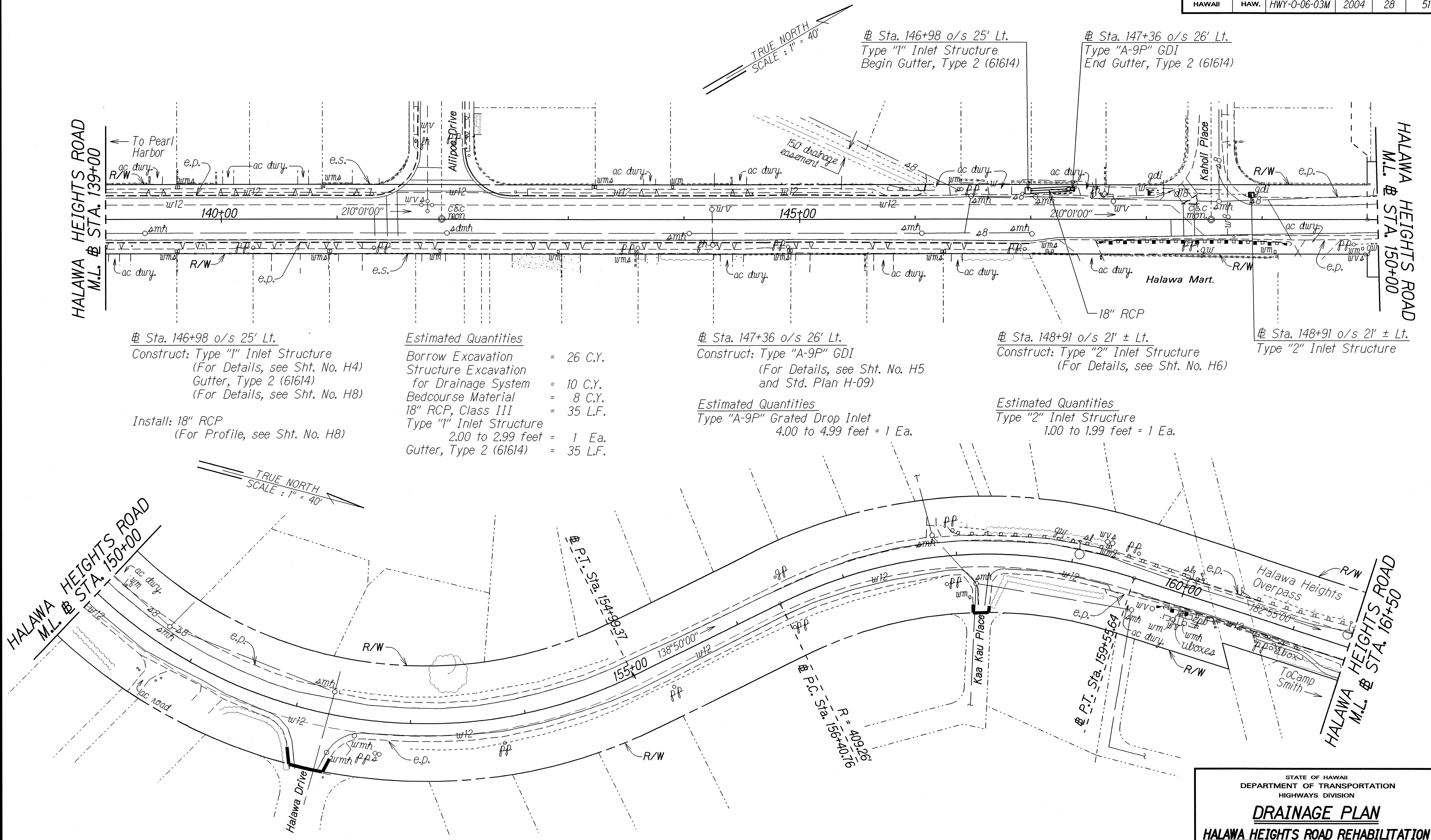


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-O-06-03M	2004	28	51



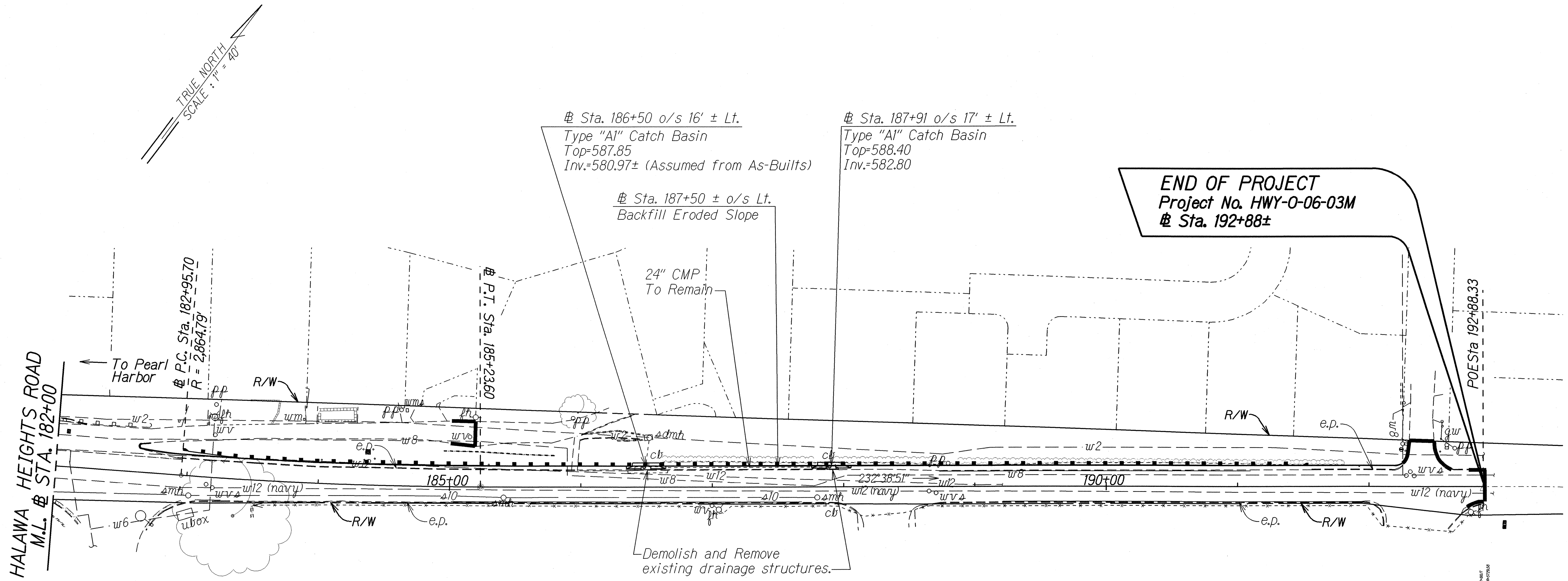
ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	10/19/04
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE PLAN
HALAWA HEIGHTS ROAD REHABILITATION
Kikania Street to Fernridge Place and
Kahuapaani Interchange, Moanalua Freeway, H201
Project No. HWY-O-06-03M
Scale: 1"=40' Date: May 19, 2004

SHEET No. **HI** OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-06-03M	2004	30	51



± Sta. 186+50 o/s 16' ± Lt.
Construct: Type "A1" Catch Basin
(For Details, see Std. Plan H-02)

Estimated Quantities
Type "A1" Catch Basin
6.00 to 6.99 feet = 1 Ea.

± Sta. 187+50 ± o/s Lt.
Construct: Backfill Eroded Slope

Estimated Quantities
Borrow Excavation = 74 C.Y.

± Sta. 187+91 o/s 17' ± Lt.
Construct: Type "A1" Catch Basin

Estimated Quantities
Type "A1" Catch Basin
5.00 to 5.99 feet = 1 Ea.

Note: Contractor to verify location of existing
24" Corrugated Metal Pipe prior to
construction of Type "A1" Catch Basins.

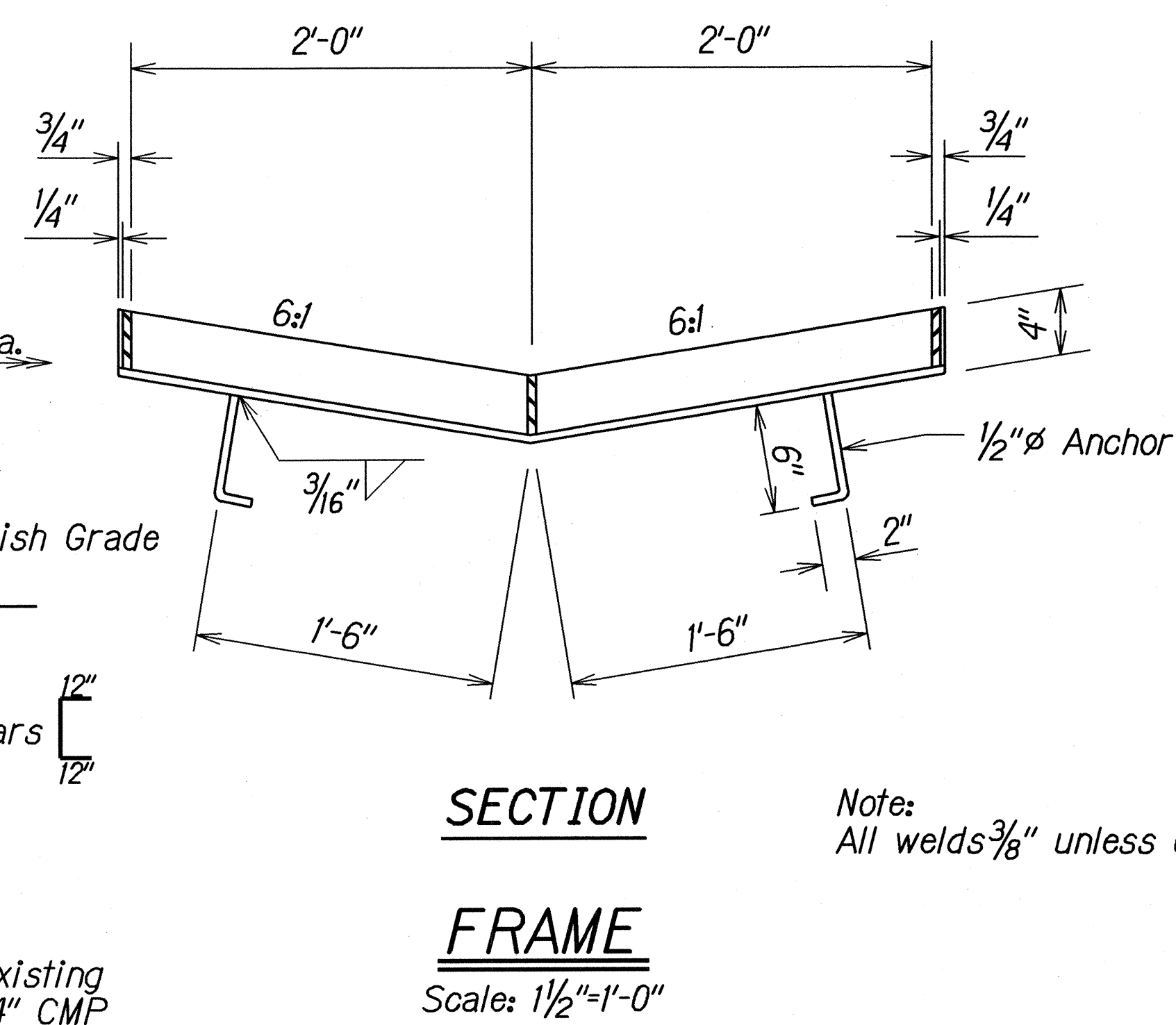
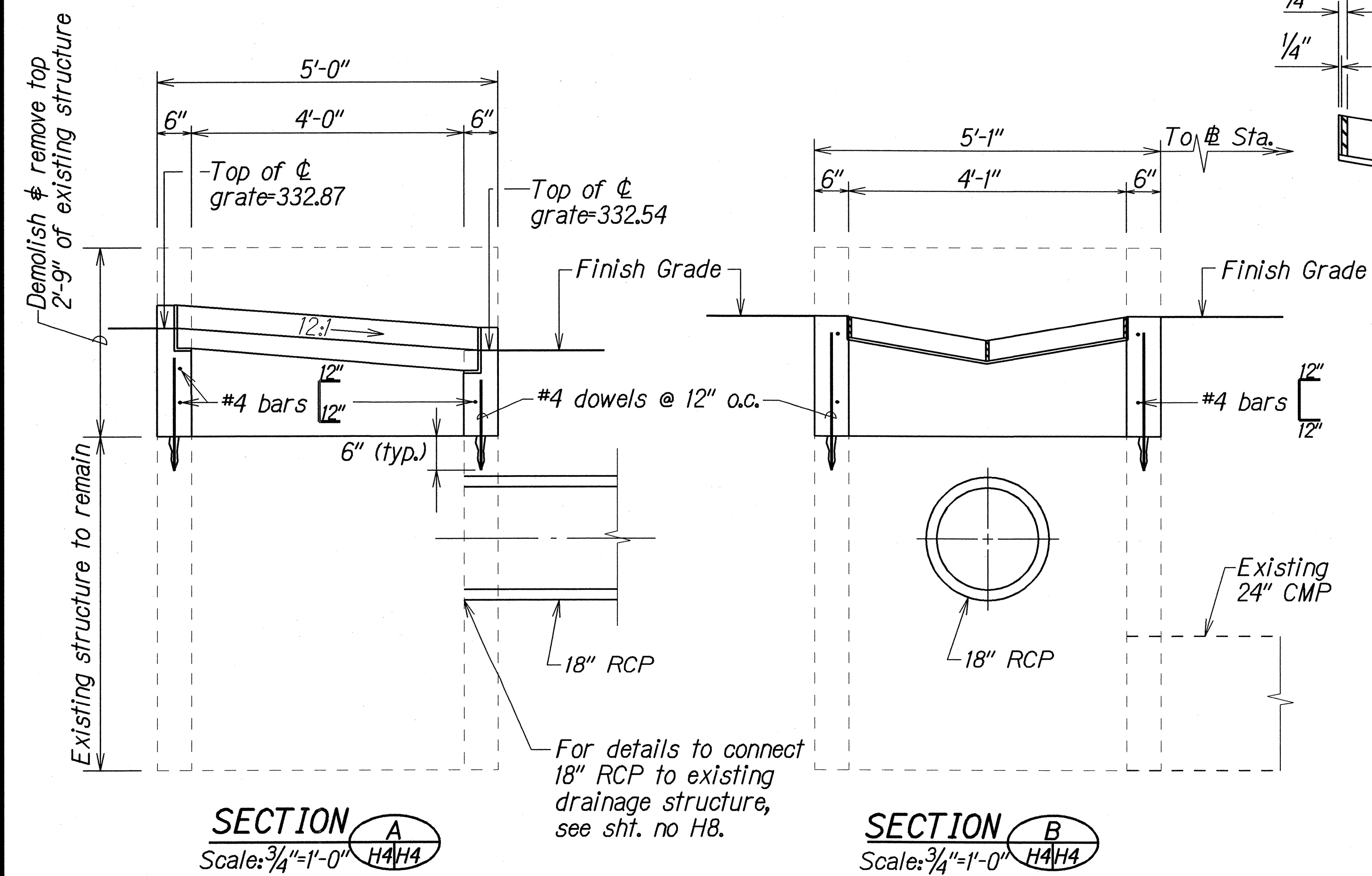
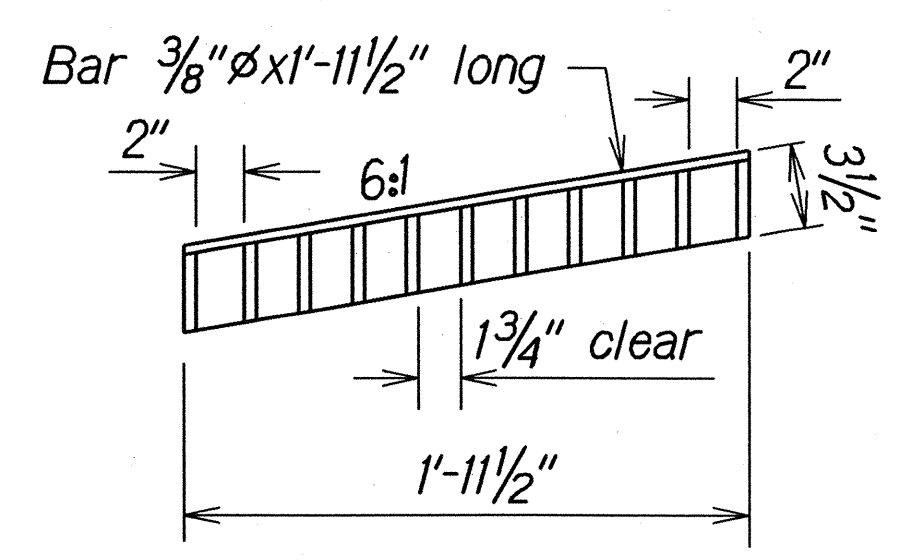
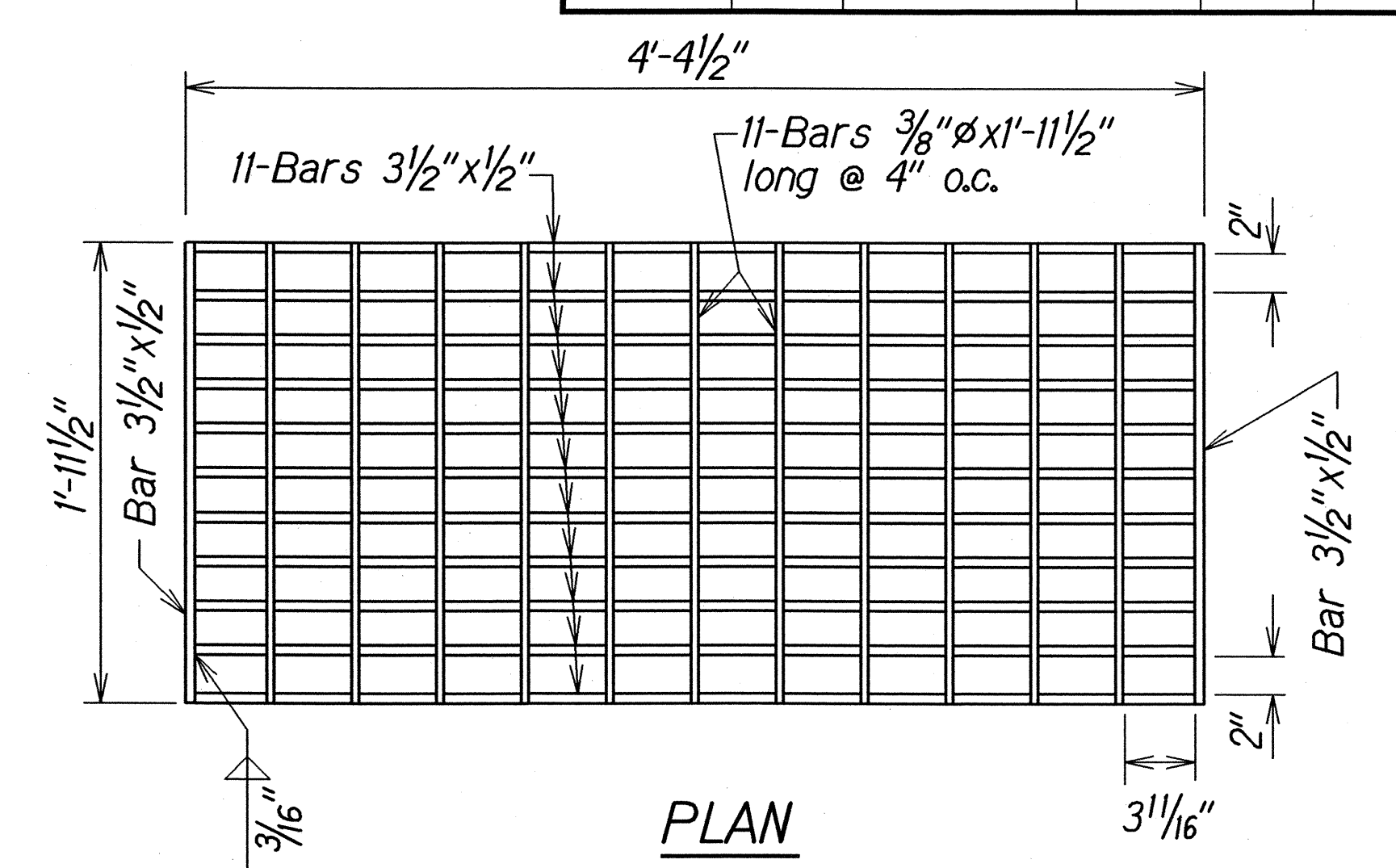
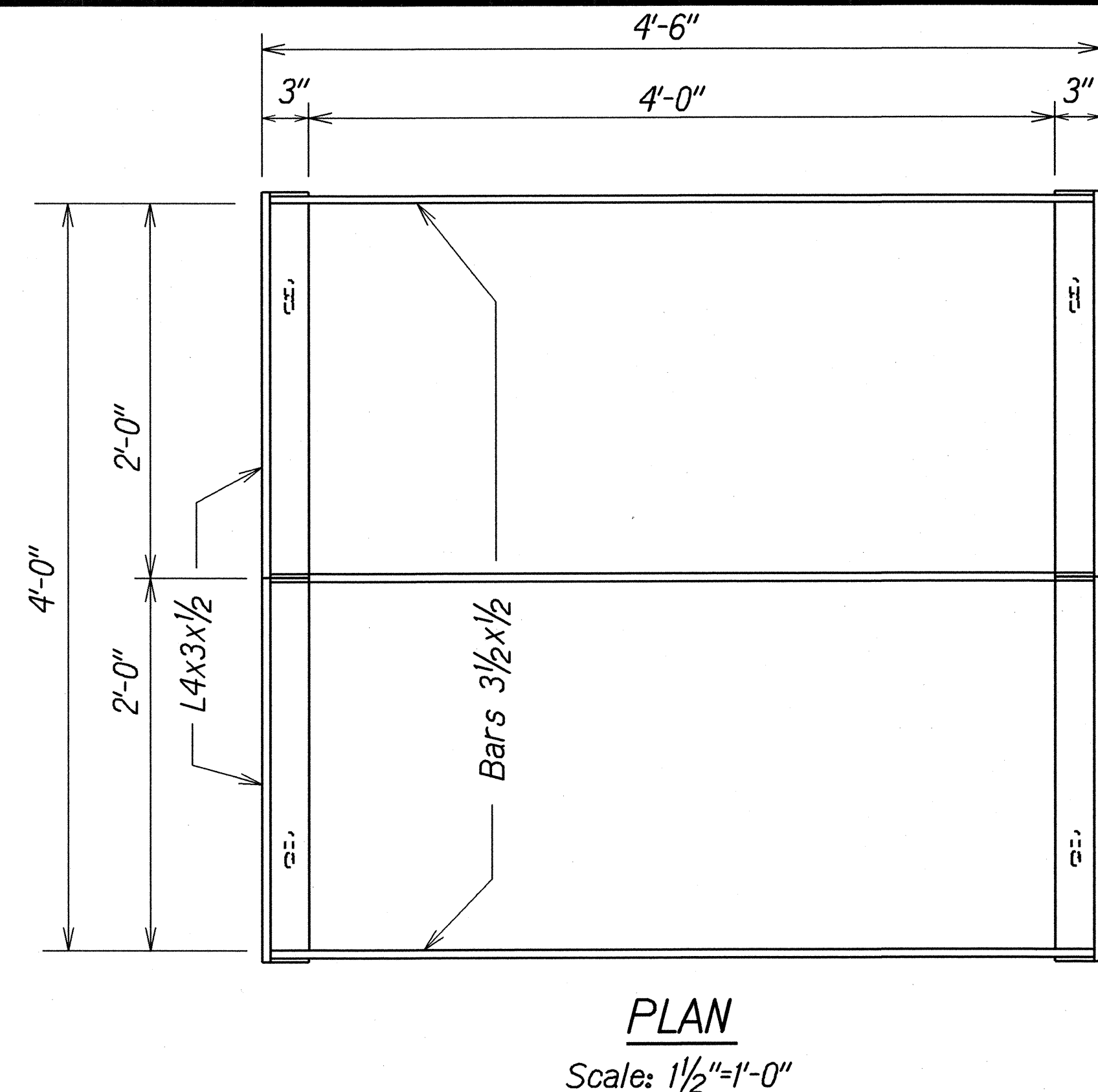
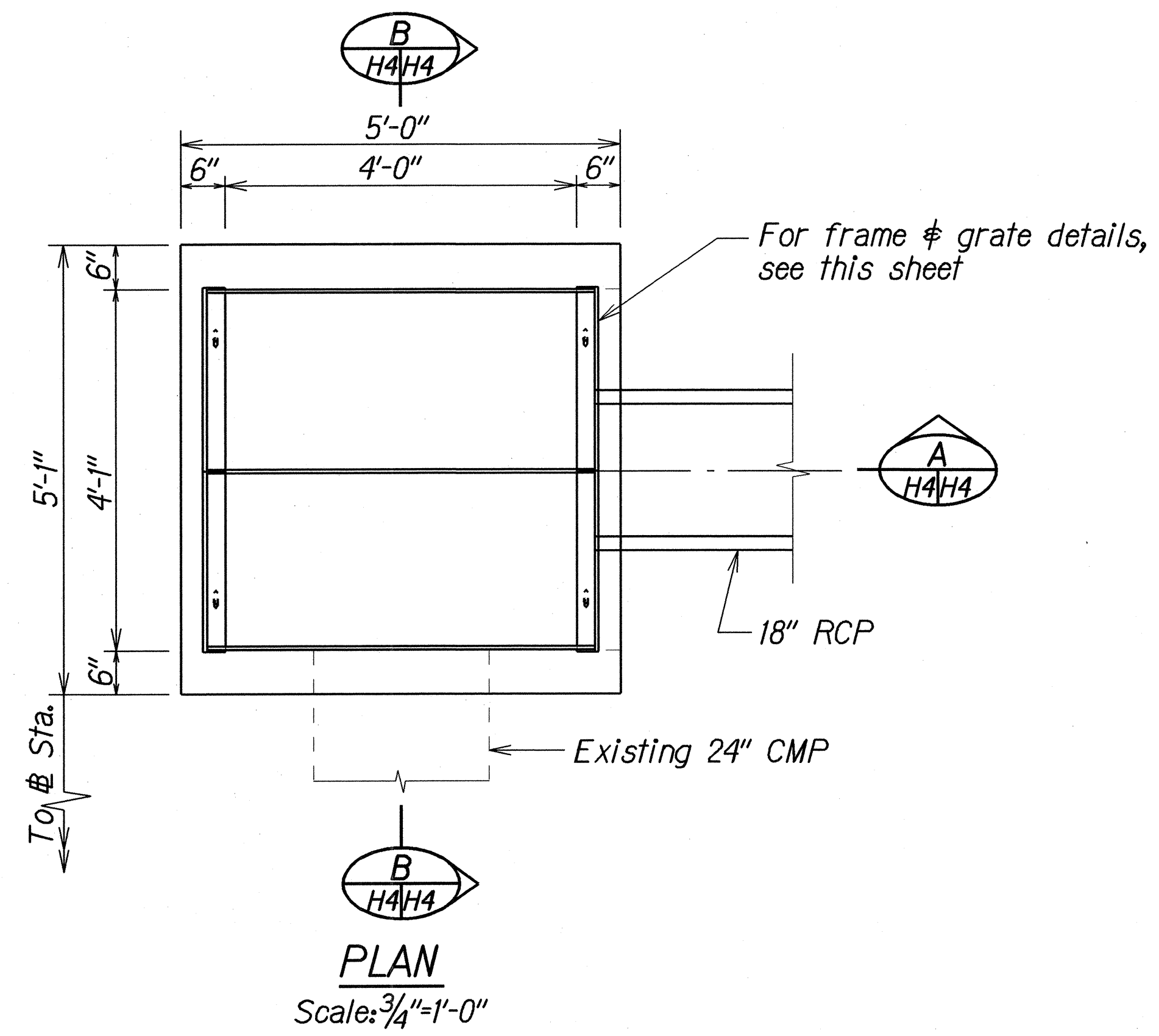
ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
PLAN	DRAWN BY	11/19/04
DESIGNED BY	TRACED BY	
QUANTITIES BY	QUANTITIES BY	
CHECKED BY	CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

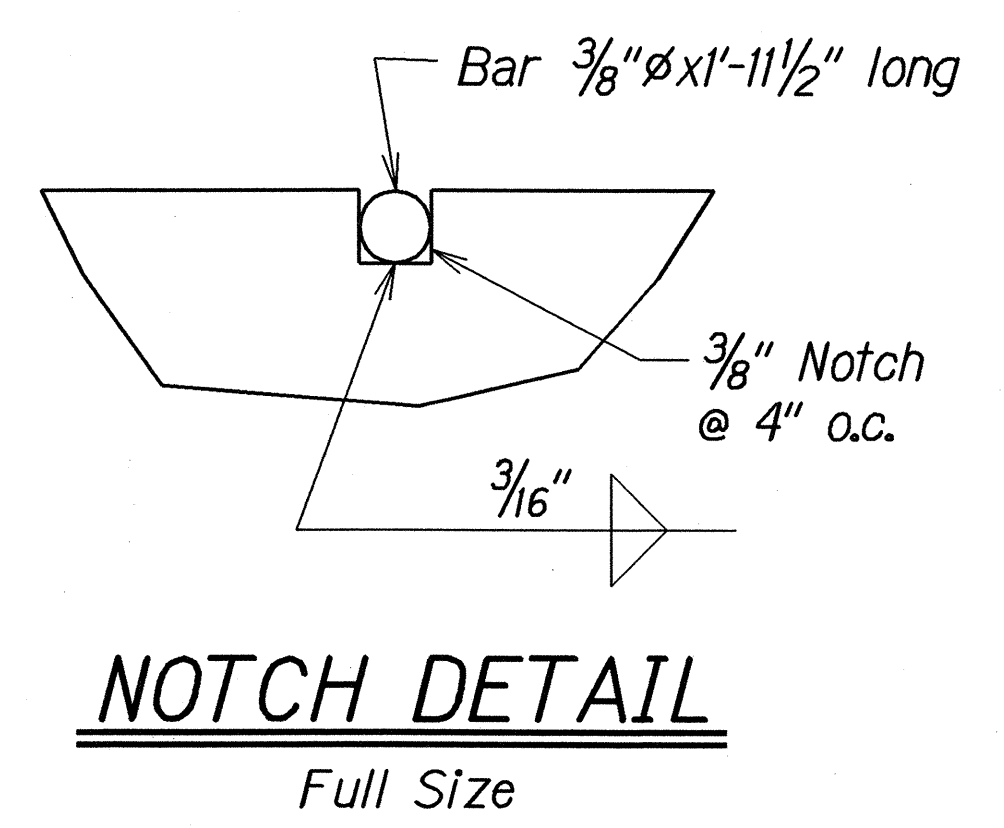
DRAINAGE PLAN
HALAWA HEIGHTS ROAD REHABILITATION
Kikania Street to Fernridge Place and
Kahuapaani Interchange, Moanalua Freeway, H201
Project No. HWY-0-06-03M
Scale: 1"=40' Date: May 19, 2004

SHEET No. H3 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-06-03M	2004	31	51



Note:
All welds 3/8" unless otherwise noted.



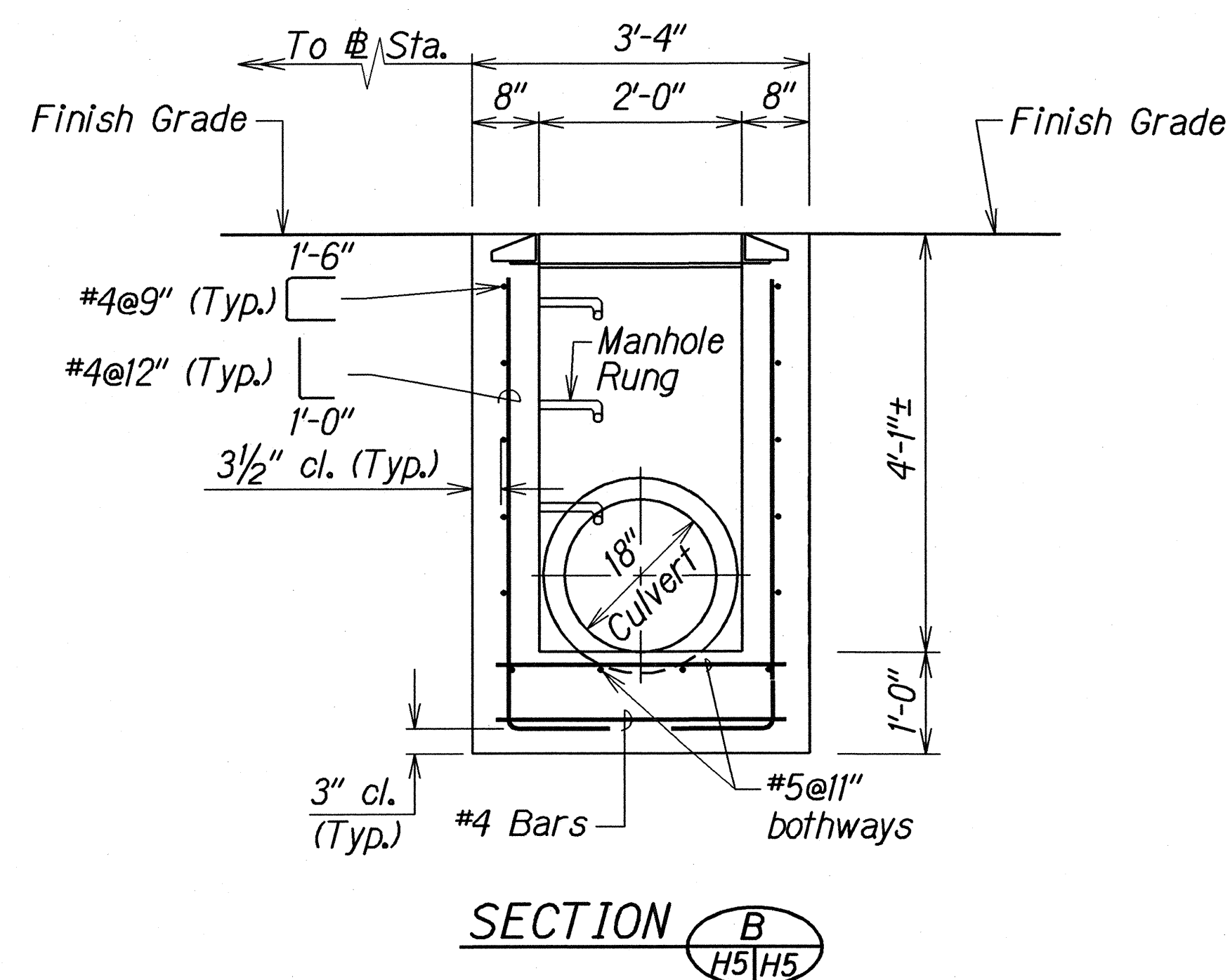
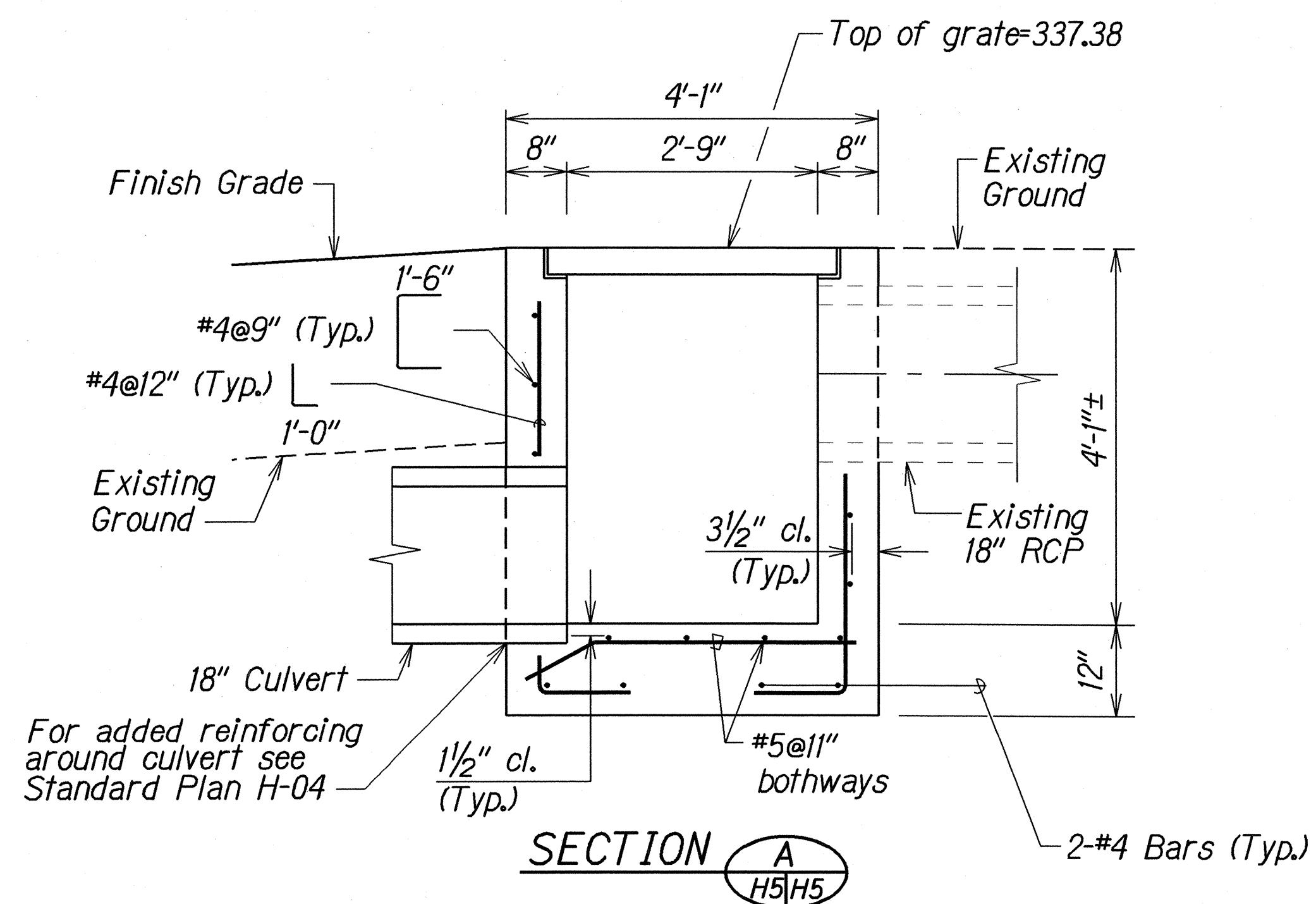
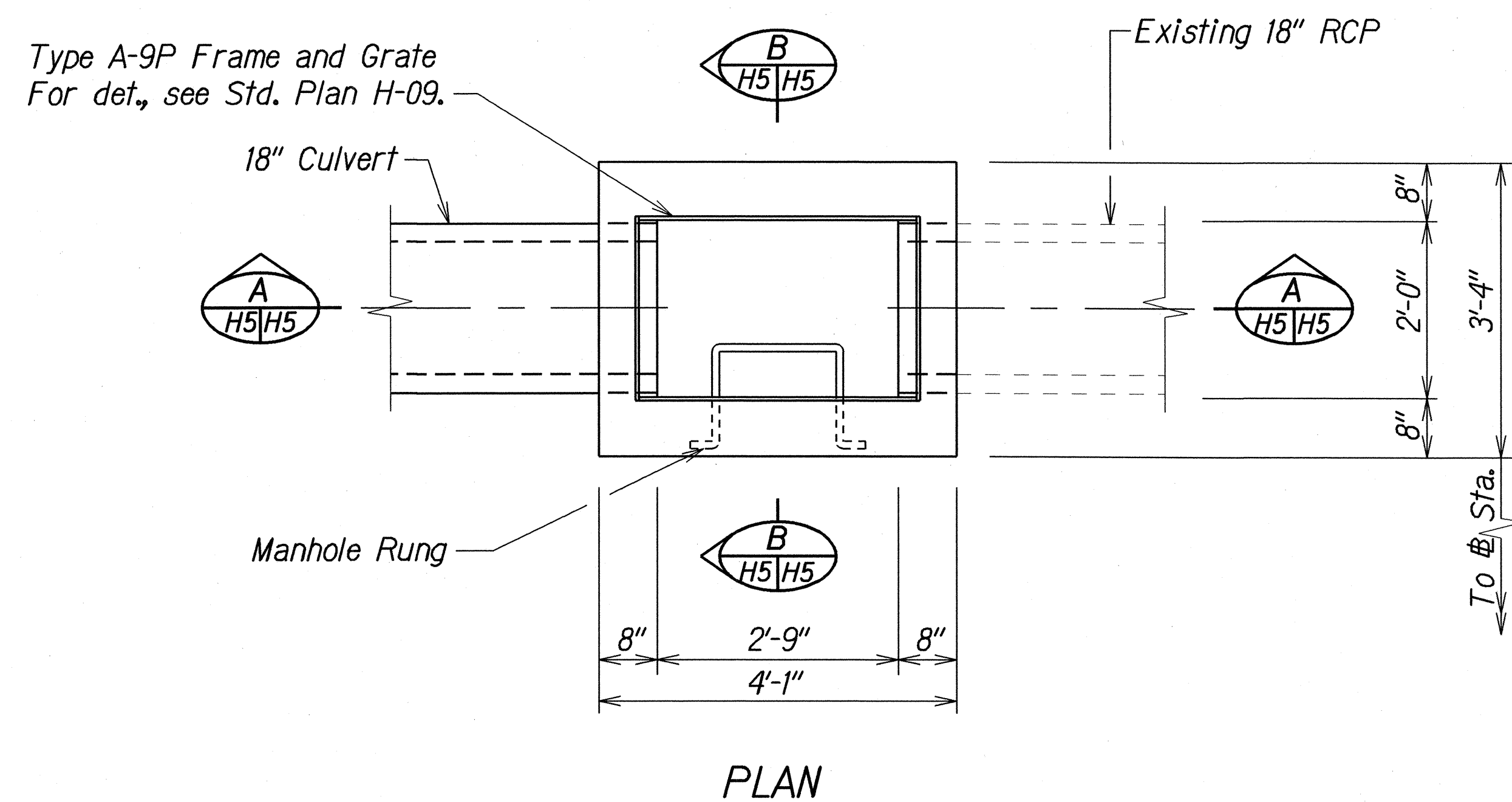
DETAIL OF TYPE "I" INLET STRUCTURE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS
HALAWA HEIGHTS ROAD REHABILITATION
Kikania Street to Fernridge Place and
Kahuapaani Interchange, Moanalua Freeway, H201
Project No. HWY-0-06-03M
Scale: As Shown Date: May 2004
SHEET No. H4 OF 8 SHEETS

ORIGINAL PLAN	DATE
DESIGNED BY	
DRAWN BY	
CHECKED BY	
APPROVED BY	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-06-03M	2004	32	51



DETAIL OF TYPE A-9P GRATED DROP INLET

ORIGINAL PLAN	DATE
DRAWN BY	05/19/04
DESIGNED BY	
CHECKED BY	
APPROVED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

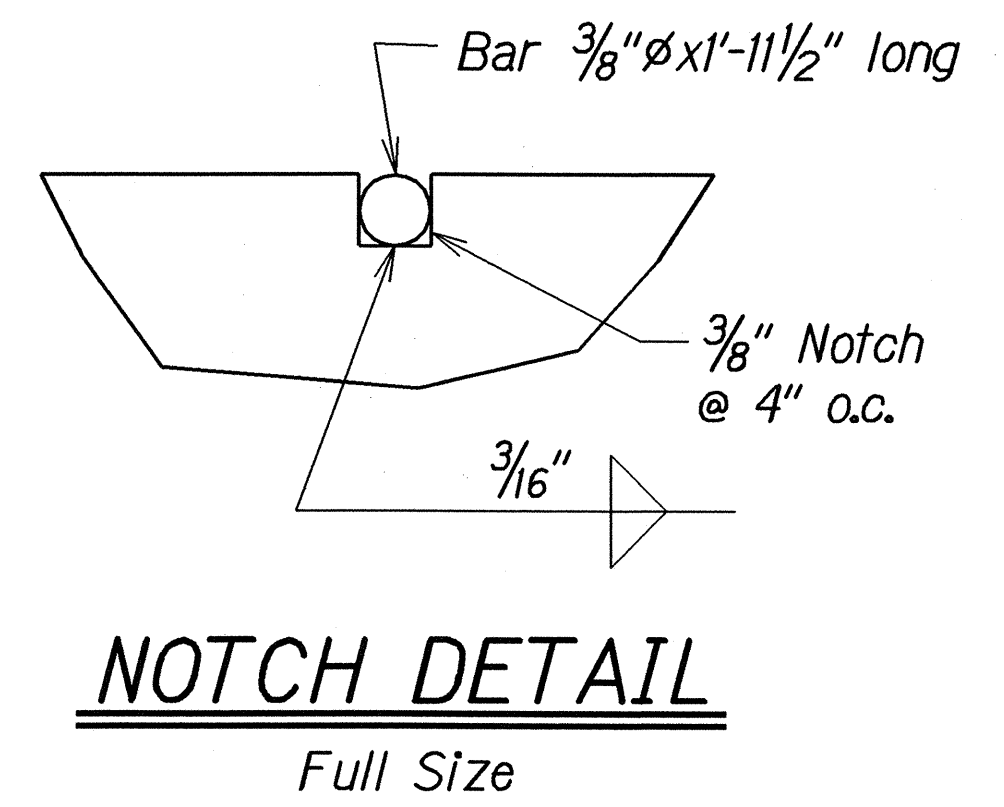
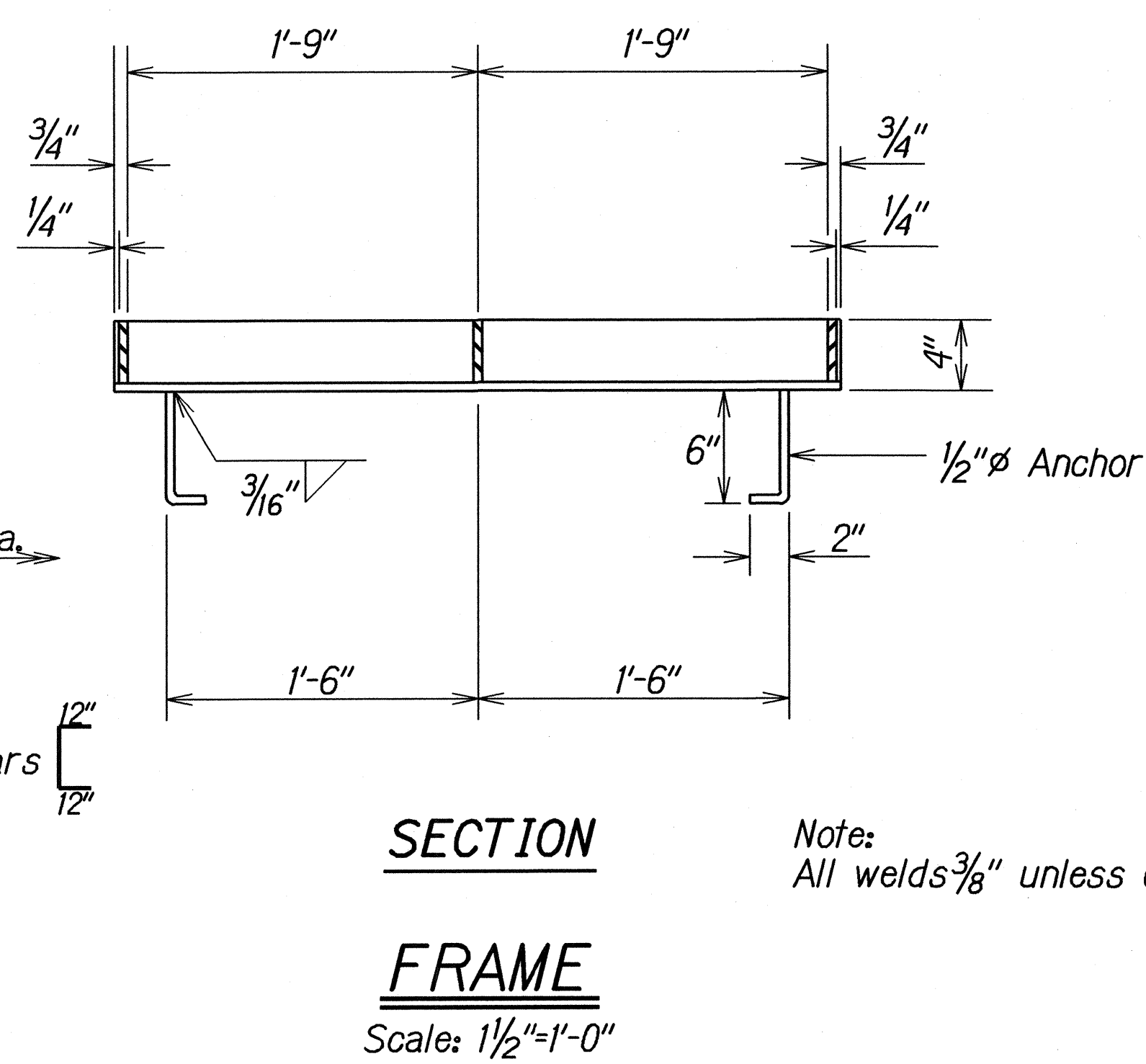
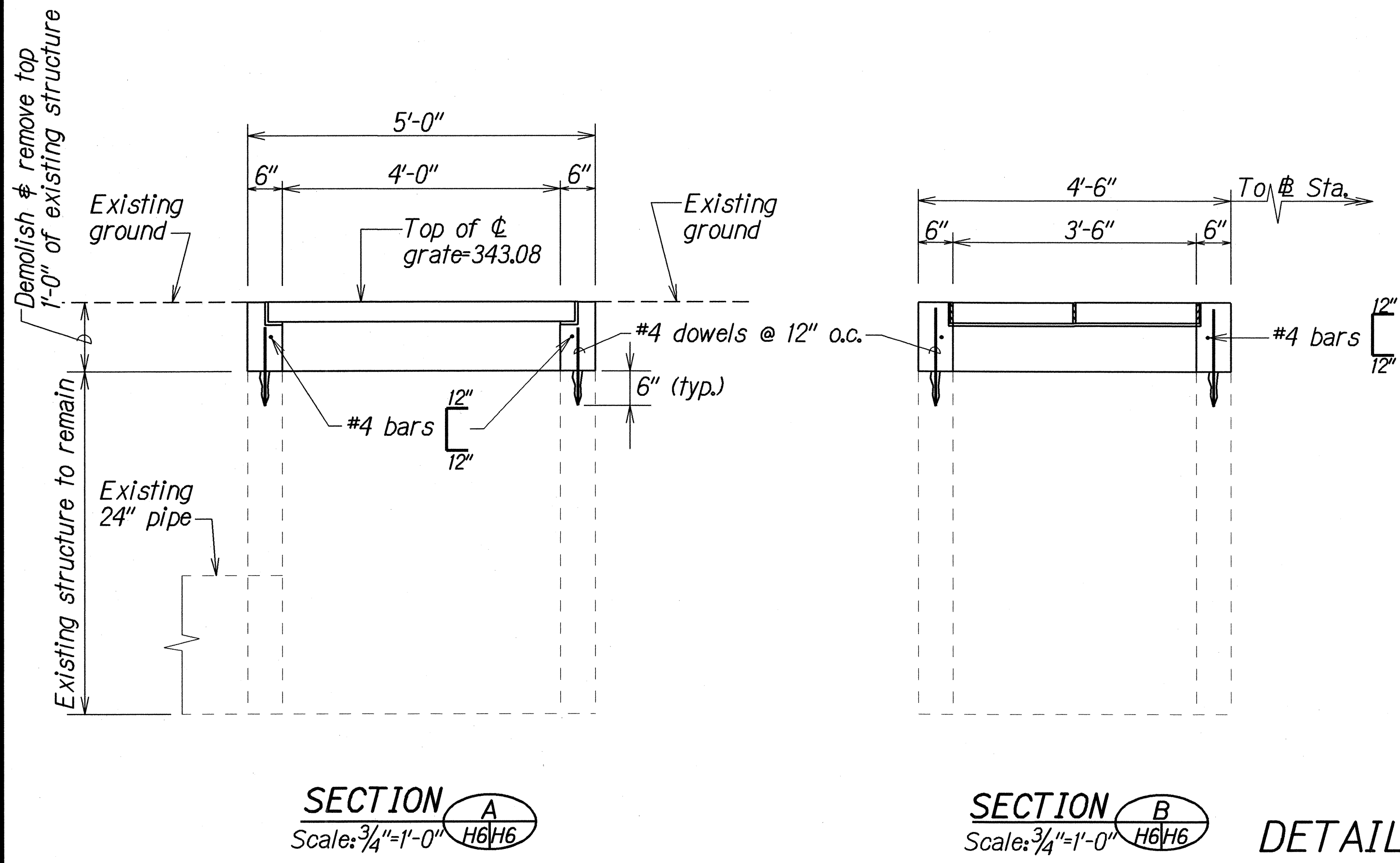
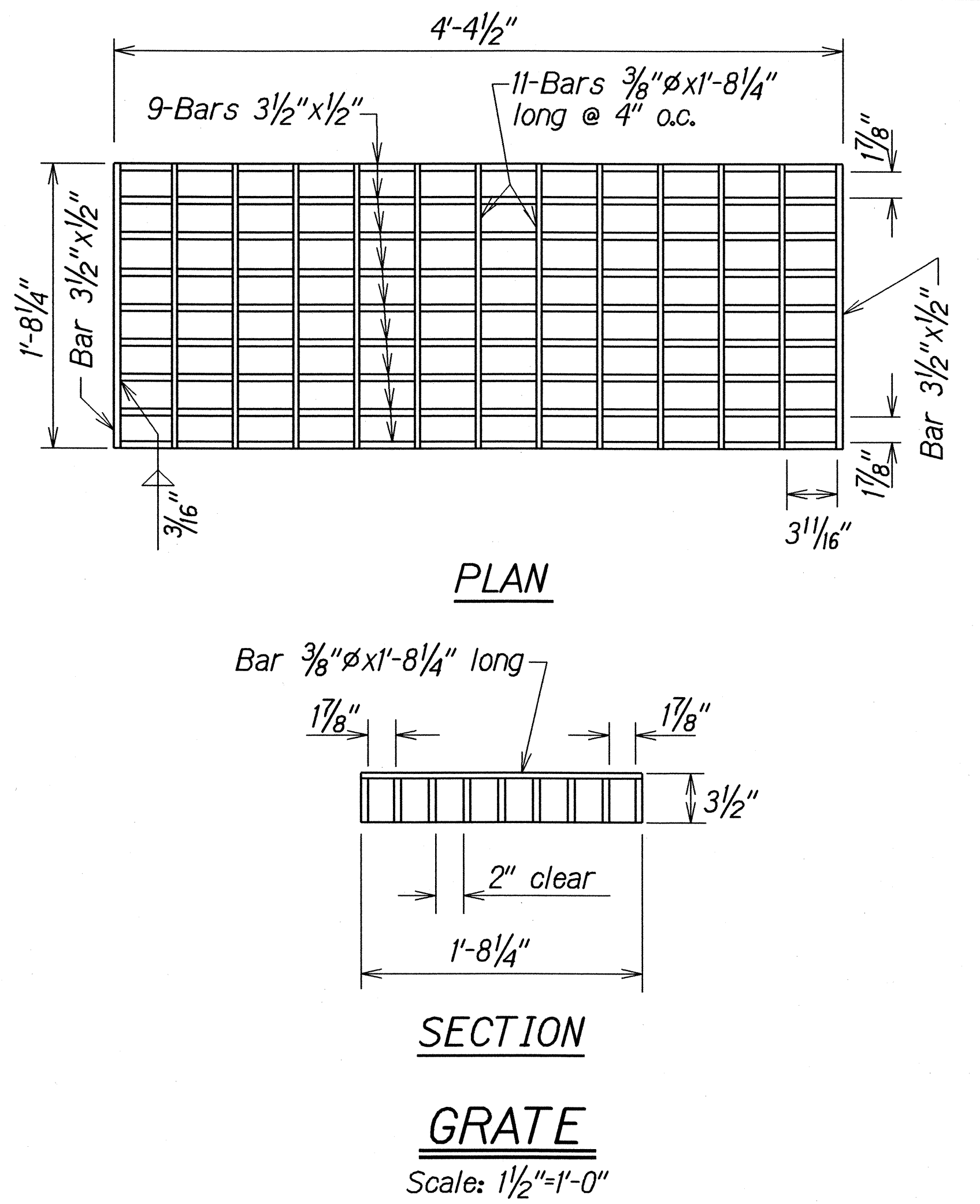
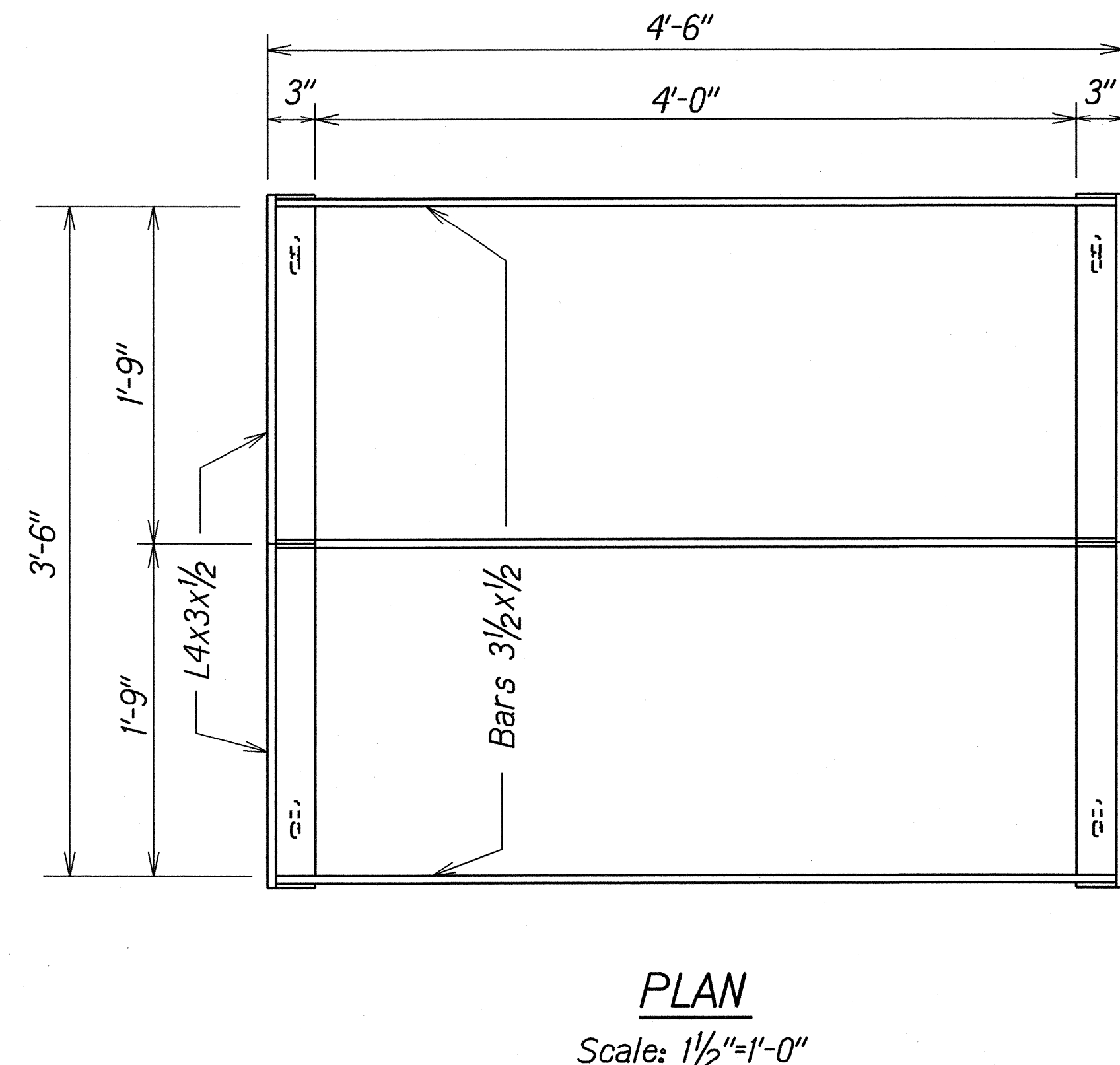
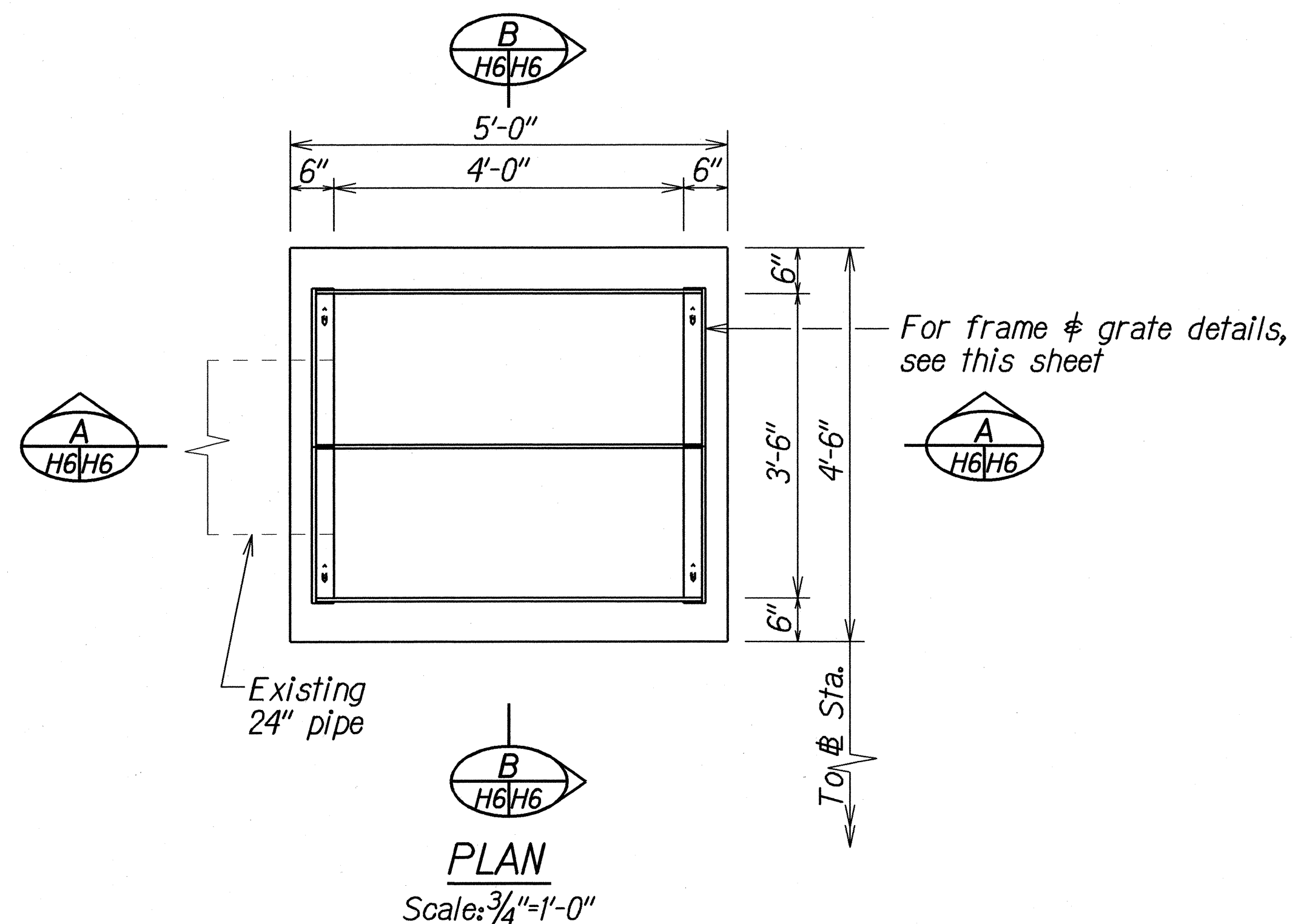
DRAINAGE DETAILS

HALAWA HEIGHTS ROAD REHABILITATION
Kikania Street to Fernridge Place and
Kahuapaani Interchange, Moanalua Freeway, H201

Project No. HWY-0-06-03M
Scale: 3/4"=1'-0" Date: May, 2004

SHEET No. H5 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-06-03M	2004	33	51



Note: All welds 3/8" unless otherwise noted.

DETAIL OF TYPE "2" INLET STRUCTURE

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

DRAINAGE DETAILS

HALAWA HEIGHTS ROAD REHABILITATION

Kikania Street to Fernridge Place and

Kahuapaani Interchange, Moanalua Freeway, H201

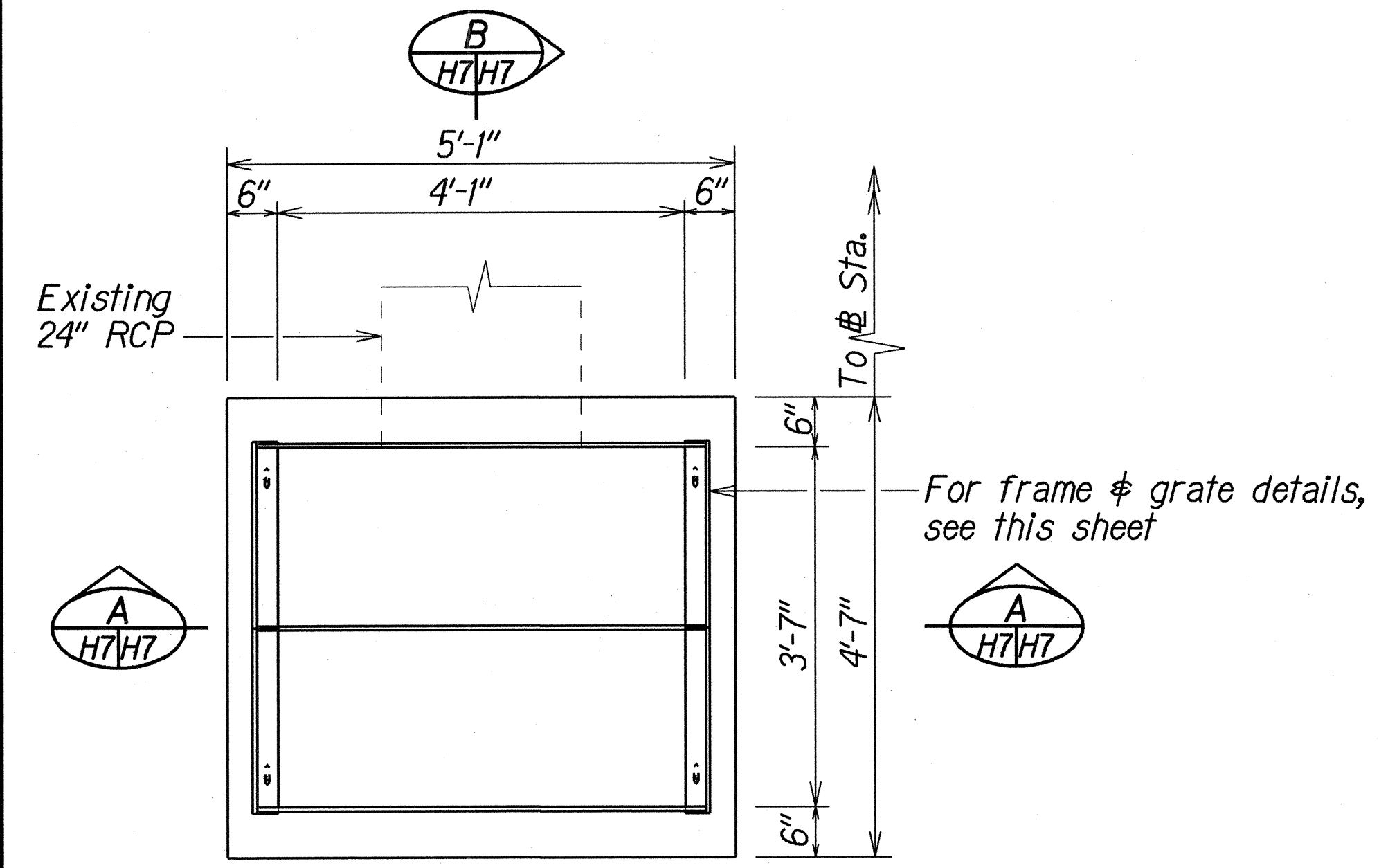
Project No. HWY-0-06-03M

Scale: As Shown

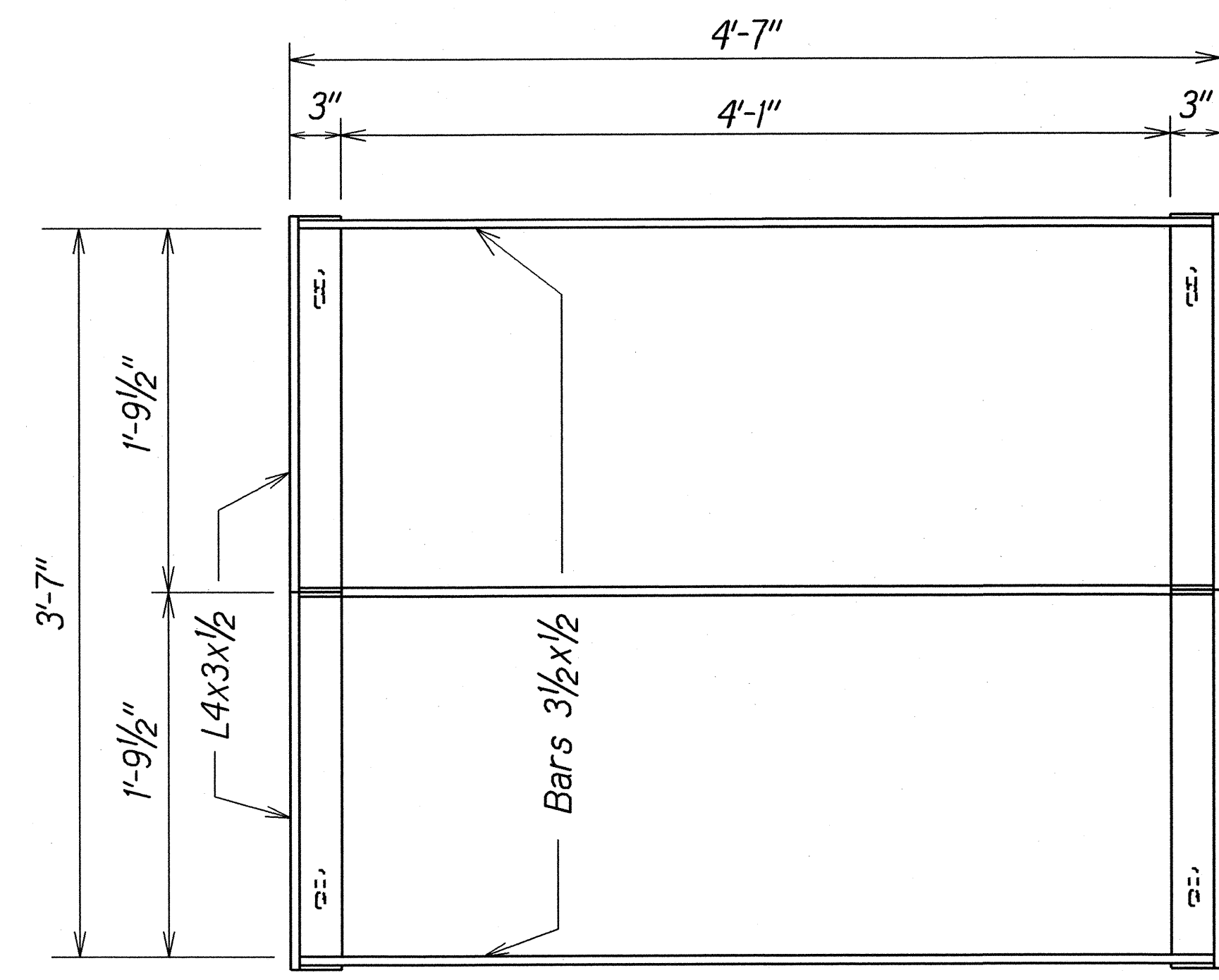
Date: May 2004

SHEET No. H6 OF 8 SHEETS

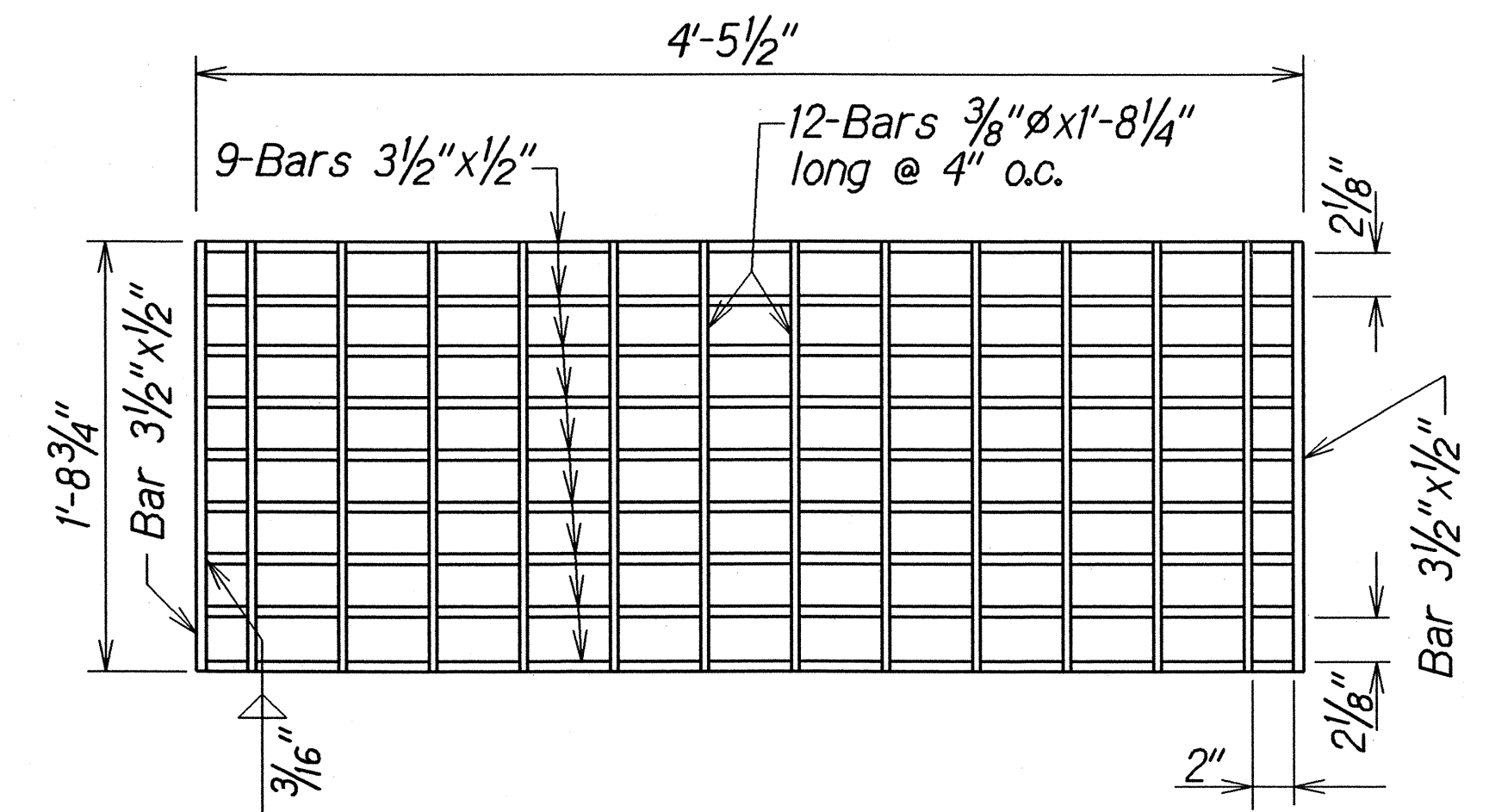
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-06-03M	2004	34	51



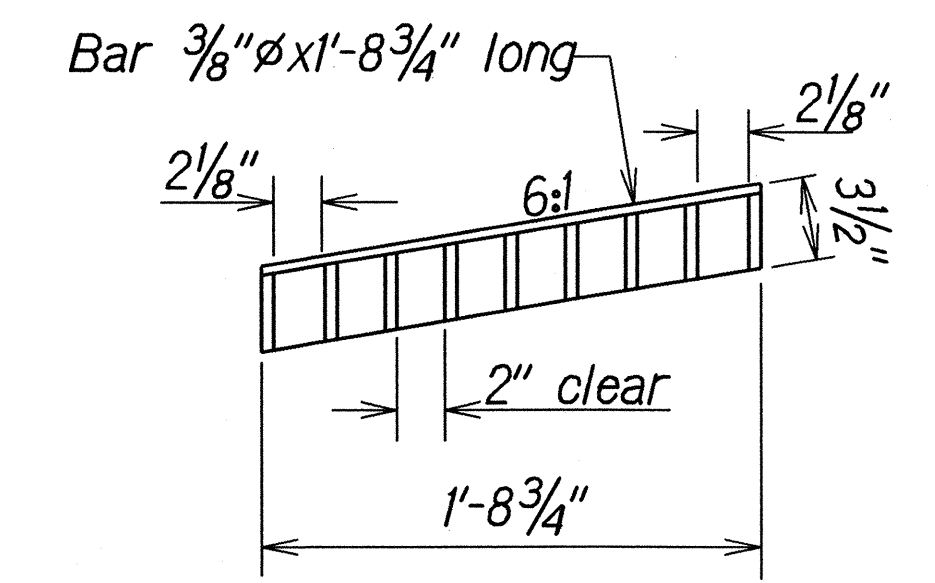
PLAN
Scale: 3/4"=1'-0"



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

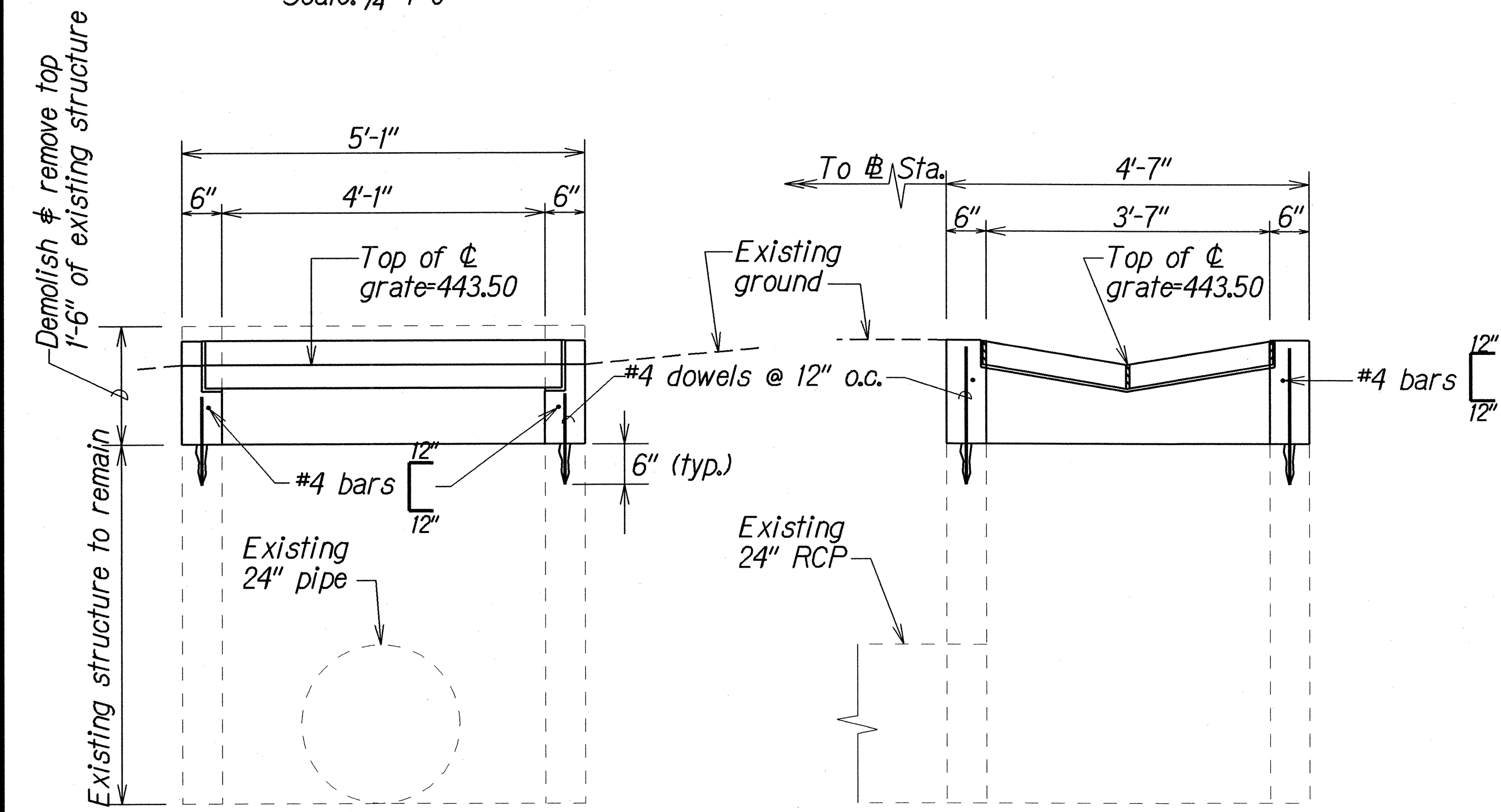


PLAN



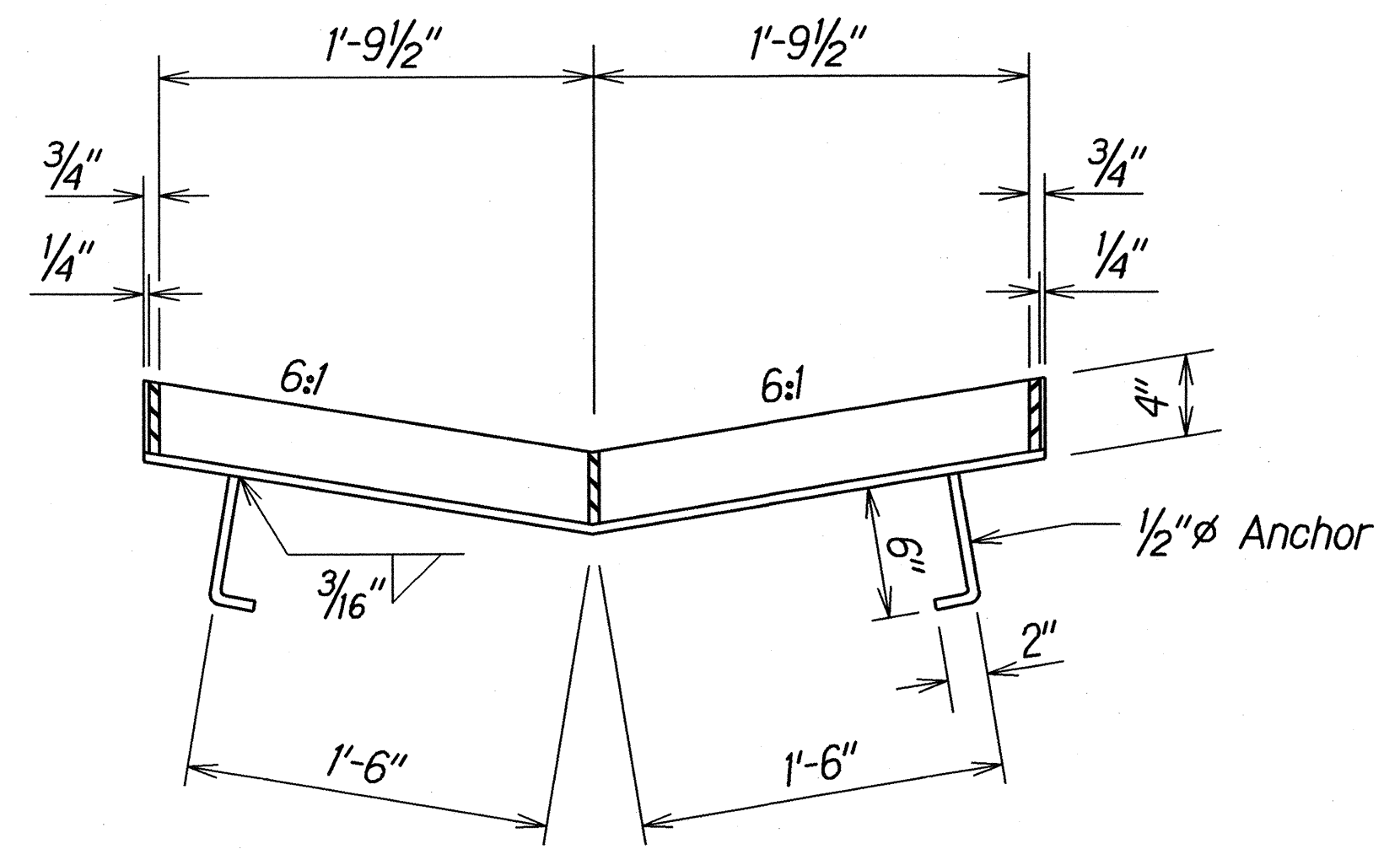
SECTION

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



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

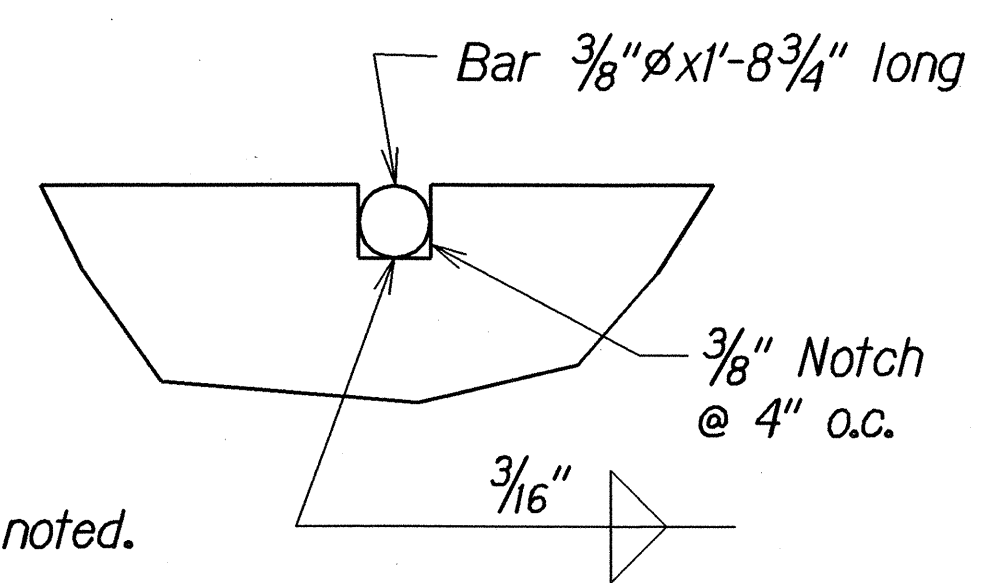
SECTION B
Scale: 3/4"=1'-0"



SECTION

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

Note: All welds 3/8" unless otherwise noted.



NOTCH DETAIL
Full Size

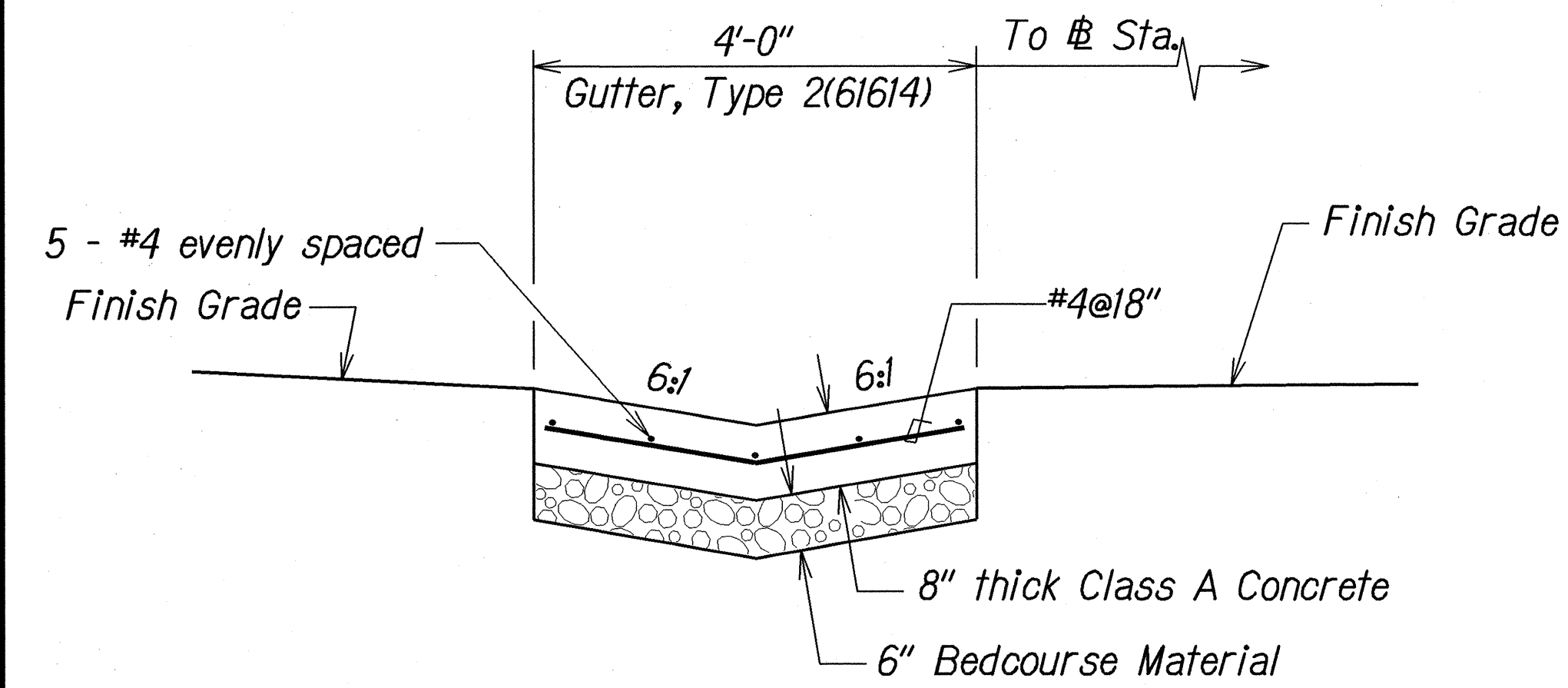
ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
DRAWN BY	
DESIGNED BY	
CHECKED BY	
APPROVED BY	

DETAIL OF TYPE "3" INLET STRUCTURE

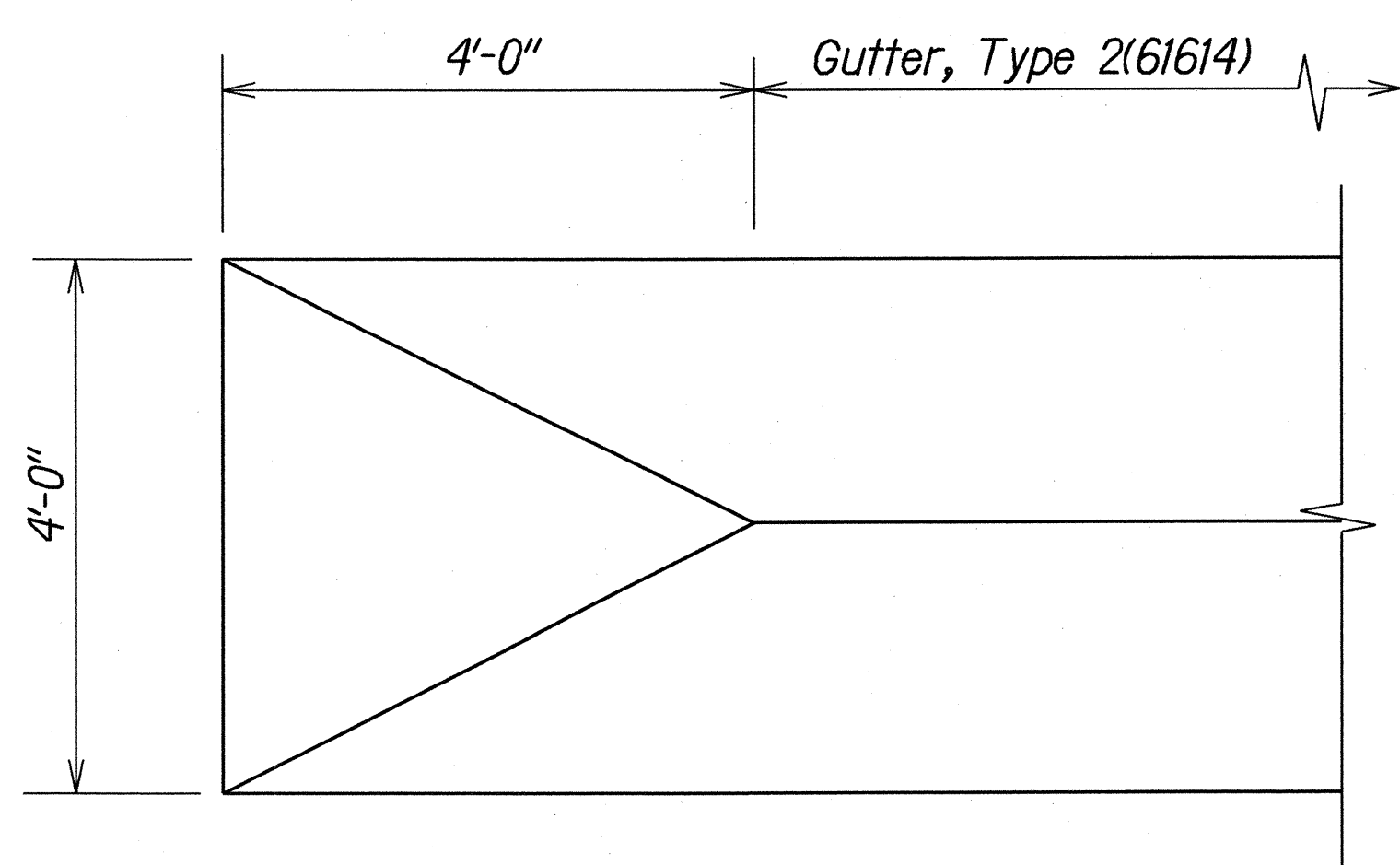
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS
HALAWA HEIGHTS ROAD REHABILITATION
Kikania Street to Fernridge Place and
Kahuapaani Interchange, Moanalua Freeway, H201
Project No. HWY-0-06-03M
Scale: As Shown Date: May 2004
SHEET No. H7 OF 8 SHEETS

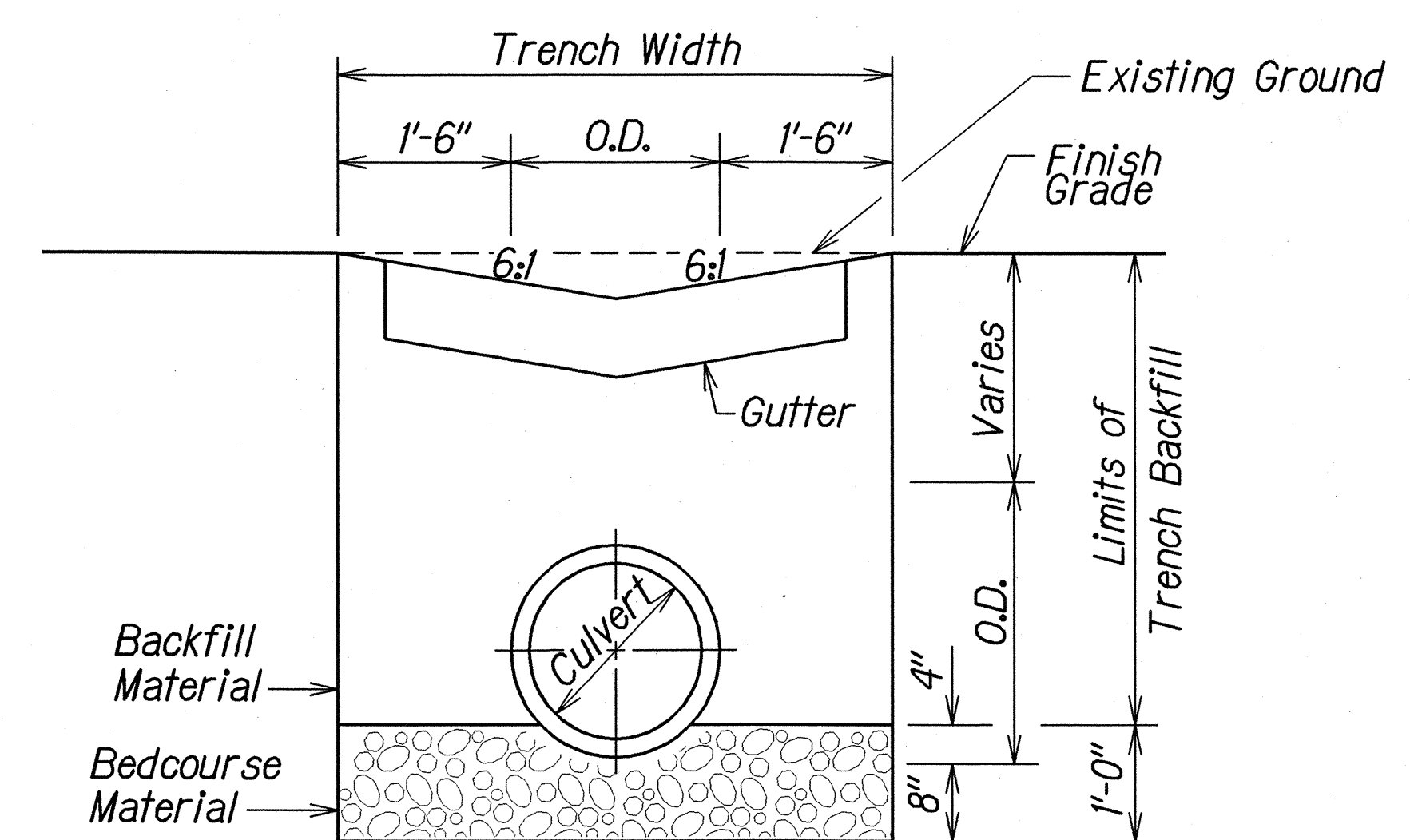
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-06-03M	2004	35	51



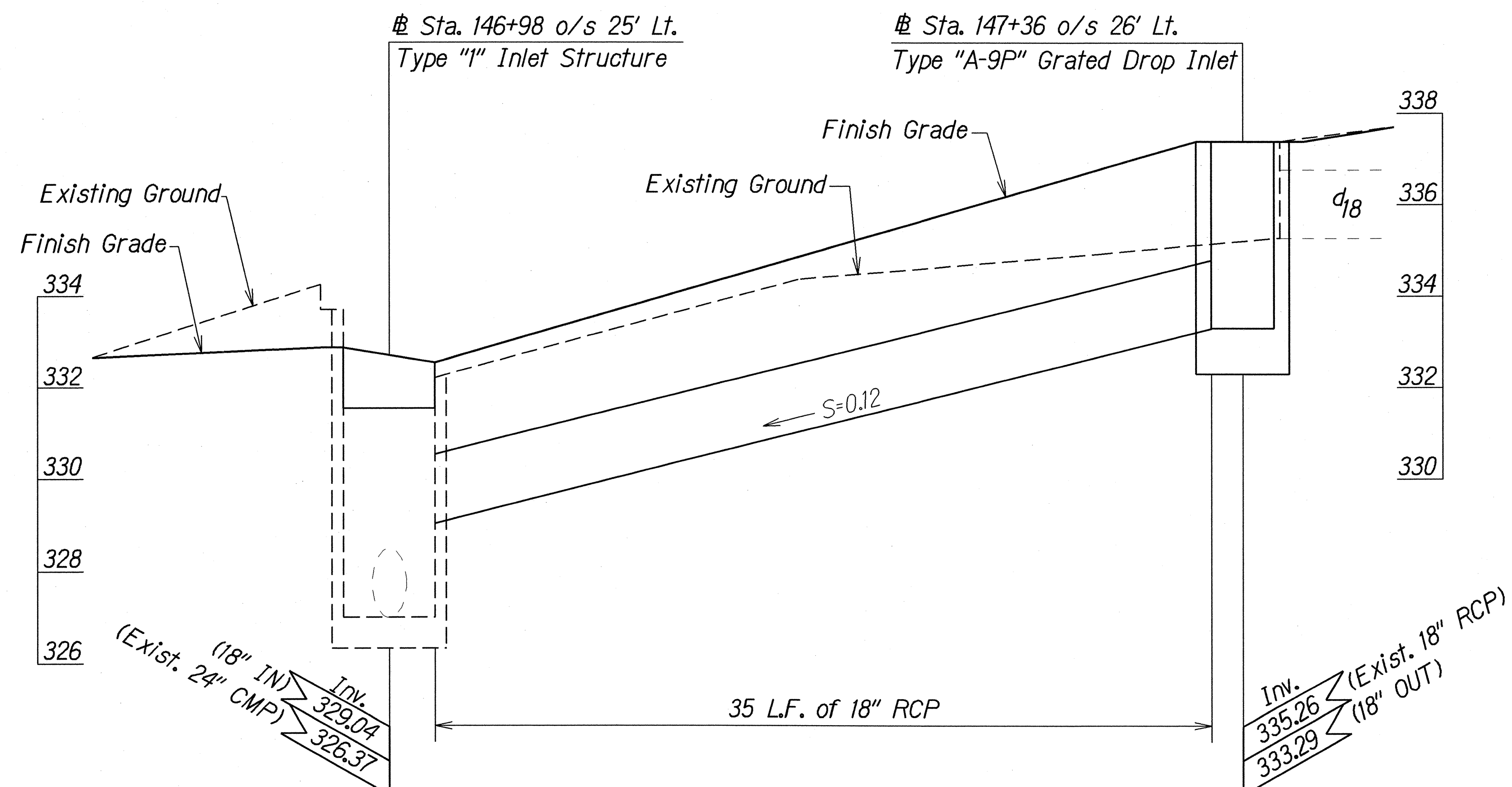
DETAIL OF GUTTER, TYPE 2(61614)
Scale: 3/4"=1'-0"



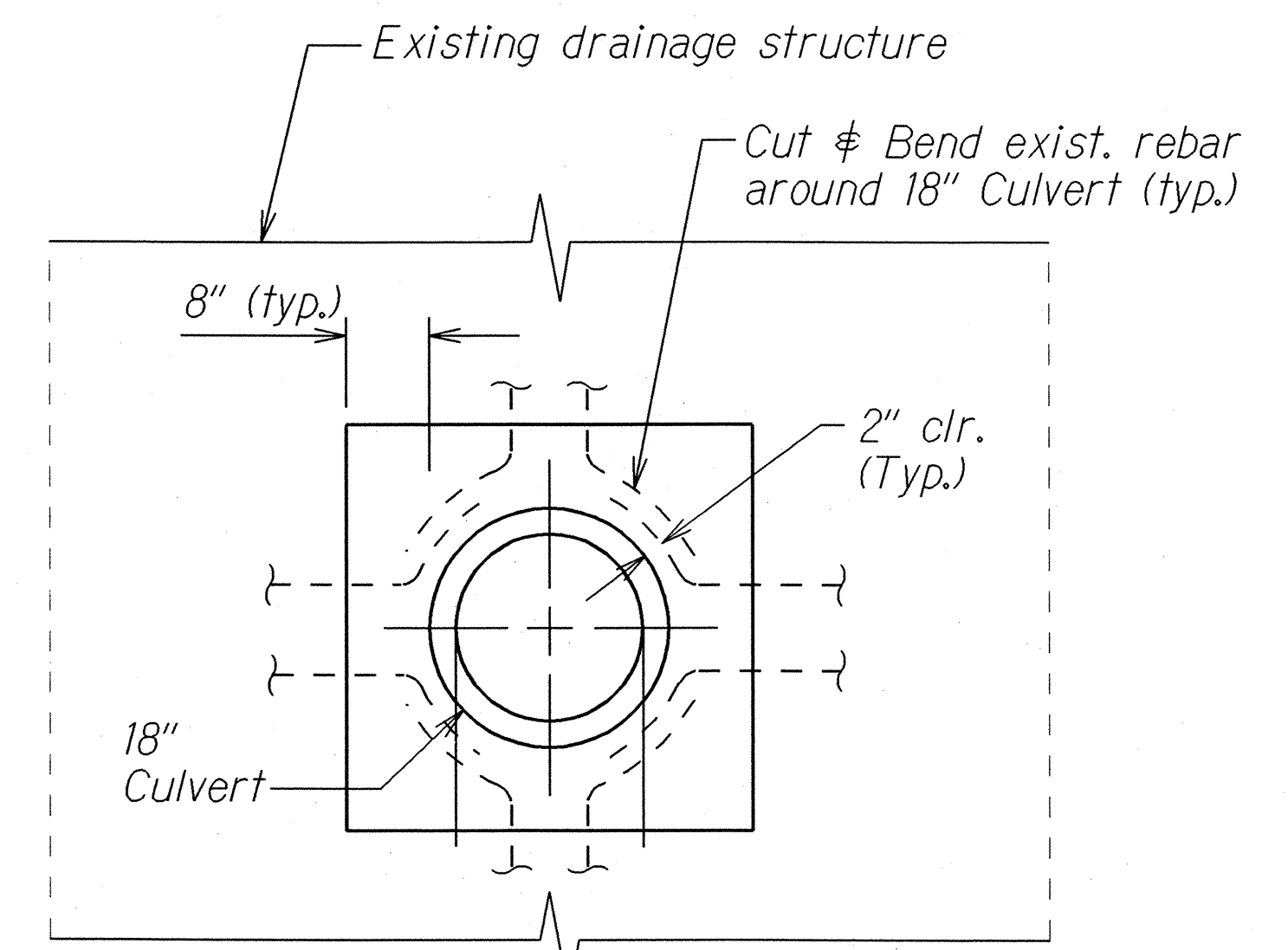
TYPICAL DETAIL OF 4' CONCRETE GUTTER TRANSITION
Scale: 3/4"=1'-0"



TYPICAL DETAIL OF CULVERT TRENCH RESTORATION
Scale: 3/4"=1'-0"



PROFILE - DRAINLINE AT STA. 146+98 O/S LT. TO STA. 147+36 O/S LT.
Scale: Horizontal 1"= 4'
Vertical 1"= 2'



DETAIL OF 18" CULVERT CONNECTION TO EXISTING DRAINAGE STRUCTURE
Scale: 3/4"=1'-0"

ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
DRAWN BY	
DESIGNED BY	
CHECKED BY	
APPROVED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS
HALAWA HEIGHTS ROAD REHABILITATION
Kikania Street to Fernridge Place and
Kahuapaani Interchange, Moanalua Freeway, H201
Project No. HWY-0-06-03M
Scale: As Shown Date: May 2004
SHEET No. H8 OF 8 SHEETS