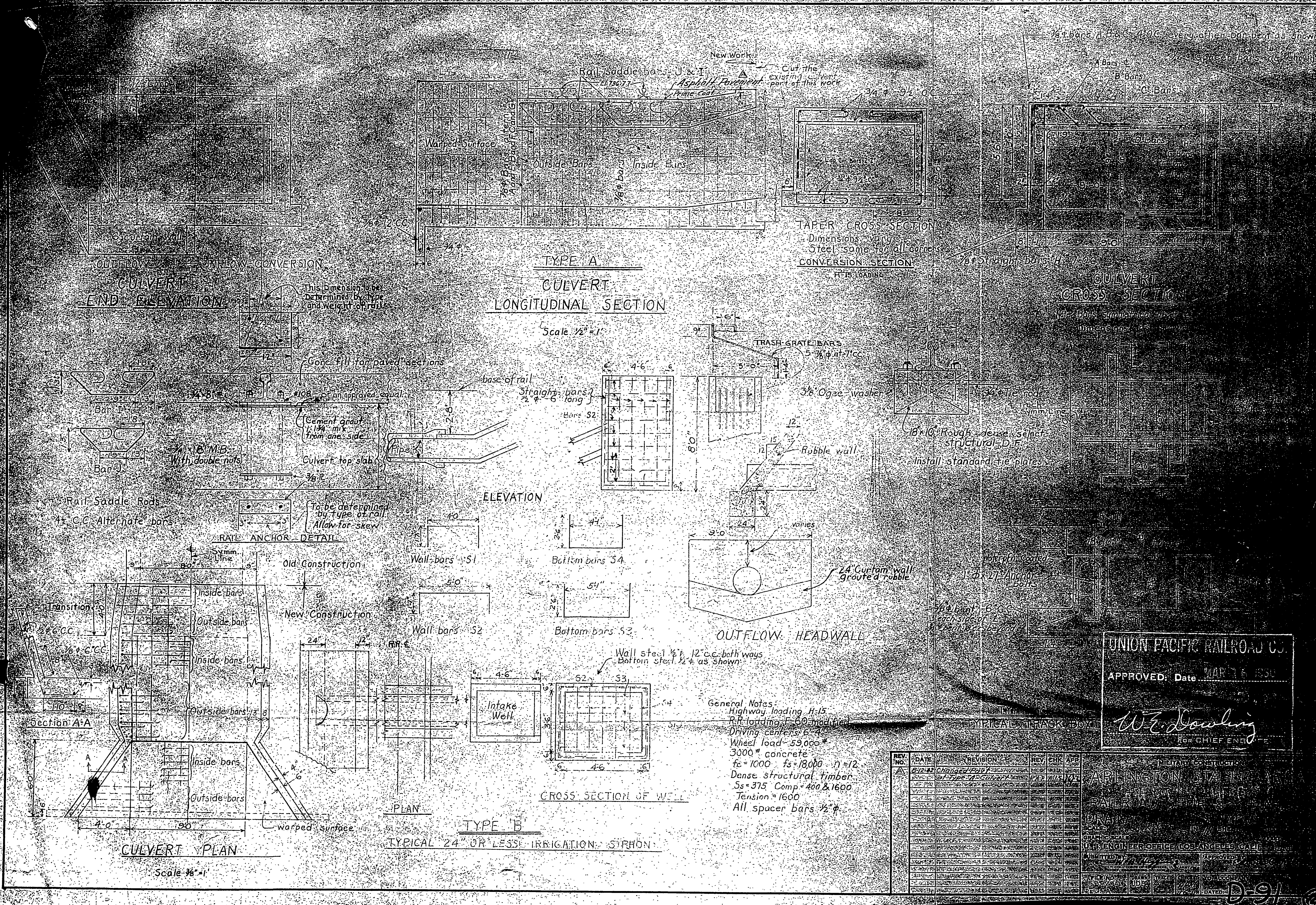
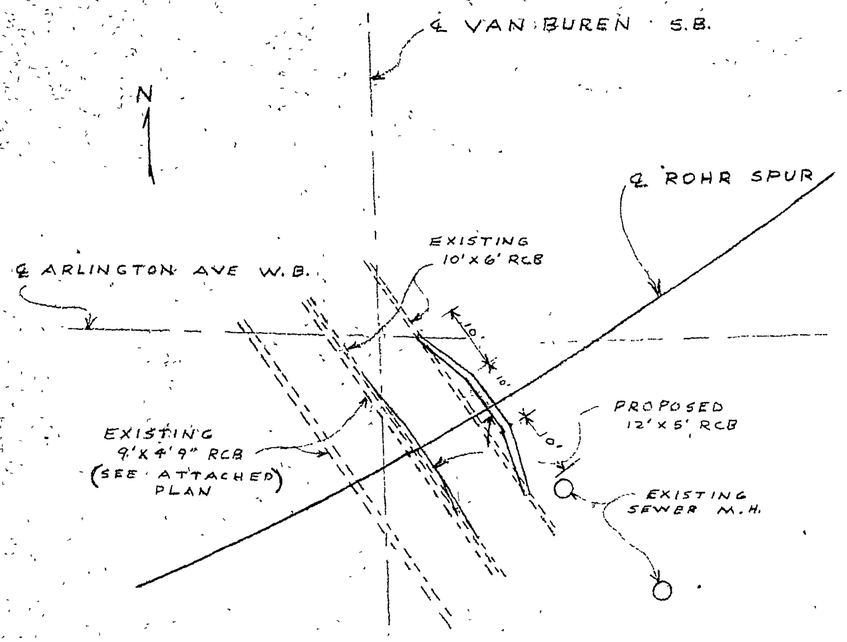
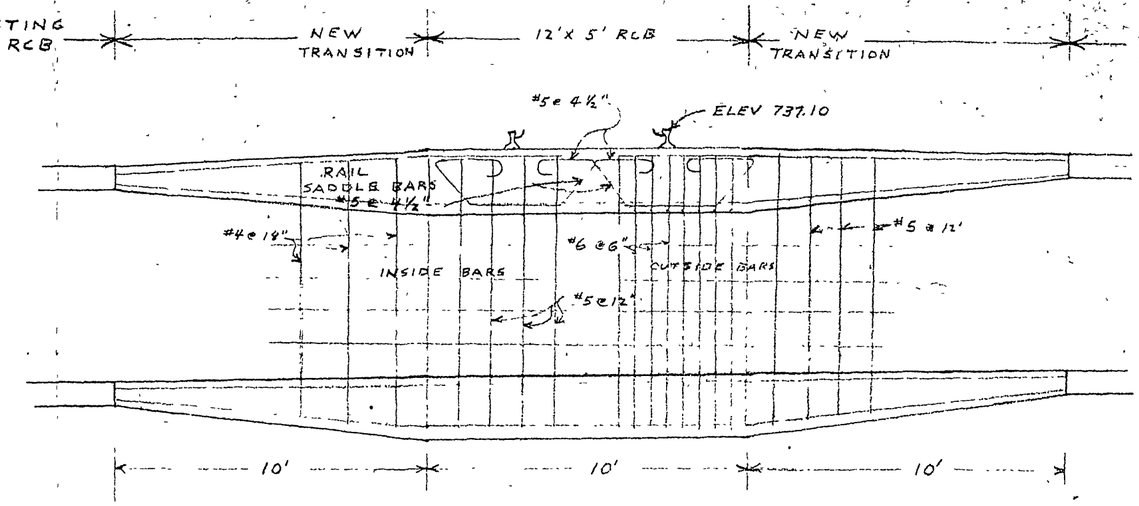
MISSING SHEET

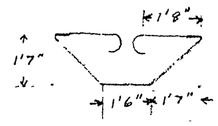

CORPS OF ENGINEERS, U. S. ARMY
New Work
Cut the existing culvert part of this work
Rail saddle bars J & I
El. 796.77
Asphalt Pavement
Prime coat
Warped Surface
7/8φ Bars altern. And B and F and G
7/8φ bars H
Outside Bars
Inside Bars
3/8φ 12 C.C.
3/4"φ
6" curtain wall
OUTFLOW - INFLOW CONVERSION
CULVERT
END ELEVATION
TYPE A
CULVERT
LONGITUDINAL SECTION
Scale 1/2" = 1'
3/4"φ - 9 1/2" O.C.
Lap Cor. Bars 2-2
1/2φ 9 1/2 cc
TAPER CROSS SECTION
Dimensions vary
Steel same for all corners
CONVERSION SECTION
H-15 LOADING
7/8"φ bars A, B & C 4" O.C. every other bar bent as shown
1/2"φ spacer bars as shown
A Bars
B Bars
C Bars
D Bars
7/8φ Straight bars H 7" O.C.
CULVERT
CROSS SECTION
This Dimension to be Determined by type and weight of rail
Conc. fill for paved sections
Bar I
Bar J
#108 - or an approved equal
Cement grout 1:1 3/4 mix from one side
3/4" x 18" M.B. With double nuts
Culvert top slab
3/8 Pl.
Rail Saddle Rods
4 1/2" C.C. Alternate bars
To be determined by type of rail
Allow for skew
RAIL ANCHOR DETAIL
base of rail
Straight bars 1/2"φ - 6" long
Bars S2
Pipe
ELEVATION
TRASH GRATE BARS 5 - 7/8φ at 7" cc
3/8" Ogee washer
3/4φ Tie rod
℄ Track
Symm. Line
18" x 10" Rough dense select structural - D.F.
Install standard tie plates
Rubble wall
varies
24" Curtain wall grouted rubble
OUTFLOW HEADWALL
Waterproof Coated
1"φ x 27" Anchor bolts
5/8φ bent 6" C.C. each side of ℄
TYPICAL TRACK BOX
Wall bars S1
Bottom bars S4
Wall bars S2
Bottom bars S3
Symm. Line
Old Construction
New Construction
Transition
Inside bars
Outside bars
1/2φ 6" CC
7/8φ 6" CC
Section A-A
warped surface
CULVERT PLAN
Scale 3/8" = 1'
RR ℄
PLAN
Intake Well
Wall steel 1/2"φ 12" c.c. both ways
Bottom steel 1/2"φ as shown
CROSS SECTION OF WELL
TYPE 'B'
TYPICAL 24" OR LESS IRRIGATION SIPHON
General Notes:
Highway loading H-15
R.R. loading E-60 modified
Driving centers 6'-4"
Wheel load - 59,000#
3000# concrete
fc = 1000 fs = 18,000 n = 12
Dense structural timber
Ss = 375 Comp. = 400 & 1600
Tension = 1600
All spacer bars 1/2"φ
UNION PACIFIC RAILROAD CO.
APPROVED: Date MAR 16 1950
W. E. Dowling
FOR CHIEF ENGINEER
REV. NO.
DATE
REVISION
REV.
CHK.
APP.
8-12-42
Changed Print at Type "A" Culvert
MILITARY CONSTRUCTION
ARLINGTON STAGING AREA
RAILROAD
DRAINAGE
U.S. ENGINEER OFFICE, LOS ANGELES, CALIF.
SUBMITTED BY
APPROVED
D-91



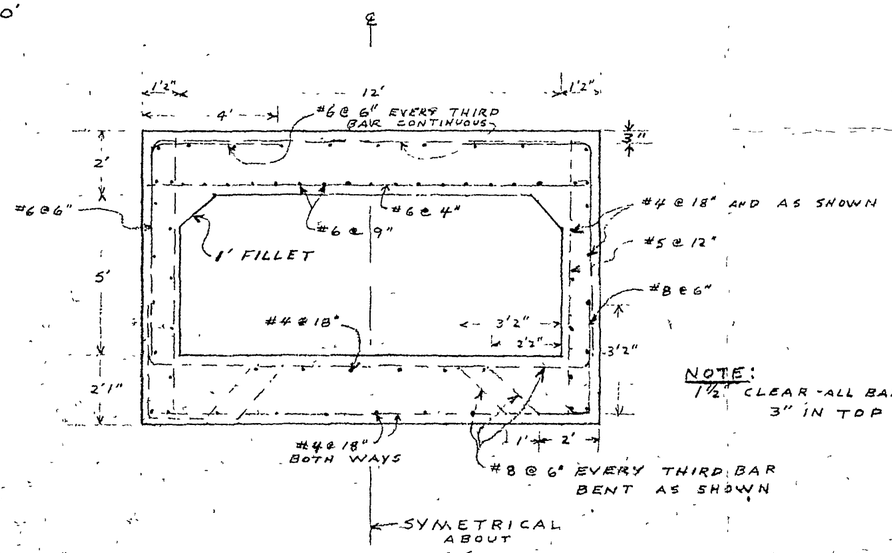
PLAN
1" = 20'



LONGITUDINAL SECTION
1" = 4'



RAIL SADDLE BARS
#5 @ 4½" c to c.



CROSS SECTION
1" = 4'

NOTE:
1½" CLEAR - ALL BARS EXCEPT 3" IN TOP SLAB

GENERAL NOTES:
E-72 R.R. LOADING
f_s = 18,000 psi
f_c = 1,000 psi
n = 12
f'_c = 3,000 psi

REVISION OF EXISTING
STORM DRAIN
FOR
RAILROAD LOADS
AT
ROHR SPUR AND
VAN BUREN - ARLINGTON
RIVERSIDE, CALIF.

E.L. YEAGER CO. MARCH 1960

DRAWN, DESIGNED by
B.D. Gilbert
B.D. GILBERT
C.E. 9586

Monroe Storm Drain

~~PLAN NO.~~
~~S-152~~

D-91 (3)