

CITY OF RIVERSIDE
CALIFORNIA
CONSTRUCTION PLANS
FOR

ALESSANDRO BLVD. & WOOD ROAD
TRUNK SEWER PROJECT
BROWN STREET SEWER

STA. 153 + 25.00 TO STA. 190 + 33.81

DWG. INDEX

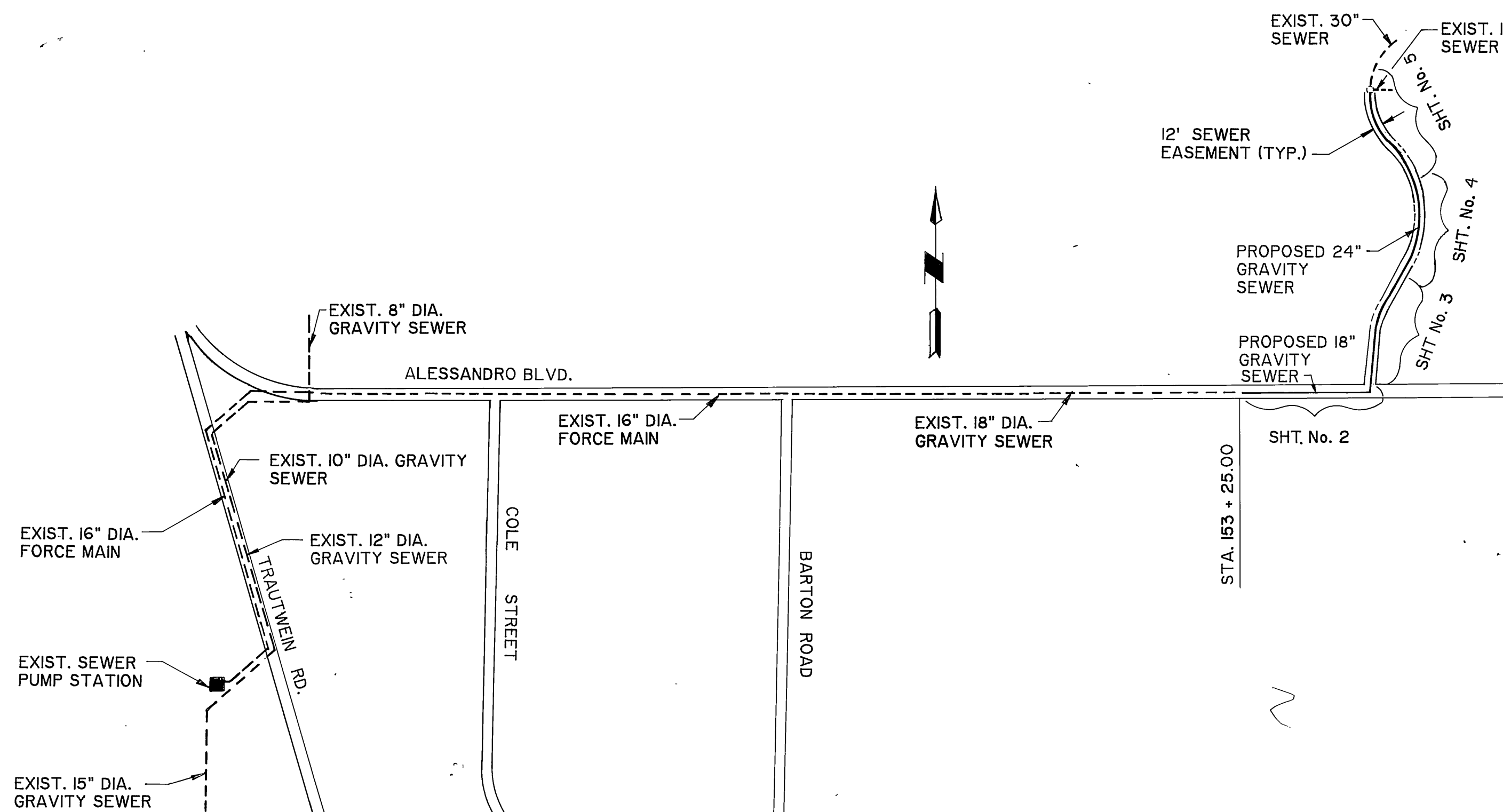
SHT. NO.	TITLE
1.	TITLE SHEET
2.	18" GRAVITY SEWER ALESSANDRO BLVD.
3.	24" GRAVITY SEWER BROWN ST.
4.	24" GRAVITY SEWER BROWN ST.
5.	24" GRAVITY SEWER BROWN ST.
6.	DETAILS

GENERAL NOTES :

- LOCATIONS OF UNDERGROUND UTILITIES SHOWN ON THE DRAWINGS WERE OBTAINED FROM AVAILABLE RECORDS. NEITHER THE CITY OR THE ENGINEER ASSUMES ANY RESPONSIBILITY FOR UTILITIES NOT SHOWN, OR NOT IN LOCATION SHOWN. CONTRACTOR SHALL VERIFY ALL LOCATIONS & ELEVATIONS AND SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT UTILITY LINES WEATHER OR NOT SHOWN. UTILITIES SHOWN IN THE PROFILE HAVING A BROKEN LEADER LINE WITH A " ? " ATOP (---) INDICATES THAT THE COVER OF THE UTILITIES ARE UNKNOWN, BUT THE UTILITY IS NOT EXPECTED TO CONFLICT WITH THE PROPOSED IMPROVEMENTS.
- CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING IMPROVEMENTS, WHICH ARE TO REMAIN IN PLACE, FROM DAMAGE. ALL IMPROVEMENTS DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE EXPEDITIOUSLY REPAIRED OR RECONSTRUCTED TO THE ENGINEERS SATISFACTION AT THE CONTRACTOR'S EXPENSE WITHOUT ADDITIONAL COMPENSATION.
- THE CONTRACTOR SHALL COMPLY WITH THE STATE DEPT. OF HEALTH SERVICES CRITERIA FOR THE SEPARATION OF WATER MAINS AND SANITARY SEWERS AS SET FORTH IN SECTION 64630, TITLE 22 OF THE CALIFORNIA ADMINISTRATIVE CODE.
- THE CONTRACTOR SHALL CONTACT "UNDERGROUND SERVICES ALERT" (U.S.A.) AT 1-800-422-4133 FOR FIELD LOCATION OF UTILITIES.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" 1985 EDITION, AND 1986 SUPPLEMENT, ALONG WITH CITY OF RIVERSIDE STANDARD DWGS.
- THE PRIVATE ENGINEER SIGNING THESE PLANS IS RESPONSIBLE FOR ASSURING THE ACCURACY & ACCEPTABILITY OF THE WORK HEREON. IN THE EVENT OF DISCREPANCIES ARISING DURING CONSTRUCTION, THE PRIVATE ENGINEER SHALL BE RESPONSIBLE FOR DETERMINING AN ACCEPTABLE SOLUTION & REVISING THE PLANS FOR APPROVAL BY THE CITY.

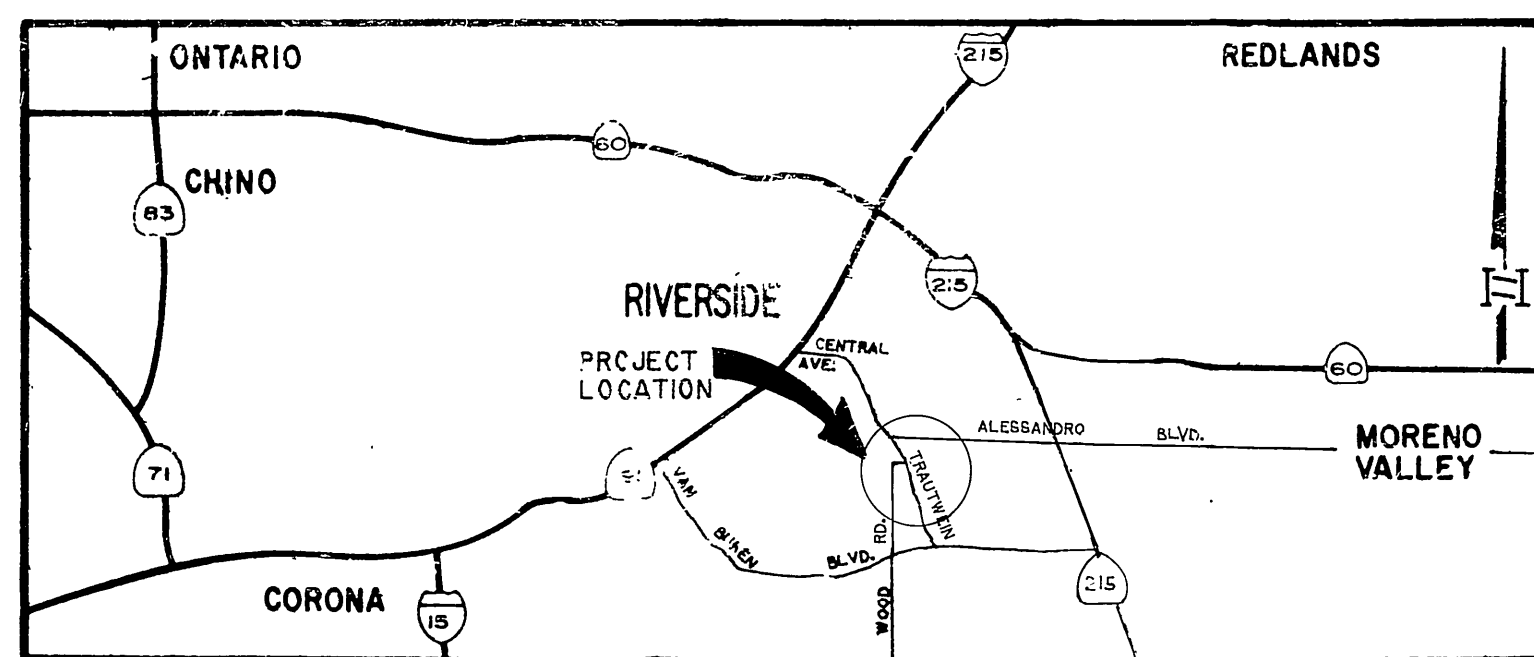
CONSTRUCTION NOTES :

- SEWER ELEVATIONS SHOWN ARE TO INVERT (FLOW-LINE OF CONDUIT).
- STRAIGHT SLOPES SHALL BE MAINTAINED BETWEEN INVERTS SHOWN.
- ADJUST ALL VALVE BOXES, PULL BOXES AND MANHOLES TO FINISH GRADE UNLESS OTHERWISE SHOWN OR DIRECTED. MANHOLES IN OPEN FIELDS SHALL BE SET TWO (2) FEET ABOVE GRADE. APPROX. RM ELEVATIONS ARE SHOWN ON THE PLAN.
- SEWER PIPE ZONE AND TRENCH BACKFILL SHALL BE IN ACCORDANCE WITH DETAIL DRAWINGS AND SPECIFICATIONS. BEDDING SHALL BE CLASS I, UNLESS NOTED OTHERWISE.
- ALL MANHOLE STEPS SHALL BE PLASTIC REINFORCED WITH 1/2" DIA. STEEL BAR. TREAD SHALL BE OF THE "NON-SKID" TYPE WITH SIDES RAISED TO PREVENT SLIPPING. (AS MFG. BY M.A. INDUSTRIES, INC. OR APPROVED EQUAL.)
- ALL MANHOLES DEEPER THAN TWELVE (12) FEET TO THE SHELF SHALL BE EQUIPPED WITH A "SAFETY CLIMB" AS MFG. BY NORTH CONSUMER SAFETY PROD. OR APPROVED EQUAL.
- ALL MANHOLES TO BE CONSTRUCTED PER CITY OF RIVERSIDE STANDARD 500 WITH THE FOLLOWING MODIFICATIONS: C.L. STATION SHOWN IS THE PHYSICAL CENTER OF THE MANHOLE AND NOT THE OFFSET C.L. OF THE COVER. ELEVATIONS SHOWN AT C.L. REFER TO THE PROLONGED INVERT GRADE LINES.



BASIS OF BEARING: BEARINGS ARE BASED ON THE SOUTH LINE OF THE NORTHWEST ONE-QUARTER LINE OF SECTION 29, T.3S, R.4W, S.B.M. (ALSO KNOWN AS THE CENTERLINE OF KRAMERIA AVE.) BEING N.88°53'45"E. AS FOUND ON THE PARCEL MAP ON FILE IN BOOK 14, PAGES 86 & 87, OFFICIAL RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

LOCATION & INDEX MAP
N.T.S.



TRENCH RESURFACING

STREET	STA. TO STA.	STRUCTURAL SECTION PER STD. DWG. 453 OR .36" A.C. OVER 1.30' C.A.B. OR .95" FULL DEPTH A.C.
ALESSANDRO BLVD.	STA. 153 + 25.00 TO STA. 158 + 50.00	

AS BUILT

APPROVED BY: *Rodney D. Crampton*
DATE: 12-15-89

VICINITY MAP
N.T.S.

FOR THE DIRECTION OF:
Rodney D. Crampton
REGISTERED CIVIL ENGINEER NO. C22522
EXPIRATION DATE 12-31-89 DATE: 2-26-87

J. F. DAVIDSON ASSOCIATES

CIVIL ENGINEERS • PLANNERS • SURVEYORS
3426 TENTH STREET • RIVERSIDE, CALIFORNIA 92501 • (714) 988-0444
11200 S. MT. VERNON AVE., SUITE 107 • COLTON, CALIF. 92324 • (714) 985-1082



COUNTY OF RIVERSIDE, CALIFORNIA
EASTERN MUNICIPAL WATER DISTRICT

APPROVED BY: *[Signature]*
DATE: 2-25-87

COUNTY OF RIVERSIDE, CALIFORNIA
WESTERN MUNICIPAL WATER DISTRICT

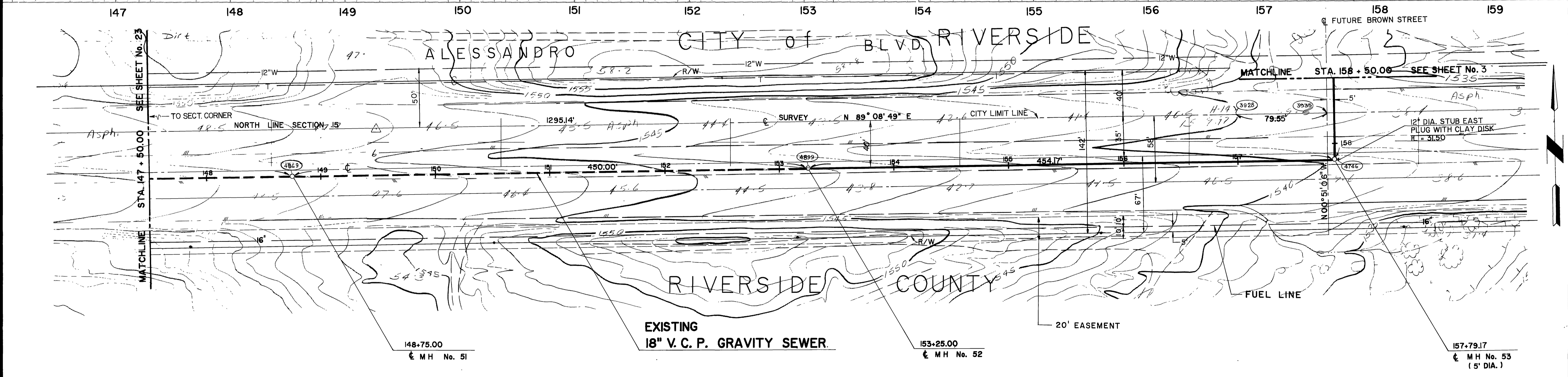
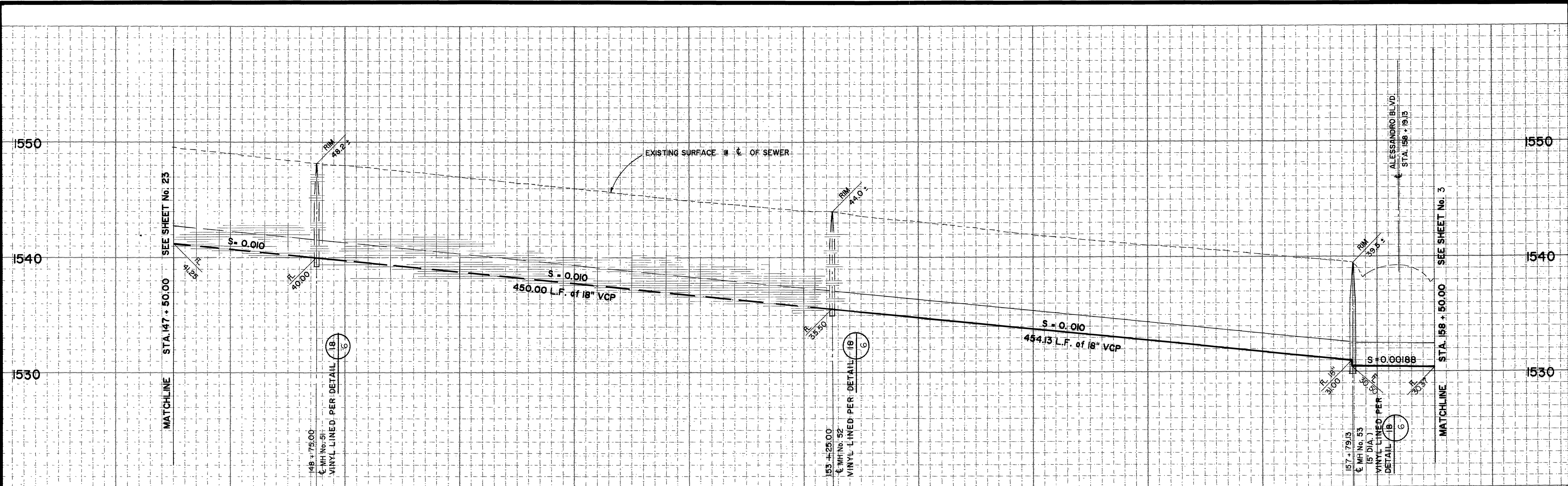
REVIEWED BY: *[Signature]*
DATE: 2-17-87

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY: *[Signature]*
DATE: 2/27/87

ALESSANDRO BLVD. & WOOD RD.
TRUNK SEWER PROJECT
BROWN STREET SEWER
TITLE SHEET

PROJECT NO.
S-1430C
1 of 6
FILE NO. 86-8202



NOTE:
 IN ALESSANDRO BLVD. RIV. CO. RD. DEPT.
 REQUIRES RECONSTRUCTION OF ENTIRE LANE
 WIDTH IF EXIST. TRAVEL LANE IS DAMAGED BY
 CONTRACTOR.

AS BUILT
 APPROVED BY: *Robert D. Compton*
 DATE: 12-15-89

COUNTY OF RIVERSIDE, CALIFORNIA
 ROAD DEPARTMENT
 APPROVED BY: *Anna F. Baumgartner*
 DATE: 2/18/87

PREPARED UNDER THE DIRECTION OF:
Robert D. Compton
 REGISTERED CIVIL ENGINEER NO. C22522
 EXPIRATION DATE 12-31-89 DATE: 2-17-87

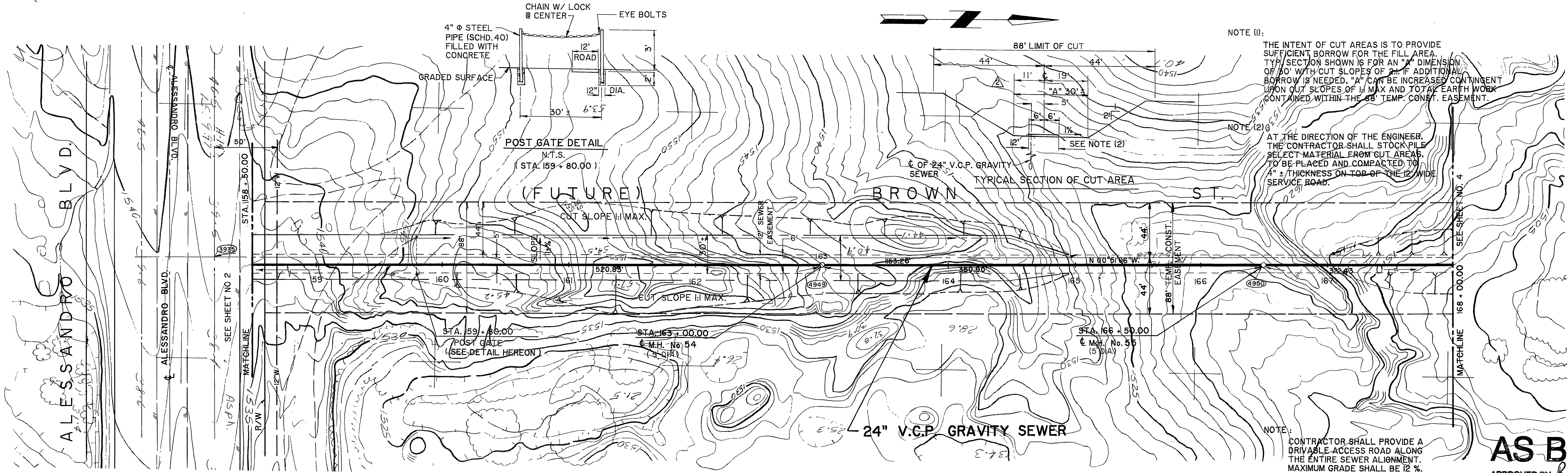
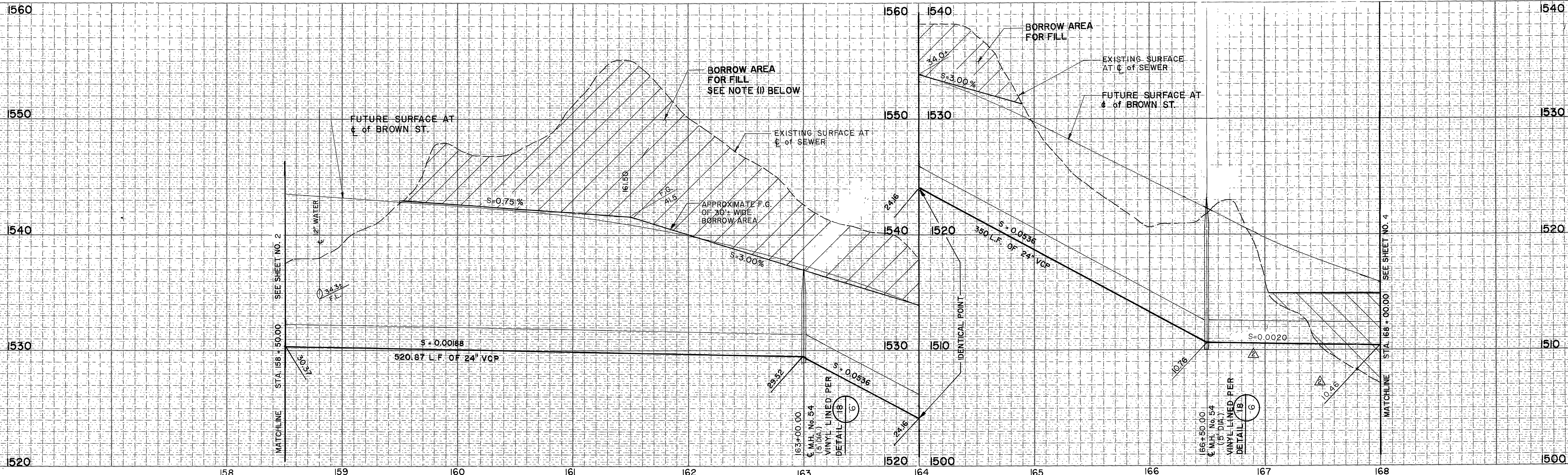
J F DAVIDSON ASSOCIATES, INC.
 CIVIL ENGINEERS • SURVEYORS • PLANNERS
 P.O. BOX 493 11200 SO. MT. VERNON AVE., #D 73-080 EL PASO, #103
 RIVERSIDE, CA 92502 COLTON, CA 92324 PALM DESERT, CA 92260
 (714) 686-0844 (714) 825-1082 (619) 346-5691
 SCALE: _____ BENCH MARK: _____ DATE: 8/71 RIVERSIDE COUNTY ELEV. 1700.870
 DATE: _____
 BRASS DISK FLUSH & MARKED V. S. 10-84, 0.8 M E. ON VAN BUREN BLVD. FROM INT. OF VAN BUREN & WOOD RD. TOP N. OF VAN BUREN AT THE GRANITE BOULDER ON TOP OF 3' X 10' X 10' BOULDER.

REVISIONS	DATE
DESIGNED BY	DRAWN BY
CHECKED BY	

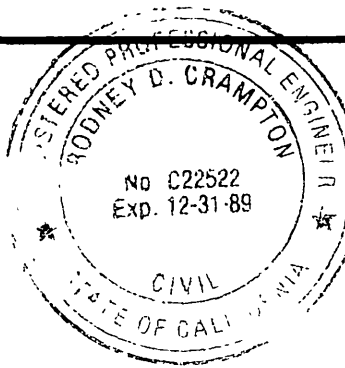
REVISOR: _____ DATE: 8/87
 CITY OF RIVERSIDE, CALIFORNIA
 DEPARTMENT OF PUBLIC WORKS
 APPROVED BY: *Barry Bad*
 DATE: 8/27/87

ALESSANDRO BLVD. & WOOD RD.
 TRUNK SEWER PROJECT
 BROWN STREET SEWER
 18" GRAVITY SEWER ALESSANDRO BLVD.
 STA. 147 + 50.00 TO STA. 158 + 50.00
 HORIZ. SCALE: 1" = 40' VERT. SCALE: 1" = 4'

PROJECT NO.
S-1430C
 SHEET 2 OF 6
 FILE NO. 86-9202



AS BUILT
 APPROVED BY: *Robert J. Compton*
 DATE: 12-15-89



PREPARED UNDER THE DIRECTION OF:
Robert J. Compton
 REGISTERED CIVIL ENGINEER NO. C22522
 EXPIRATION DATE 12-31-89 DATE: 2-17-87

J F DAVIDSON ASSOCIATES, INC.
 CIVIL ENGINEERS • SURVEYORS • PLANNERS
 P.O. BOX 493 11200 SO. MT. VERNON AVE., #D 73-080 EL PASO, #103
 RIVERSIDE, CA 92502 COLTON, CA 92324 PALM DESERT, CA 92260
 (714) 686-0844 (714) 825-1082 (619) 346-5691

REVISIONS	DATE
REVISED FOR BROWN ST.	8/87
AS BUILT	12-89

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

ALESSANDRO BLVD. & WOOD RD.
TRUNK SEWER PROJECT
BROWN STREET SEWER
18" GRAVITY SEWER ALESSANDRO BLVD.

PROJECT NO.
S-1430C
 SHEET 3 OF 6

SCALE: _____ BENCH MARK: DATE: 1/71 RIVERSIDE COUNTY ELEV. 1700.870
 BRASS DISK FLUSH & MARKED V. B. 10-84, 0.5 M E. ON VAN BUREN BLVD. FROM INT. OF VAN BUREN & WOOD RD. 206' N. OF VAN BUREN AT THE GRANITE BOLDER ON TOP OF 5' X 16' X 16' BOLDER.

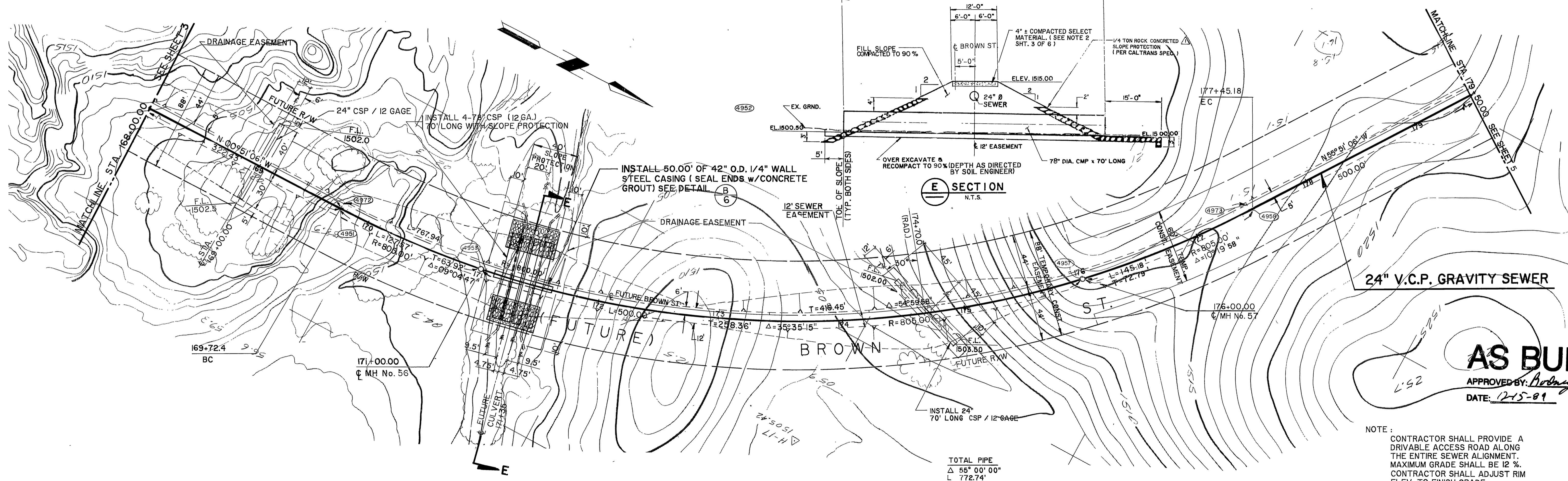
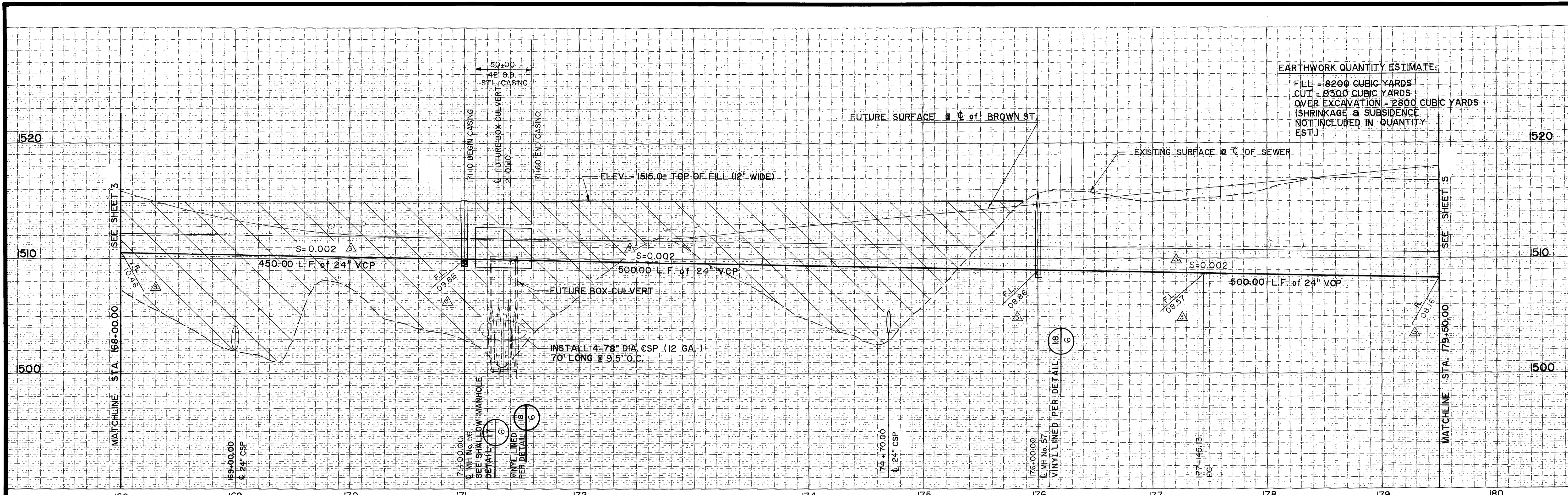
DESIGNED BY	DRAWN BY	CHECKED BY

APPROVED BY: *Robert J. Compton*
 DIRECTOR OF PUBLIC WORKS
 DATE: 8/27/87

STA. 158 + 50.00 TO STA. 168 + 00.00
 HORIZ. SCALE: 1" = 40' VERT. SCALE: 1" = 4'

FILE NO. 86-9202

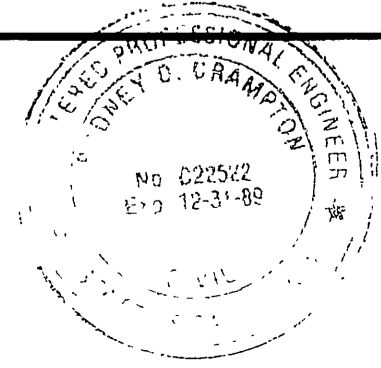
EARTHWORK QUANTITY ESTIMATE:
 FILL = 8200 CUBIC YARDS
 CUT = 9300 CUBIC YARDS
 OVER EXCAVATION = 2800 CUBIC YARDS
 (SHRINKAGE & SUBSIDENCE NOT INCLUDED IN QUANTITY EST.)



AS BUILT
 APPROVED BY: *Robyn D. Crampton*
 DATE: 12-15-89

NOTE:
 CONTRACTOR SHALL PROVIDE A DRIVABLE ACCESS ROAD ALONG THE ENTIRE SEWER ALIGNMENT. MAXIMUM GRADE SHALL BE 12%. CONTRACTOR SHALL ADJUST RIM ELEV. TO FINISH GRADE.

TOTAL PIPE
 Δ 55' 00" 00"
 L 772.74'
 R 805.00'
 T 419.06'



PREPARED UNDER THE DIRECTION OF:
Robyn D. Crampton
 REGISTERED CIVIL ENGINEER NO. C22522
 EXPIRATION DATE 12-31-89 DATE: 2-17-87

J F DAVIDSON ASSOCIATES, INC.
 CIVIL ENGINEERS • SURVEYORS • PLANNERS
 P.O. BOX 493 11200 SO. MIT VERNON AVE. #D 73-080 EL PASO, #103
 RIVERSIDE, CA 92502 COLTON, CA 92324 PALM DESERT, CA 92260
 (714) 686-0844 (714) 825-1082 (619) 346-5691



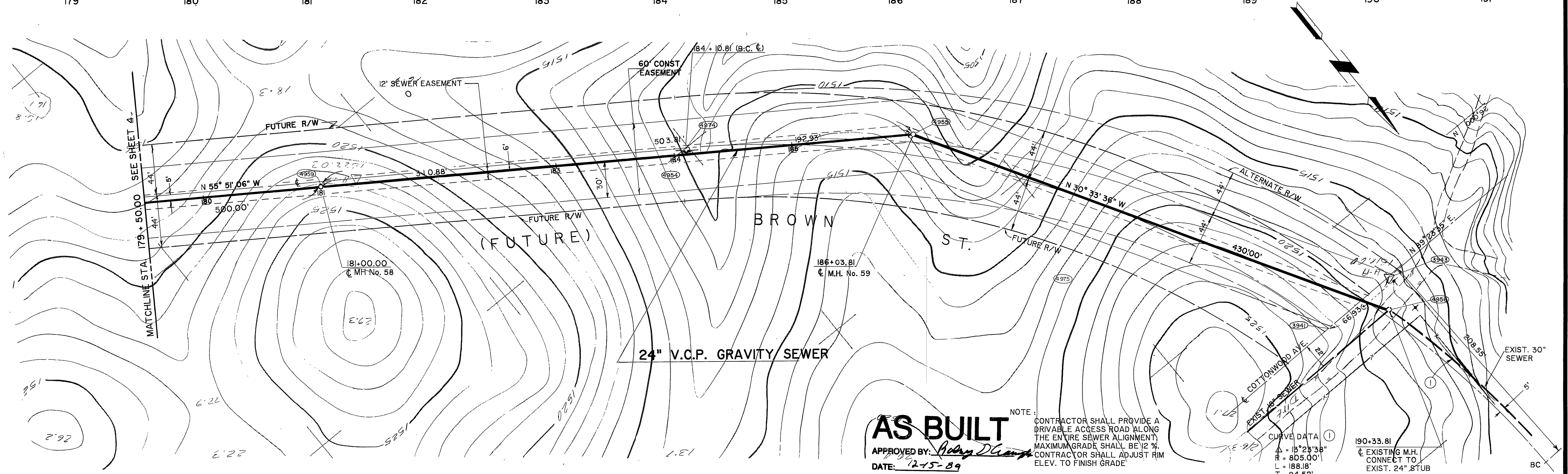
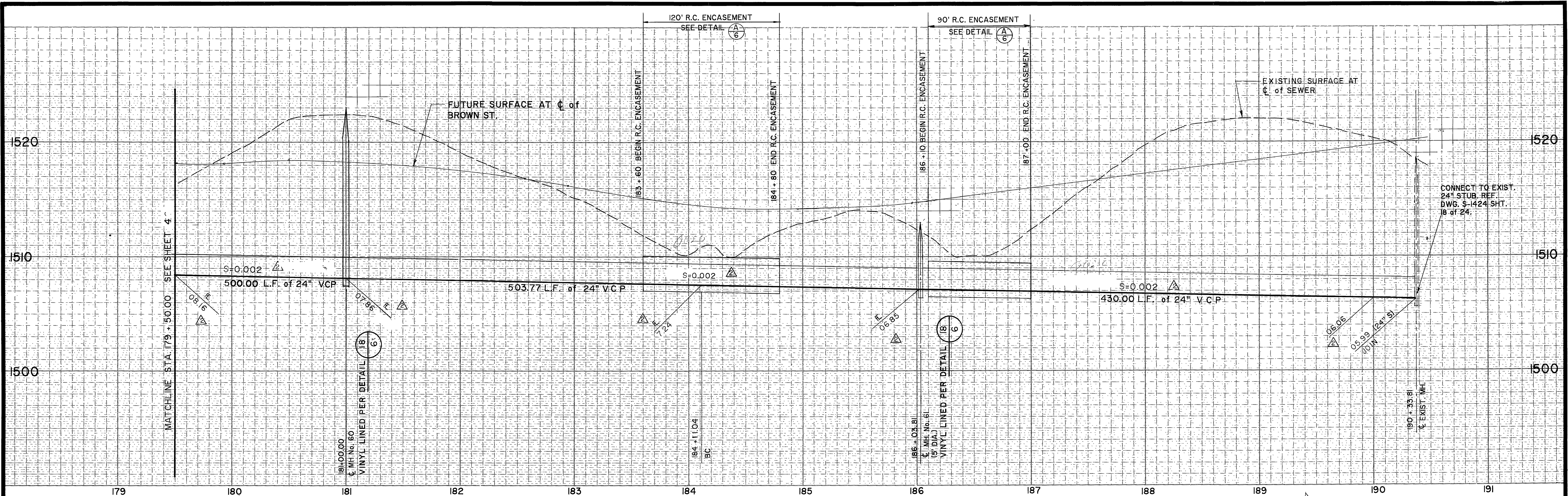
SCALE: BENCH MARK: DATE: 07/1987 RIVERSIDE COUNTY ELEV. 1700.870
 BRASS DISK FLUSH & MARKED V. B. 10-84. 0.8 MI E. ON VAN BUREN BLVD. FROM INT. OF VAN BUREN & WOOD RD. 200' N. OF VAN BUREN AT THE GRANITE BOULDER ON TOP OF 3' X 16' X 16' BOULDER.

REVISIONS	DATE
Δ REVISED SLOPE PROTECTION	3-12-87
Δ REVISED FOR BROWN ST.	8/87
Δ AS BUILT	12-89

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
 APPROVED BY: *Robyn D. Crampton*
 TRAFFIC DIVISION
 DATE: 8/27/87

ALESSANDRO BLVD. & WOOD RD.
TRUNK SEWER PROJECT
BROWN STREET SEWER
24" GRAVITY SEWER BROWN ST.
 STA. 168 +00.00 TO STA. 179 +50.00
 HORIZ. SCALE: 1" = 40' VERT. SCALE: 1" = 4'

PROJECT NO. **S-1430C**
 SHEET **4** OF **6**
 FILE NO. 96-9202

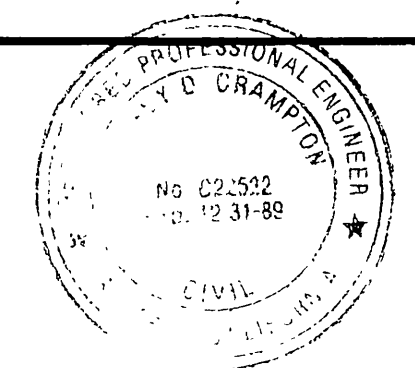


AS BUILT NOTE: CONTRACTOR SHALL PROVIDE A DRIVABLE ACCESS ROAD ALONG THE ENTIRE SEWER ALIGNMENT. MAXIMUM GRADE SHALL BE 12%. CONTRACTOR SHALL ADJUST RIM ELEV. TO FINISH GRADE.

APPROVED BY: *Roby D. Camp*
DATE: 12-15-89

CURVE DATA:
 $\Delta = 18^{\circ}23'38''$
 $R = 805.00'$
 $L = 188.18'$
 $T = 94.52'$

190+33.81
 EXISTING M.H. CONNECT TO EXIST. 24" STUB



PREPARED UNDER THE DIRECTION OF:
Roby D. Camp
 REGISTERED CIVIL ENGINEER NO. 02552
 EXPIRATION DATE: 12-31-89

J F DAVIDSON ASSOCIATES, INC.
 CIVIL ENGINEERS • SURVEYORS • PLANNERS
 P.O. BOX 493 11200 SO. MT. VERNON AVE., #D 73-080 EL PASO, #103
 RIVERSIDE, CA 92502 COULON, CA 92324 PALM DESERT, CA 92260
 (714) 686-0844 (714) 825-1082 (619) 346-5671

SCALE: BENCH MARK: DATE: 1971 RIVERSIDE COUNTY ELEV. 1700.870
 BRASS DISK FLUSH & MARKED V. S. 10-84, 0.6 MI E. ON VAN BUREN BLVD. FROM INT. OF VAN BUREN & WOOD RD. 206' N. OF VAN BUREN AT THE GRANITE BOULDER ON TOP OF 3' X 16' X 16' BOULDER.

REVISIONS	APPR.	DATE
DESIGNED BY	DRAWN BY	CHECKED BY

REVISOR: *8/87*
 AS BUILT

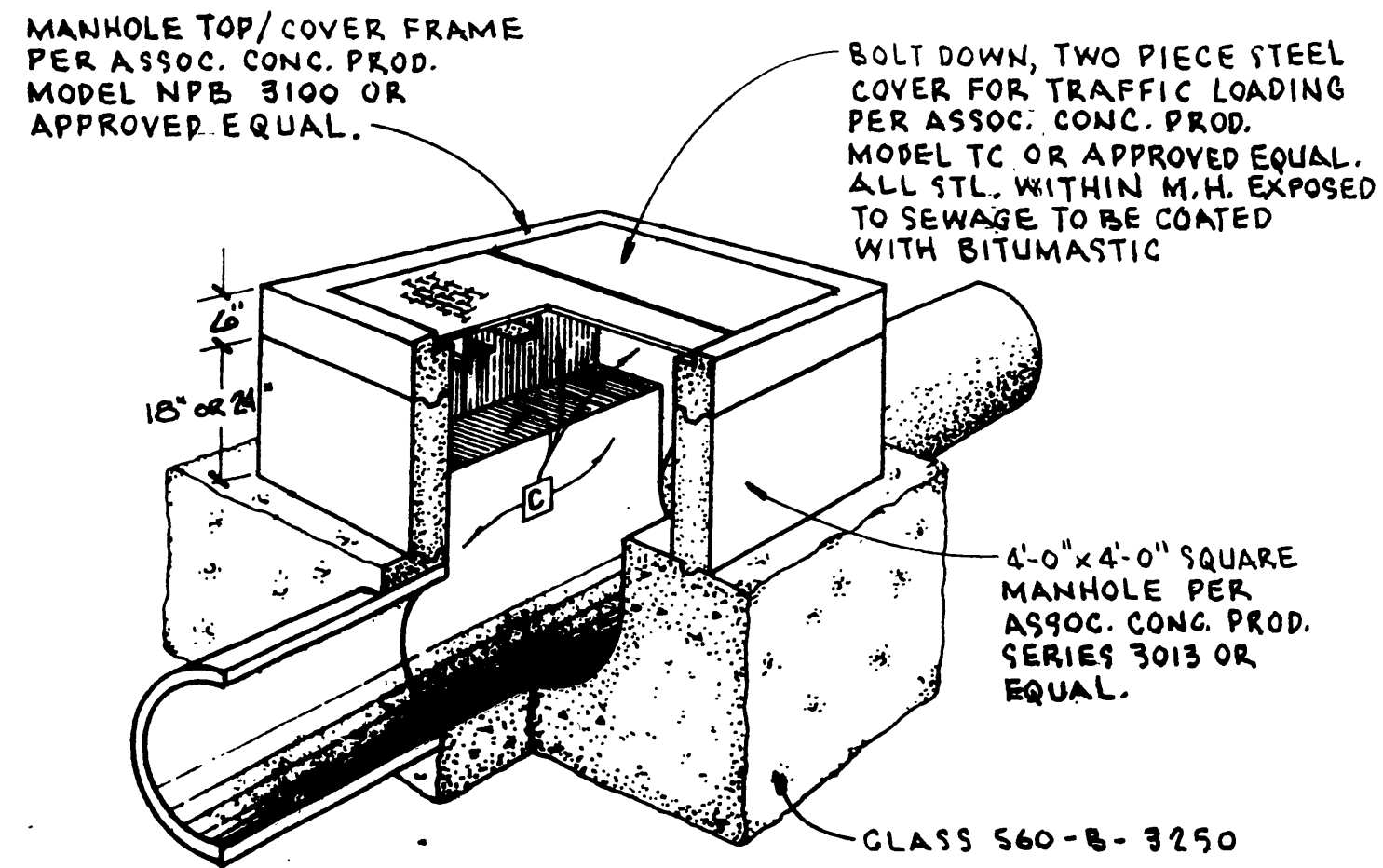
CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

APPROVED BY: *Dan Paul*
 DIRECTOR OF PUBLIC WORKS
 DATE: 8/27/87

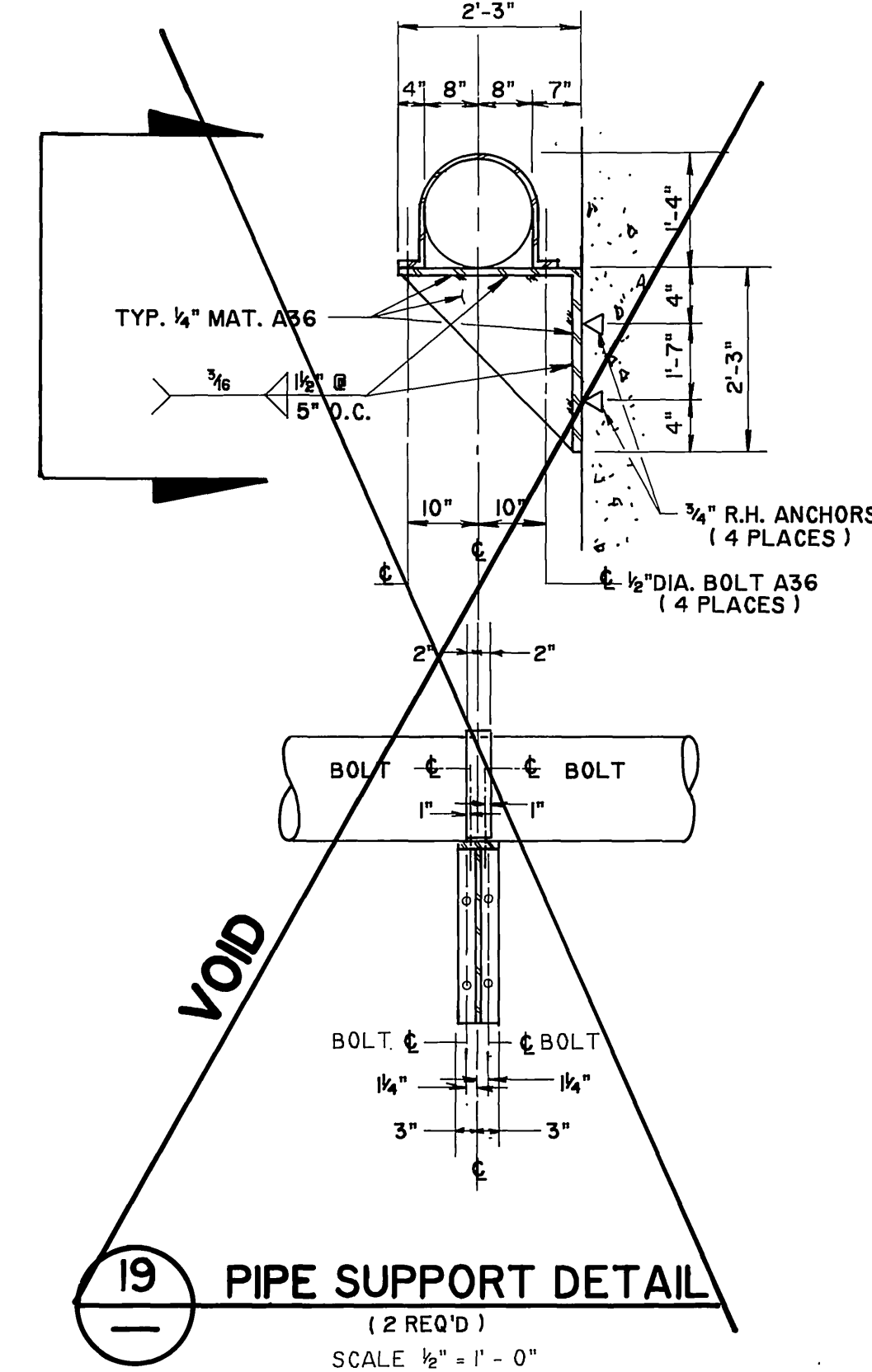
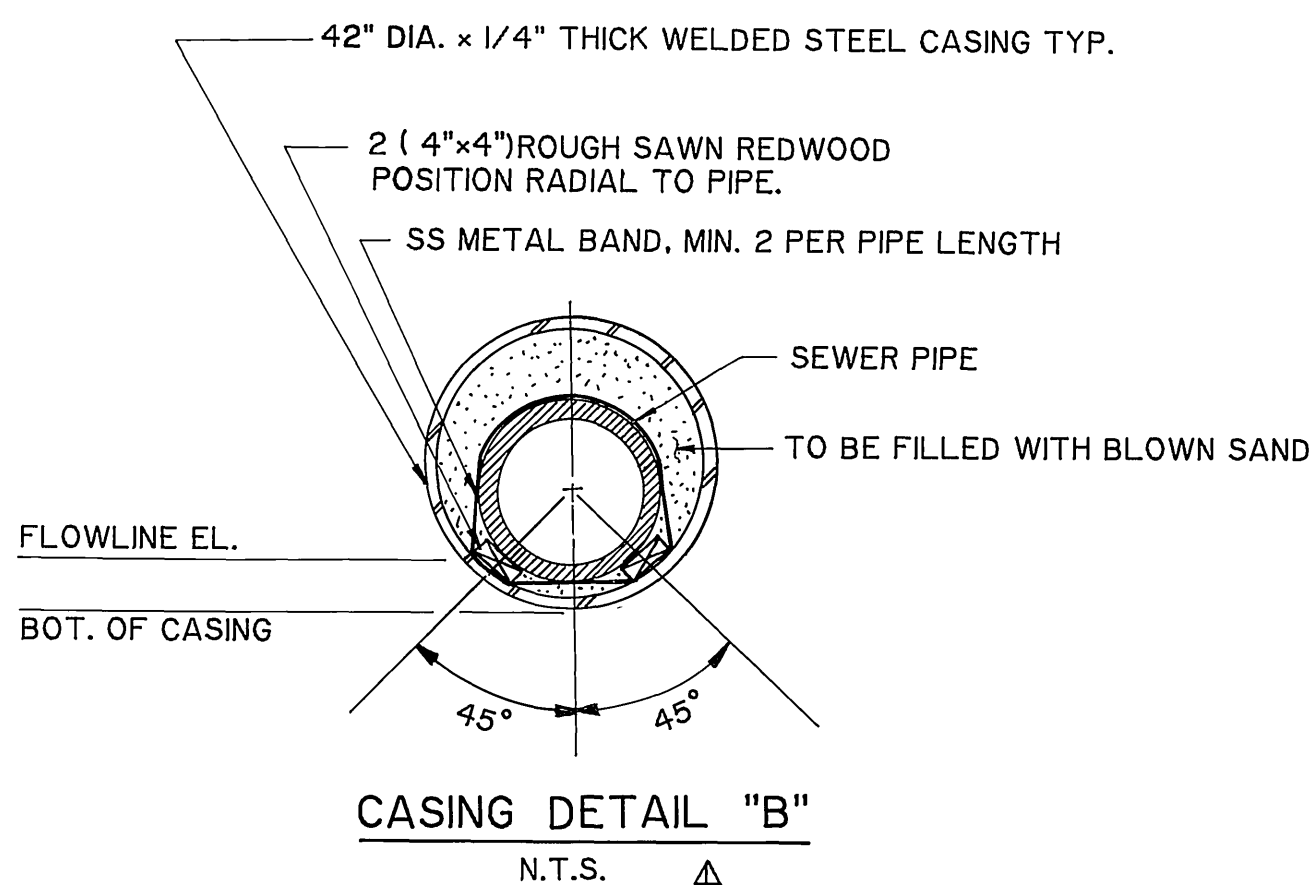
ALESSANDRO BLVD. & WOOD RD. TRUNK SEWER PROJECT
BROWN STREET SEWER
 24" GRAVITY SEWER BROWN ST.
 STA. 179 + 50.00 TO STA. 190 + 33.77

PROJECT NO. **S-1430C**
 SHEET **5** OF **6**
 FILE NO. 86-9202

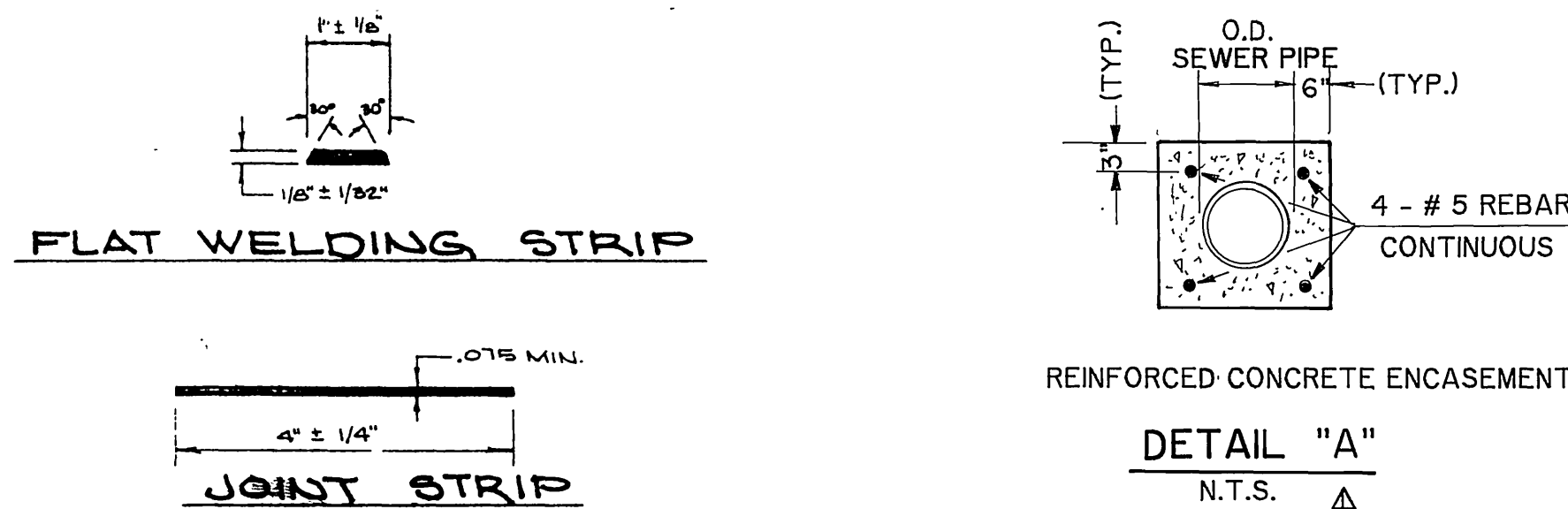
HORIZ. SCALE: 1" = 40' VERT. SCALE: 1" = 4'



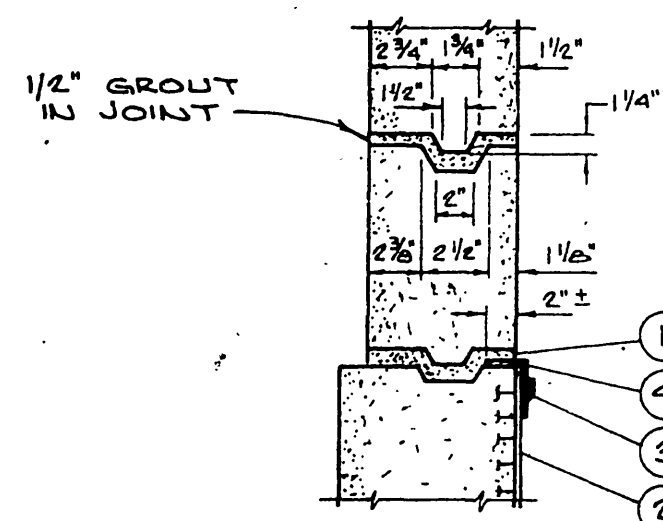
17 SHALLOW MANHOLE DETAIL



19 PIPE SUPPORT DETAIL
(2 REQ'D)
SCALE 1/2\"/>



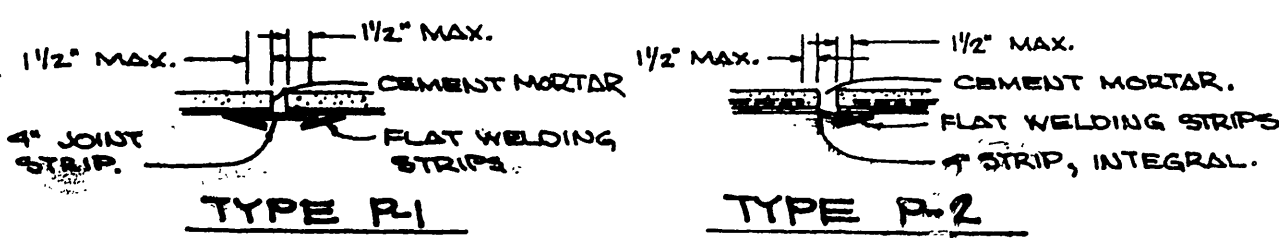
20 GENERATOR FOUNDATION DETAIL
SCALE 1/4\"/>



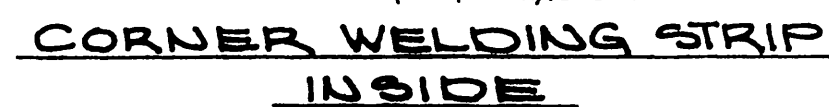
PVC LINER INSTALLATION NOTES

1. SET MANHOLE SHAFT AND GRADE RINGS IN CEMENT GROUT ON TOP OF PVC LINER.
2. T-LOCK PVC LINER INSTALLED IN PIPE BY PIPE FABRICATOR.
3. 1-INCH WELD STRIP.
4. 2 1/2\"/>

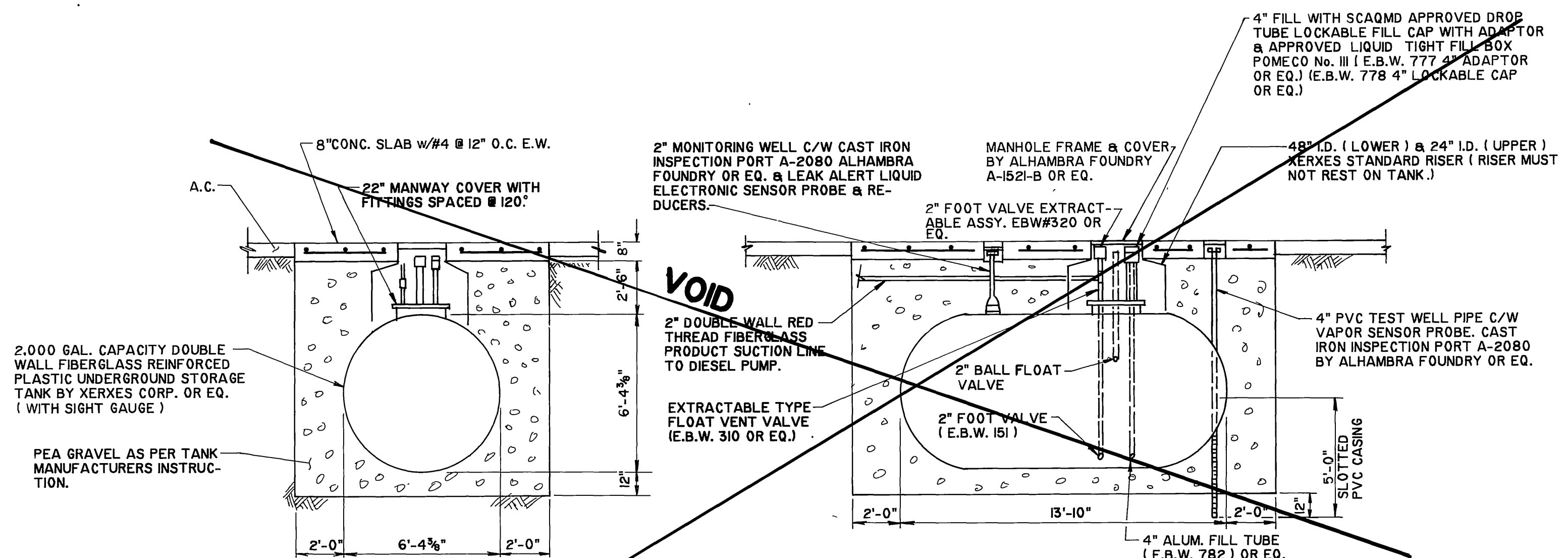
VINYL LINER JOINTS



18 DETAILS FOR VINYL LINING

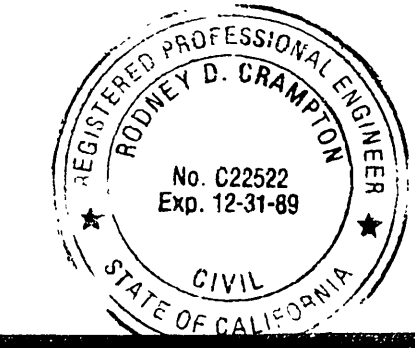


18 STANDARD INSTALLATION ACCESSORY STRIPS



21 2,000 GAL. FUEL TANK DETAIL
SCALE 1/4\"/>

AS BUILT
APPROVED BY: *Rodney D. Compton*
DATE: 12-15-89



PREPARED UNDER THE DIRECTION OF
Rodney D. Compton
REGISTERED CIVIL ENGINEER NO. C22522
EXPIRATION DATE 12-31-89 DATE 2-17-87

DESIGNED BY: *l.c.* DRAWN BY: *J.S.* CHECKED BY: *A.C.*
DATE: 8/87

REVISIONS
DATE: 8/21/87

CITY OF RIVERSIDE, CALIFORNIA
DEPARTMENT OF PUBLIC WORKS
APPROVED BY: *Baumgardner*
DIRECTOR OF PUBLIC WORKS
DATE: 8/21/87

ALESSANDRO BLVD. & WOOD RD.
TRUNK SEWER PROJECT
BROWN STREET SEWER
DETAILS

PROJECT NO. S-1430C
SHEET 6 OF 6
FILE NO. 86-9202