

BERNALILLO COUNTY, NEW MEXICO

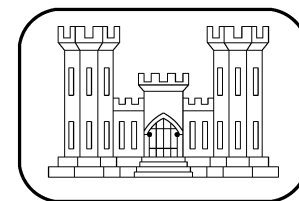
# RIO GRANDE FLOODWAY

RECOMMENDED PLAN FOR

## 2018 ISLETA WEST UNIT LEVEE I 100YR WS100 + 4'

SOLICITATION NO. : XXXX

DATED : December 2019



**United States Army  
Corps of Engineers**

...Serving the Army  
...Serving the Nation

# Albuquerque District



THE DESIGN, ASSOCIATED DETAILS, AND PRESENTATION CONCEPTS IN THIS SET OF DRAWINGS WERE ASSEMBLED AND REVIEWED BY THE FOLLOWING ALBUQUERQUE DISTRICT DESIGN TEAM. THIS DOCUMENT MEETS OUR HIGH STANDARDS OF QUALITY AND PROFESSIONALISM.

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<b>PLAN FORMULATION</b>		
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<b>PROJECT MANAGEMENT</b>		
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SIGNATURES AFFIXED BELOW INDICATE OFFICIAL RECOMMENDATION AND APPROVAL OF ALL DRAWINGS IN THIS SET AS INDEXED.

SUBMITTED:

APPROVED:

\_\_\_\_\_  
CHIEF, DESIGN BRANCH

\_\_\_\_\_  
CHIEF, ENGINEERING AND CONSTRUCTION DIVISION

THIS PROJECT WAS DESIGNED BY THE U.S. ARMY CORPS OF ENGINEERS ALBUQUERQUE DISTRICT. THE INITIALS OR SIGNATURES AND REGISTRATION DESIGNATIONS OF GOVERNMENT INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER 1110-1-8152.

# MRG BERNALILLO TO BELEN LEVEE FEASIBILITY STUDY

## INDEX OF DRAWINGS

SEQ	SHT	TITLE	SEQ	SHT	TITLE	SEQ	SHT	TITLE
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**GENERAL**

1	G-001	COVER SHEET
2	G-002	INDEX OF DRAWINGS
3	G-003	GENERAL PLAN

**2018 ISLETA WEST UNIT LEVEE I  
100YR WS+4'**

55	C-100	ISLETA WEST UNIT LEVEE LEVEE I 100YR WS100 + 4' HORIZONTAL CONTROL
56	C-101	ISLETA WEST UNIT LEVEE LEVEE I 100YR WS100 + 4' KEY PLAN
57	C-102	ISLETA WEST UNIT LEVEE LEVEE I 100YR WS100 + 4' PLAN AND PROFILE STA. 0+00 TO 28+00
58	C-103	ISLETA WEST UNIT LEVEE LEVEE I 100YR WS100 + 4' PLAN AND PROFILE STA. 28+00 TO 56+00
59	C-104	ISLETA WEST UNIT LEVEE LEVEE I 100YR WS100 + 4' PLAN AND PROFILE STA. 56+00 TO 82+00
60	C-303	ISLETA WEST UNIT LEVEE LEVEE I 100YR WS100 + 4' TYPICAL LEVEE SECTION AND DETAILS



Date	Appr.	Description

File Name: R030302	Proj Date: AUGUST 2015	SOL/CONTRACT NO.:	PROJECT NO.:	 North Arrow Tolerance
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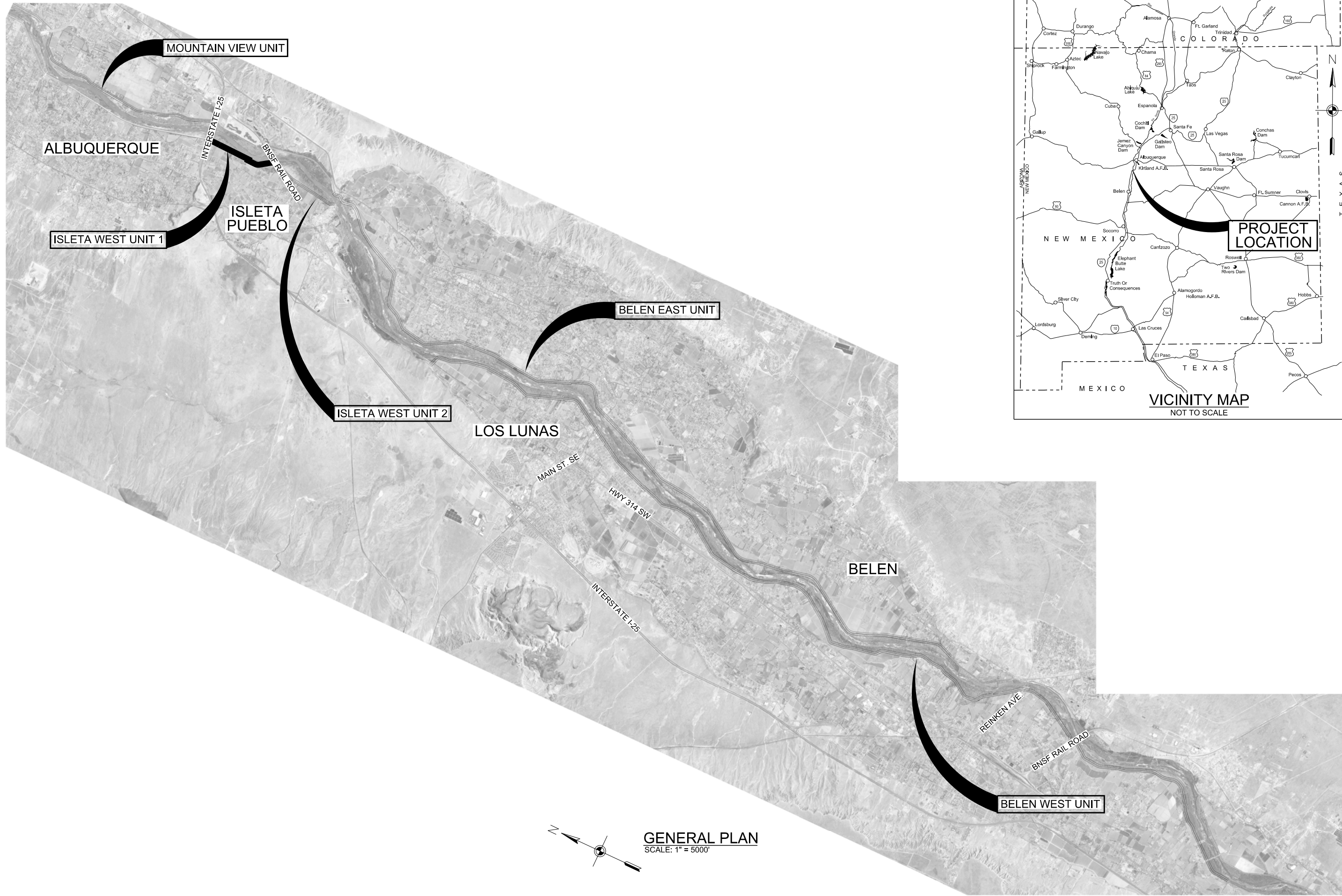
DESIGN BY: SEE COVER	DRAWN BY: SEE COVER	REVIEWED BY: SEE COVER	
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ALBUQUERQUE, NEW MEXICO

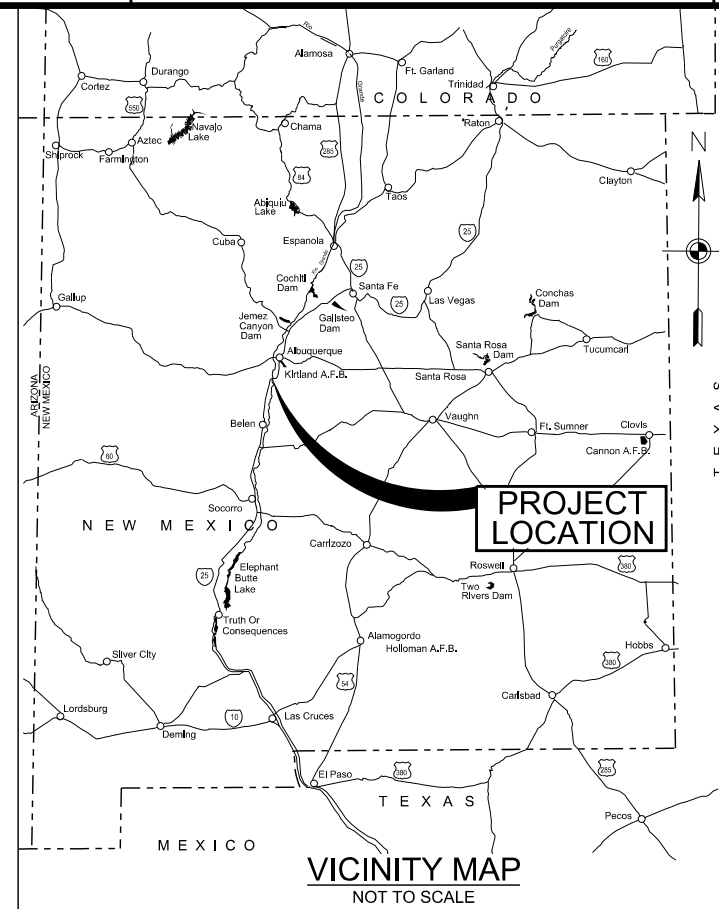
BERNALILLO COUNTY AND VALENCIA COUNTY, NEW MEXICO  
MIDDLE RIO GRANDE FLOOD PROTECTION PROJECT  
BERNALILLO TO BELEN LEVEES  
**INDEX OF DRAWINGS**

SHEET NO.  
**G-002**  
2 OF 3

SEQUENCE NO.  
**2**



**GENERAL PLAN**  
SCALE: 1" = 5000'



 US Army Corps of Engineers  
Albuquerque District

Mark	Description	Date	Appr.

File Name: C:\03\sign  
Proj Date: AUGUST 2015  
Proj Scale: 1"=5000'  
SOL/CONTRACT NO.  
PROJECT NO.  
ero Accidents  
ero Tolerance

DESIGN BY:  
SEE COVER  
DRAWN BY:  
SEE COVER  
REVIEWED BY:  
SEE COVER

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BERNALILLO COUNTY AND VALENCIA COUNTY, NEW MEXICO  
MIDDLE RIO GRANDE FLOOD PROTECTION PROJECT  
BERNALILLO TO BELEN LEVEES

SHEET NO.  
**G-003**  
3 OF 3

SEQUENCE NO.  
**3**

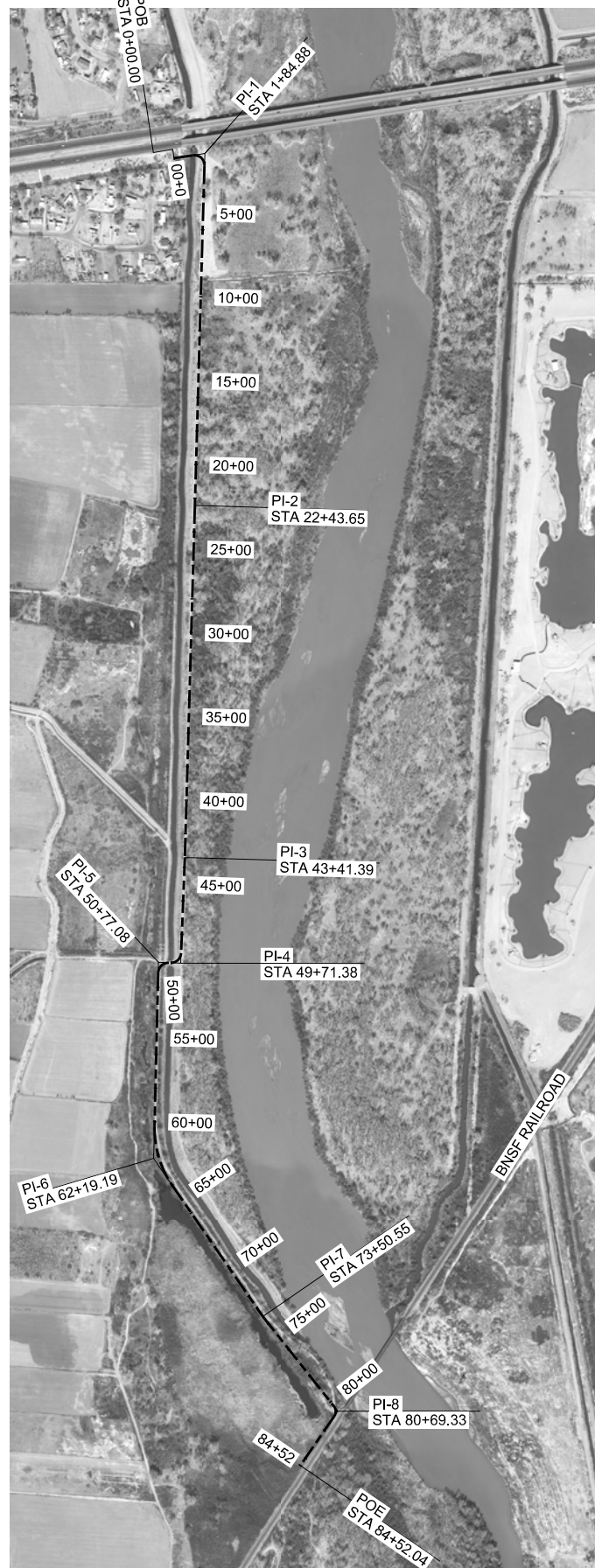
GENERAL PLAN

### ISLETA WEST UNIT LEVEE 1 HORIZONTAL CONTROL

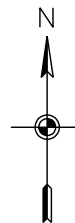
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PI-1	N=1437100.69	E=1510135.13	STA. 1+84.88
DELTA =	100°27'11"R	PC-1 =	STA. 1+12.80
DEGREE =	95°29'35"	PI-1 =	STA. 1+84.88
RADIUS =	60.00	PT-1 =	STA. 2+18.00
TANGENT =	72.08		
LENGTH =	105.19		
PI-2	N=1435003.80	E=1510075.43	STA. 22+43.65
PI-3	N=1432906.91	E=1510015.73	STA. 43+41.39
PI-4	N=1432277.42	E=1509990.93	STA. 49+71.38
DELTA =	89°59'18"R	PC-4 =	STA. 49+11.39
DEGREE =	95°29'35"	PI-4 =	STA. 49+71.38
RADIUS =	60.00	PT-4 =	STA. 50+05.62
TANGENT =	59.99		
LENGTH =	94.24		
PI-5	N=1432282.56	E=1509859.59	STA. 50+77.08
DELTA =	90°49'14"L	PC-5 =	STA. 50+16.21
DEGREE =	95°29'35"	PI-5 =	STA. 50+77.08
RADIUS =	60.00	PT-5 =	STA. 51+11.32
TANGENT =	60.87		
LENGTH =	95.11		
PI-6	N=1431114.18	E=1509830.55	STA. 62+19.19
DELTA =	36°01'51"L	PC-6 =	STA. 60+24.06
DEGREE =	09°32'57"	PI-6 =	STA. 62+19.19
RADIUS =	600.00	PT-6 =	STA. 64+01.38
TANGENT =	195.13		
LENGTH =	377.31		
PI-7	N=1430172.35	E=1510480.46	STA. 73+50.55
PI-8	N=1429608.90	E=1510926.74	STA. 80+69.33
DELTA =	72°51'09"R	PC-8 =	STA. 80+32.44
DEGREE =	114°35'30"	PI-8 =	STA. 80+69.33
RADIUS =	50.00	PT-8 =	STA. 80+96.01
TANGENT =	36.90		
LENGTH =	63.58		
POE	N=1429284.97	E=1510704.35	STA. 84+52.04

### GENERAL NOTES

- COORDINATES ARE NEW MEXICO STATE PLANE COORDINATES, CENTRAL ZONE, NAD83. ELEVATIONS REFERENCE NAVD88.



**HORIZONTAL CONTROL PLAN**  
SCALE 1" = 500'



Mark	Description	Date	Appr.

File Name: EC38851-C-100.dgn	Proj Date: AUGUST 2015
Proj Scale: 500:1	SOL/CONTRACT NO. 7
	PROJECT NO. 7
	ero Accidents
	ero Tolerance

DESIGN BY: SEE COVER	DRAWN BY: SEE COVER	REVIEWED BY: SEE COVER
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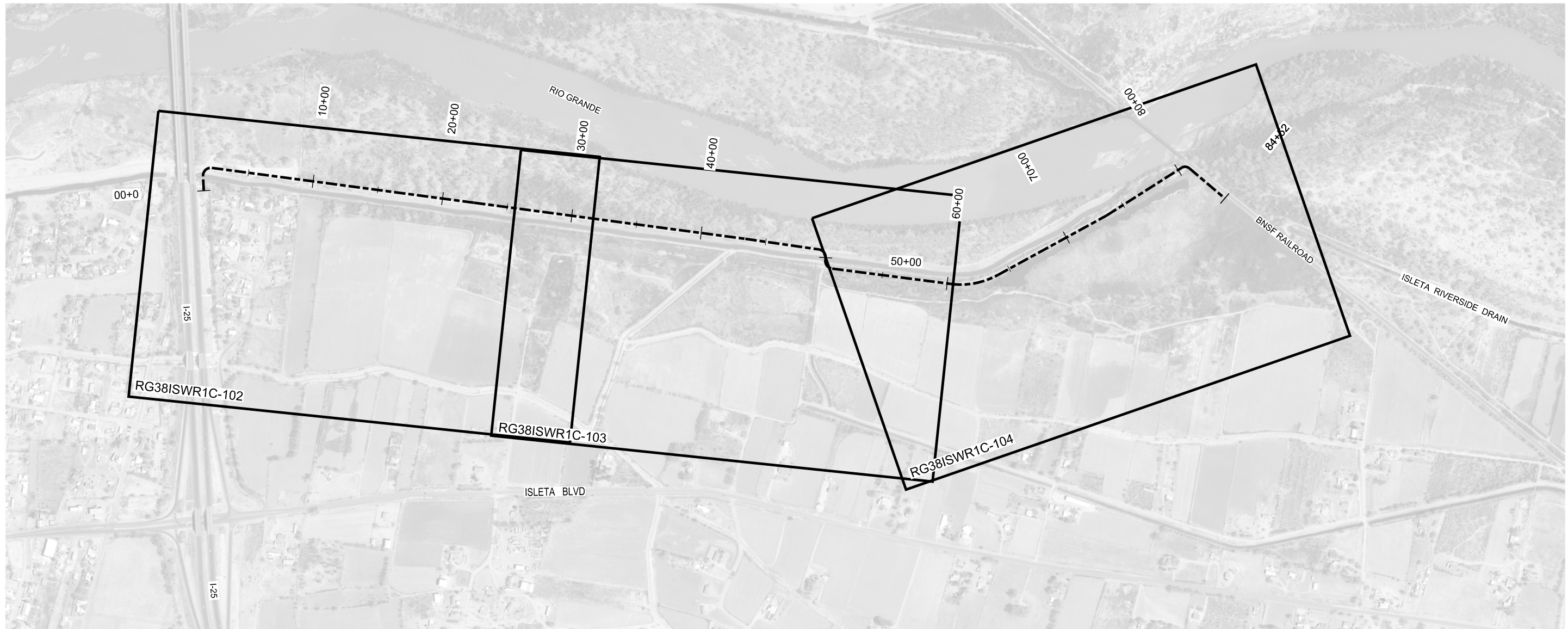
U.S. ARMY ENGINEER DISTRICT  
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ALBUQUERQUE, NEW MEXICO

BERNALILLO COUNTY AND VALENCIA COUNTY, NEW MEXICO  
MIDDLE RIO GRANDE FLOOD PROTECTION PROJECT  
BERNALILLO TO BELEN LEVEES  
**ISLETA WEST UNIT LEVEE 1**  
100YR WS + 4'  
**HORIZONTAL CONTROL**

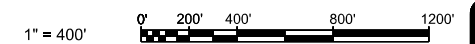
SHEET NO.  
**C-100**  
1 OF 6

SEQUENCE NO.  
**55**





**ISLETA WEST UNIT LEVEE 1 KEY PLAN**  
SCALE: 1" = 400'



US Army Corps  
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Albuquerque District

Work	Description	Date	Appr.

File Name: rg38-101.dgn  
 Plot Scale: 1/4" = 100'  
 Plot Date: AUGUST 2015  
 SOL/CONTRACT NO.: 100YR WS + 4'  
 PROJECT NO.:  
 Date Accidents: 0  
 Date Tolerance: 0

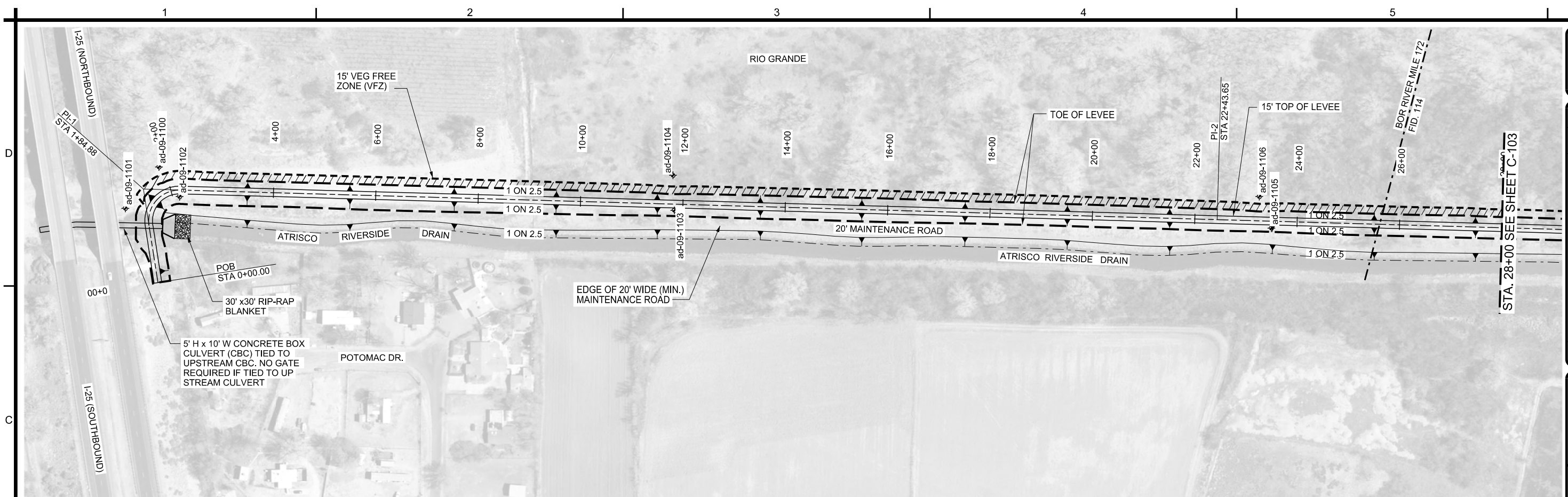
DESIGN BY: SEE COVER  
 DRAWN BY: SEE COVER  
 REVIEWED BY: SEE COVER

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BERNALILLO COUNTY AND VALENCIA COUNTY, NEW MEXICO  
 MIDDLE RIO GRANDE FLOOD PROTECTION PROJECT  
 BERNALILLO TO BELEN LEVEES  
 ISLETA WEST UNIT LEVEE 1  
 100YR WS + 4'  
 KEY PLAN

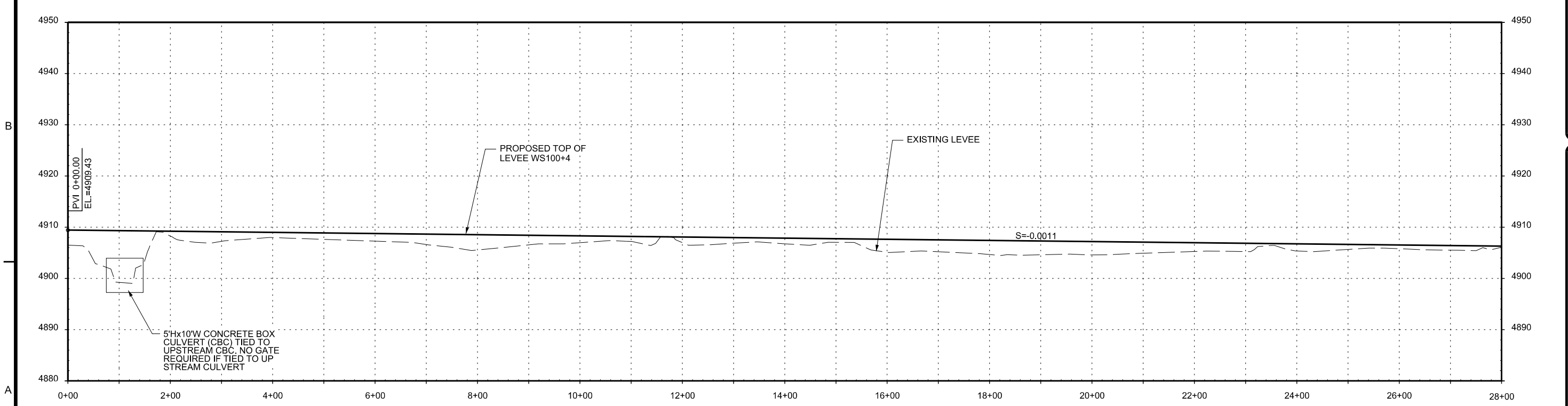
SHEET NO.  
**C-101**  
 2 OF 6

SEQUENCE NO.  
**56**

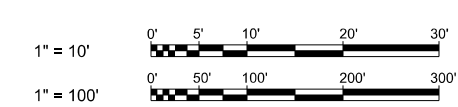


**PLAN**  
SCALE: 1" = 100'

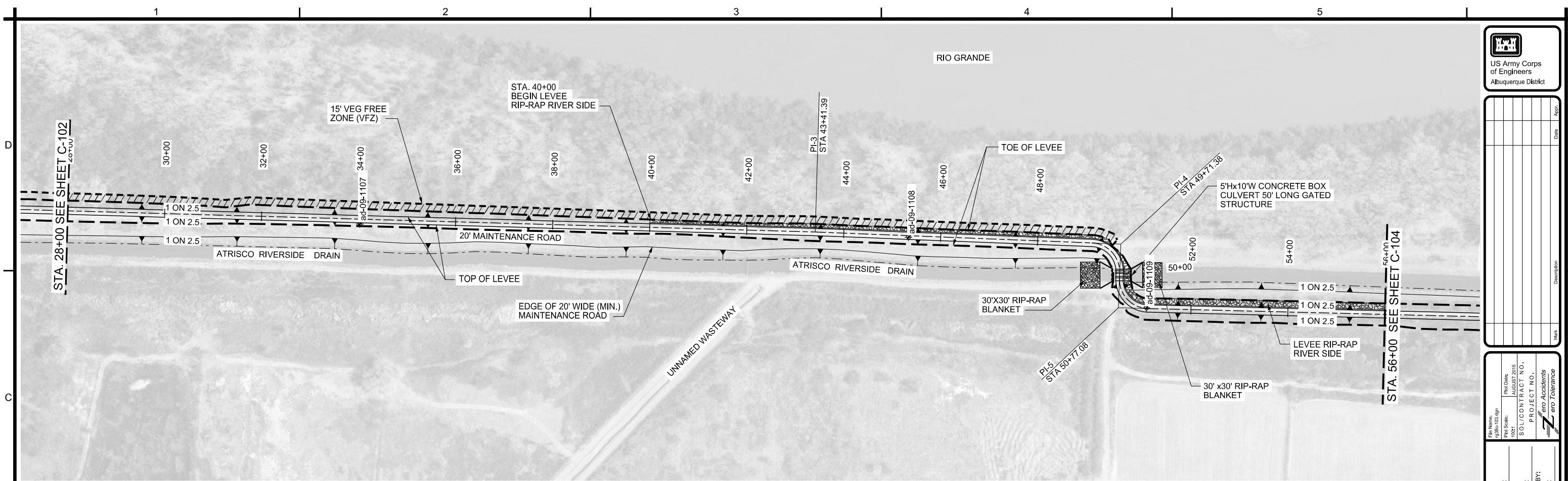
**LEGEND**  
 ♦ ad-09-1106 BORE HOLE LOCATION



**PROFILE**  
SCALE: HORIZ: 1"=100'  
VERT: 1"=10'



<p>US Army Corps of Engineers Albuquerque District</p>	
<p>File Name: c:\38c-102.dwg        Plot Scale: 100:1        S.O.L./CONTRACT NO.:        PROJECT NO.:        Date: _____        Mark: _____        Description: _____</p>	<p>DESIGN BY: _____        SEE COVER        DRAWN BY: _____        SEE COVER        REVIEWED BY: _____        SEE COVER</p>
<p>U.S. ARMY ENGINEER DISTRICT        CORPS OF ENGINEERS        ALBUQUERQUE, NEW MEXICO</p>	
<p>BERNALILLO COUNTY AND VALENCIA COUNTY, NEW MEXICO        MIDDLE RIO GRANDE FLOOD PROTECTION PROJECT        BERNALILLO TO BELÉN LEVEES        ISLETA WEST UNIT LEVEE 1 100YR WS + 4'        PLAN AND PROFILE        STA.0+00 TO STA.28+00</p>	
<p>SHEET NO. <b>C-102</b> 3 OF 6</p>	
<p>SEQUENCE NO. <b>57</b></p>	

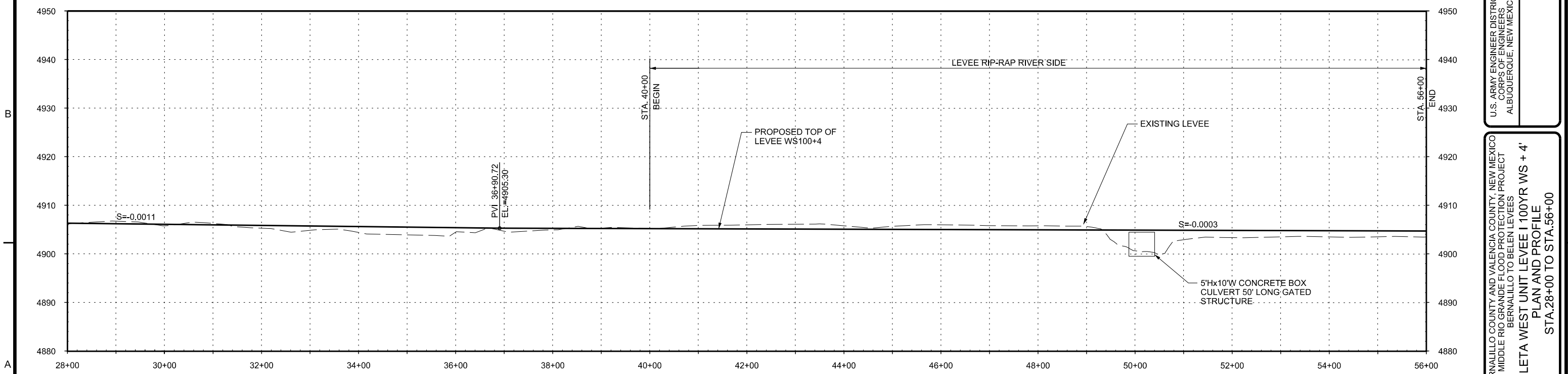


**PLAN**

SCALE: 1" = 100'

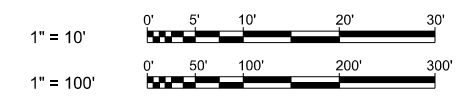
**LEGEND**

◆ ad-09-1106 BORE HOLE LOCATION



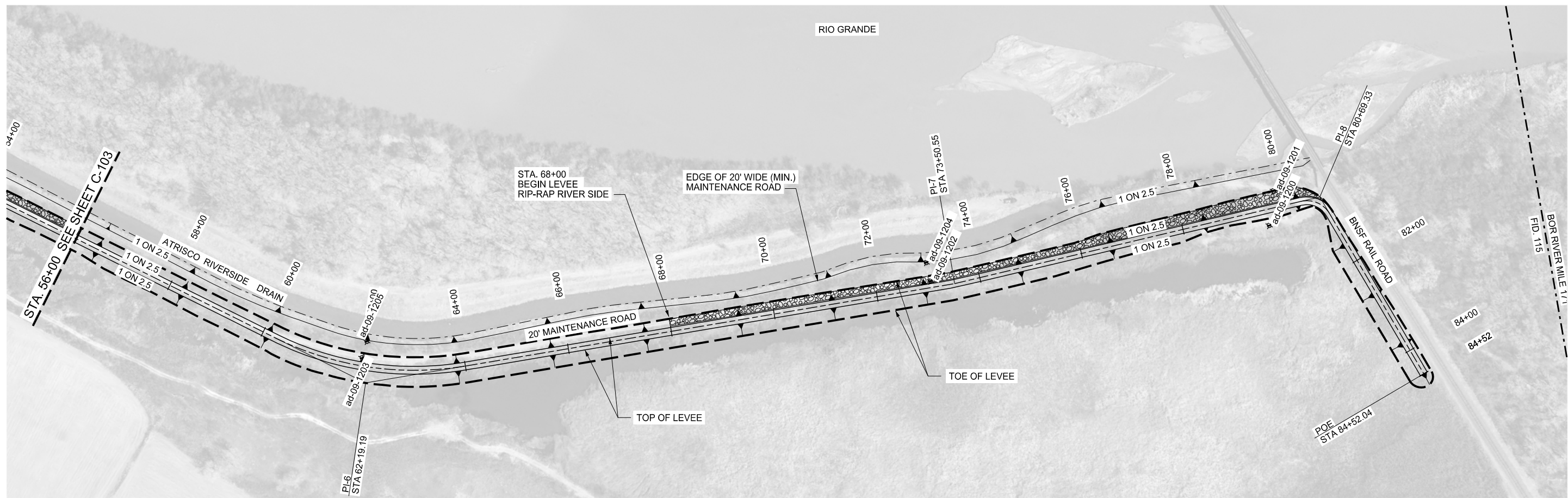
**PROFILE**

SCALE: HORIZ: 1"=100'  
VERT: 1"=10'



File Name: p38-103.dgn Plot Scale: 100:1 SOL/CONTRACT NO.: 1001 PROJECT NO.: 7	Date: _____ Mark: _____ Description: _____ Date: _____ Appr.: _____
DESIGN BY: SEE COVER DRAWN BY: SEE COVER REVIEWED BY: SEE COVER	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS ALBUQUERQUE, NEW MEXICO
BERNALILLO COUNTY AND VALENCIA COUNTY, NEW MEXICO MIDDLE RIO GRANDE FLOOD PROTECTION PROJECT BERNALILLO TO BELEN LEVEES ISLETA WEST UNIT LEVEE I 100YR WS + 4' PLAN AND PROFILE STA.28+00 TO STA.56+00	
SHEET NO. <b>C-103</b> 4 OF 6	
SEQUENCE NO. <b>58</b>	



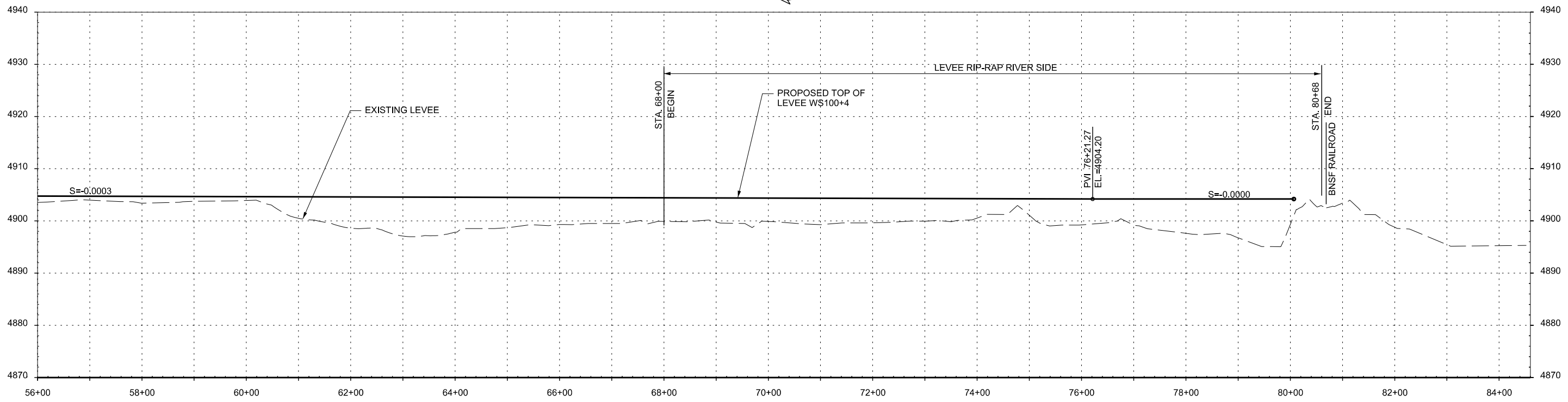


**PLAN**

SCALE: 1" = 100'

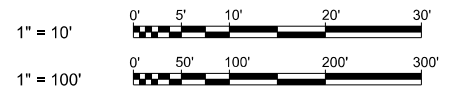
**LEGEND**

◆ ad-09-1106 BORE HOLE LOCATION



**PROFILE**

SCALE: HORIZ: 1"=100'  
VERT: 1"=10'



Mark	Description	Date	Appr.

File Name: g38c-104.dgn	Proj Date: AUGUST 2015
Proj Scale: 100%	SOL/CONTRACT NO. 1001
	PROJECT NO. 7
	ero Accidents
	ero Tolerance

DESIGN BY: SEE COVER
DRAWN BY: SEE COVER
REVIEWED BY: SEE COVER

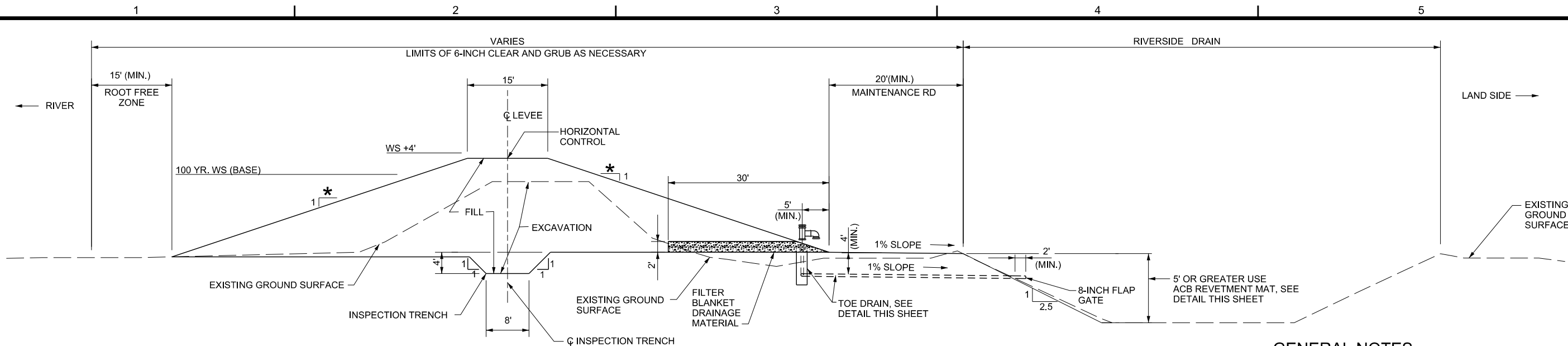
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BERNALILLO COUNTY AND VALENCIA COUNTY, NEW MEXICO  
MIDDLE RIO GRANDE FLOOD PROTECTION PROJECT  
BERNALILLO TO BELLEN LEVEES  
ISLETA WEST UNIT LEVEE I 100YR WS + 4'  
PLAN AND PROFILE  
STA.56+00 TO STA.82+00

SHEET NO.  
**C-104**  
5 OF 6

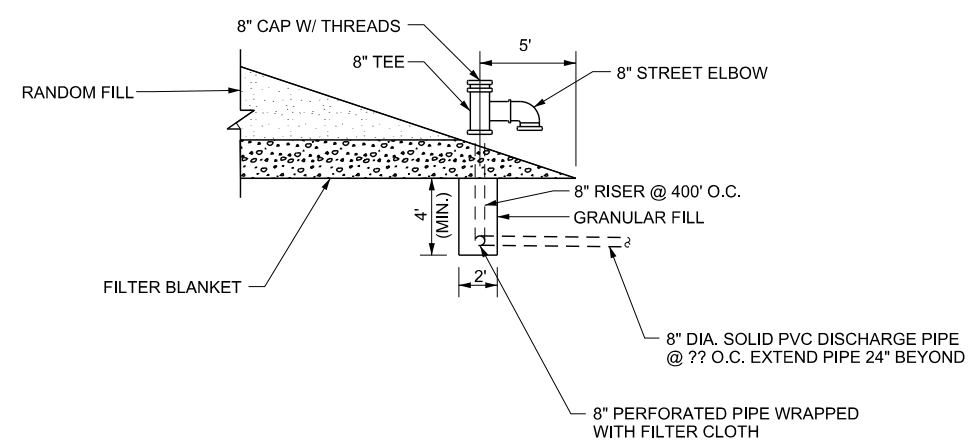
SEQUENCE NO.  
**59**



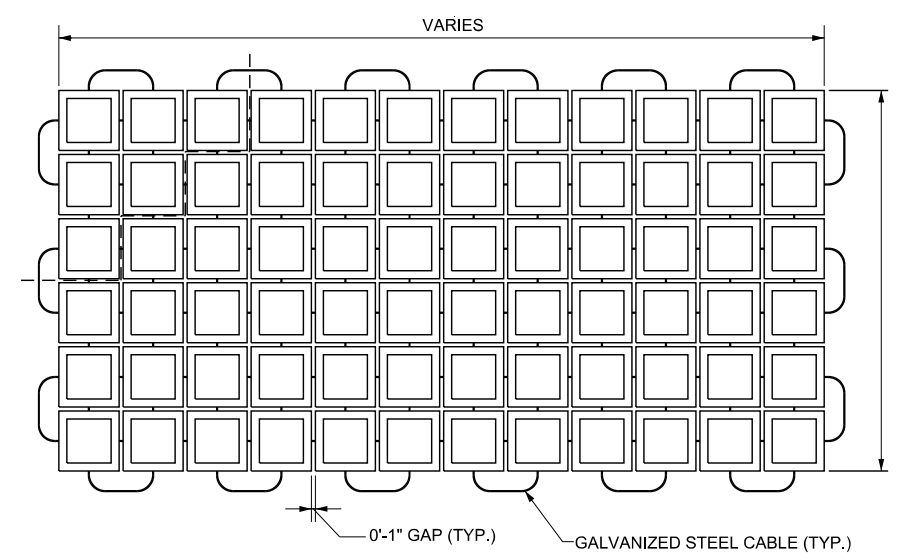


**TYPICAL LEVEE REPLACEMENT SECTION**  
NOT TO SCALE

\* LEVEE HEIGHTS EQUAL TO OR LESS THAN 12' USE  $\frac{2.5}{1}$  SIDESLOPE.  
LEVEE HEIGHTS GREATER THAN 12' USE  $\frac{3}{1}$  SIDESLOPE.

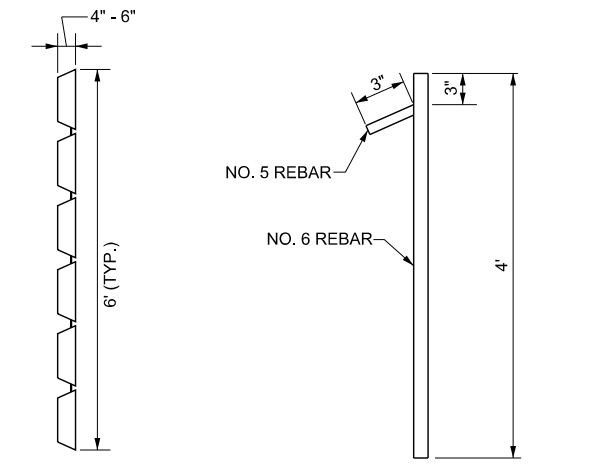


**TYPICAL TOE DRAIN DETAIL**  
NOT TO SCALE

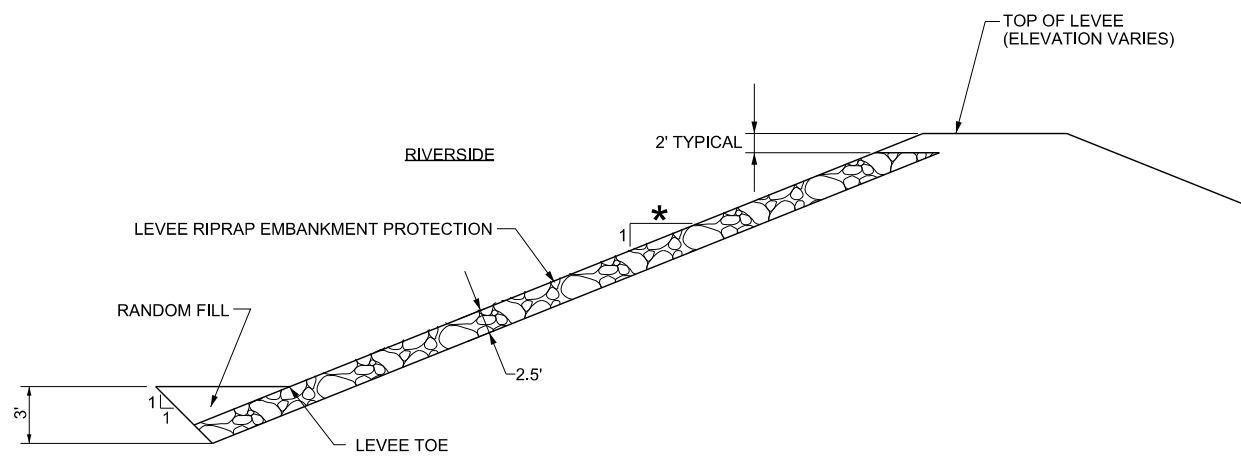


**ARTICULATED CONCRETE BLOCK REVETMENT MAT**  
NOT TO SCALE

LOCATION OF ARTICULATED CONCRETE BLOCK REVETMENT MAT:  
STA. 2+00 TO STA. 80+00



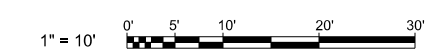
**ARTICULATED CONCRETE BLOCK REVETMENT MAT ANCHOR DETAIL**  
NOT TO SCALE



**TYPICAL LEVEE RIPRAP SECTION**  
NOT TO SCALE

**LEGEND**

- RANDOM FILL
- FILTER BLANKET
- EXISTING GROUND SURFACE



**GENERAL NOTES**

1. DELETE TOE DRAIN, AND INSPECTION TRENCH WHEN HEIGHT OF LEVEE IS 5' OR LESS.
2. EXISTING LEVEE SHALL BE DEMOLISHED TO CONSTRUCT NEW LEVEE.
3. GRADING REQUIREMENTS ARE AS SHOWN AND DEPEND ON LEVEE HEIGHT.
4. ACB REVETMENT MATS SHALL BE PLACED, ANCHORED, CUT AND CLAMPED TO FIT SLOPES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION. CONTRACTOR SHALL NOT USE FLAME CUTTING.
5. CONTRACTOR SHALL ANCHOR ACB REVETMENT MATS INTO THE NEW LEVEE SIDE SLOPES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

US Army Corps of Engineers  
Albuquerque District

DESIGN BY: SEE COVER DRAWN BY: SEE COVER REVIEWED BY: SEE COVER	PROJECT NO. AUGUST 2015 S.O.L./CONTRACT NO.
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BERNALILLO COUNTY AND VALENCIA COUNTY, NEW MEXICO  
MIDDLE RIO GRANDE FLOOD PROTECTION PROJECT  
BERNALILLO TO BELEN LEVEES  
ISLETA WEST UNIT LEVEE 100YR WS + 4'  
TYPICAL LEVEE SECTION AND DETAILS

SHEET NO.  
**C-301**  
6 OF 6

SEQUENCE NO.  
**60**