ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

CONSTRUCTION PLANS FOR:

SOUTH ARROYO DE DOMINGO BACA CHANNEL

BARSTOW TO WYOMING

NOVEMBER 1985

These Record Drawings are in substantial conformance with the constructed facilities and are based on information supplied by field survey and inspection. Items shown in the "bubbles" denotes actual record information.

By: 11/22/87
Greiner Engineering Sciences, Inc.
Carl A. Tebbens, P.E.
Vice President

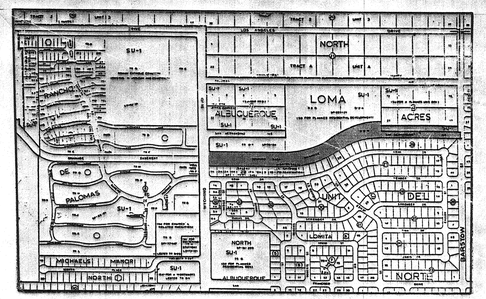
CARL A. TEBBENS 6309 NEW MEXICO REGISTERED PROFESSIONAL ENGINEER

INDEX TO DRAWINGS

PREPARED BY: Jeryl D. Hart Jr. 11/14/85
JERYL D. HART, JR. P.E. No. 6780 DATE

PREPARED UNDER THE SUPERVISION OF: Carl A. Tebbens 11/15/85
CARL A. TEBBENS DATE
VICE PRESIDENT

1 2 3 4 5 6 7 8 9 10 11 12
2 6 2 7 1 5 0 1 8 7



VICINITY MAP
ZONE ATLAS D-19
SCALE: APPROX. 1" = 800'

South Domingo Baca Channel Channel Plan & Profile 2715

GENERAL NOTES

1. All work required shall be done in accordance with the New Mexico State Highway Department Standard Specifications for Road and Bridge Construction, 1984 Edition, and as modified by the contract documents.
2. Existing profiles and grades shown may vary due to recent and current work done by others in the construction area. Quantities will be adjusted accordingly.
3. All existing utilities shown were taken from record drawings and are located as accurately as possible from information available. It will be the contractors responsibility to protect, maintain in service, and at points required, verify exact location of these utilities during construction operations of this project.
4. The contractor shall notify the appropriate utility company at 765-1234 two (2) working days prior to any excavation in the vicinity of any existing utility lines for location of existing utilities.
5. All construction signs that remain in place over 24 hours are to be mounted 7' (seven feet) high. All construction signs shall be furnished and installed by the contractor. No separate payment shall be made for this work.
6. The contractor shall confine all his activities within the construction limit and/or right-of-way as staked and preserve all existing vegetation on any private property. Parking of construction equipment shall not obstruct driveway openings & shall clear designated traffic lanes by 10' (ten feet).
7. ⚠ The contractor is cautioned that the traffic must be carried through construction on Barstow. Three days prior to the commencement of construction in Barstow, the contractor shall obtain a traffic control plan approved by the City of Albuquerque Traffic Department.
8. All construction signing and barricading for all roadways, permissible detours, open excavations, and other incidental work for the completion of this project shall be in accordance with the New Mexico Manual and specifications for a uniform system of traffic control devices for streets and highways (Part VI 1978 Edition) and modifications thereto. All barricades shall be reflective orange and white.
9. Signing and barricading shall include adequate protection against open excavation and other hazards to pedestrian traffic.
10. New pavement and replacement on Barstow Street shall be per Standard City of Albuquerque Drawings included in the Contract Documents.
11. The contractor shall comply with the following City of Albuquerque Local Environmental Ordinance:
    Chapter 6 - Health, Safety and Sanitation
    Article I Air Pollution Control
    Article VI Refuse Collection
    Article VIII Anti-Litter Ordinance
    Article XVI Joint Air Quality Control Board
    Article XXII Noise Control Ordinance
12. Fill within the R.O.W. shall be graded to blend with surrounding terrain as directed.
13. Design reference documents (not part of construction documents for this project):
    - South Arroyo De Domingo Baca, Barstow to Wyoming. Conceptual Design Report of Channel Improvements. Aug., 1985. Greiner Engineering
    - Heritage Hills Unit 5, Barstow Ave. Bridge Plans, Specifications and Calculations 2/80.
    - Loma Del Norte Unit 10. Hydrology Study June. 1975.
    - Las Palomas Joint Venture (Countrywood Subdivision) Conceptual Grading and Draiange Plan, July, 1983.
    - Subsurface Investigation Barstow Street Bridge, Nov., 1985, Fox Consulting Engineers & Geologists.
    - Hydrologic & Hydraulic Impacts of the Detention Reservior of Arroyo De Domingo Baca, June, 1979, E. H. & A.
    - Countrywood Subdivision Paving & Drainage Design, City of Albuquerque Drawing No. 2055, March, 1984.
    - S.A.D. No. 195 Domingo Baca Bridge, December, 1982.
14. South Arroyo De Domingo Baca Design Discharge Q_{100} = 1980 c.f.s.
15. Place channel ladder steps and safety posts as shown on Plan and Profile Sheets on both sides of channel, payment incidental to channel paving.

REV	SHEETS	AMAFCA ENGR	DATE	USER DEPT.	DATE	USER DEPT.	DATE
1	1,2,4,6,7			MDD C. A. Chapman	12/4/85	Trans. D. A. Perkes	12/11/85

APPROVAL OF REVISIONS

JERYL D. HART, JR. NEW MEXICO 6780 REGISTERED PROFESSIONAL ENGINEER

GREINER ENGINEERING
2601 WYOMING BLVD., NE
ALBUQUERQUE, NM 87112
(505) 292-1936
JN. 0690540

APPROVED FOR CONSTRUCTION
Richard E. Lamard
AMAFCA 11/15/85

2715 | MAP NO. D-19 | SHEET 1 OF 11

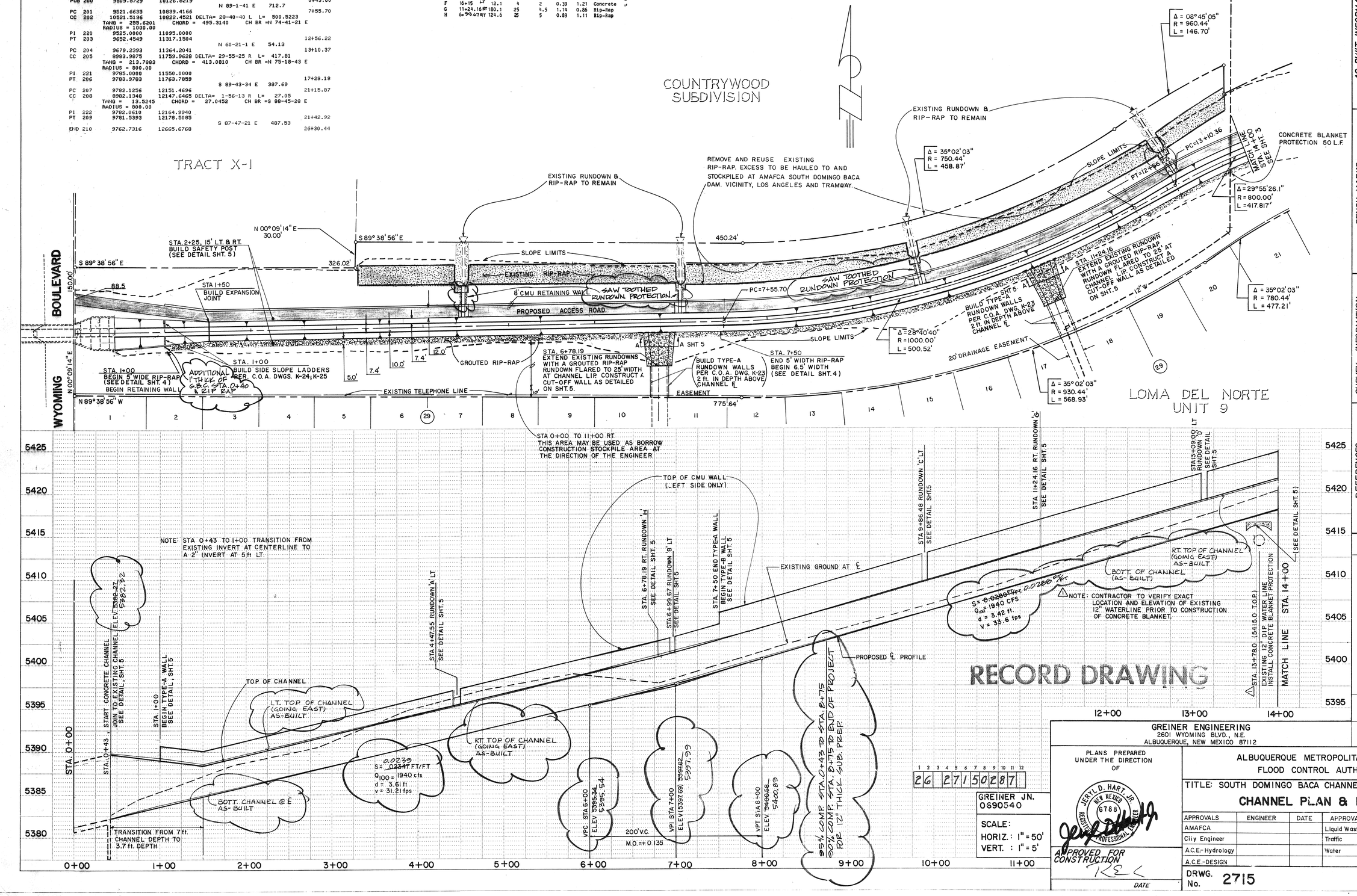
RECORD DRAWING

CENTERLINE SURVEY DATA

POINT	NORTH	EAST	BEARING	DISTANCE	STATION
POB 200	9509.5729	10126.8219			0+43.00
			N 89-1-41 E	712.7	
PC 201	9521.6635	10839.4166			7+55.70
CC 202	10521.5196	10822.4521 DELTA= 28-40-40 L L= 500.5223			
TANG = 255.6201	CHORD = 495.3140	CH BR =N 74-41-21 E			
RADIUS = 1000.00					
PI 220	9525.0000	11095.0000			
PT 203	9652.4549	11317.1504			12+56.22
			N 60-21-1 E	54.13	
PC 204	9679.2393	11364.2041			13+10.37
CC 205	8983.9875	11759.9628 DELTA= 29-55-25 R L= 417.81			
TANG = 213.7883	CHORD = 413.0810	CH BR =N 75-18-43 E			
RADIUS = 800.00					
PI 221	9785.0000	11550.0000			
PT 206	9783.9783	11763.7859			17+28.18
			S 89-43-34 E	387.69	
PC 207	9782.1256	12151.4696			21+15.87
CC 208	8982.1348	12147.6465 DELTA= 1-56-13 R L= 27.05			
TANG = 13.5245	CHORD = 27.0452	CH BR =S 88-45-28 E			
RADIUS = 800.00					
PI 222	9782.0610	12164.9940			
PT 209	9781.5393	12178.5085			21+42.92
			S 87-47-21 E	487.53	
END 210	9762.7316	12665.6768			26+30.44

RUNDOWN TABLE

RUNDOWN	STATION	Q (cfs)	WIDTH (ft)	SLOPE (%)	Dn (ft)	FB (ft)	TYPE	
A	4+47.5 LT	20.6	4	2	0.55	1.05	Concrete	TYPE "E"
B	6+78.9 LT	10.5	2	2	0.62	0.98	Concrete	"
C	9+86 LT	10.1	2	2	0.60	1.00	Concrete	"
D	13+09 LT	8.7	2	2	0.54	1.06	Concrete	"
E	14+58 LT	1.9	2	2	0.20	1.40	Concrete	"
F	16+15 LT	12.1	4	2	0.39	1.21	Concrete	"
G	11+24.16 RT	180.1	25	4.5	1.14	0.86	Rip-Rap	
H	6+99.67 RT	124.6	25	5	0.89	1.11	Rip-Rap	



GREINER ENGINEERING
2601 WYOMING BLVD., N.E.
ALBUQUERQUE, NEW MEXICO 87112

PLANS PREPARED UNDER THE DIRECTION OF

JERYL D. HART, JR. NEW MEXICO 6788 REGISTERED PROFESSIONAL ENGINEER

APPROVED FOR CONSTRUCTION

DATE

26 27150287

GREINER JN. 0690540

SCALE:
HORIZ.: 1" = 50'
VERT.: 1" = 5'

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

TITLE: SOUTH DOMINGO BACA CHANNEL

CHANNEL PLAN & PROFILE

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
AMAFCA			Liquid Waste	N/A	12-12-85
City Engineer			Traffic		
A.C.E.-Hydrology			Water		12-12-85
A.C.E.-DESIGN					

DRWG. No. 2715

SHEET 2 OF 11

AS BUILT INFORMATION
CONTRACTOR BENDER CONST. DATE 12/85
WORK STAKED BY GREINER DATE 6/86
INSPECTORS ACCEPTANCE BY " " DATE 6/86
VERIFICATION BY " " DATE 1/20/87
CORRECTED BY LRA

MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS
USC & GS brass tablet "HEAVEN 1969", set in top of concrete post flush with ground. To reach the station from the intersection of Central Ave. and Wyoming Blvd., 6.0 mi. to the junction with Barstow St., then continue north on Barstow St. 1.0 mi. to intersection with Los Angeles Dr., then west on Los Angeles Dr., 0.15 mi. to the station on the left. Elevation = 5378.787

SURVEY INFORMATION

FIELD NOTES NO.	BY	DATE
1659	J. Freeriks	9-84
1726	J. Ayers	12-85
1727	J. Ayers	12-85

REFERENCES
MAP NO. D-19
EST. NO.
W.O. NO.

NO.	DATE	REMARKS	BY
1	12/85	ADDENDUM Nº 1	RB

REVISIONS

DESIGN	DATE 11/13/85	
DESIGNED BY R.B.	DATE 11/13/85	
DRAWN BY L.A.	DATE 11/13/85	
CHECKED BY J.H.		

LOMA DEL NORTE
UNIT 9
TRACT 5-2-A

RUNDOWN TABLE

RUNDOWN	STATION	Q (cfs)	WIDTH (ft)	SLOPE (%)	Dn (ft)	FB (ft)	TYPE
A	11+47.5 LT	20.6	4	2	0.55	1.05	Concrete TYPE "C"
B	6+78.9 LT	10.5	2	2	0.62	0.98	Concrete "
C	9+86 LT	10.1	2	2	0.60	1.00	Concrete "
D	13+09 LT	8.7	2	2	0.54	1.06	Concrete "
E	14+58 LT	1.9	2	2	0.20	1.40	Concrete "
F	16+15 LT	12.1	4	2	0.39	1.21	Concrete "
G	11+24.16 RT	180.1	25	4.5	1.14	0.86	Rip-Rap
H	6+99.67 RT	124.6	25	5	0.89	1.11	Rip-Rap

CENTERLINE SURVEY DATA

POINT #	NORTH	EAST	BEARING	DISTANCE	STATION
POB 200	9509.5729	10126.8219			0+43.00
			N 89-1-41 E	712.7	
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CC 202	10521.5196	10822.4521	DELTA= 28-40-40 L	L= 500.5223	
	TANG = 255.6201	CHORD = 495.3140	CH BR =N 74-41-21 E		
	RADIUS = 1000.00				
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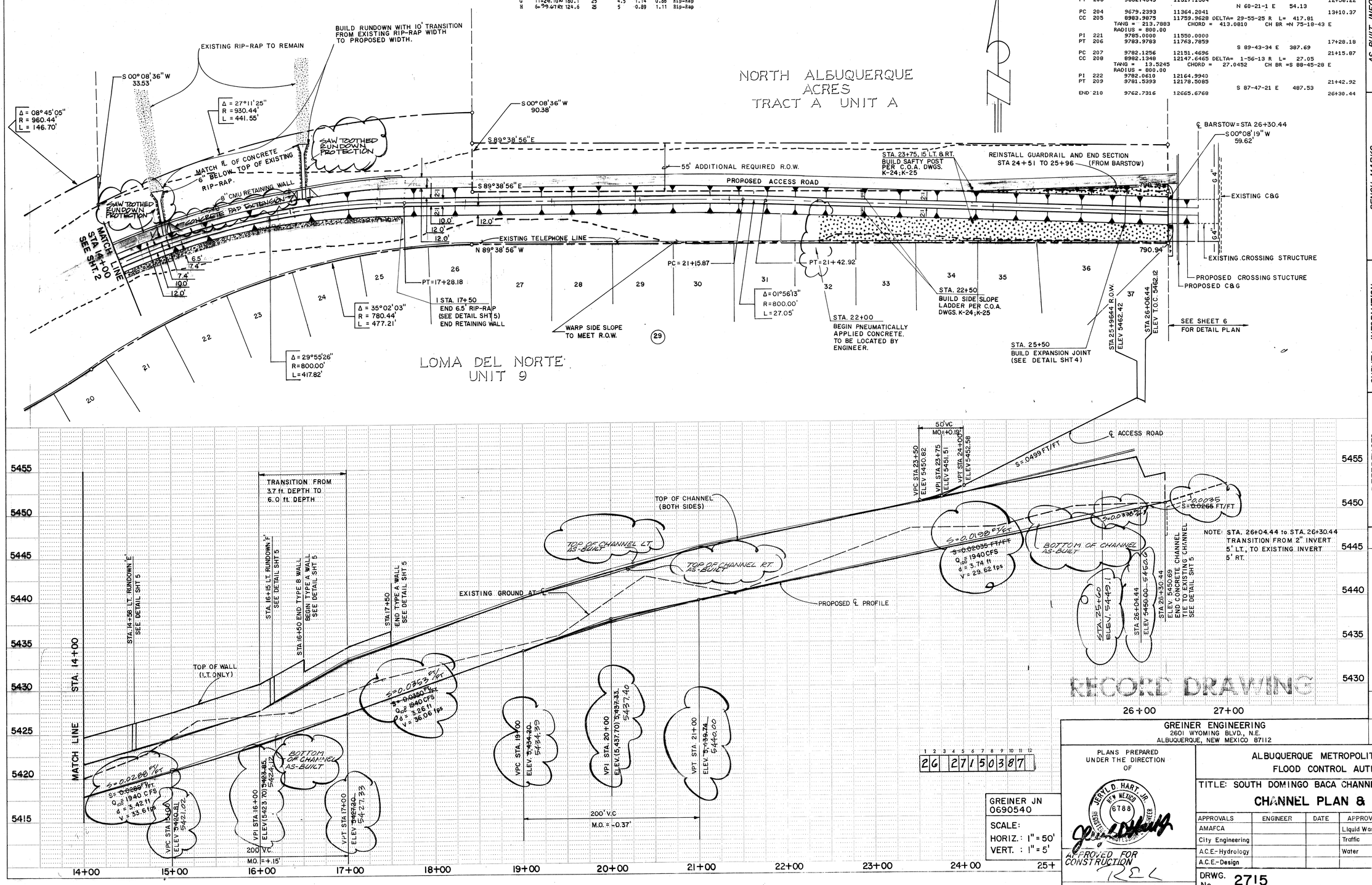


RECORD DRAWING

1 2 3 4 5 6 7 8 9 10 11 12
2G 2715 0387

GREINER JN 0690540

SCALE:
HORIZ.: 1" = 50'
VERT.: 1" = 5'

GREINER ENGINEERING
2601 WYOMING BLVD., N.E.
ALBUQUERQUE, NEW MEXICO 87112

PLANS PREPARED UNDER THE DIRECTION OF
JERYL D. HART JR. NEW MEXICO 6788 REGISTERED PROFESSIONAL ENGINEER
APPROVED FOR CONSTRUCTION
DATE

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

TITLE: SOUTH DOMINGO BACA CHANNEL

CHANNEL PLAN & PROFILE

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
AMAFCA			Liquid Waste	N/A B.R.	12-12-85
City Engineering			Traffic		
A.C.E.-Hydrology			Water	N/A B.R.	12-12-85
A.C.E.-Design					

DRWG. No. 2715

SHEET 3 OF 11

AS BUILT INFORMATION
CONTRACTOR BENDER CONST. DATE 12/85 - 6/86
WORK STAKED BY GREINER DATE
INSPECTORS ACCEPTANCE BY " " DATE 6/86
FIELD VERIFICATION BY DATE
DRAWINGS CORRECTED BY LRA DATE 1/20/87
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS
USC & GS brass tablet "HEAVEN 1969", set in top of concrete post flush with ground. To reach the station from the intersection of Central Ave. and Wyoming Blvd., 6.0 mi. to the junction with Barstow St.; then continue north on Barstow St. 1.0 mi. to intersection with Los Angeles Dr.; then west on Los Angeles Dr., 0.15 mi. to the station on the left. Elevation = 5378.787

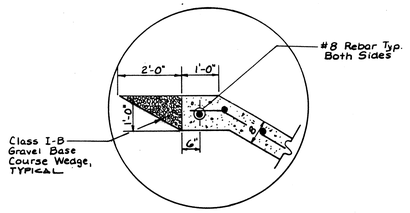
SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
1659	J. Freeks	9-84
1726	J. Ayers	12-85
1727	J. Ayers	12-85

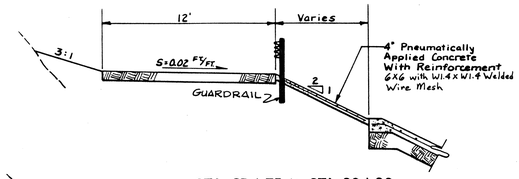
REFERENCES
MAP NO. D-19
EST. NO.
W.O. NO.

REMARKS
REVISIONS

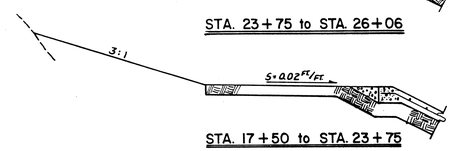
NO.	DATE	BY
DESIGN		
DESIGNED BY R.B.	DATE 11/14/85	
DRAWN BY L.A.	DATE 11/14/85	
CHECKED BY J.H.	DATE 11/14/85	



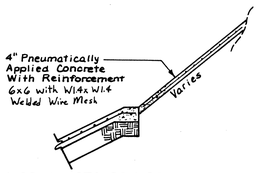
CHANNEL EDGE DETAIL
STA. 1+50 to STA. 23+75
NTS



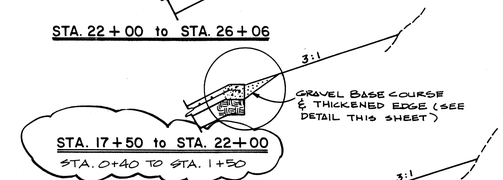
STA. 23+75 to STA. 26+06



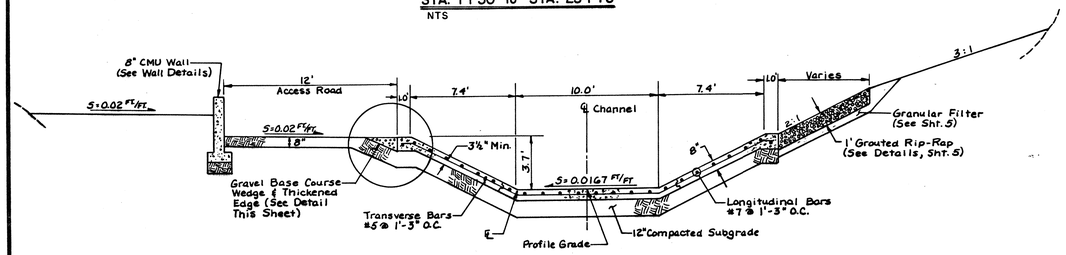
STA. 17+50 to STA. 23+75



STA. 22+00 to STA. 26+06



STA. 17+50 to STA. 22+00
STA. 0+40 TO STA. 1+50



TYPICAL CHANNEL SECTION
STA. 1+50 to STA. 16+00
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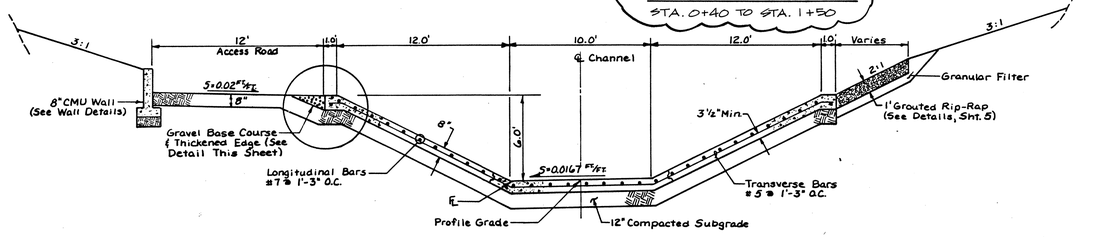
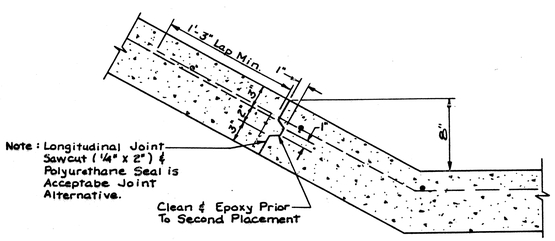
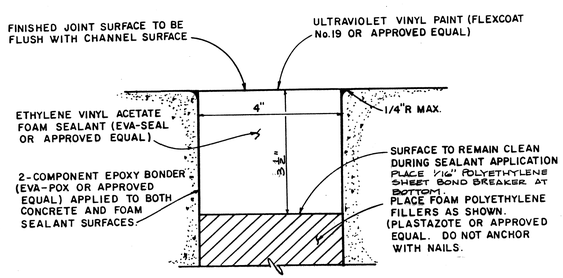


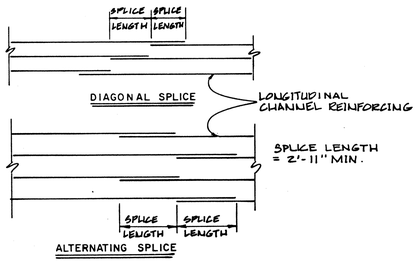
TYPICAL CHANNEL SECTION
STA. 17+00 to STA. 26+30.44
NTS



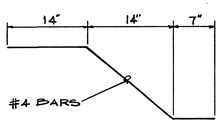
LONGITUDINAL JOINT
NTS



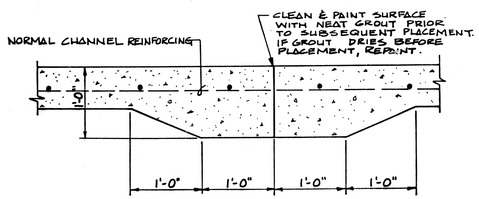
DETAIL B
⚠ NOTE: FOAM SEALANT ORDER WIDTH SHALL BE 5".



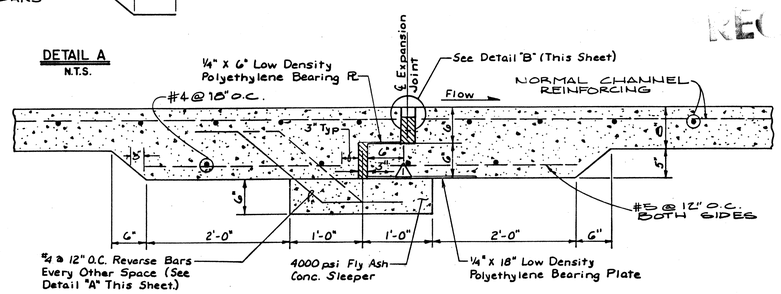
TYPICAL LONGITUDINAL SPLICE
NOTE: LONGITUDINAL CHANNEL REINFORCING SHALL HAVE ALTERNATING SPLICE OR DIAGONAL SPLICE. (NOT REQUIRED FOR TRANSVERSE BARS).



DETAIL A
N.T.S.



CONSTRUCTION JOINT
SCALE: 1" = 1'-0"



EXPANSION JOINT WITH CONCRETE SLEEPER
NTS

NOTE:

1. Concrete shall be 3000 P.S.I. 28 Day strength with maximum aggregate size as stated in the specifications.
2. All reinforcing steel shall be Grade 60 deformed bars, unless otherwise shown.
3. All steel spacing are given to the centerline of the bars, unless otherwise shown.
4. All exposed edges shall have a 3/4" chamfer, unless otherwise shown.
5. Channel rebar shall be supported on 3-1/2" sand chairs at a maximum spacing of 5' perpendicular to the channel centerline.
6. Place channel ladder steps and safety posts as shown on Plan and Profile Sheets on both sides of channel, payment incidental to channel paving.
7. Minimum subgrade compaction shall be 90% per ASTM D 1557.

EXPANSION JOINT CONSTRUCTION NOTES

1. Compact sleeper subgrade to 90% per ASTM D 1557.
2. Pour sleeper with Z-bar reinforcement extending above slab. Steel trowel bearing plate surface only.
3. Compact subgrade and form downstream portion of joint. Construction joints may be installed a min. of 5 feet upstream and downstream of joint centerline. Place lower bearing plate and downstream reinforcing and make downstream pour. Steel trowel upper bearing plate surface.
4. Compact subgrade and form upstream portion of joint. Place reinforcing steel, upper bearing plate, and upper and lower foam filler material. Upper bearing plate must be parallel to lower bearing plate. Do not anchor foam filler material with nails or bonding agent, but keep flush with poured downstream section. Block out foam sealant notch, clean exposed sleeper surface and make upstream pour.
5. When upstream and downstream concrete has reached a min. of 80% design strength or after a minimum of seven days has elapsed since concrete was poured, remove sealant notch form, sand blast vertical surfaces and blow all debris from notch. Apply Epoxy bonder to both vertical concrete faces and to both sides of foam sealant material. Immediately compress foam sealant into notch. Remove bonder from top surface of sealant material, but do not clean bonder bead along edges.
6. If sealant material extends from 0" to 1/8" above channel flowline, apply ultra violet paint as specified. If sealant material extends from 1/8" to 1/2" above channel flowline, power sand material flush with channel flowline under the direction of the Engineer prior to application of ultra violet paint.

RECORD DRAWING

1	2	3	4	5	6	7	8	9	10	11	12
2	6		2	7	1	5	0	4	8	7	

JN. 0690540

AS BUILT INFORMATION
CONTRACTOR BENDER CONSTR. 12/85 –
WORK STAKED BY GREINER DATE 6/86
INSPECTOR'S ACCEPTANCE BY " " DATE
FIELD VERIFICATION BY " " DATE 6/86
DRAWINGS CORRECTED BY LRA DATE 1/20/87
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS
SEE SHEET 2 OF 11

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
1659	J. Freeks	9-84
1726	J. Ayers	12-85
1727	J. Ayers	12-85

REFERENCES
MAP NO. D-19
EST. NO. WO. NO.

REVISIONS

NO.	DATE	REMARKS	BY
1	12/85	ADDENDUM Nº 1	RB

DESIGN
DESIGNED BY R.B. DATE 11/13/85
DRAWN BY L.A. DATE 11/13/85
CHECKED BY J.H. DATE 11/13/85

GREINER ENGINEERING
2601 WYOMING BLVD., N.E.
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PLANS PREPARED UNDER THE DIRECTION OF
JERYL D. HART, JR. NEW MEXICO 6788 REGISTERED PROFESSIONAL ENGINEER
APPROVED FOR CONSTRUCTION
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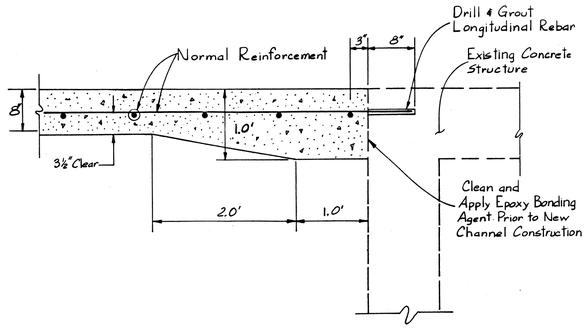
ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

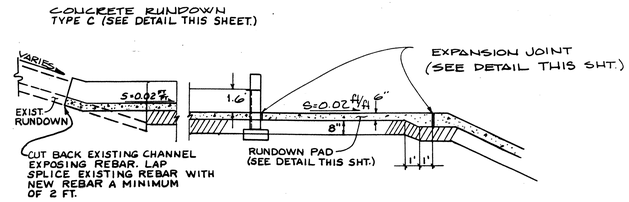
TITLE: SOUTH DOMINGO BACA CHANNEL
CHANNEL DETAILS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste	N/A BK	12-12-85
AMAFCA			Traffic		
A.C.E.-Hydrology			Water	N/A BK	12-12-85
A.C.E.-Design					

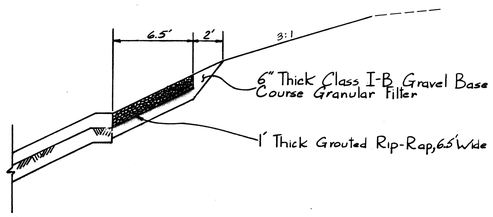
DRWG. No. 2715
SHEET 4 OF 11



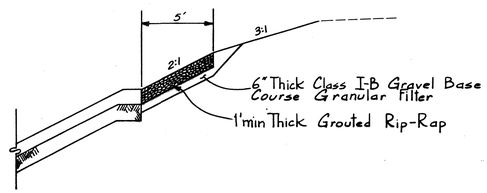
JOINT AT STA. 0+43 and STA. 26+30.44
SCALE: 1"=1'



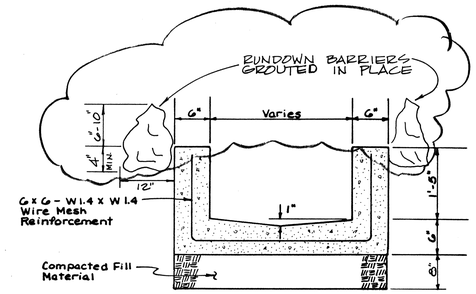
NORTH RUNDOWN DETAILS
N.T.S.



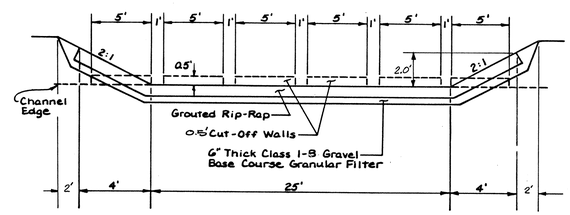
RIP-RAP DETAIL
STA. 7+50 to 16+50
SCALE: 1"=5' ±



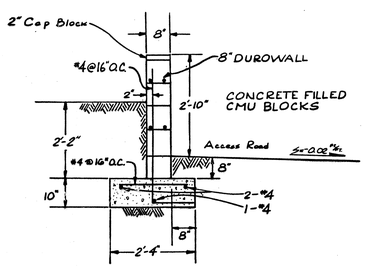
RIP-RAP DETAIL
STA. 1+00 to 7+50
STA. 16+50 to 17+50
SCALE: 1"=5'



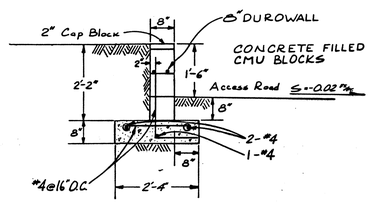
TYPE 'C' RUNDOWN
NTS



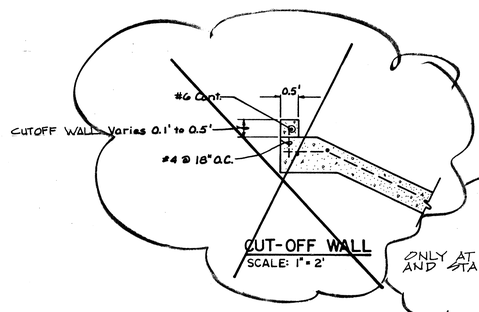
SOUTH RUNDOWN SECTION A-A
NTS



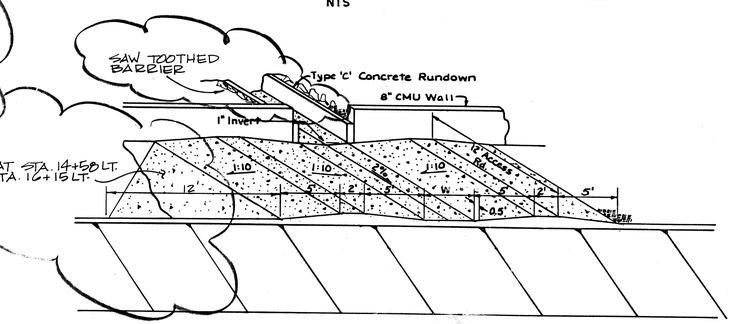
CMU RETAINING WALL, TYPE B
STA. 7+50 to STA. 16+50
SCALE: 1/2"=1'



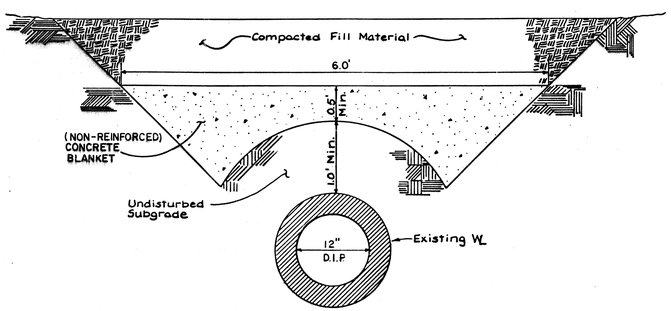
CMU RETAINING WALL, TYPE A
STA. 1+00 to STA. 7+50
STA. 16+50 to STA. 17+50
SCALE: 1/2"=1'



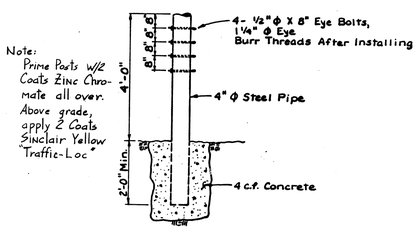
CUT-OFF WALL
SCALE: 1"=2'



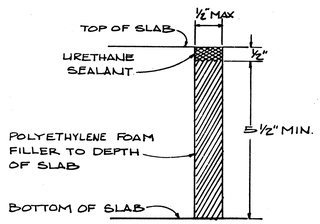
TYPICAL RUNDOWN PAD DETAIL
NTS



CONCRETE BLANKET DETAIL
NTS



SAFETY POST DETAIL
NTS



EXPANSION JOINT DETAIL (FOR RUNDOWNS)
N.T.S.

1 2 3 4 5 6 7 8 9 10 11 12
2 6 2 7 1 5 0 5 8 7

JN. 0690540

RECORD DRAWING

GREINER ENGINEERING
2601 WYOMING BLVD., N.E.
ALBUQUERQUE, NEW MEXICO 87112

PLANS PREPARED UNDER THE DIRECTION OF
JERYL D. HART, JR. NEW MEXICO 6788 REGISTERED PROFESSIONAL ENGINEER

APPROVED FOR CONSTRUCTION
R E L
DATE

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

TITLE: SOUTH DOMINGO BACA CHANNEL
CHANNEL DETAILS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste	N/A	BR	12-12-85
AMAFCA			Traffic		
A.C.E.-Hydrology			Water	B Kyle	12-12-85
A.C.E.-Design					

DWG. No. 2715
SHEET 5 OF 11

AS BUILT INFORMATION
CONTRACTOR BENDER CONSTR. DATE 12/85 -
WORK STAKED BY GREINER DATE 6/86
INSPECTED BY " " DATE
ACCEPTANCE BY " " DATE
FIELD VERIFICATION BY " " DATE 6/86
DRAWINGS CORRECTED BY LRA DATE 1/20/87
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS
SEE SHEET 2 OF 11

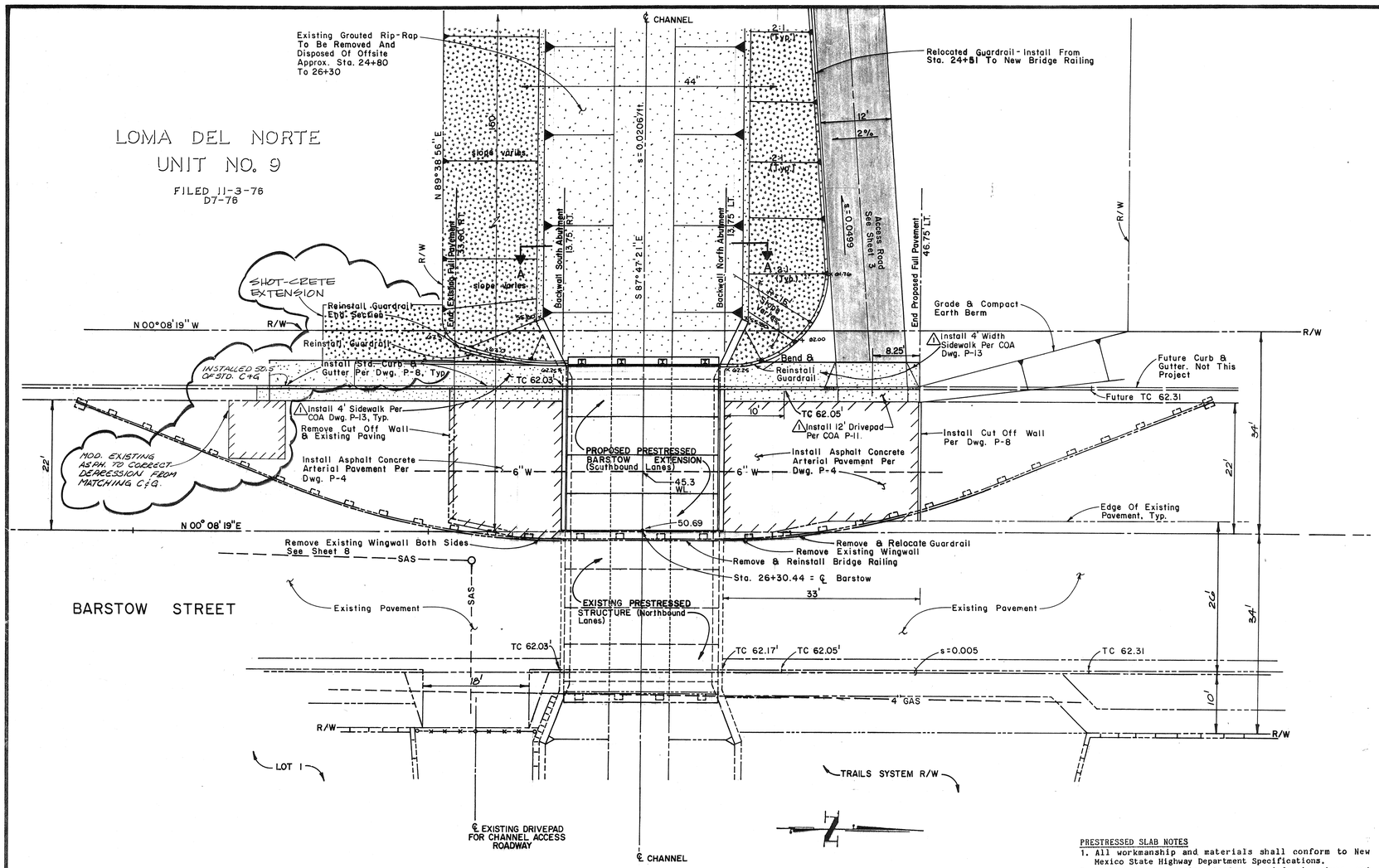
SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
1659	J. Freeks	9-84
1726	J. Ayers	12-85
1727	J. Ayers	12-85

REFERENCES
MAP NO. D-19
WO. NO.
EST. NO.

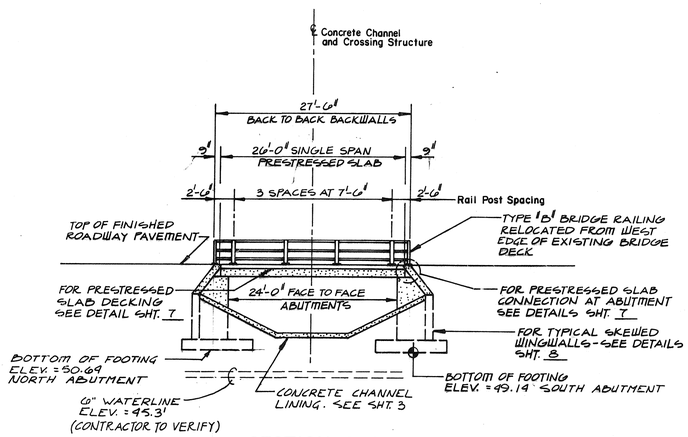
REVISIONS

NO.	DATE	REMARKS	BY
		DESIGN	
		DESIGNED BY R.B.	DATE 11/14/85
		DRAWN BY L.A.	DATE 11/14/85
		CHECKED BY J.H.	DATE 11/14/85



STRUCTURE LAYOUT PLAN

SCALE: 1" = 10'



SECTION A-A

LEGEND

- NEW CONCRETE
- NEW SLOPE PAVING
- NEW ARTERIAL PAVEMENT
- NEW CURB

DESIGN DATA - CROSSING STRUCTURE

Design according to A.A.S.H.T.O. Specifications, 1983, Interim 1984.

Live Load: HS 20-44.

Design Stresses: Prestressed Slab

f'c = 5000#/sq. in. (Minimum compressive strength of concrete at time of initial prestress, f'ci = 4000#/sq. in.)

1/2" diameter seven wire steel strands. Minimum yield = 35,100#/strand.

Initial prestress =28,910#/strand; f's = 41,300#/strand; fse = 22,960#/strand; computed losses = 5,950#/strand.

Conventional Reinforcing Bars: Grade 40;

Design Stresses: Cast In Place Concrete

Horizontal Earth Pressure - 43#/ft.^{3} Eq. fluid pressure and 2' surcharge.

Max. Computed Footing Pressure - Abut. No. 1 = 2,900#/ft.^{2}
Abut. No. 2 = 2,900#/ft.^{2}

Conventional Reinforcing Bars: Grade 60; f'c = 3,000#/sq.in.

GENERAL NOTES - CROSSING STRUCTURE/BARSTOW STREET

1. Workmanship and materials shall conform to New Mexico State Highway Department Specification for Road and Bridge Construction, 1984 Edition.
2. Concrete for structural cast-in-place concrete shall be f'c = 3000 psi at 28 days. All concrete shall use 3/4" diameter aggregate, having a maximum 4" slump and 5-7% entrained air content. Topping concrete for the deck shall comply with Section 503.28. Finish for deck shall be tined float. Chamfer all exposed edges of concrete 3/4 inch unless noted otherwise on details.
3. Reinforcing Bars shall conform to A.S.T.M. Specification A-615, Grade 60 unless otherwise noted. Dimensions are to centerline of bar unless otherwise noted. Shop drawings shall be prepared on City of Albuquerque mylars to allow their filing with the bridge plans. A set of approved mylars to be submitted to the engineer once any revisions have been completed.
4. Structural Steel shall be carbon steel conforming to A.S.T.M. Specification A-36.
5. Preformed bituminous joint filler shall conform to A.A.S.H.T.O. Specification M-213. Cost of all joint filler in place is incidental to the completion of the work and no direct payment will be made thereafter.
6. Non-shrink grout shall conform to the requirements in Section 617 of the Specifications. Furnishing and placing non-shrink grout will be considered incidental to the completion of the work and no direct payment will be made therefor.
7. Metal bridge railing to be relocated shall receive one prime coat of red lead in accordance with Section 615.038 of the Standard Specifications, and two coats of silver paint according to A.A.S.H.T.O. Specification M-70, Type I, Class B.
8. After tightening nuts on all bolts, burr threads.
9. Elastomeric Bearing Pads shall conform to Section 514.
10. The soils engineer shall inspect all foundations prior to footing construction. Once the excavation reaches bottom of footing elevation, the ground must be scarified 8" and recompacted to 95% of the Modified Proctor Density, using non-vibratory compactors.
11. See Appendix A for soil log borings. Fox Lab #0117090.
12. Neat line cut and trim edge of existing pavement back 1.0' where new arterial pavement matches to existing pavement. Apply tack coat to edge of existing pavement.
13. Patch holes left by guardrail to be removed. Neat line cut and trim pavement for a 2' x 2' patch. Install asphalt concrete arterial pavement per Dwg. P-25.
14. See Special Condition No. 19 regarding design approval by City for crossing structure.

PRESTRESSED SLAB NOTES

1. All workmanship and materials shall conform to New Mexico State Highway Department Specifications.
2. Cost of prestressing tendons, reinforcing bars and structural steel items embedded in the slabs shall be included in the unit price bid for each slab.
3. Slab fabricator shall determine the type of devices to be used for lifting. Lifting method shall be submitted for the Engineer's approval prior to their installation in the slabs. Slabs shall be cast, lifted, stored, hauled, and installed in a horizontal position.
4. The top surface of the slab is to be roughened and raked to produce 1/4" deep grooves diagonally each way approximately 1-1/2" apart.
5. Prestressing tendons for pretensioned slabs shall consist of high-tensile strength seven-wire steel strands conforming to requirements of New Mexico State Highway Department Specifications.
6. Uncoated seven-wire high strength prestressing strand having properties other than those shown in Design Data may be used. Should the Contractor elect to use such strands, the number of strands per slab and the strand pattern will be redetermined on the basis of strand strength. New design to be prepared by the Contractor and submitted to the Engineer for approval.
7. All exposed corners shall be chamfered 3/4".
8. Type III cement may be used at the fabricator's option without obtaining written consent of the Engineer.
9. Top layer of reinforcing steel shall be epoxy coated.
10. Alternate designs for panel widths and reinforcing will be considered.

1	2	3	4	5	6	7	8	9	10	11	12
2	G	2	7	1	5	0	6	8	7		

RECORD DRAWING

GREINER ENGINEERING
2601 WYOMING BLVD., N.E.
ALBUQUERQUE, NEW MEXICO 87112

PLANS PREPARED UNDER THE DIRECTION OF

APPROVED FOR CONSTRUCTION
CITY ENGINEER — DATE 12/12/85

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

TITLE: SOUTH DOMINGO BACA • BARSTOW CROSSING STRUCTURE
STRUCTURE LAYOUT PLAN
BARSTOW AVE. BRIDGE WIDENING

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer		12/12/85	Liquid Waste	N/A B.R.	12/12/85
A.C.E.- Design		12/12/85	Traffic	D.A. Parks	12/12/85
A.C.E.- Hydrology		12/12/85	Water	N/A B.R.	12/12/85

DRAWING NO. 2715

SHEET 6 OF 11

AS BUILT INFORMATION

CONTRACTOR	BENDER CONSTR.	
WORK STAKED BY	GREINER	12/85-6/86
INSPECTOR'S ACCEPTANCE BY	" "	DATE
FIELD VERIFICATION BY	" "	DATE 6/86
DRAWINGS CORRECTED BY	LRA	DATE 1/20/87

MICRO-FILM INFORMATION

RECORDED BY	
DATE	
NO.	

BENCH MARKS

SEE SHEET 2 OF 11

REFERENCES

MAP NO. D-19
EST. NO.
WO. NO.

SURVEY INFORMATION

FIELD NOTES

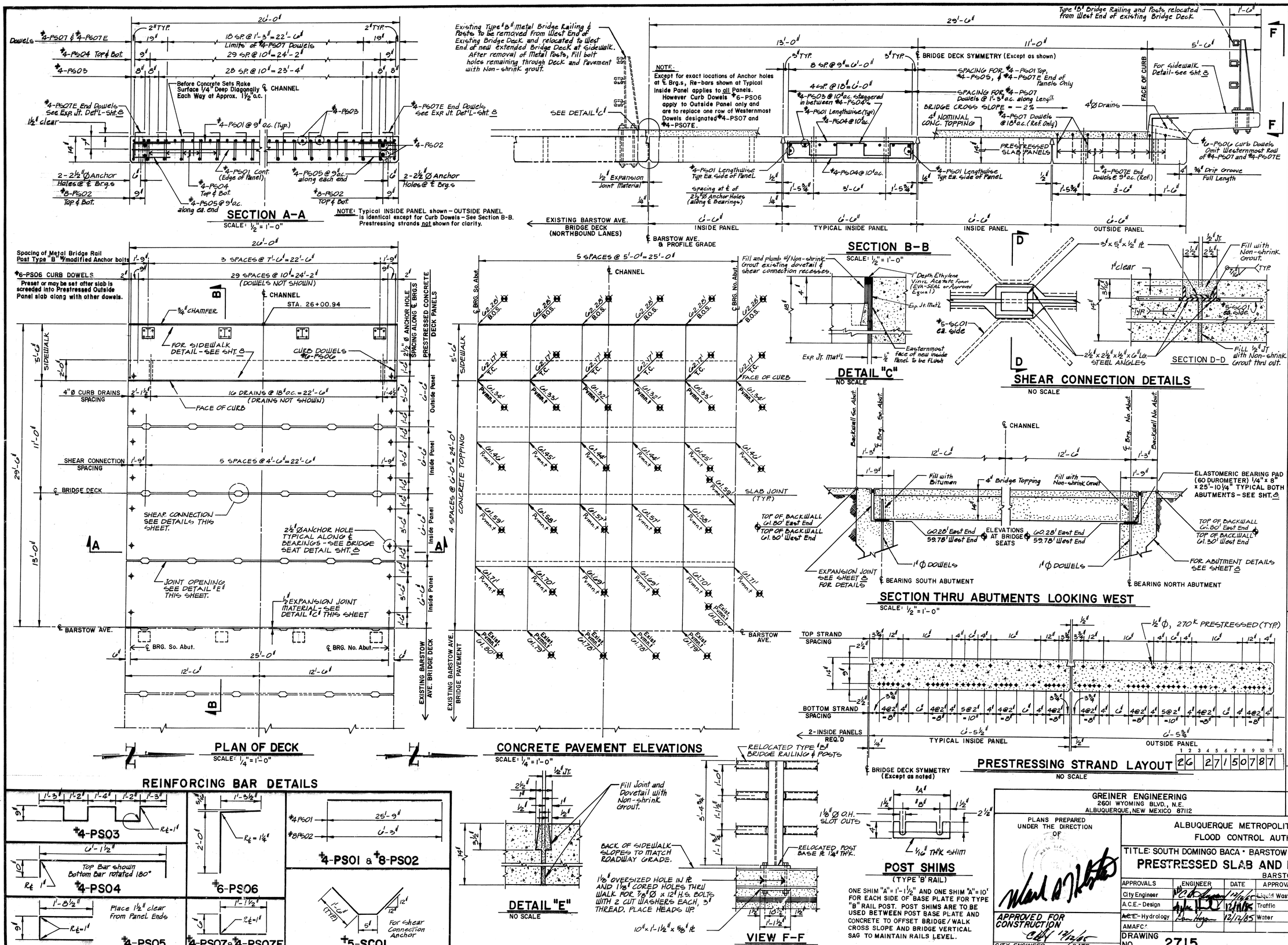
NO.	BY	DATE
1659	J. Freeks	9-84
1726	J. Ayers	12-85
1727	J. Ayers	12-85

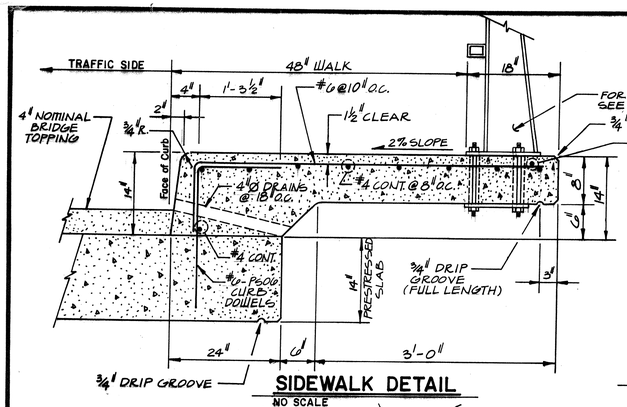
REVISIONS

NO.	DATE	REMARKS	BY
1	12/85	ADDENDUM No 1	RB

DESIGN

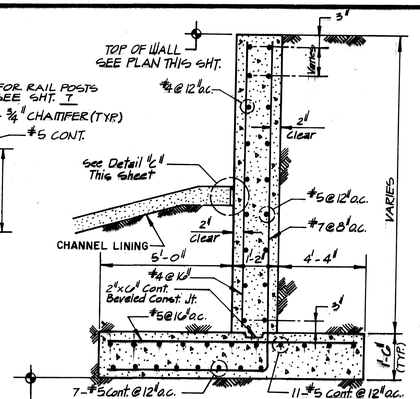
DESIGNED BY M. Denton DATE 11-85
DRAWN BY E. Molina / J. Wood DATE 11-85
CHECKED BY DATE 11-85


SECTION A-A
SCALE: 1/2" = 1'-0"
NOTE: Typical INSIDE PANEL shown – OUTSIDE PANEL is identical except for Curb Dowels – See Section B-B. Prestressing strands not shown for clarity.
SECTION B-B
SCALE: 1/2" = 1'-0"
DETAIL "C"
NO SCALE
SHEAR CONNECTION DETAILS
NO SCALE
SECTION D-D
SECTION THRU ABUTMENTS LOOKING WEST
SCALE: 1/2" = 1'-0"
PLAN OF DECK
SCALE: 1/4" = 1'-0"
CONCRETE PAVEMENT ELEVATIONS
SCALE: 1/4" = 1'-0"
PRESTRESSING STRAND LAYOUT
NO SCALE
2G 2715 0787
DETAIL "E"
NO SCALE
VIEW F-F
NO SCALE
POST SHIMS
(TYPE 'B' RAIL)
ONE SHIM "A" = 1'-1 1/2" AND ONE SHIM "A" = 10' FOR EACH SIDE OF BASE PLATE FOR TYPE "B" RAIL POST. POST SHIMS ARE TO BE USED BETWEEN POST BASE PLATE AND CONCRETE TO OFFSET BRIDGE/WALK CROSS SLOPE AND BRIDGE VERTICAL SAG TO MAINTAIN RAILS LEVEL.
REINFORCING BAR DETAILS
#4-PS03
#4-PS04
#6-PS06
#4-PS05
#4-PS07 & #4-PS07E
#4-PS01 & #8-PS02
#5-SC01
For Shear Connection Anchor
GREINER ENGINEERING
2601 WYOMING BLVD., N.E.
ALBUQUERQUE, NEW MEXICO 87112
PLANS PREPARED UNDER THE DIRECTION OF
APPROVED FOR CONSTRUCTION
CITY ENGINEER / DATE
ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY
TITLE: SOUTH DOMINGO BACA • BARSTOW CROSSING STRUCTURE
PRESTRESSED SLAB AND DECK DETAILS
BARSTOW AVE. BRIDGE WIDENING
DRAWING NO. 2715
SHEET 7 OF 11
AS BUILT INFORMATION
CONTRACTOR BENDER CONST.
WORK STAKED BY: GREINER
INSPECTOR'S ACCEPTANCE BY " "
VERIFICATION BY " "
DRAWINGS CORRECTED BY LRA
MICRO-FILM INFORMATION
RECORDED BY
DATE
NO.
BENCH MARKS
SEE SHEET 2 OF 11
SURVEY INFORMATION
FIELD NOTES
REFERENCES
MAP NO. D-19
EST. NO.
WO. NO.
REMARKS
REVISIONS
GREINER J.N.: 0690540
DESIGNED BY M. Denton
DRAWN BY E. Molina
CHECKED BY M. Holstad
RECORD DRAWING



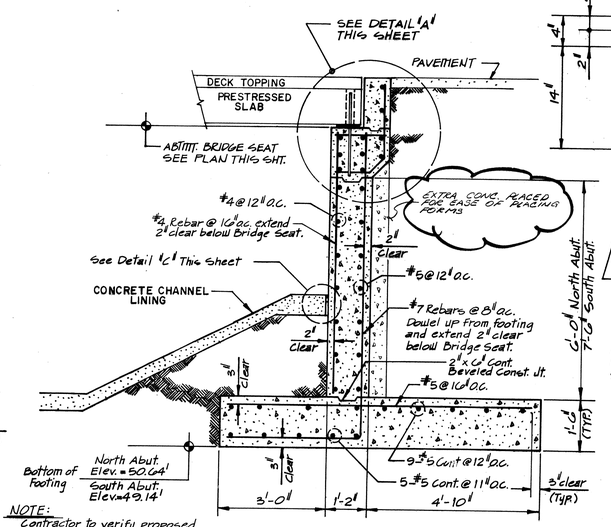
SIDEWALK DETAIL

NO SCALE



SECTION B-B

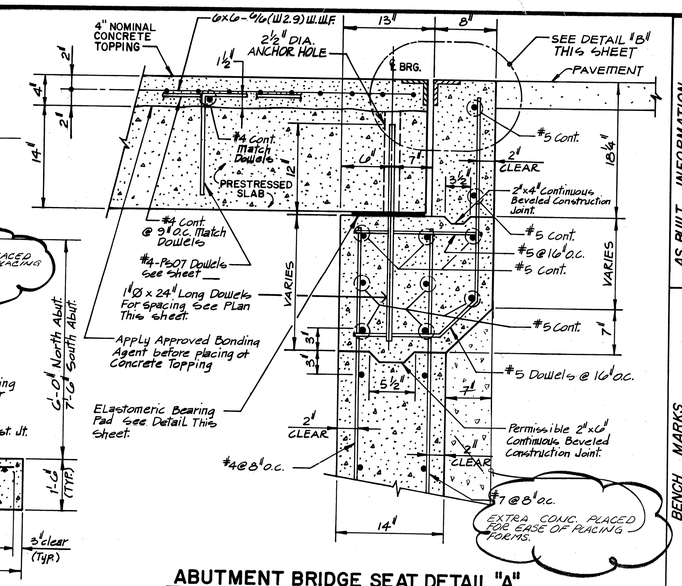
NO SCALE



NOTE:
Contractor to verify proposed Footing Elevations. New Footings to match Top of existing footings.

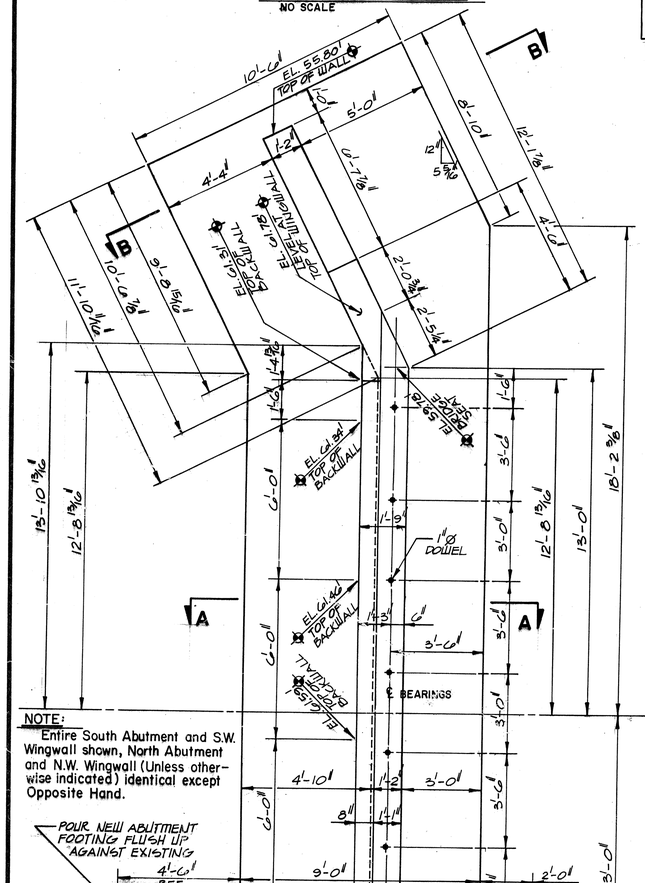
SECTION A-A

SCALE: ½" = 1'-0"



ABUTMENT BRIDGE SEAT DETAIL "A"

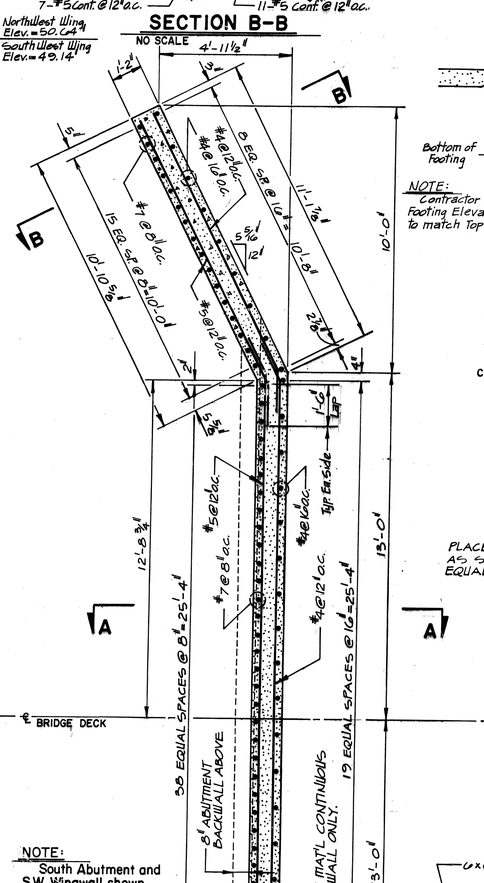
NO SCALE



NOTE:
Entire South Abutment and S.W. Wingwall shown, North Abutment and N.W. Wingwall (Unless otherwise indicated) identical except Opposite Hand.

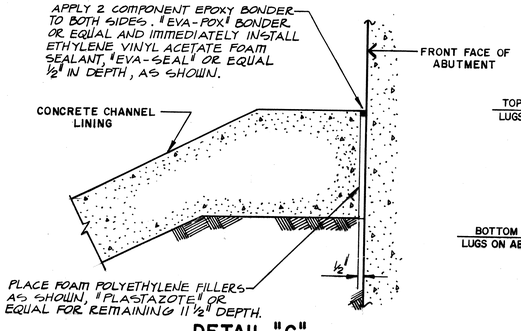
ABUTMENT PLAN

SCALE: 3/8" = 1'-0"



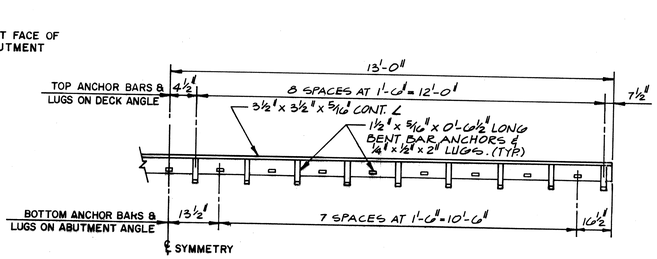
REINFORCING IN ABUTMENT/WINGWALLS

SCALE: 3/8" = 1'-0"



DETAIL "C"

NO SCALE



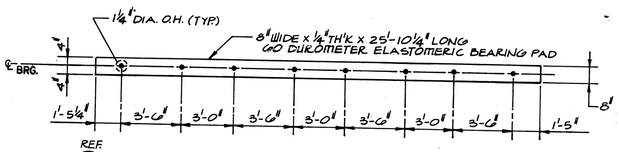
NOSING ANGLE DETAILS

NO SCALE — 4 REQ'D

NOTES:

1. Any Excavation to be done along Existing Wingwalls upon Removal - to be done in a way so as not to cause extensive damage to existing pavement.
2. The following provides Minimum splice Lengths for Re-bars. ALL splices to be staggered.

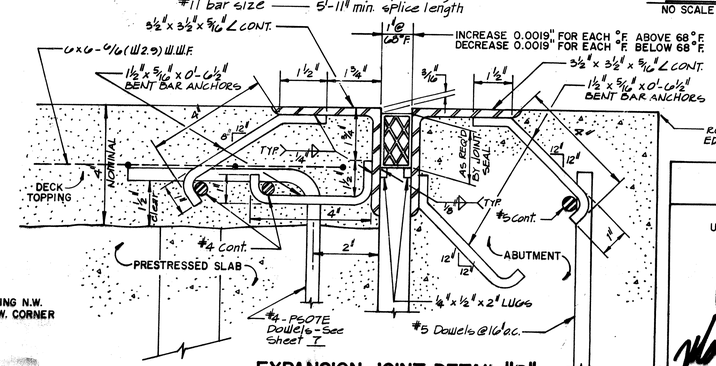
#4 bar size	1'-0" min. splice length
#5 bar size	1'-3" min. splice length
#6 bar size	1'-8" min. splice length
#7 bar size	2'-3" min. splice length
#8 bar size	3'-3" min. splice length
#9 bar size	3'-10" min. splice length
#10 bar size	4'-10" min. splice length
#11 bar size	5'-11" min. splice length



PLAN-ELASTOMERIC BEARING PAD

NO SCALE

2 REQUIRED EACH BRIDGE SEAT AT ABUTMENTS - SEE DETAIL ABOVE FOR NOSING ANGLE IN DECK TOPPING.



EXPANSION JOINT DETAIL "B"

NO SCALE

1	2	3	4	5	6	7	8	9	10	11	12
2	6	2	7	1	5	0	8	8	7		

GREINER ENGINEERING
2601 WYOMING BLVD., N.E.
ALBUQUERQUE, NEW MEXICO 87112

PLANS PREPARED UNDER THE DIRECTION OF
MARK S. HOLSTAD
NEW MEXICO 6857
12/12/85

APPROVED FOR CONSTRUCTION
12/12/85
CITY ENGINEER — DATE

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

TITLE: SOUTH DOMINGO BACA • BARSTOW CROSSING STRUCTURE
SUBSTRUCTURE DETAILS
BARSTOW AVE. BRIDGE WIDENING

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer		12/12/85	Liquid Waste	N/A B.R.	12-12-85
A.C.E.-Design		12/11/85	Traffic	D.A. Parks	12/11/85
~~A.C.E.~~-Hydrology		12/12/85	Water	N/A B.R.	12-12-85
AMAFCA					

DRAWING NO. 2715 — SHEET 8 OF 11

AS BUILT INFORMATION
CONTRACTOR BENDER CONST. DATE 12/85
WORK STAKED BY GREINER DATE 6/86
CONTROLS " " " DATE
ACCEPTANCE BY " " DATE 6/86
VERIFICATION BY " " DATE 1/20/87
DRAWINGS CORRECTED BY LRA
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS
SEE SHEET 2 OF 11

SURVEY INFORMATION
FIELD NOTES

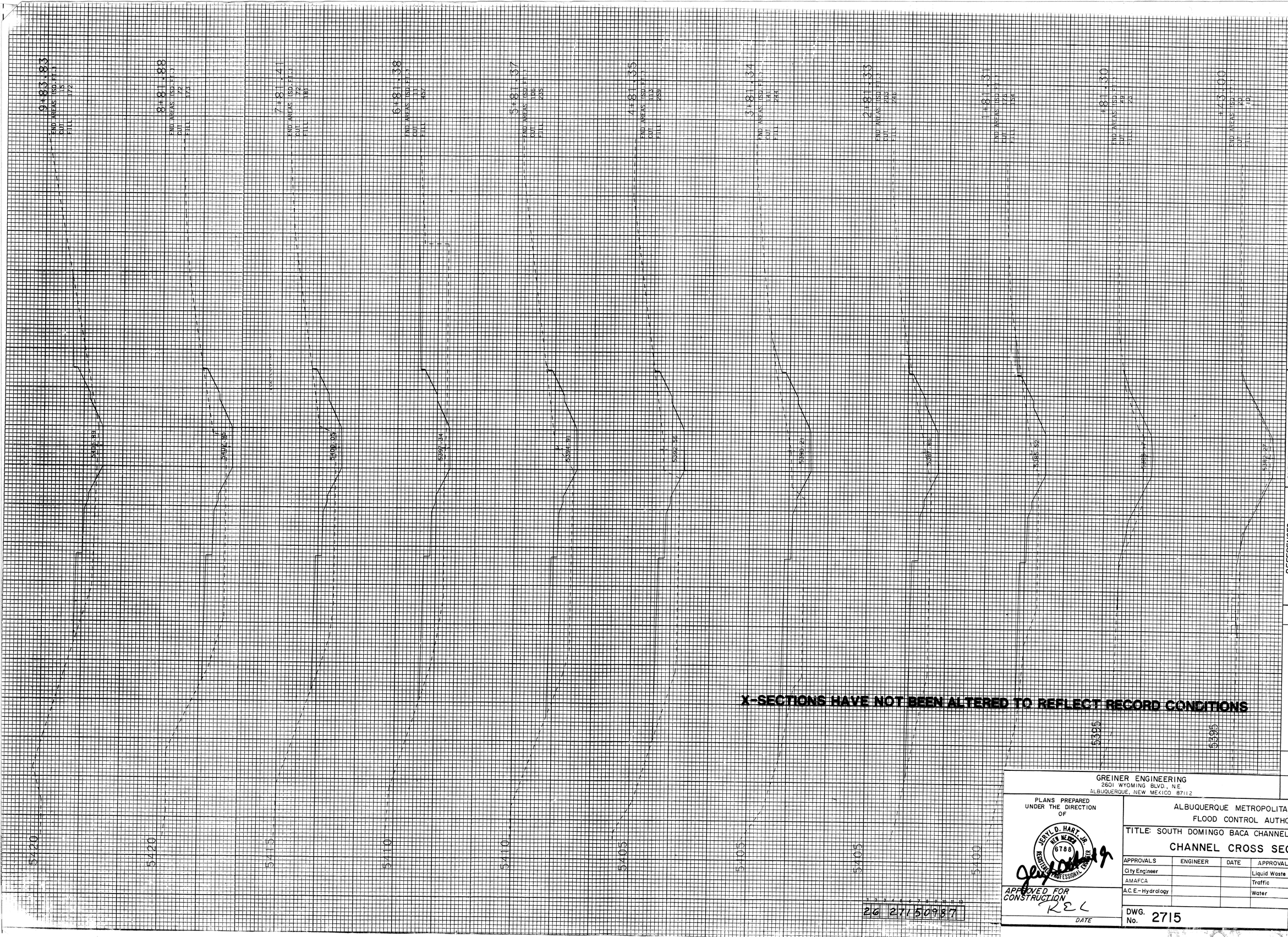
NO.	BY	DATE
1659	J. Freeks	9-84
1726	J. Ayers	12-85
1727	J. Ayers	12-85

REFERENCES
MAP NO. D-19
EST. NO. WO. NO.

NO.	DATE	REMARKS	BY
		REVISIONS	

GREINER J.N.: 0690540
DESIGNED BY M. Denton DATE Nov. '85
DRAWN BY E. Molina DATE Nov. '85
CHECKED BY M. Holstad DATE Nov. '85

RECORD DRAWINGS



SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE
1659	J. Freeirks	9-84
1726	J. Ayers	12-85
1727	J. Ayers	12-85

BENCH MARKS

SEE SHEET 2 OF 11

AS BUILT INFORMATION

CONTRACTOR BENDER CONST.

WORK STAKED BY GREINER DATE 12/85 - 6/86

INSPECTOR'S ACCEPTANCE BY " " DATE

FIELD VERIFICATION BY " " DATE 6/86

DRAWINGS CORRECTED BY LRA DATE 1/20/87

MICRO-FILM INFORMATION

RECORDED BY DATE

NO.

REFERENCES

MAP NO. D-19

EST. NO.

W.O. NO.

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY R.B. DATE 11/13/85

DRAWN BY L.A. DATE 11/13/85

CHECKED BY J.H. DATE 11/13/85

GREINER ENGINEERING
2601 WYOMING BLVD., N.E.
ALBUQUERQUE, NEW MEXICO 87112

PLANS PREPARED UNDER THE DIRECTION OF

JERYL D. HART JR. NEW MEXICO 6788 REGISTERED PROFESSIONAL ENGINEER

APPROVED FOR CONSTRUCTION REL

DATE

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

TITLE: SOUTH DOMINGO BACA CHANNEL

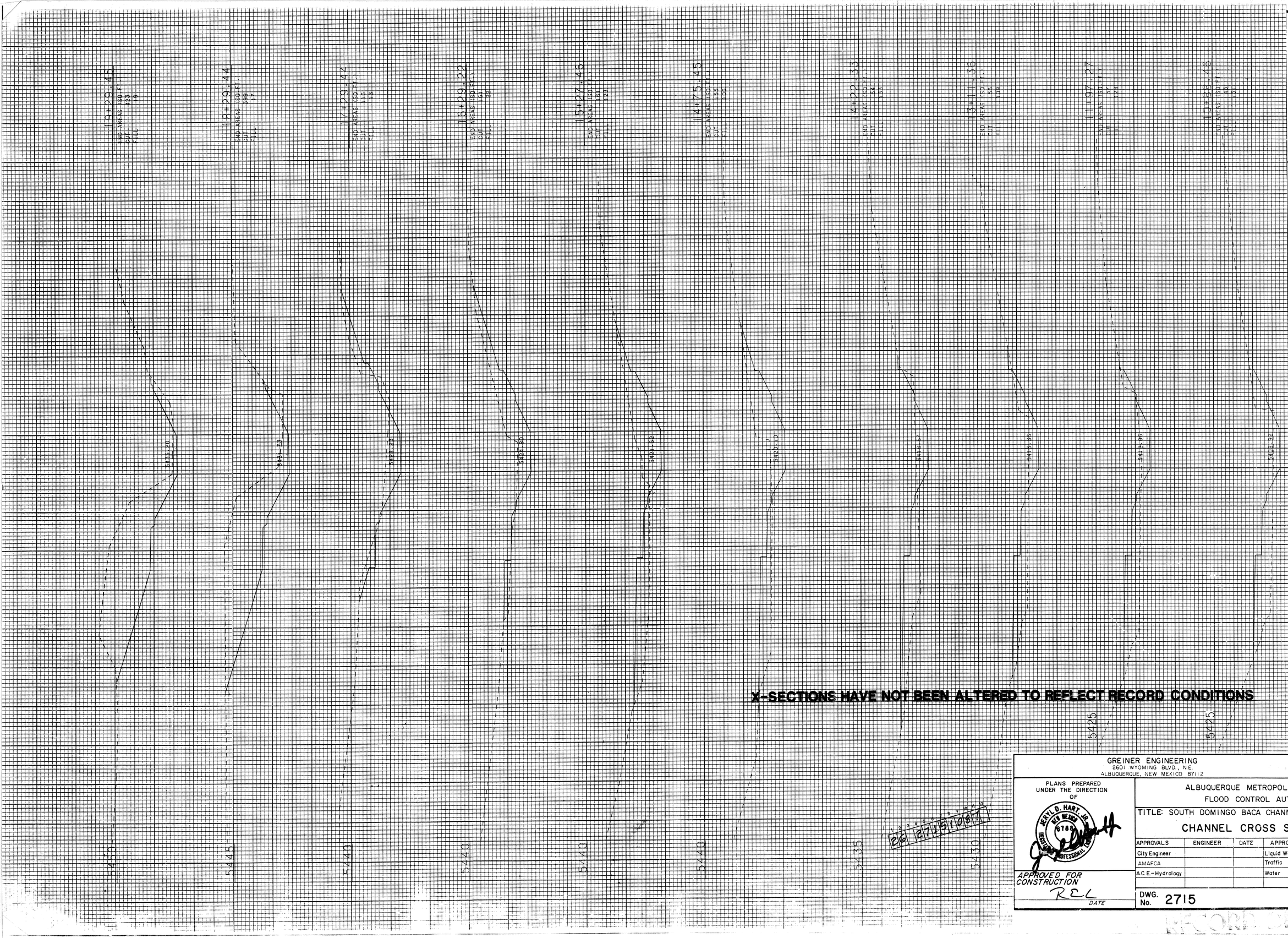
CHANNEL CROSS SECTIONS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste		
AMAFCA			Traffic		
A.C.E.-Hydrology			Water		

DWG. No. 2715

SHEET 9 OF 11

26 27 15 09 87



AS BUILT INFORMATION

CONTRACTOR	BENDER CONSTR.
WORK STAKED BY	GREINER
INSPECTOR'S ACCEPTANCE BY	" "
FIELD VERIFICATION BY	" "
DRAWINGS CORRECTED BY	LRA

DATE 12/85 – DATE 6/86 – DATE 6/86 – DATE 1/20/87

MICRO-FILM INFORMATION

RECORDED BY — DATE

NO.

BENCH MARKS

SEE SHEET 2 OF 11

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE
1659	J. Freerks	9-84
1726	J. Ayers	12-85
1727	J. Ayers	12-85

REFERENCES

MAP NO.	WO. NO.
D-19	
EST. NO.	

NO.	DATE	REMARKS	BY

REVISIONS

DESIGN

DESIGNED BY R.B. — DATE 11/13/85
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CHECKED BY J.H. — DATE 11/13/85

GREINER ENGINEERING
2601 WYOMING BLVD., N.E.
ALBUQUERQUE, NEW MEXICO 87112

PLANS PREPARED UNDER THE DIRECTION OF

JERYL D. HART, JR. — NEW MEXICO — 8788 — REGISTERED PROFESSIONAL ENGINEER

APPROVED FOR CONSTRUCTION

REL
DATE

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

TITLE: SOUTH DOMINGO BACA CHANNEL

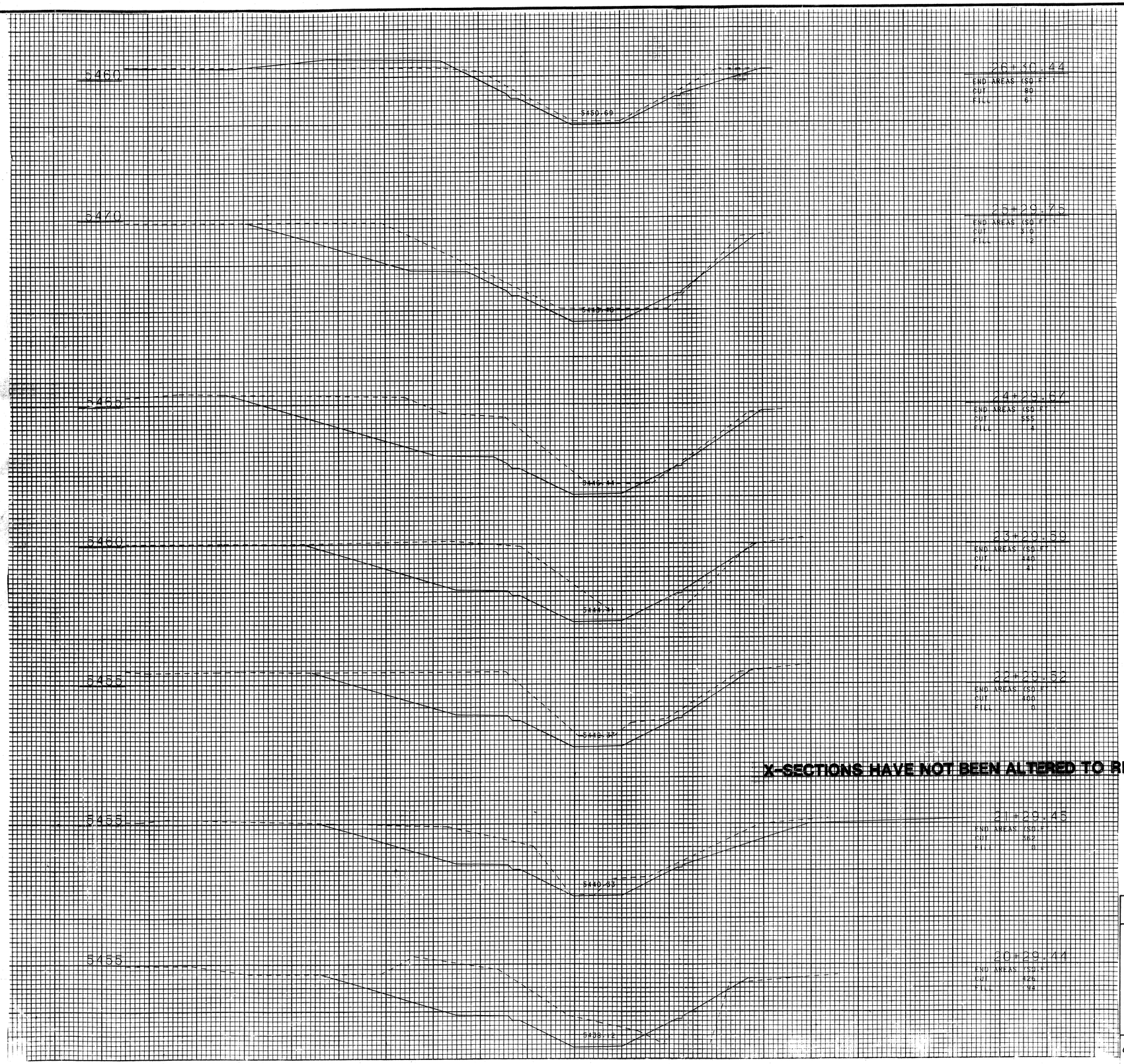
CHANNEL CROSS SECTIONS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste		
AMAFCA			Traffic		
A.C.E.–Hydrology			Water		

DWG. No. 2715

SHEET 10 OF 11

RECORD DRAWING



X-SECTIONS HAVE NOT BEEN ALTERED TO REFLECT RECORD CONDITIONS

1 2 3 4 5 6 7 8 9 10 11 12
26 2715 1187

GREINER ENGINEERING
2601 WYOMING BLVD., N.E.
ALBUQUERQUE, NEW MEXICO 87112

PLANS PREPARED UNDER THE DIRECTION OF
JERYL D. HART, JR. NEW MEXICO 6788 REGISTERED PROFESSIONAL ENGINEER

APPROVED FOR CONSTRUCTION
R.E.L.
DATE

ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY

TITLE: SOUTH DOMINGO BACA CHANNEL

CHANNEL CROSS SECTIONS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste		
AMAFCA			Traffic		
A.C.E.-Hydrology			Water		

DRWG. No. 2715

SHEET 11 OF 11

AS BUILT INFORMATION
CONTRACTOR BENDER CONST.
WORK STAKED BY GREINER DATE 12/85-5/86
INSPECTOR'S ACCEPTANCE BY " " DATE
FIELD VERIFICATION BY " " DATE 6/86
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BENCH MARKS
SEE SHEET 2 OF 11

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MAP NO. D-19
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REVISIONS

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RECORD DRAWING