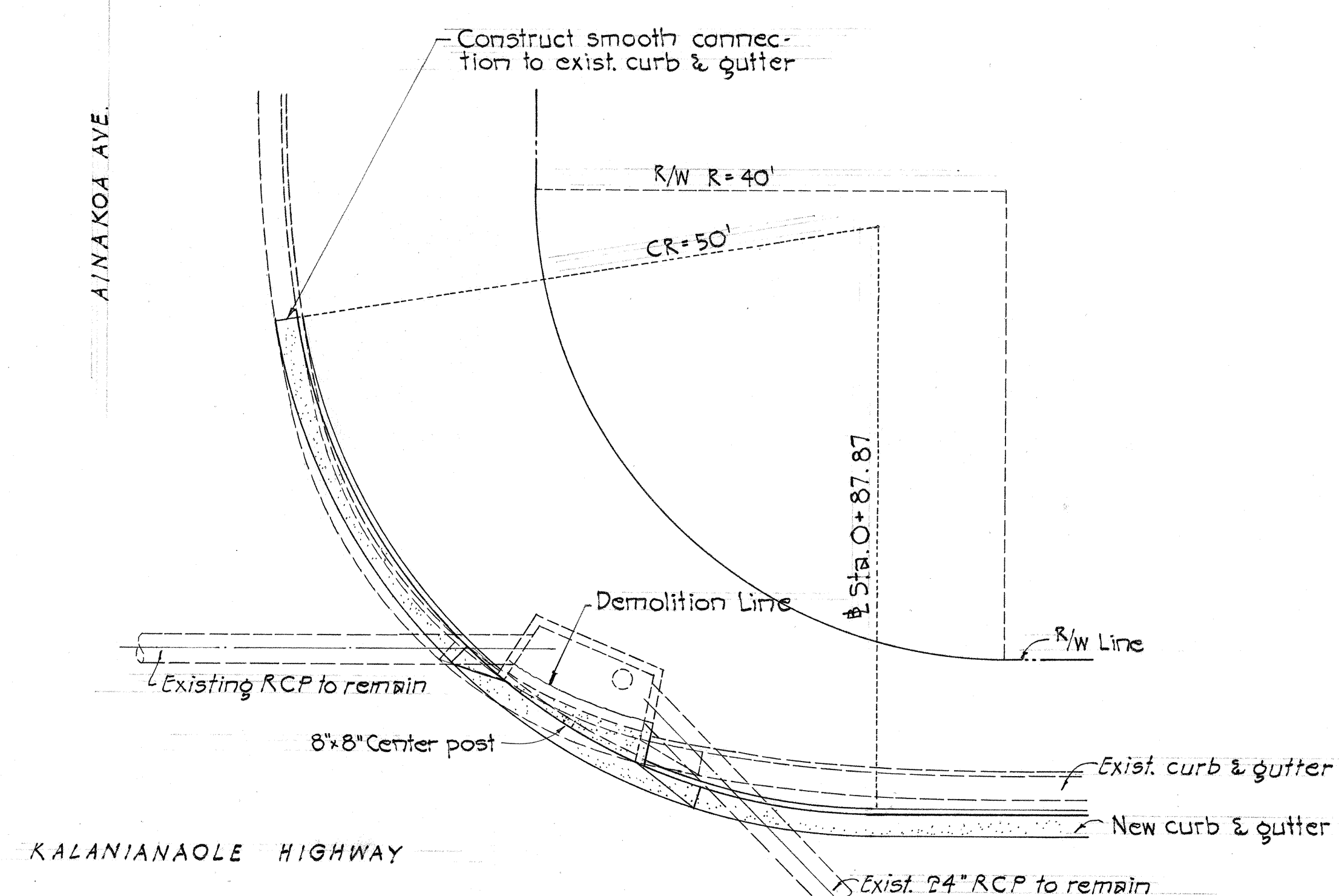
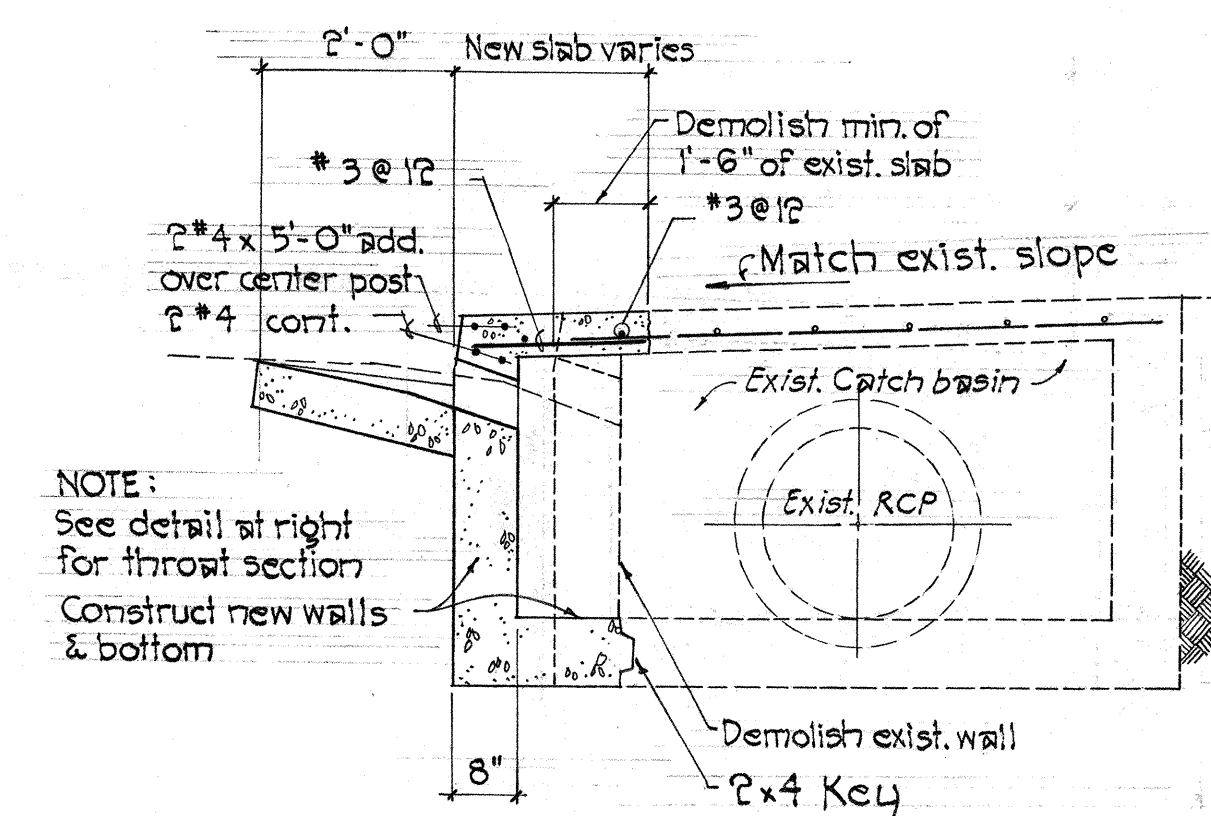


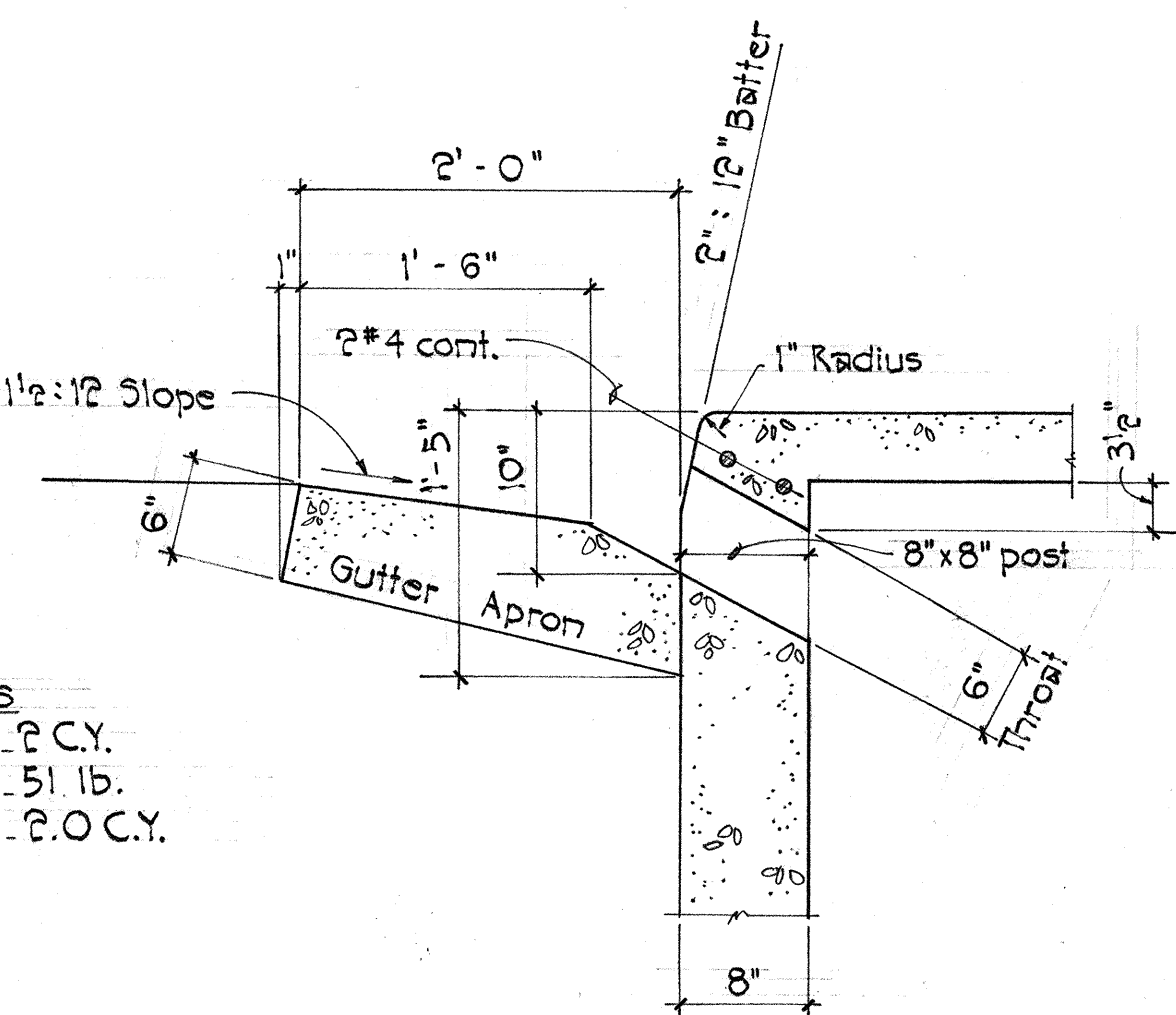


PLAN - CATCH BASIN No. 1 STA. 0+67
Scale: 1" = 10'-0"

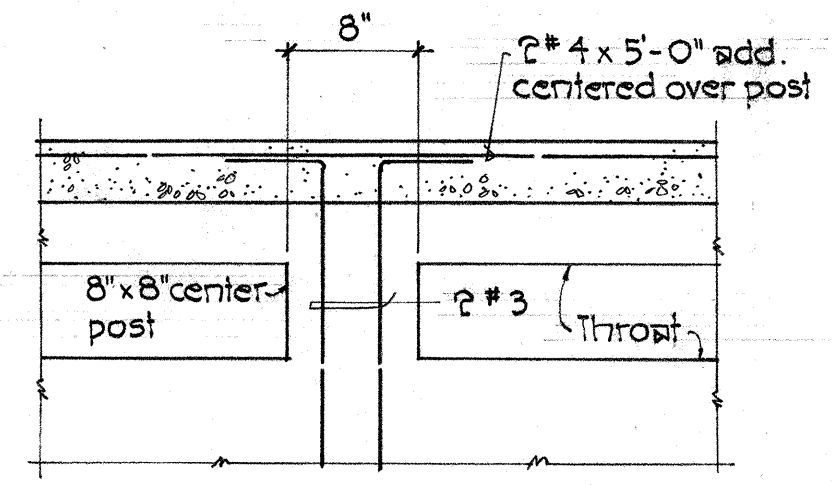


TYPICAL SECTION - CB No. 1
Scale: 1/2" = 1'-0"

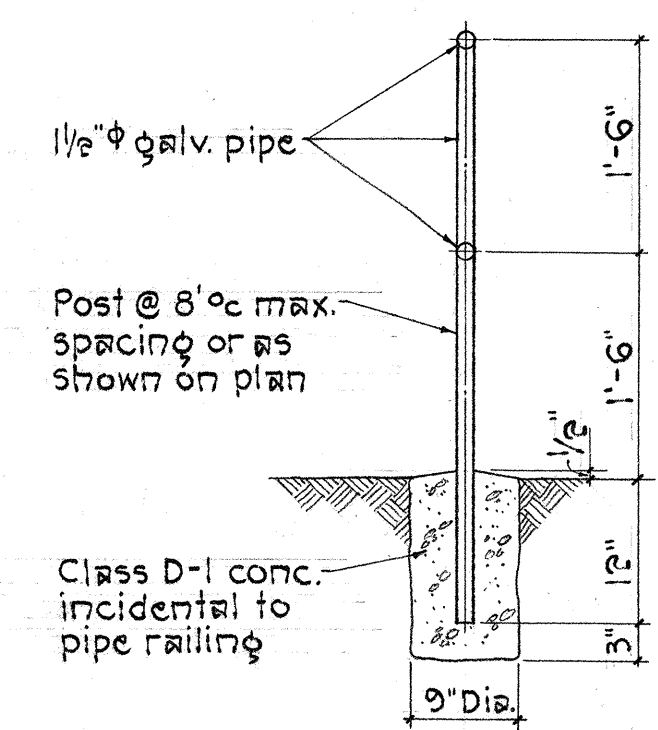
Estimated Quantities
Structure Exc. 2 C.Y.
Reinf. steel 51 lb.
Cl. A-1 conc. 2.0 C.Y.



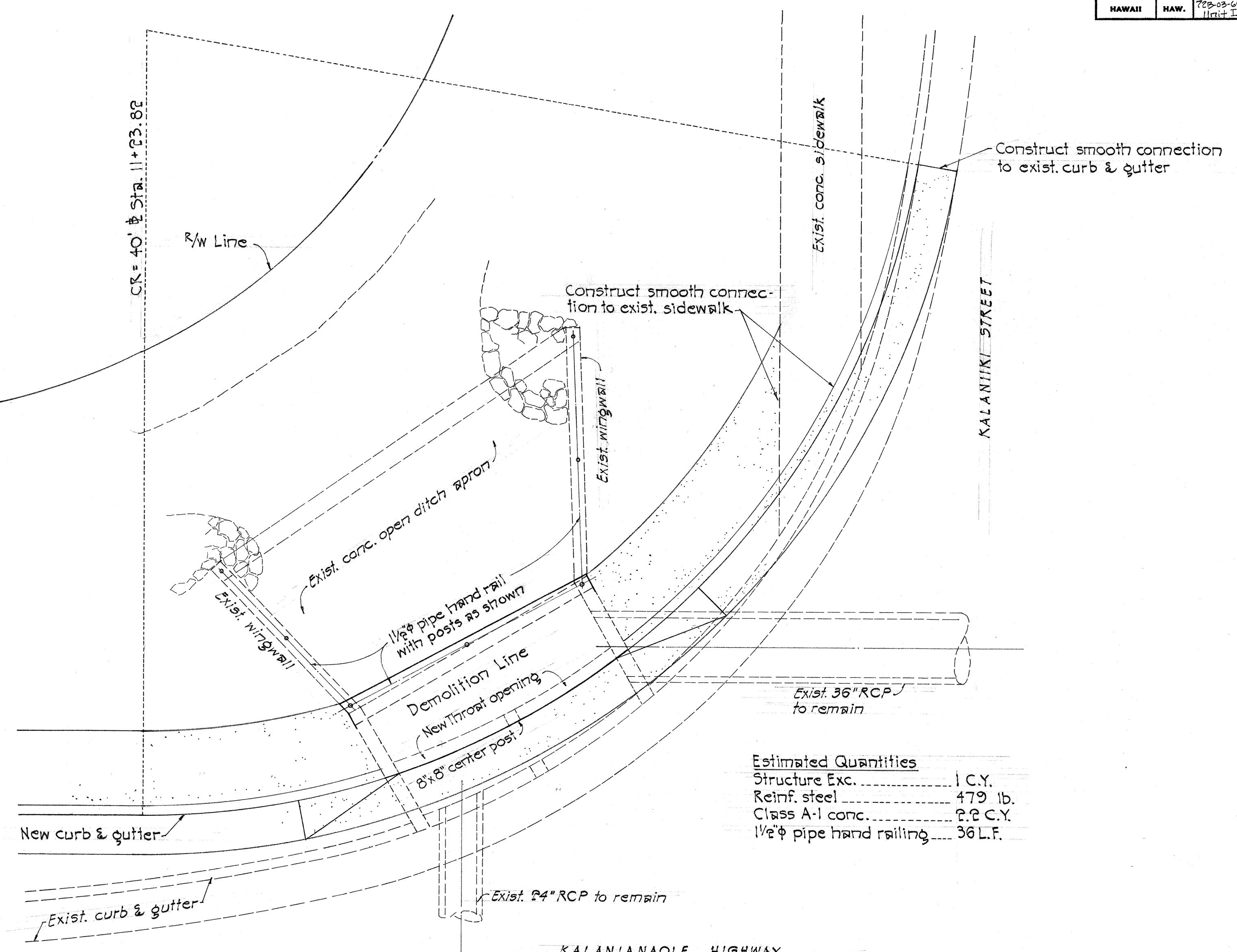
TYPICAL THROAT SECTION
Scale: 1" = 1'-0"



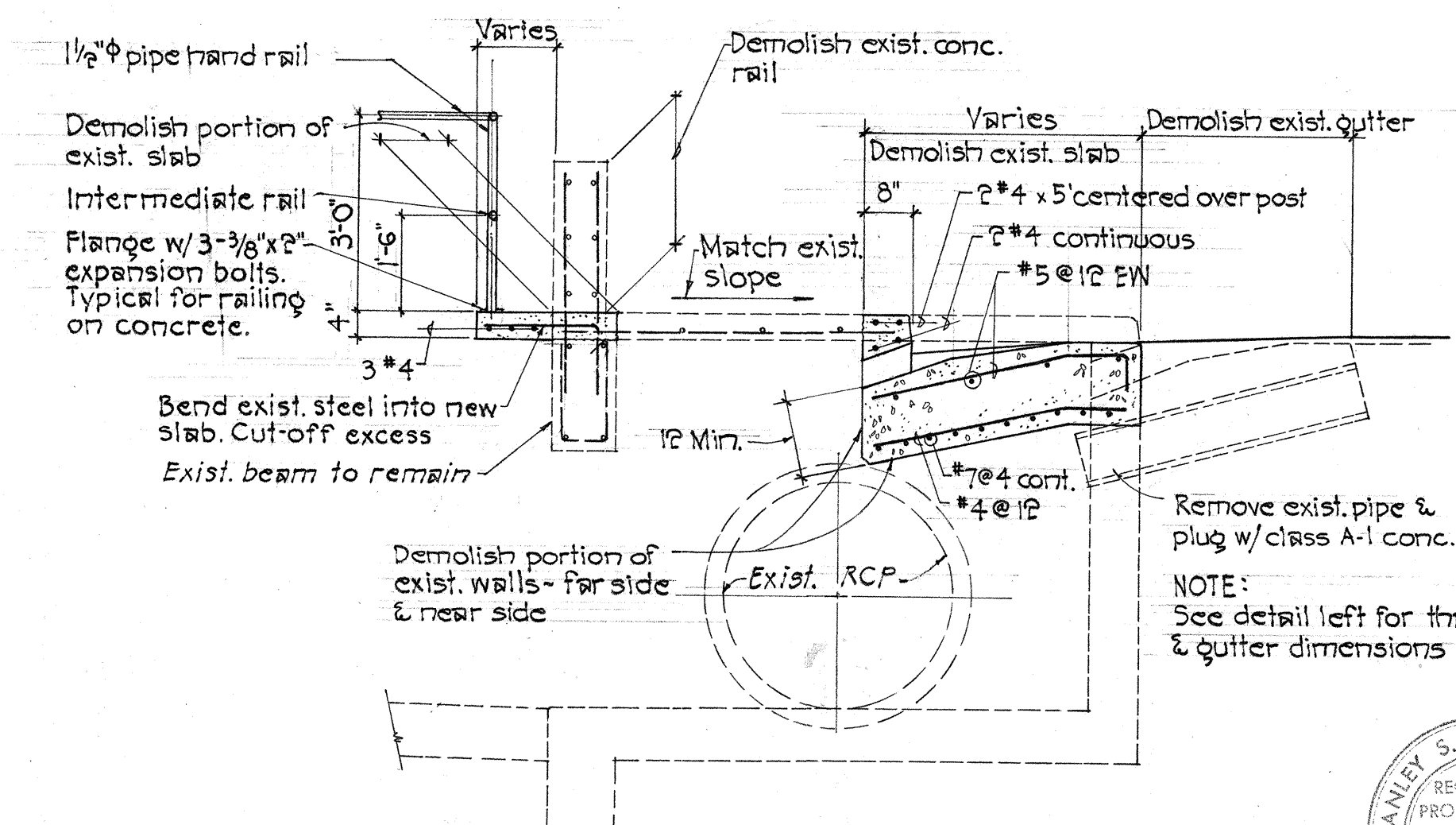
CENTER POST DETAIL
Scale: 1" = 1'-0"



TYP. DET. FOR GALV. PIPE HAND RAILING ON GROUND
Scale: 3/4" = 1'-0"

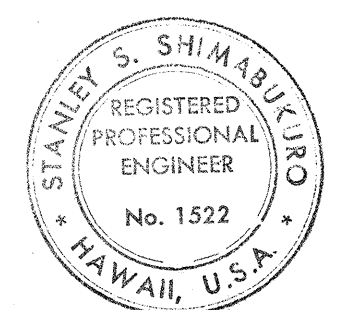


PLAN - CATCH BASIN No. 2 STA. 11+44 ±
Scale: 1/4" = 1'-0"



TYPICAL SECTION - CB No. 2
Scale: 1/2" = 1'-0"

Estimated Quantities
Structure Exc. 1 C.Y.
Reinf. steel 479 lb.
Class A-1 conc. 2.2 C.Y.
1 1/2 inch pipe hand railing 36 L.F.



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DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

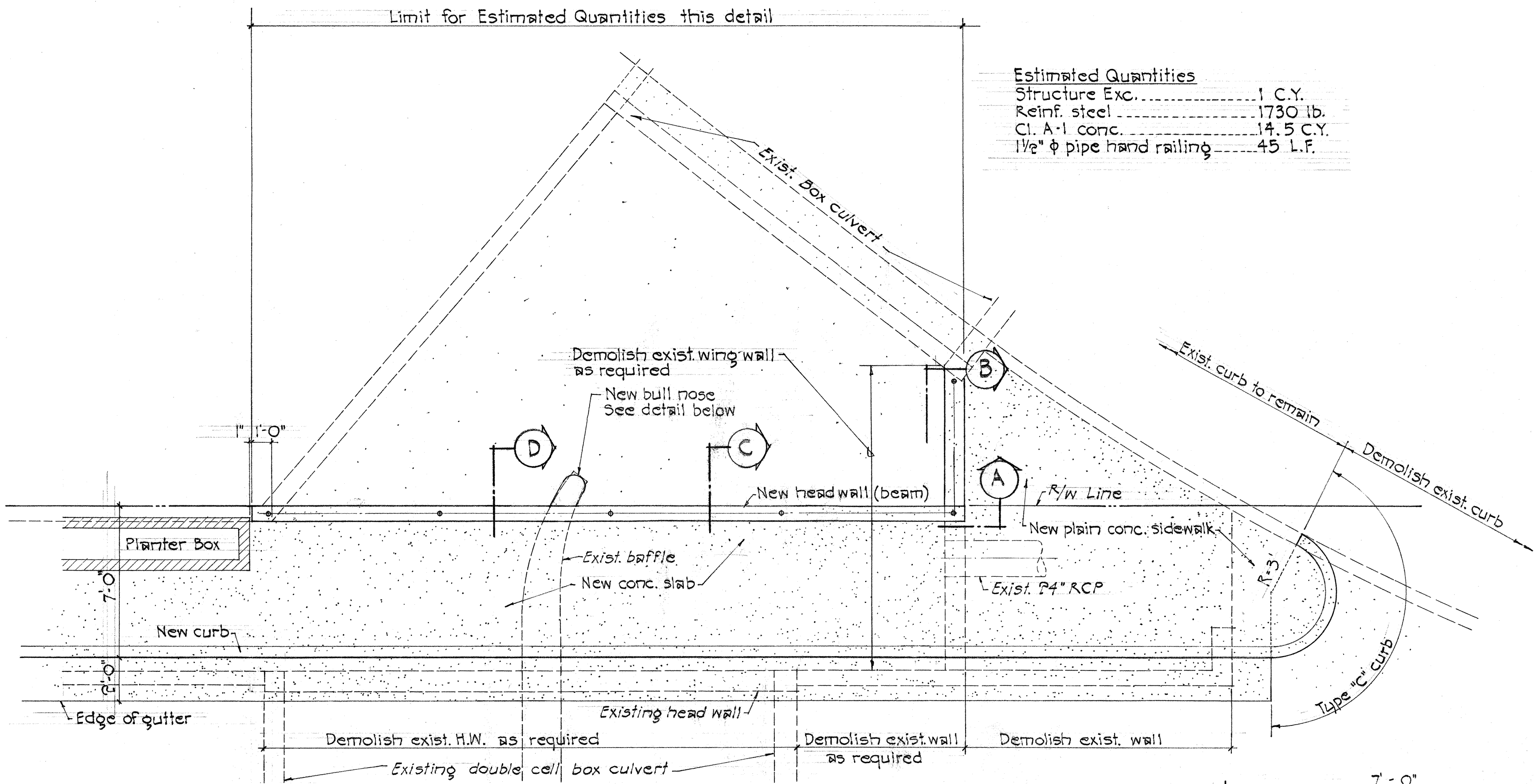
DRAINAGE DETAILS

KALANIANA'OLE HIGHWAY WIDENING
PROJECT NO. 72 B-03-68
UNIT 1

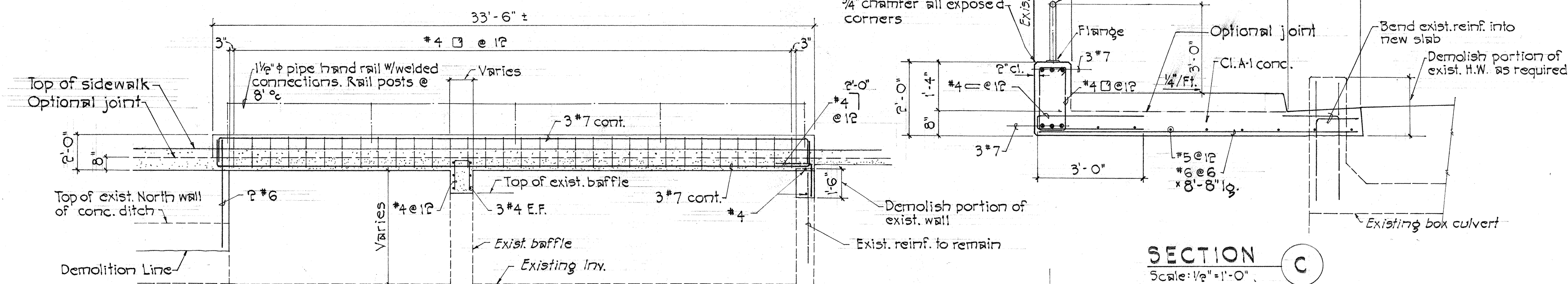
SHEET No. 18 OF 4 SHEETS

DATE	.....
SURVEY PLOTTED BY	.....
DRAWN BY	.....
CHECKED BY	.....
NOTED BY	.....
QUANTITIES BY	.....
CHECKED BY	.....
ORIGINAL PLAN	.....
NOTE BOOK	.....
No.	.....

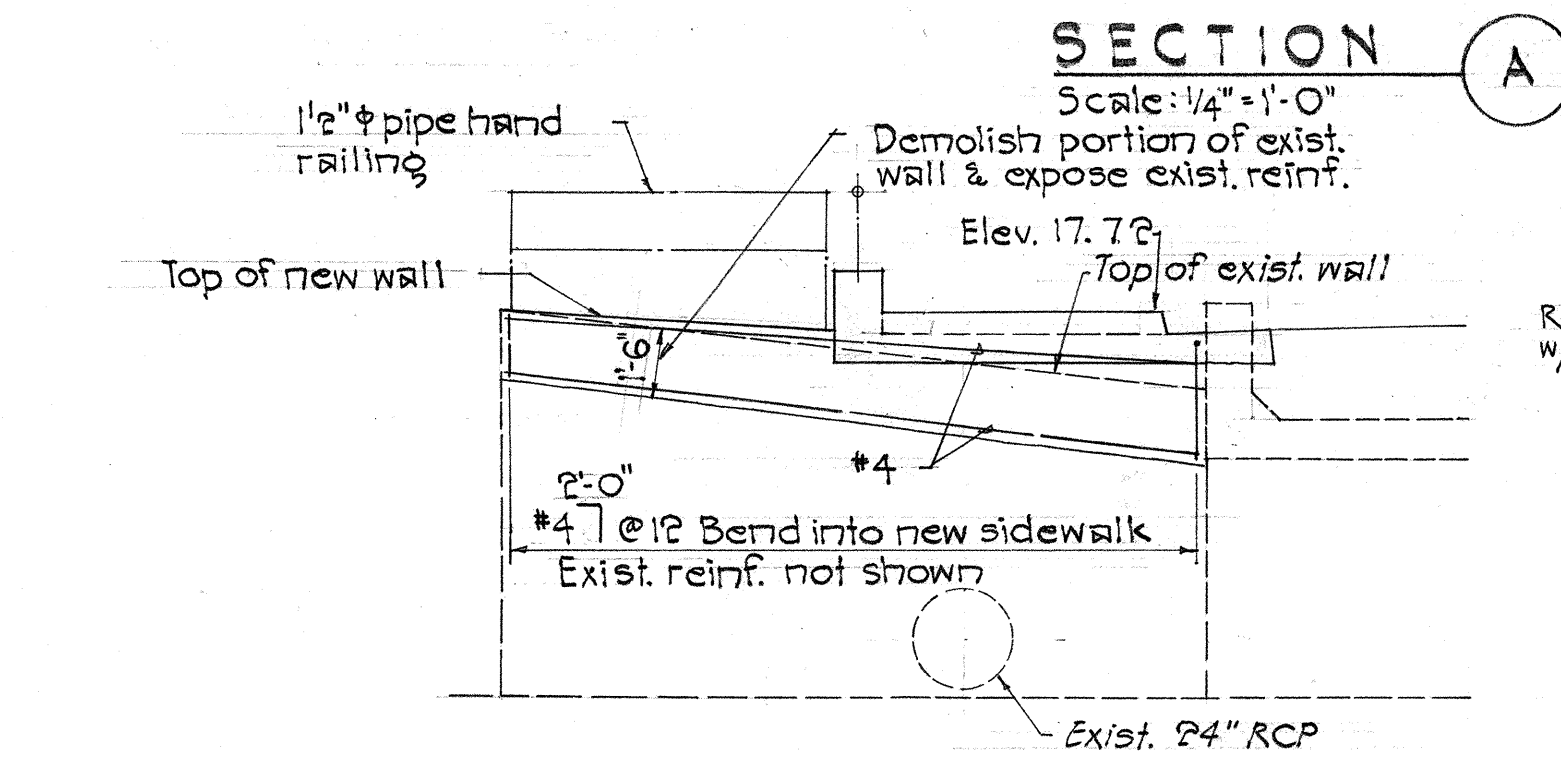
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	72B-03-68 Unit I	1968	19	50



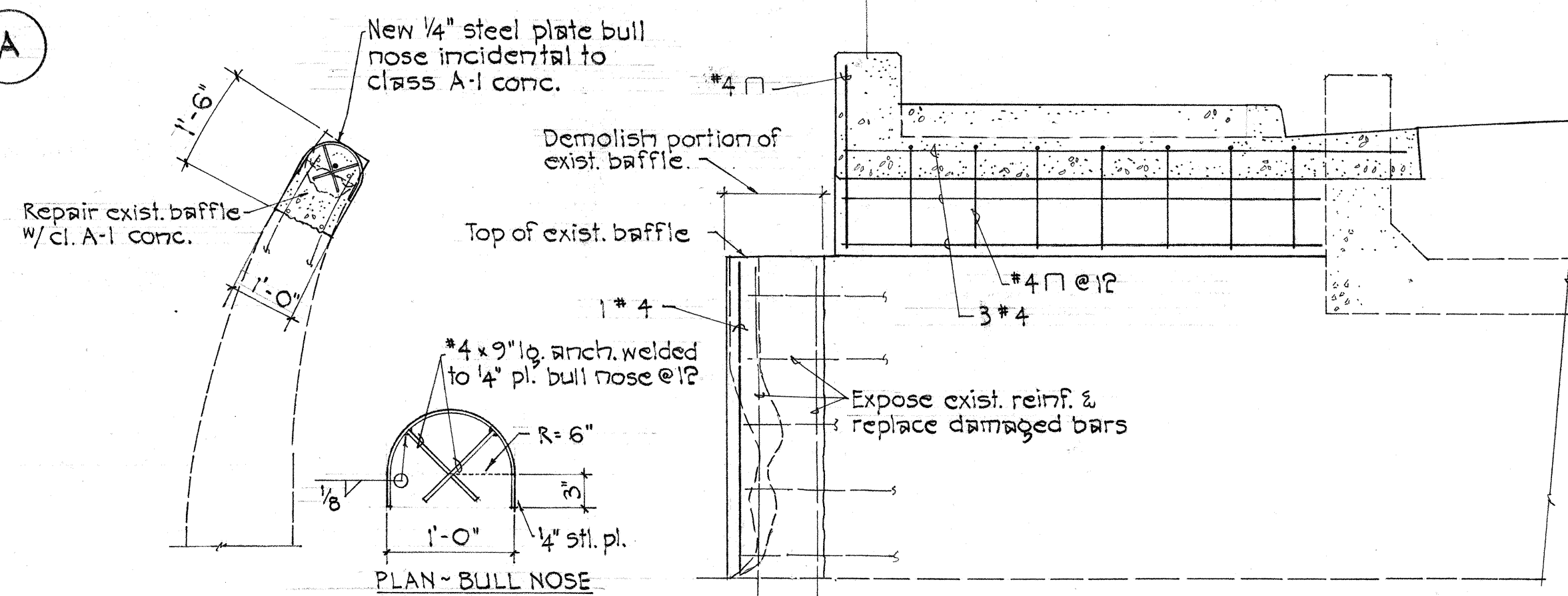
PLAN ~ NEW CONC. SLAB OVER EXIST. DITCH STA. 20+50 ±
Scale: 1/4" = 1'-0"



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

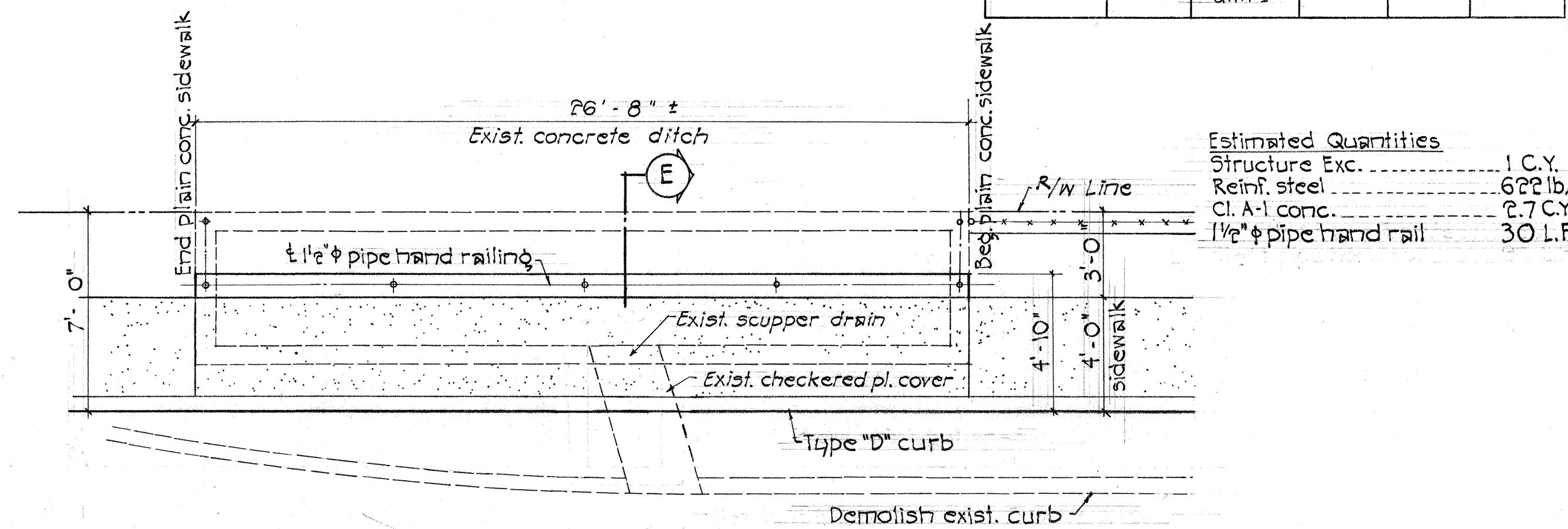


SECTION A
Scale: 1/4" = 1'-0"

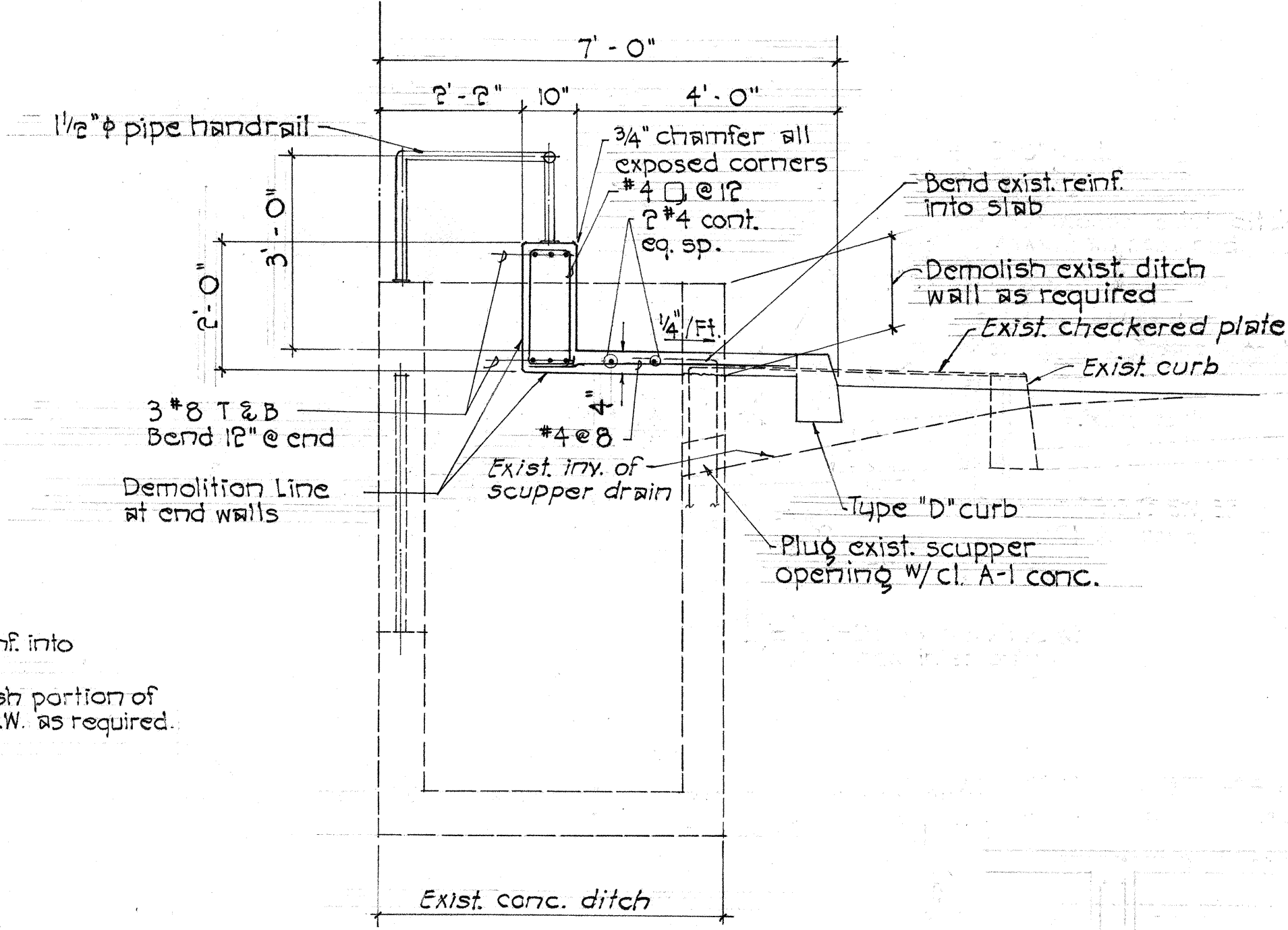


PLAN ~ REPAIR OF EXIST. BAFFLE
Scale: 1/2" = 1'-0"

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

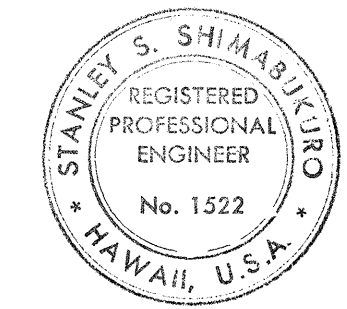


PLAN ~ NEW CONC. SLAB OVER EXIST. CONC. DITCH STA. 21+90 ±
Scale: 1/4" = 1'-0"



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

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

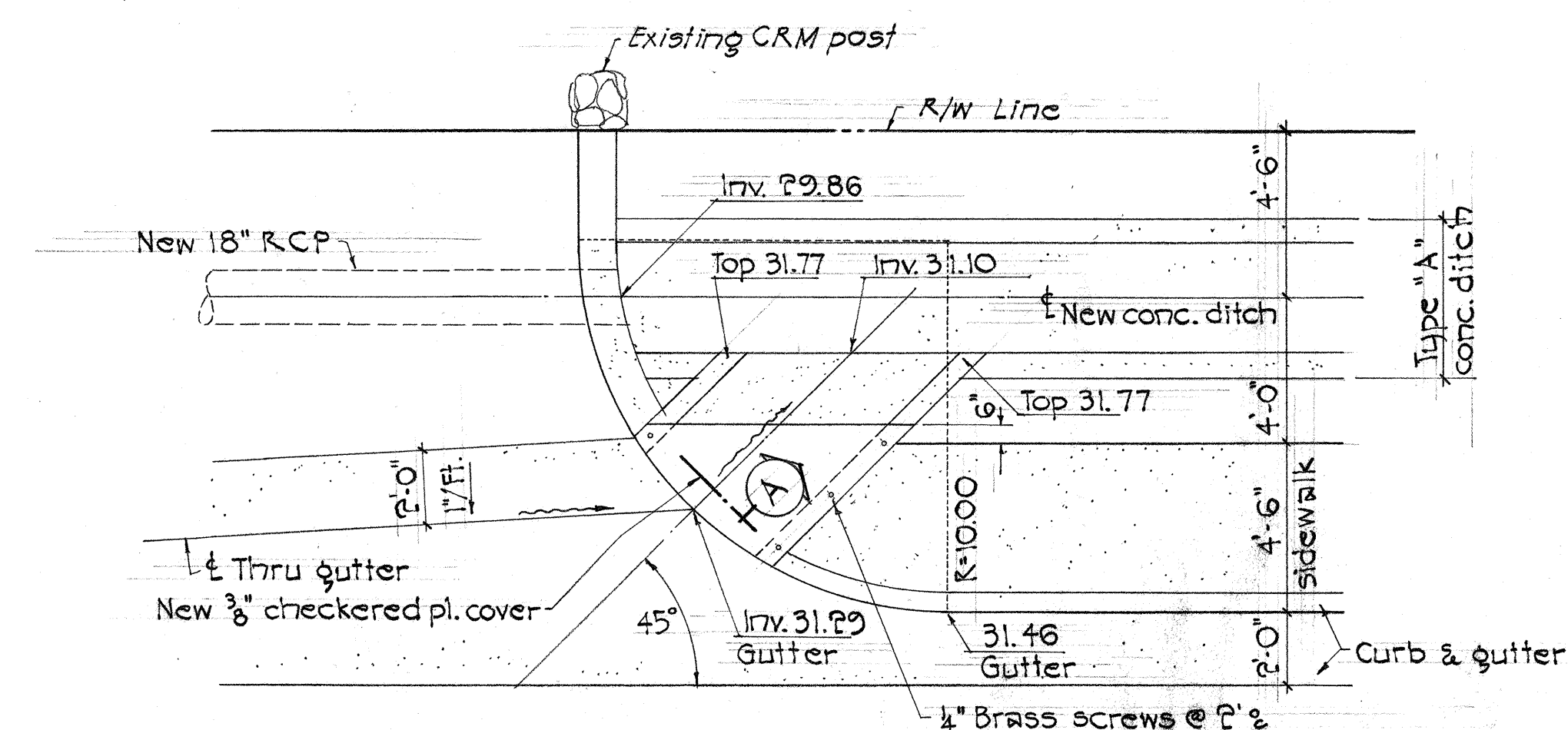


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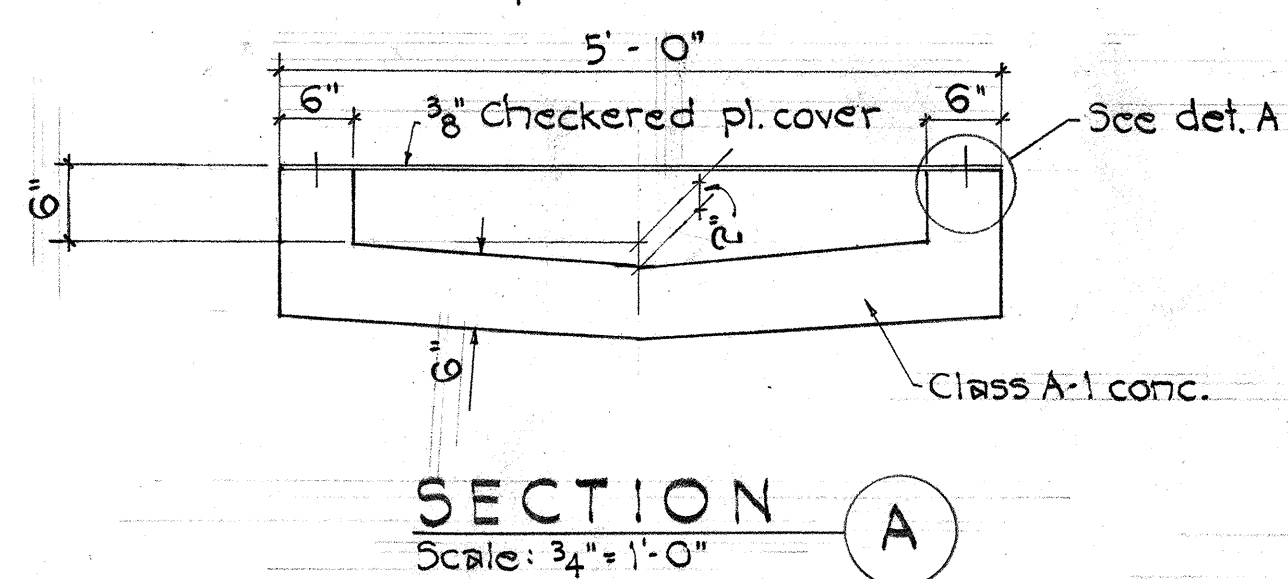
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS
KALANIANA'OLE HIGHWAY WIDENING
PROJECT NO. 72 B-03-68
UNIT I

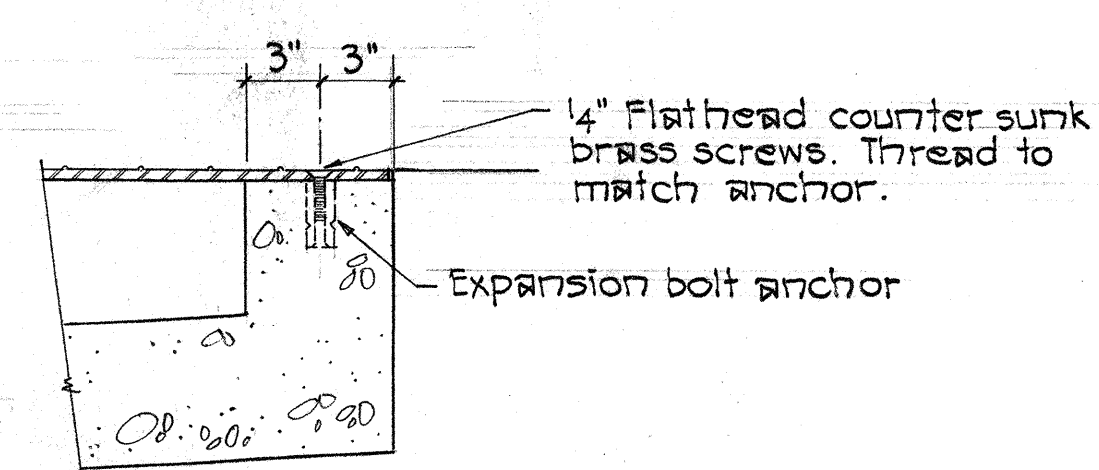
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	72B-03-00 Unit I	1968	20	50



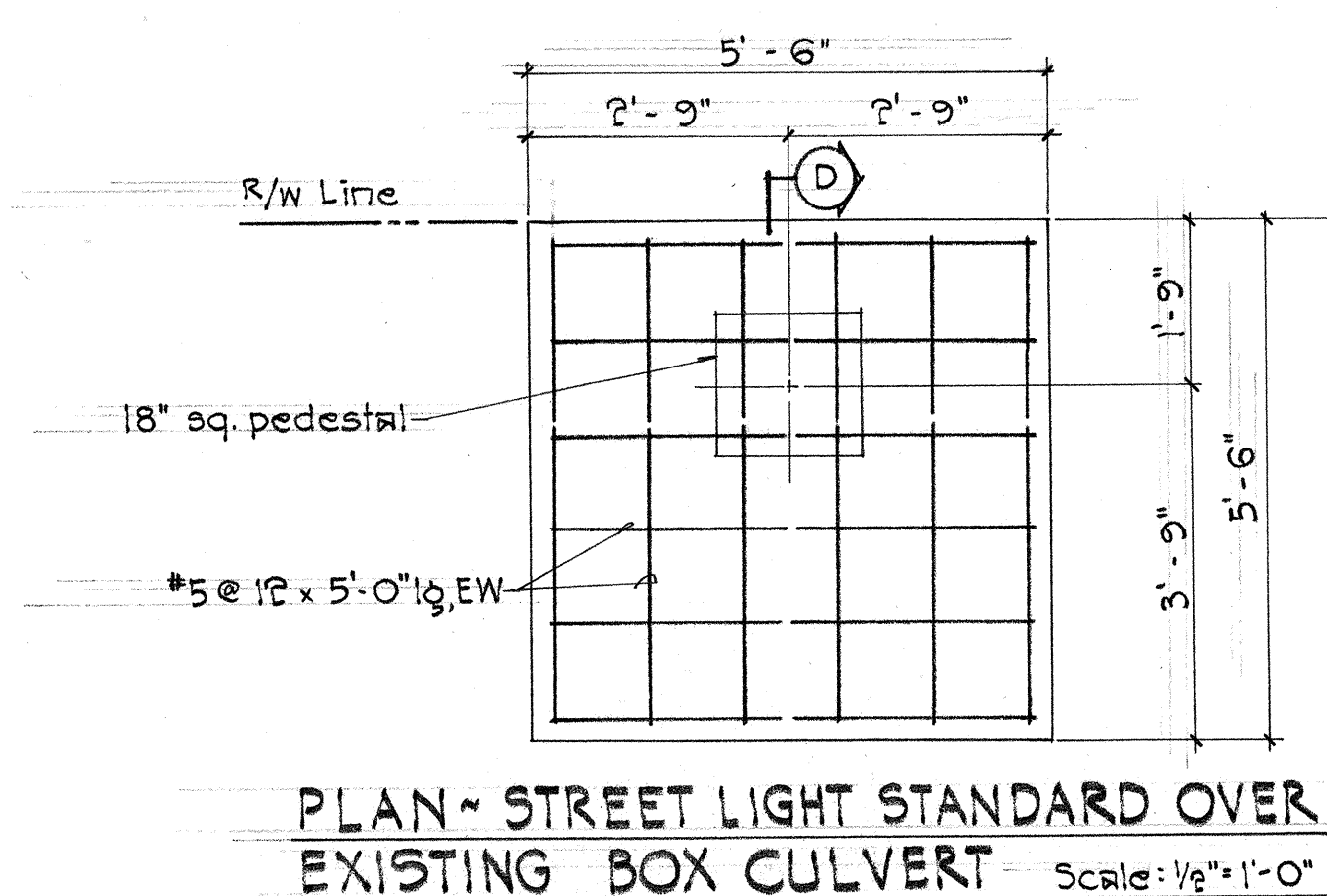
PLAN ~ SCUPPER DRAIN AT STA. 5+75
Scale: 1/4" = 1'-0"



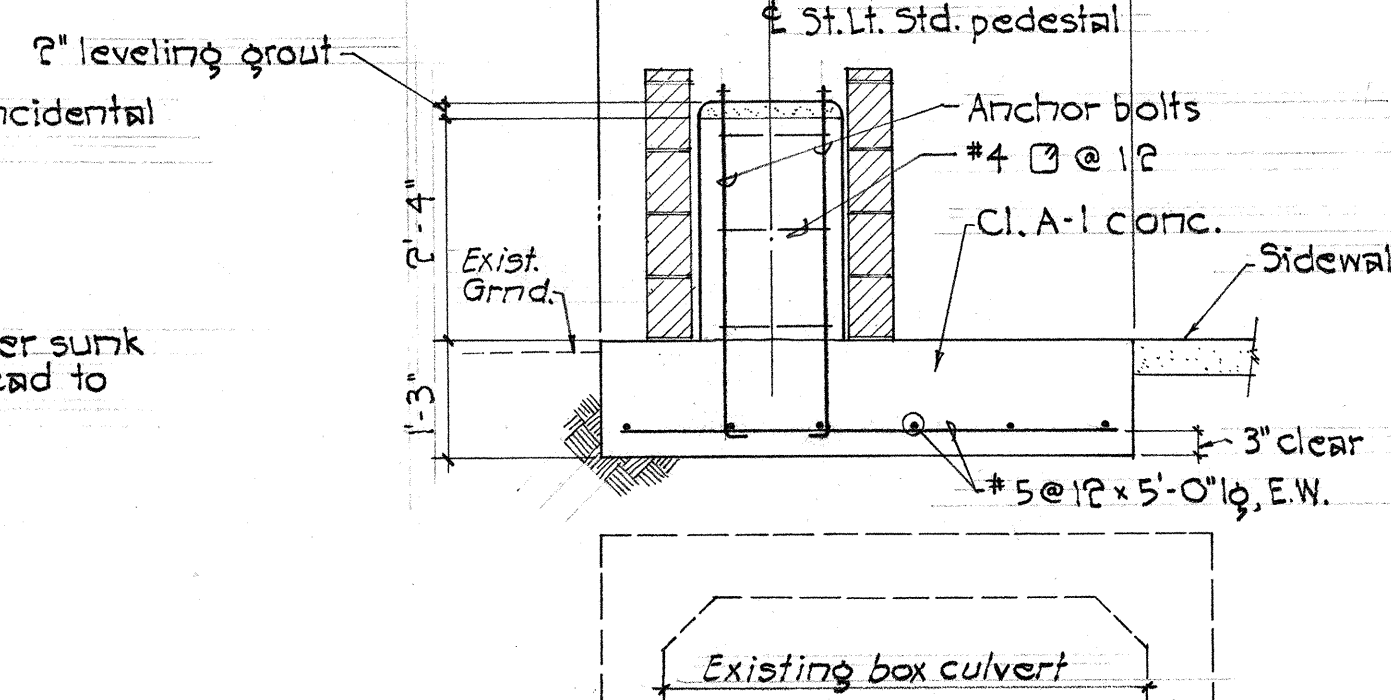
SECTION A
Scale: $\frac{3}{4}" = 1'-0"$



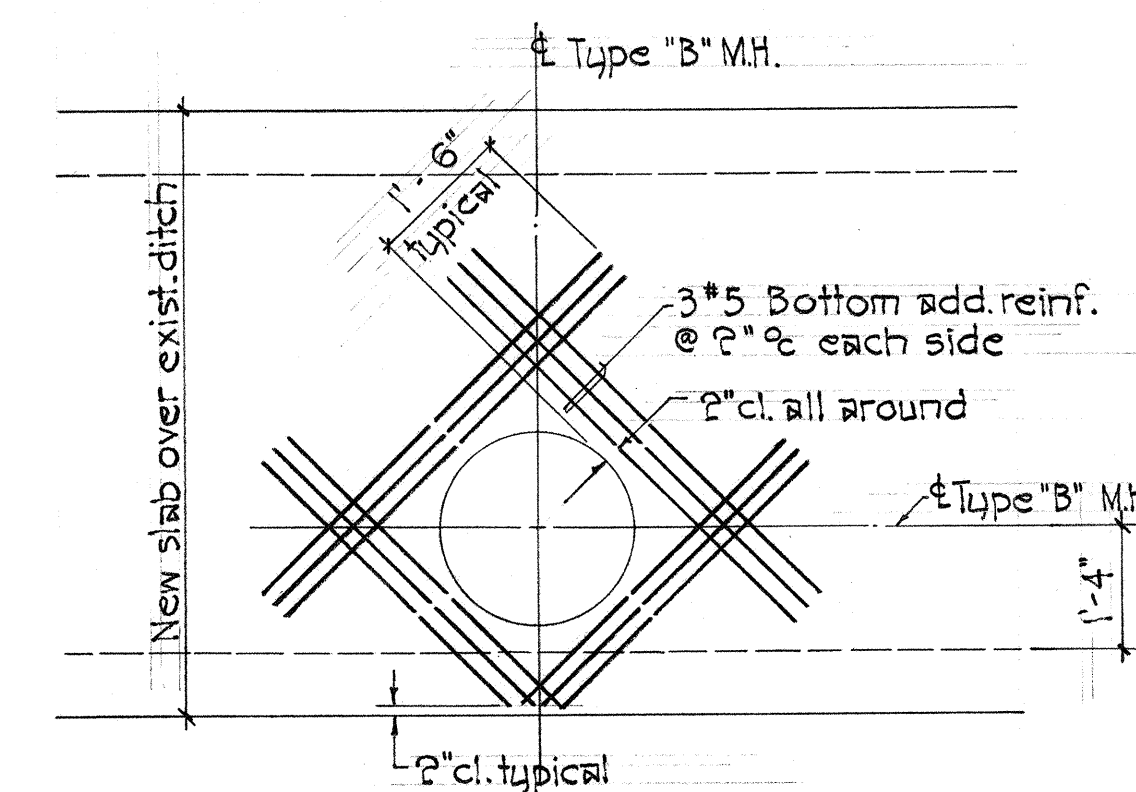
DETAIL - A
Scale: 1/2" = 1'-0"



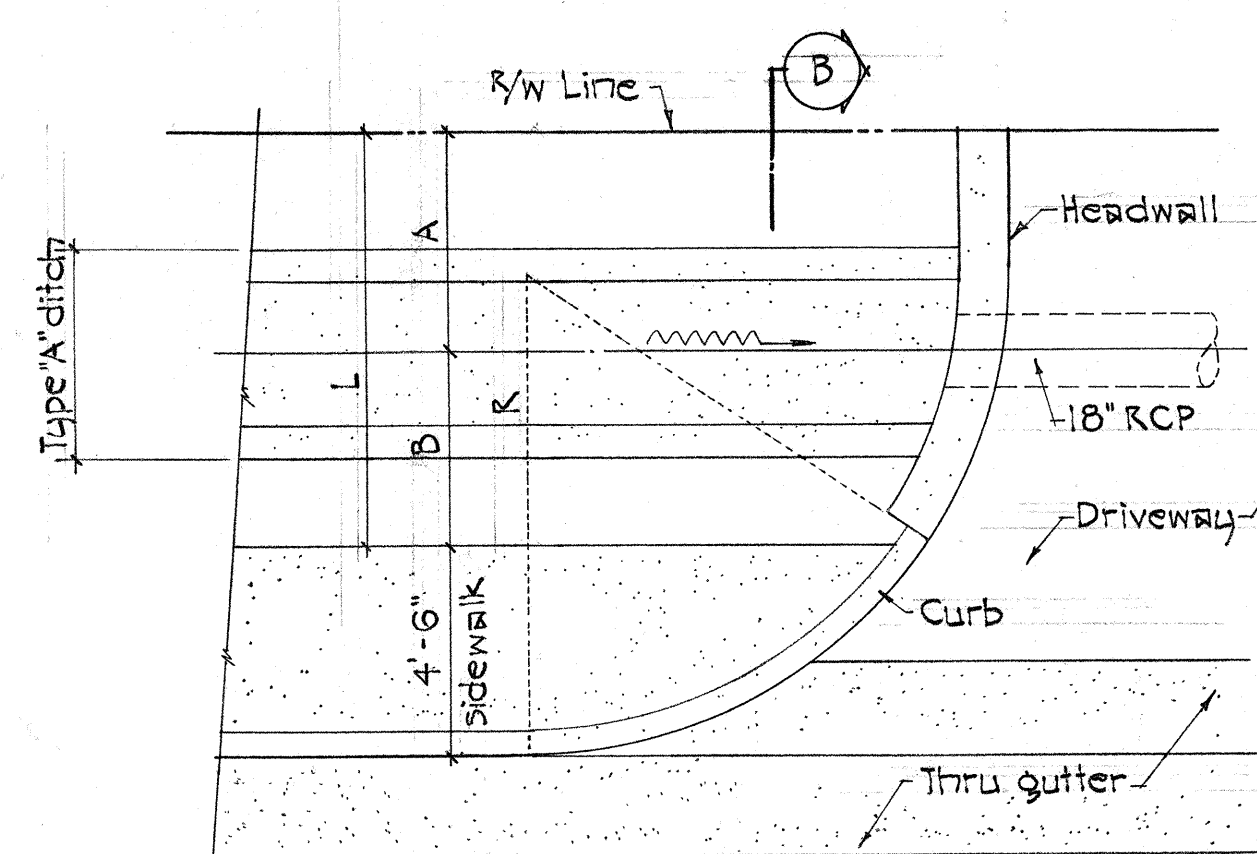
PLAN ~ STREET LIGHT STANDARD OVER
EXISTING BOX CULVERT Scale: 1/2" = 1'-0"



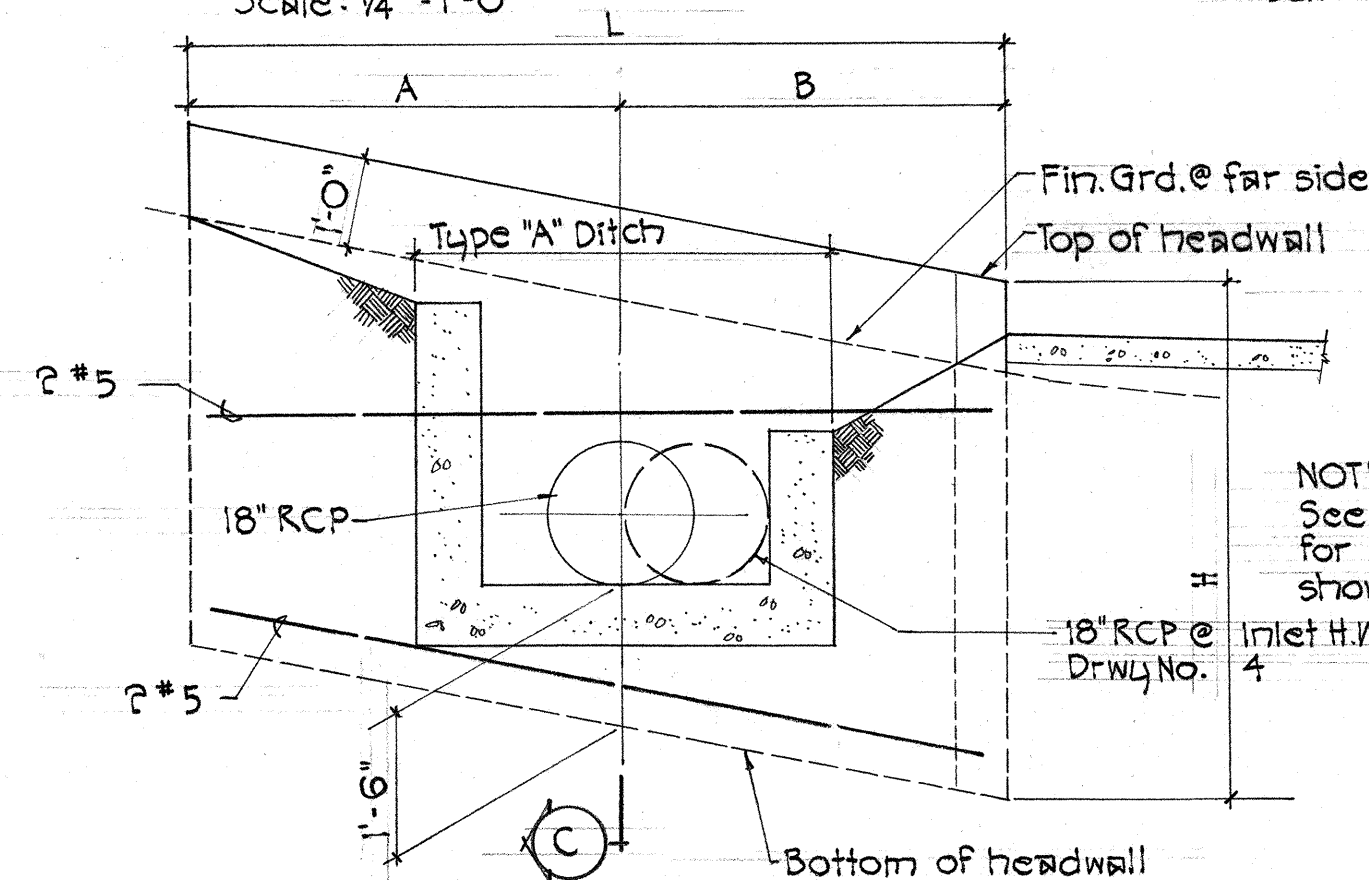
SECTION (D)
Scale: $\frac{1}{2}" = 1'-0"$



TYPICAL M.H. OPENING ADD. REINF.
Scale: $\frac{1}{2}'' = 1'-0''$

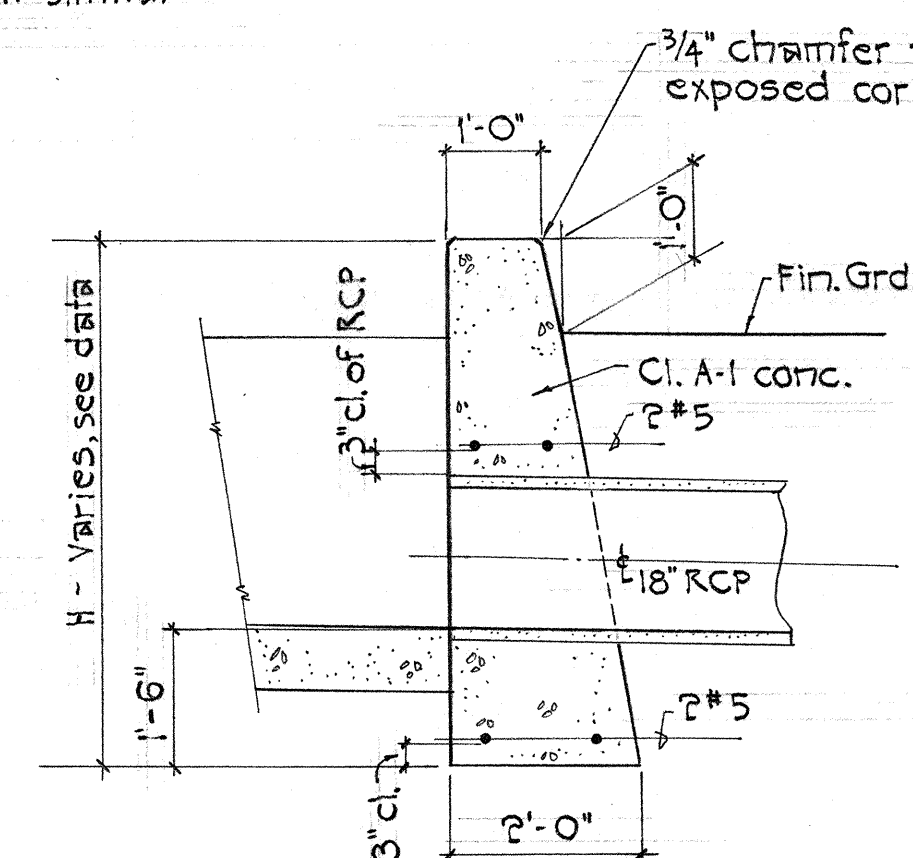


PLAN ~ TYPICAL HEADWALL
Scale: $\frac{1}{4}" = 1'-0"$



SECTION (B)
Scale: $\frac{1}{2}'' = 1'-0''$

HEADWALL DATA								
HEADWALL AT		A	B	L	H	R	Cl. A-1 conc.	Rein. steel
DRWY. No. 1	Inlet	4'-6"	4'-0"	8'-6"	5.24'	10'	2.5 C.Y.	33 lb
	Outlet	4'-6"	4'-0"	8'-6"	5.63'	10'	2.7 C.Y.	33 lb
DRWY. No. 2	Inlet	4'-6"	4'-0"	8'-6"	5.73'	10'	2.7 C.Y.	33 lb
	Outlet	4'-6"	4'-0"	8'-6"	5.80'	10'	2.7 C.Y.	33 lb
DRWY. No. 3	Inlet	4'-6"	4'-0"	8'-6"	6.09'	10'	2.9 C.Y.	33 lb
	Outlet	4'-6"	4'-0"	8'-6"	6.64'	10'	3.1 C.Y.	33 lb
DRWY. No. 4	Inlet	3'-0"	2'-2"	5'-2"	4.98'	Straight	1.4 C.Y.	21 lb
	Outlet	3'-0"	4'-0"	7'-0"	5.53'	Straight	2.2 C.Y.	27 lb
DRWY. No. 5	Inlet	4'-0"	4'-0"	8'-0"	6.41'	15'	2.8 C.Y.	31 lb
	Outlet	4'-0"	4'-6"	8'-6"	5.83'	15'	2.8 C.Y.	33 lb



SECTION
Scale: $\frac{1}{2}" = 1'-0"$ (C)

NOTE: Outlet headwall similar but opposite hand.

NOTE:
See headwall data
for dimensions not
shown.



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DRAINAGE DETAILS

KALANIANA'OLE HIGHWAY WIDENING
PROJECT NO. 72 B-03-68
UNIT I

SHEET No. 3 OF 4 SHEETS

