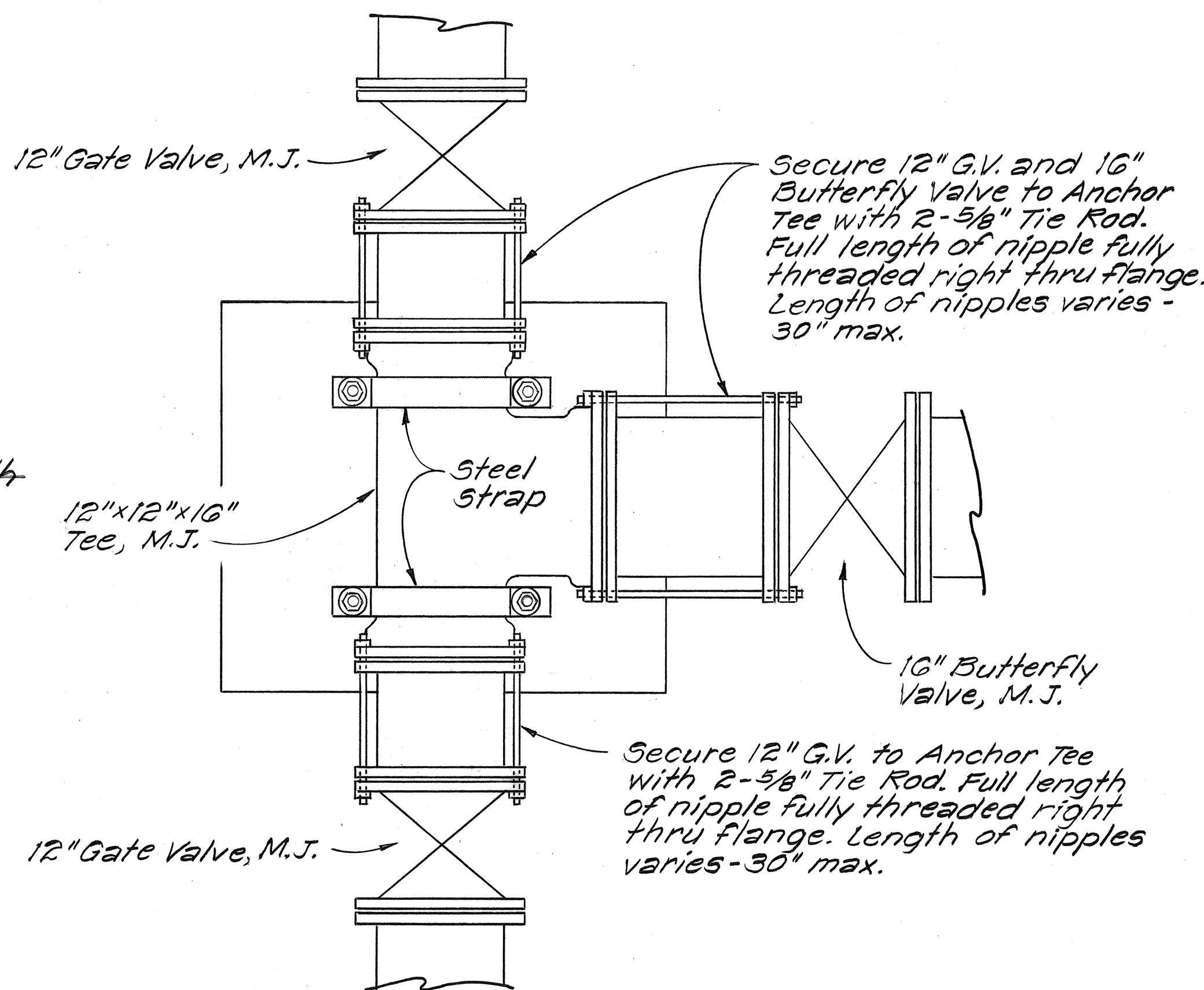
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
PLAN
WATERLINE FACILITIES AT
STA. 161+06.54 & 182+00
HONOAPIILANI HIGHWAY
KAHANA TO ALAELOA
F.A. Proj. No. F-030-1(13)
Scale: As Shown Date: Dec. 1977
SHEET NO. 2 OF 4 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-030-1(13)	1978	C0325-1	174

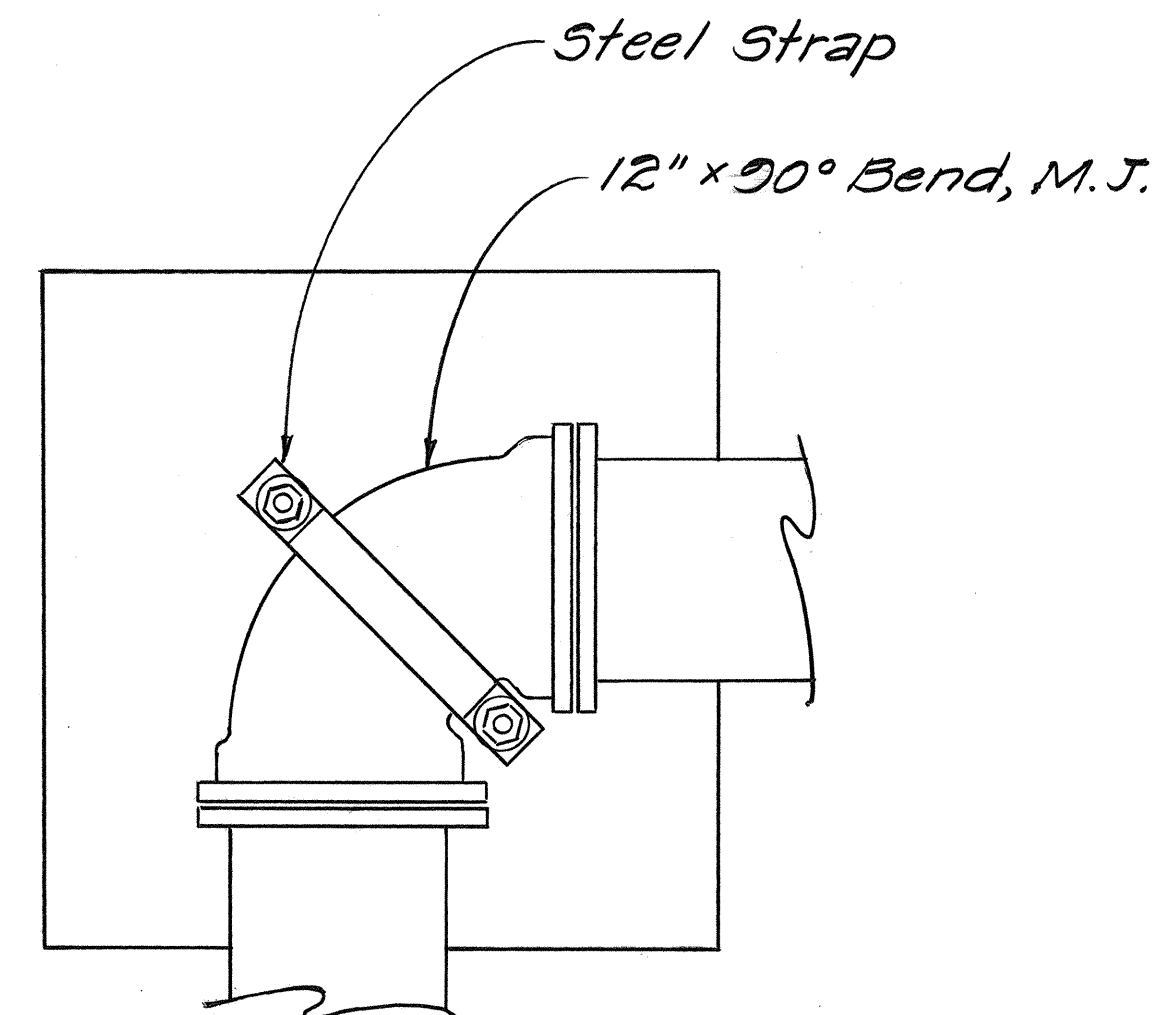
Use anchor block with straps for these fittings. Concrete for anchor block shall be poured at least 1 week prior to connection. Pour reaction block after connection.



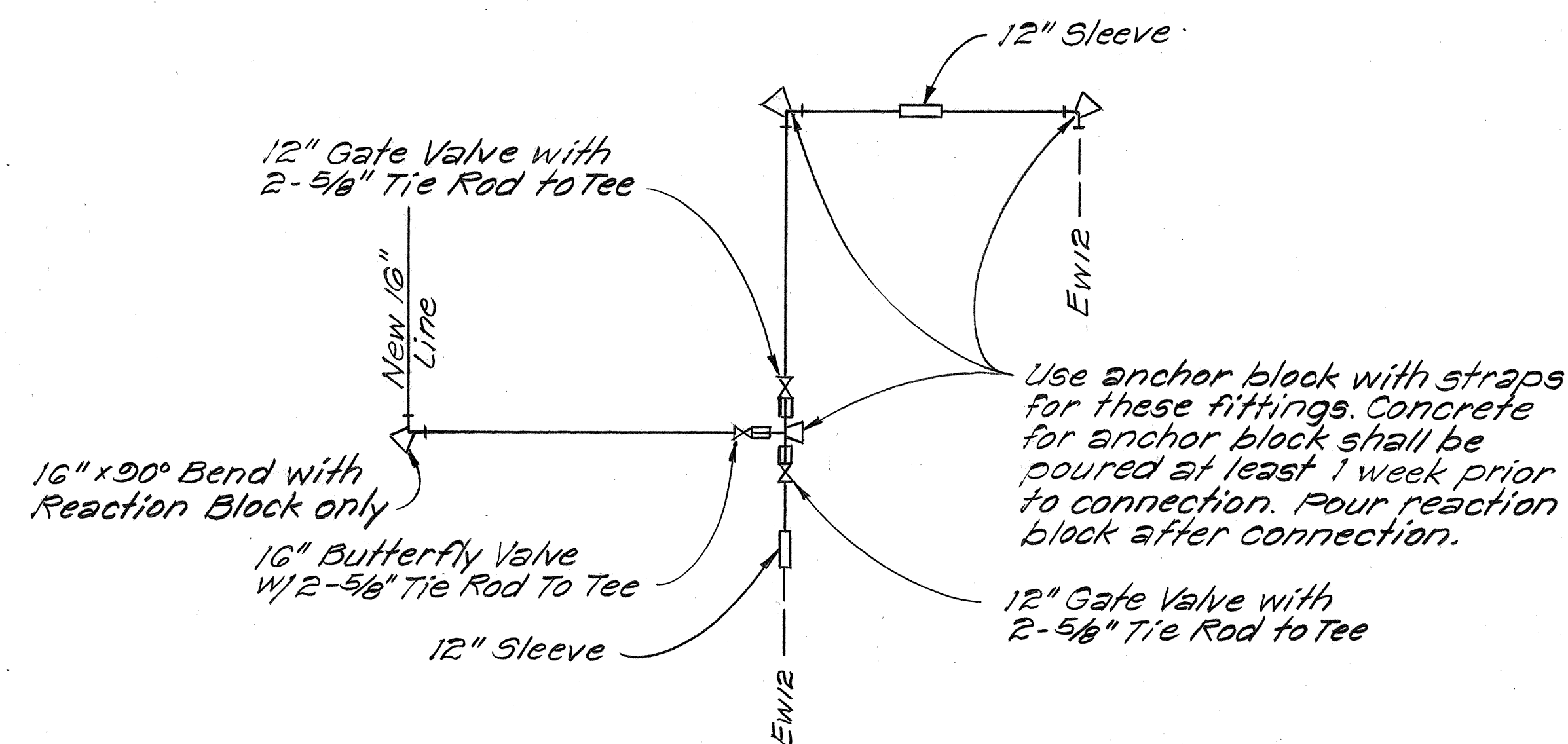
DETAIL X
N.T.S.



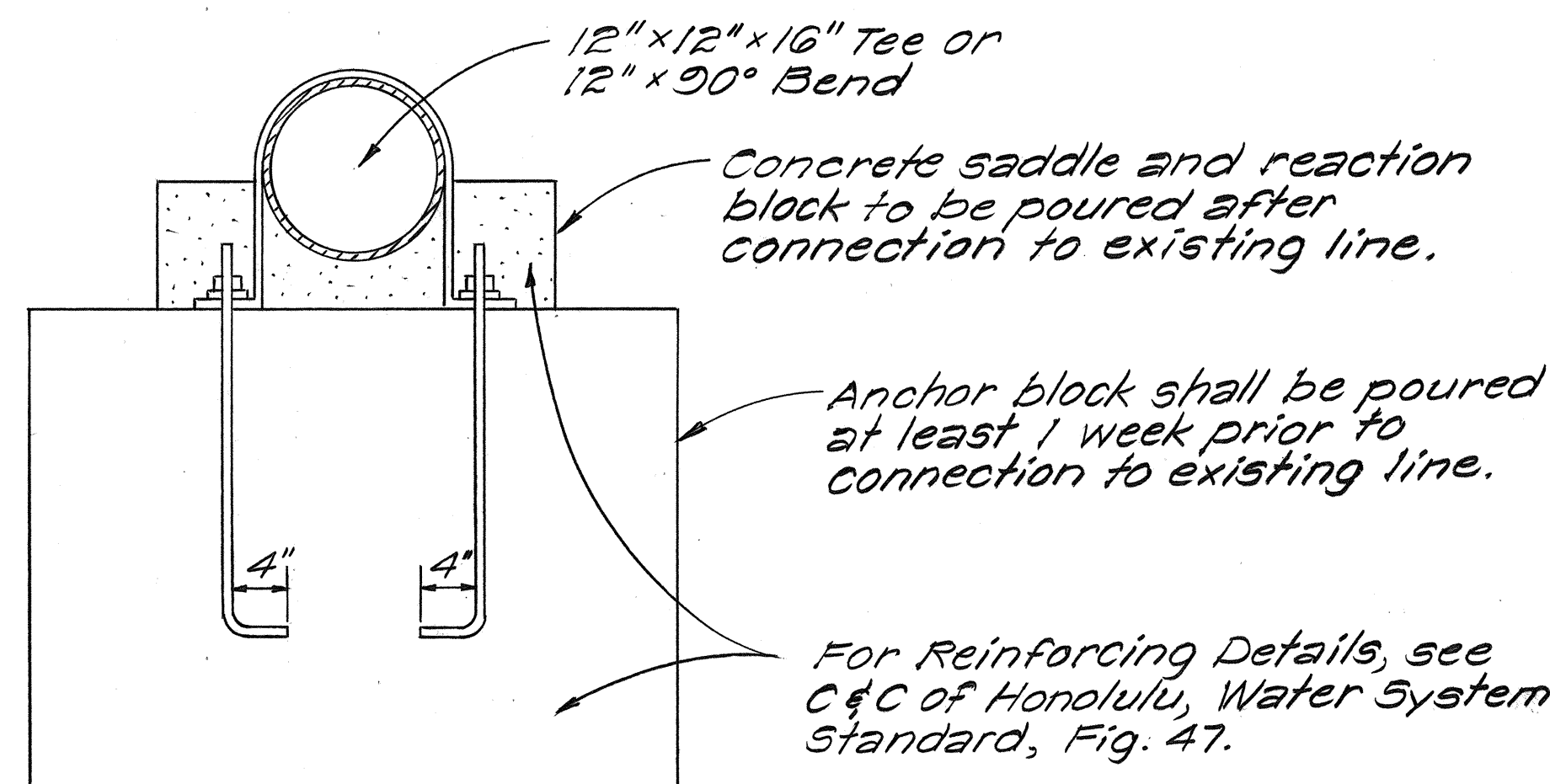
TYPICAL ANCHOR AT TEE
Scale: 1"=1'-0"



TYPICAL ANCHOR AT 90° BEND
Scale: 1"=1'-0"



DETAIL Y
N.T.S.



ANCHOR ELEVATION
Scale: 1"=1'-0"

NOTE:
Night time connection to main required.

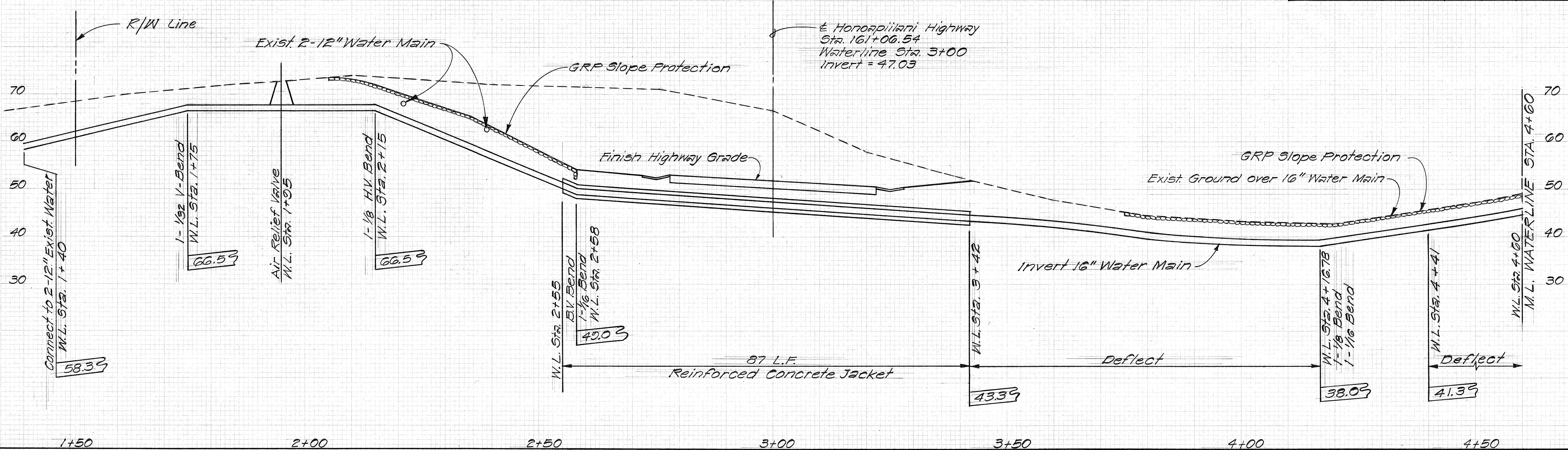
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION
WATERLINE FACILITIES AT
± STA. 161+06.54
HONOAPIILANI HIGHWAY
KAHANA TO ALAELOA
F.A. Proj. No. F-030-1(13)
Scale: As Shown Date: Nov, 1978
SHEET No. 2A OF 4 SHEETS

C0325-1

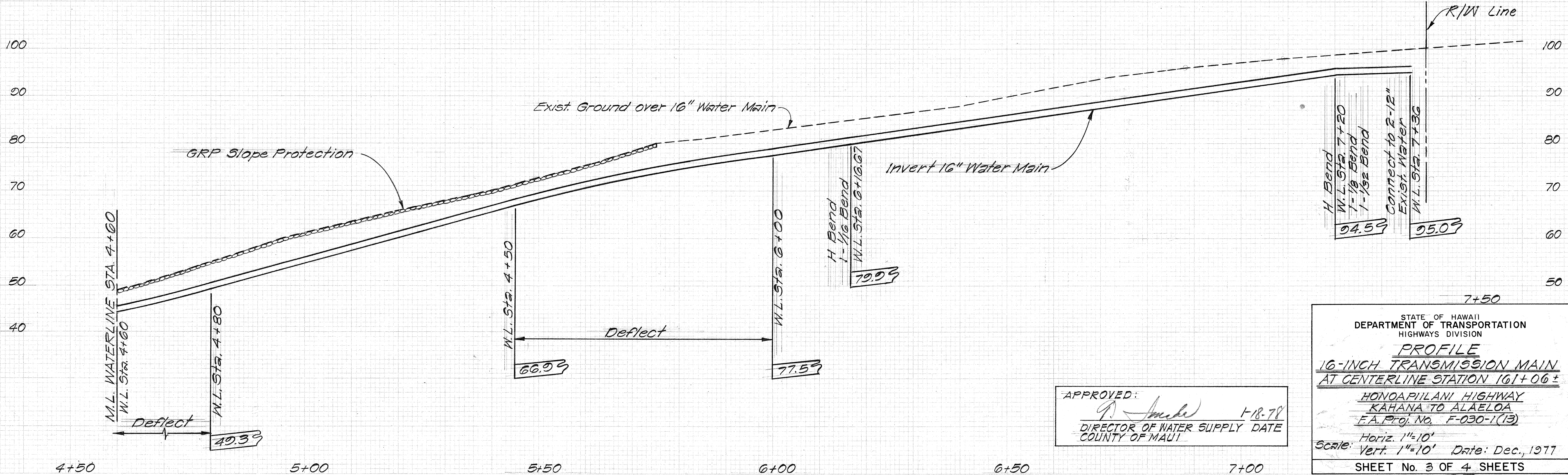
ORIGINAL PLAN	DATE
DRAWN BY	
DESIGNED BY	
NOTED BY	
CHECKED BY	
NO.	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-030-1(13)	1978	33	174

FINAL	SURVEYED	DATE
SURVEY	PLOTTED	
NOTE BOOK	AREAS	
NO.	CHECKED	



FINAL	SURVEYED	DATE
SURVEY	PLOTTED	
NOTE BOOK	AREAS	
NO.	CHECKED	



APPROVED: *[Signature]* 1-18-78
 DIRECTOR OF WATER SUPPLY DATE
 COUNTY OF MAUI

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PROFILE

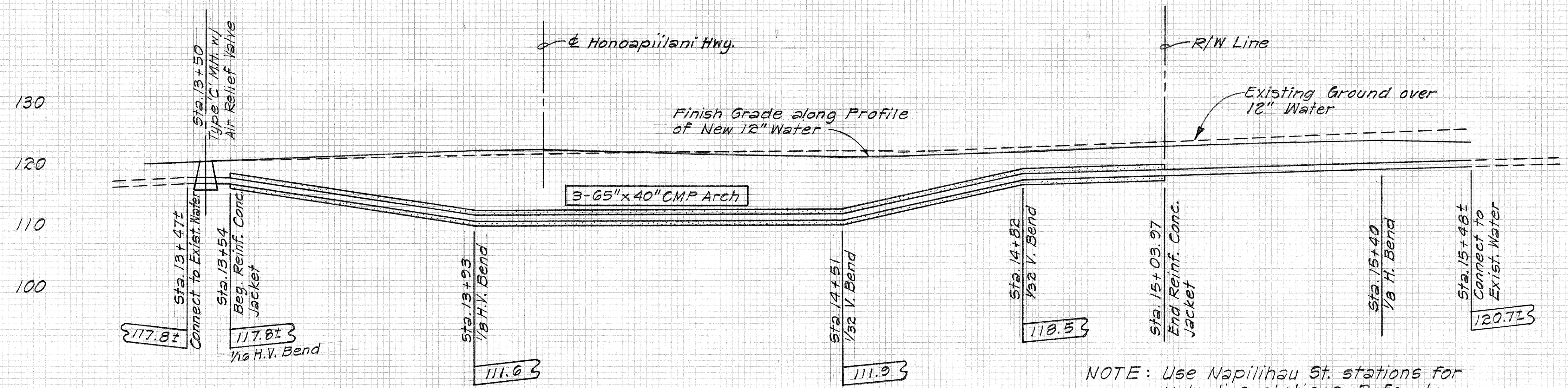
16-INCH TRANSMISSION MAIN
AT CENTERLINE STATION 161+06±

HONOAPIILANI HIGHWAY
KAHANA TO ALAELOA
F.A. Proj. No. F-030-1(13)

Horiz. 1"=10'
Scale: Vert. 1"=10' Date: Dec., 1977

SHEET No. 3 OF 4 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F0304(13)	1978	34	174



NOTE: Use Napili Hau St. stations for waterline stations. Refer to Plan for 9/8 from & Napili Hau St.

PROFILE
12-INCH WATER CROSSING AT
& STA. 182+00±
 Scale: Hor. 1"=10'
 Vert. 1"=10'

APPROVED: *[Signature]* 1-18-78
 DIRECTOR OF WATER SUPPLY DATE
 COUNTY OF MAUI

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
PROFILE
12-INCH WATER LINE AT
& STA. 182+00
HONOAPIʻILANI HIGHWAY
KAHANA TO ALAELOA
FA. PROJ. NO. F-030-1(13)
 Scale: Hor. 1"=10'
 Vert. 1"=10' Date: Dec., 1977
 SHEET No. 4 OF 4 SHEETS