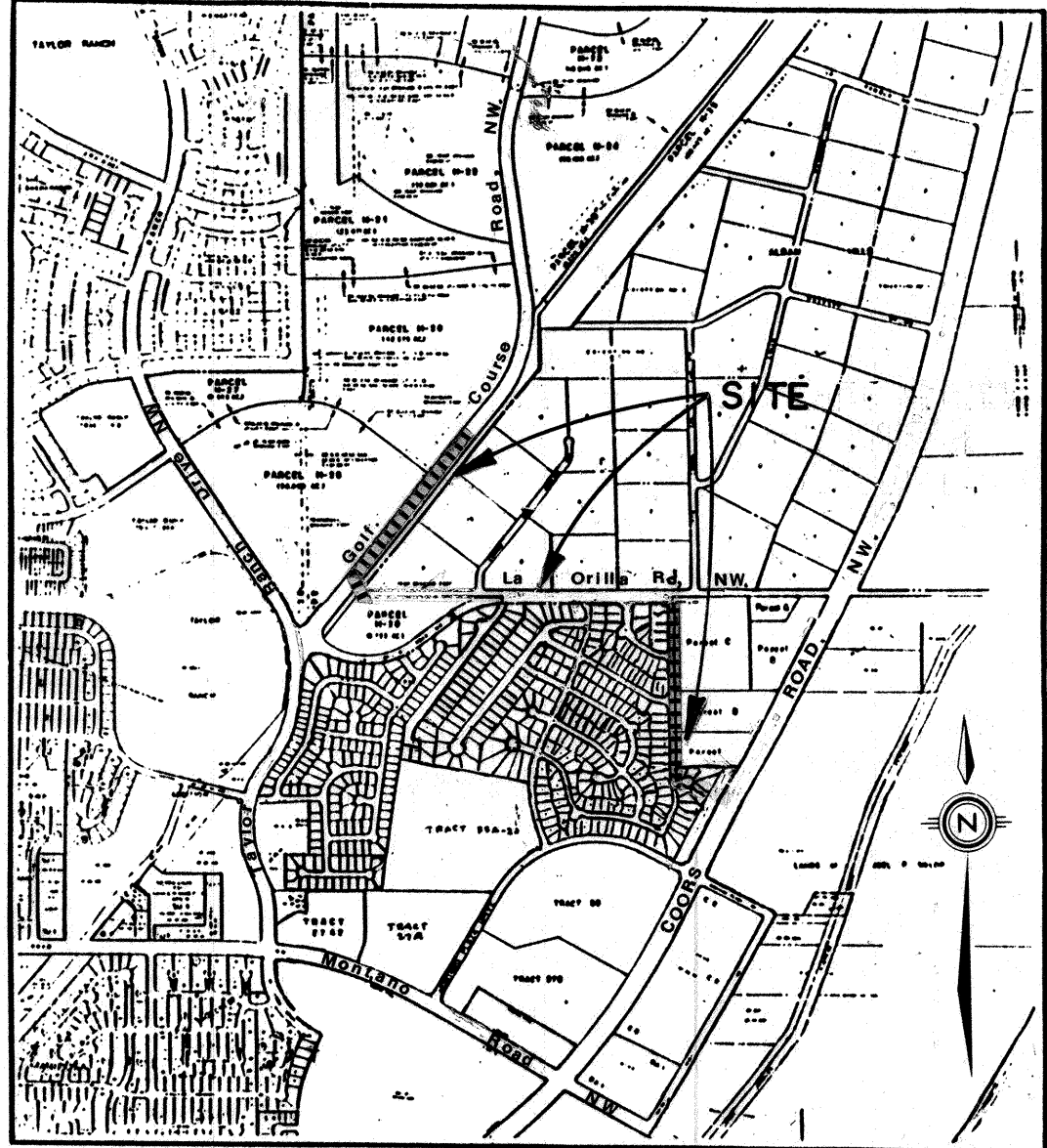


STORM SEWER IMPROVEMENTS
FOR
GOLF COURSE RD, NW & LA ORILLA RD, NW

INDEX TO SHEETS

SHEET NO. DESCRIPTION

1	TITLE SHEET, INDEX TO DRAWINGS
2-4	PLATS OF GEOMETRY
5	COMPOSITE STORM SEWER PLAN
	STORM SEWER PLAN & PROFILES
6	FROM STA. 0+00.00 TO STA. 9+50.00
7	FROM STA. 9+50.00 TO STA. 17+12.23
8	FROM STA. 17+12.23 TO STA. 23+50.00
9	FROM STA. 23+50.00 TO STA. 33+00.00
10	FROM STA. 33+00.00 TO EQUATION STA. 41+05.04
11	FROM EQUATION STA. 9+15.73 TO STA. 19+90.00
12-13	DETAILS



VICINITY MAP

GENERAL NOTES:

- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS PUBLIC WORKS CONSTRUCTION, 1985.
- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, FOR LOCATION OF EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS AND EXISTING PAVEMENT. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR SURVEYOR SO THAT THE CONFLICT CAN BE RESOLVED WITH MINIMUM AMOUNT OF DELAY.
- THE CLASS NO. FOR THE RCP SPECIFIED IN THESE PLANS IS THE MINIMUM ASTM CLASSIFICATION NO. HIGHER CLASS NO'S.. MAY BE USED AT THE CONTRACTOR'S OPTION WITH APPROVAL BY THE ENGINEER.
- RCP PIPE DIAMETERS SPECIFIED IN THESE PLANS ARE A MINIMUM. LARGER DIAMETER PIPES MAY BE SUBSTITUTED AT THE CONTRACTOR'S OPTION WITH THE APPROVAL OF THE ENGINEER.

A STANDARD USGLO SECTION CORNER MONUMENT (2 1/2 INCH BRASS TABLET) FOR SECTIONS 23, 24, 25 AND 26, T11N, R2E, N.M.P.M. AND LOCATED APPROXIMATELY 310' DUE NORTH OF INTERSECTION OF GOLF COURSE ROAD N.W. AND TAYLOR RANCH DRIVE, N.W. WITHIN RIVERVIEW PARCEL H-28 ELEV.=5,112.53

APPROVAL OF AS BUILT DRAWINGS
ASST. CITY ENGINEER
[Signature]
DATE 7-22-87

SCANNED BY

26 30700187

SCANNED BY

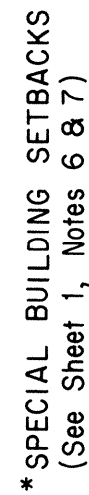
REV.	SHEETS	CITY ENGINEER	DATE	USER	DEPARTMENT	DATE	USER	DEPARTMENT	DATE
APPROVAL OF REVISIONS									

ENGINEER'S SEAL <i>[Seal: Michael J. Yost, Professional Engineer, No. 123086]</i>	DATE: NOV., 1986 SCALE: N.A. DESIGNED: G.A. DRAWN: C.S.C. JOB NO. 73-38-066	community sciences corporation LAND PLANNING ENGINEERING SURVEYING CITY ENGINEER 3/2/87 DATE	APPROVED FOR CONSTRUCTION <i>[Signature]</i> CITY ENGINEER 3/2/87 DATE
PROJECT NO. 3070	SHEET OF 13		

OCTOBER, 1986

DRB CASE NO.86-436

RESERVED FOR COUNTY CLERK



MONUMENTATION	LEGEND
○	SET NO. 5 REBAR W/CAP "L.S. 7270"
⊙	FOUND NO. 5 REBAR W/CAP "L.S. 4078"

DATE	OCT. 1986
SCALE	1" = 100'
DESIGNED	MKS
DRAWN	MKS
JOB NO.	73-47-025

SHEET 2 OF 4

OCTOBER, 1986

DRB CASEE NO.86-436

RESERVED FOR COUNTY CLERK



* SPECIAL BUILDING SETBACKS
(See Sheet 1, Notes 6 & 7)

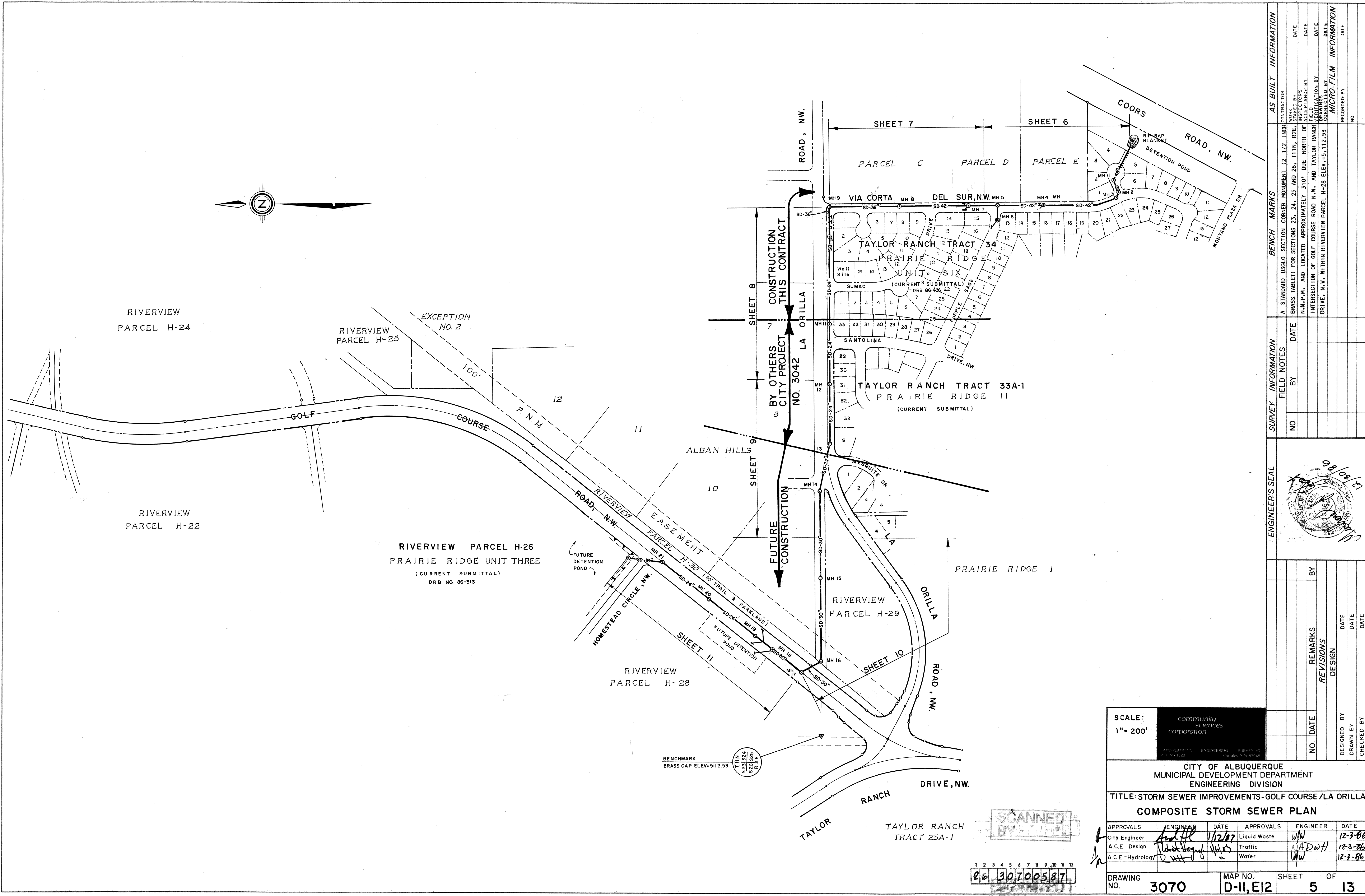
TRACT 35 - TAYLOR RANCH
(Filed 5-3-84; Vol. C23, Folio 180)

A.C.S. ALUMINUM CAP "NM448-N7A"
N.M. STATE PLANE COORDINATES
CENTRAL ZONE, X=369,804.99'
Y=1,510,014.62'
 $\Delta\alpha = -0^{\circ}15'03''$; ELEV=5006.41'(2nd Order)

SHEET 3 OF 4

community sciences corporation

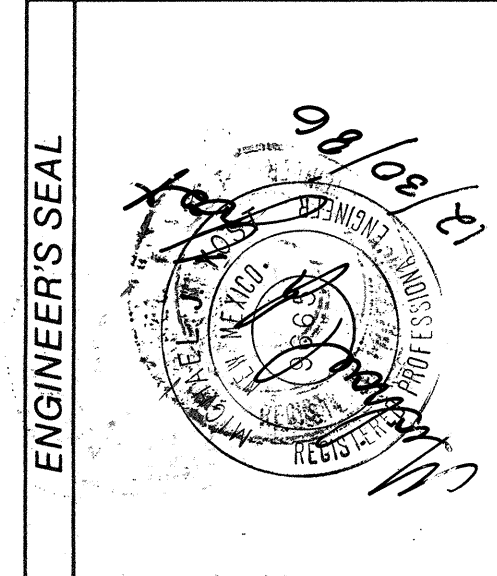
DATE:	OCT. 1986	ENGINEERING	SURVEYING
SCALE:	1" = 100'	LAND DRAINING	BO. Box 1328
	DESIGNED	MKS	Corpus Christi, TX 78408
	DRAWN:	MKS	
	JOHN NO.:		200



AS BUILT INFORMATION	
CONTRACTOR	
WORKED BY	
INSPECTED BY	
DATE	

BENCH MARKS	
A STANDARD USGLO SECTION CORNER MONUMENT (2 1/2 INCH BRASS TABLET) FOR SECTIONS 23, 24, 25 AND 26, T11N, R2E, N.M.P.M. AND LOCATED APPROXIMATELY 310' DUE NORTH OF INTERSECTION OF GOLF COURSE ROAD N.W. AND TAYLOR RANCH DRIVE, N.W. WITHIN RIVERVIEW PARCEL H-28 ELEV. = 5,112.53	

SURVEY INFORMATION	
FIELD NOTES	
NO.	
BY	
DATE	



ENGINEER'S SEAL	
REVISIONS	
NO.	
DATE	
BY	
REMARKS	
DESIGNED BY	
DRAWN BY	
CHECKED BY	
DATE	
DATE	

SCALE: 1" = 200'

community sciences corporation

LAND PLANNING ENGINEERING SURVEYING
P.O. Box 1528 Corrales, N.M. 87108

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

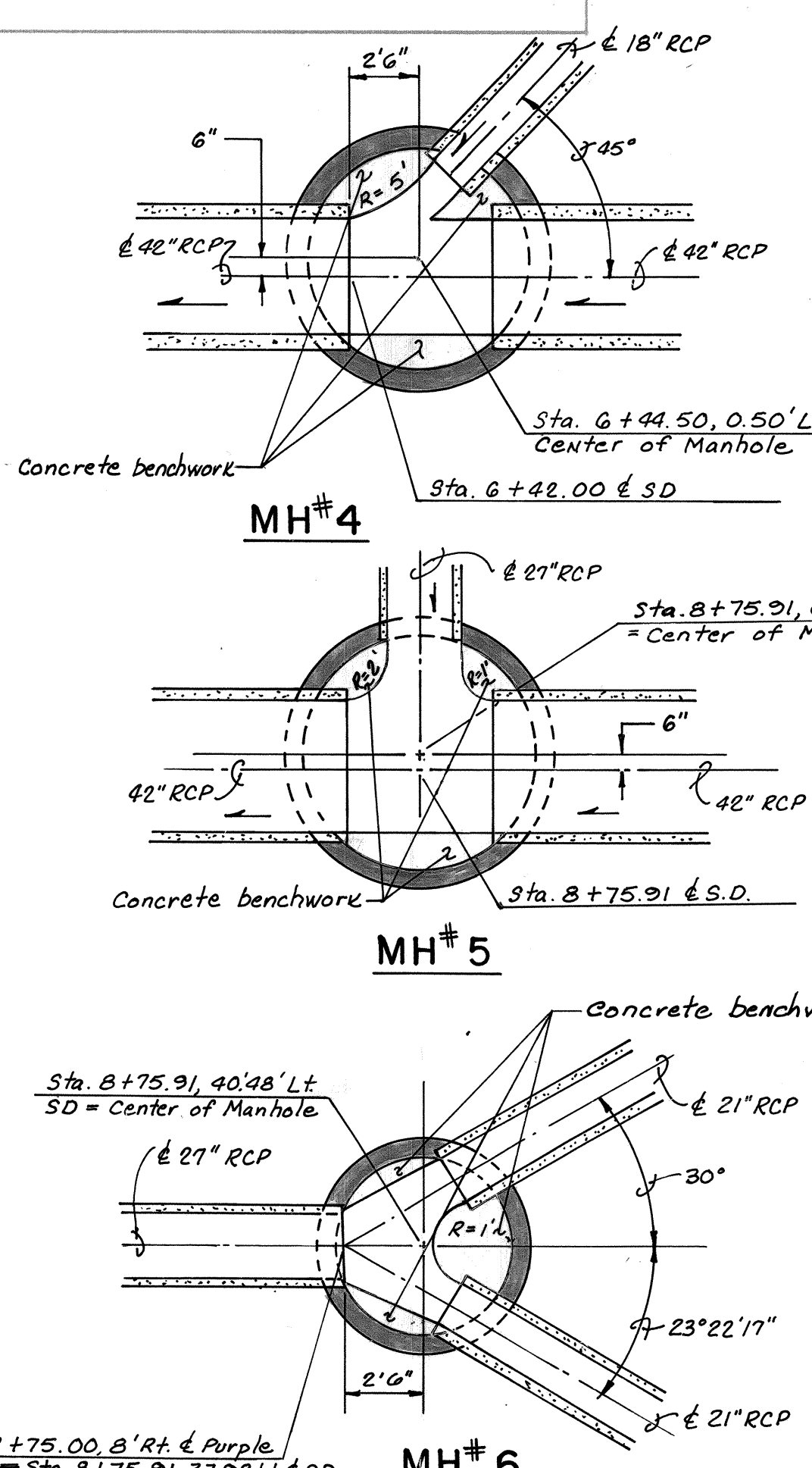
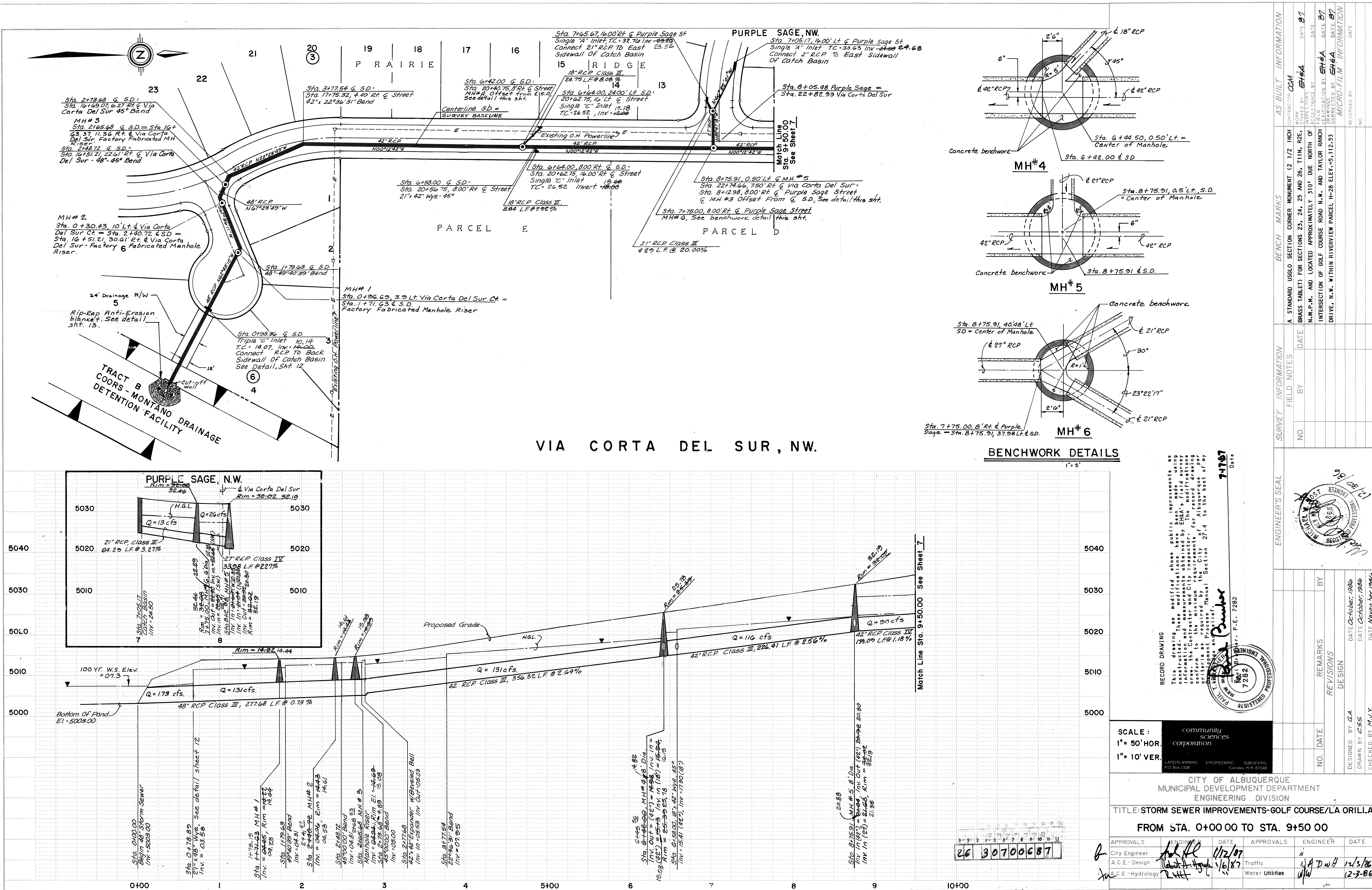
TITLE: STORM SEWER IMPROVEMENTS-GOLF COURSE/LA ORILLA
COMPOSITE STORM SEWER PLAN

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	<i>[Signature]</i>	1/12/87	Liquid Waste	<i>[Signature]</i>	12-3-86
A.C.E.-Design	<i>[Signature]</i>	1/12/87	Traffic	<i>[Signature]</i>	12-3-86
A.C.E.-Hydrology	<i>[Signature]</i>	1/12/87	Water	<i>[Signature]</i>	12-3-86

DRAWING NO. 3070 MAP NO. D-II, E12 SHEET 5 OF 13

SCANNED BY: [illegible]

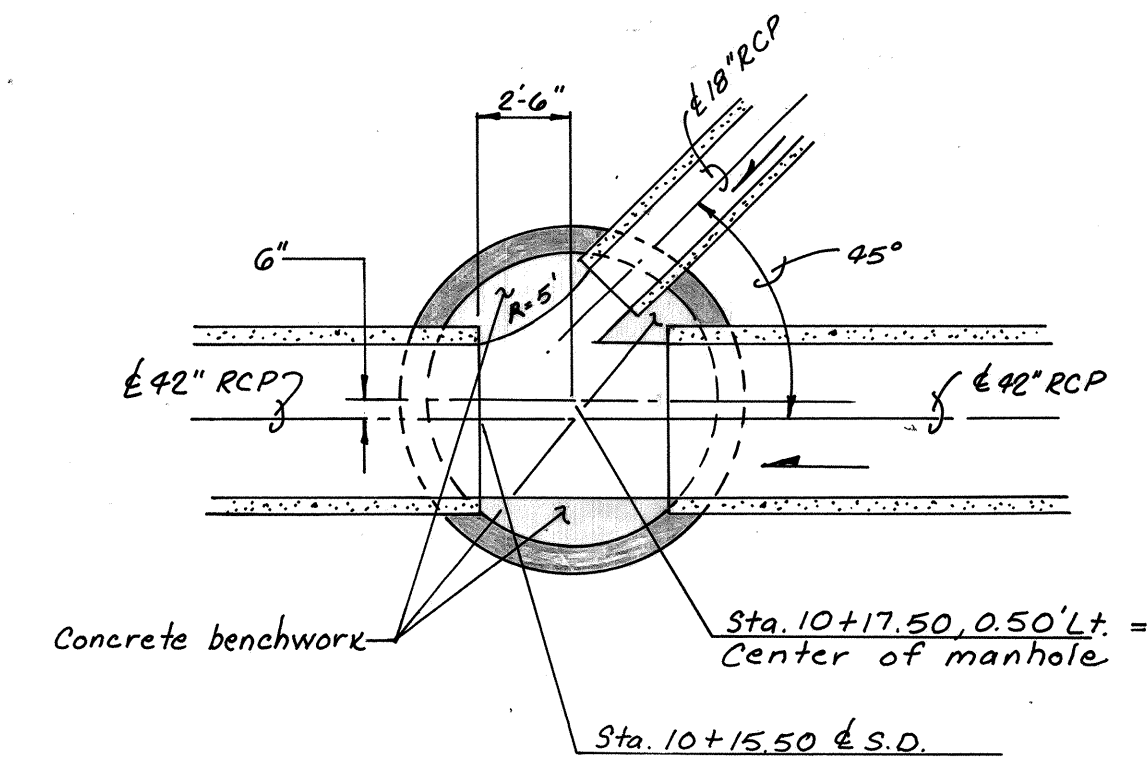
06.30700587



BENCHWORK DETAILS

RECORD DRAFTER
This drawing is modified to show public improvements as constructed. These modifications were obtained by EHA's field survey information and are shown on this drawing. The modifications conform to the minimum requirements of the American Society of Civil Engineers (ASCE) Manual No. 27.4 to the best of my knowledge and belief.
7/15/87
Date
7/15/87
Date
P.E. 7282
Professional Engineer
7282
Professional Engineer
7282
Professional Engineer

SCALE:		community sciences corporation	
1" = 50' HOR.			
1" = 10' VER.			
CITY OF ALBUQUERQUE MUNICIPAL DEVELOPMENT DEPARTMENT ENGINEERING DIVISION			
TITLE: STORM SEWER IMPROVEMENTS-GOLF COURSE/LA ORILLA FROM STA. 0+00 00 TO STA. 9+50 00			
APPROVALS	ENGINEER	DATE	APPROVALS
City Engineer	11/12/87		
A.C.E. - Design	11/12/87		
A.C.E. - Hydrology	11/12/87		
DESIGNED BY G.A.	DATE October, 1986	REVISIONS	DATE October, 1986
DRAWN BY C.S.S.	DATE October, 1986	DESIGN	DATE October, 1986
CHECKED BY M.J.Y.	DATE November, 1986		
DRAWING NO. 3070		MAP NO. D-II, E12	
		SHEET 6 OF 13	



The diagram illustrates the construction of a manhole. It features a circular concrete structure with a radius labeled $R = 4'$. The structure is surrounded by concrete benchwork. A vertical line indicates the center of the manhole. The diagram also shows the 36-inch RCP (Reinforced Concrete Pipe) and the 6-inch dimensions. The stationing is marked as Sta. 17+2.23 at S.D. (Stationing Data).

BENCHMARK DETAILS

RECORD DRAWING

This drawing as modified shows public improvements as constructed. These modifications were made using information and measurements obtained by E&A², the Engineer, and the Contractor and City Inspector. The modifications conform to the requirements of the City of Albuquerque. The modifications were made in accordance with the criteria as required by the City of Albuquerque Development Process Manual, Section 21.4, to the best of my knowledge and belief.

7.17.87
Date

82

SCALE :
1" = 50' HOR.
1" = 10' VER.

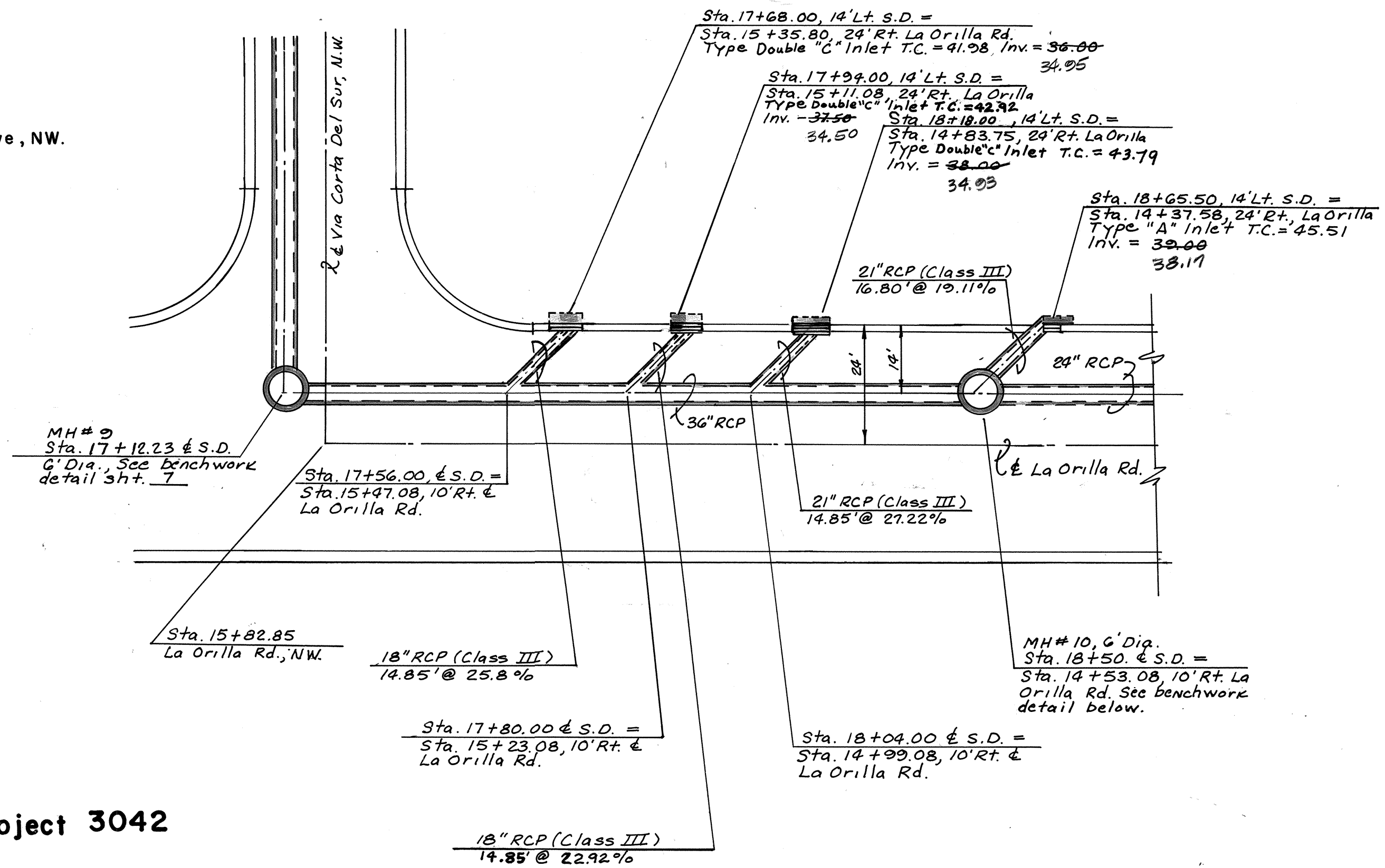
community
sciences
corporation

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

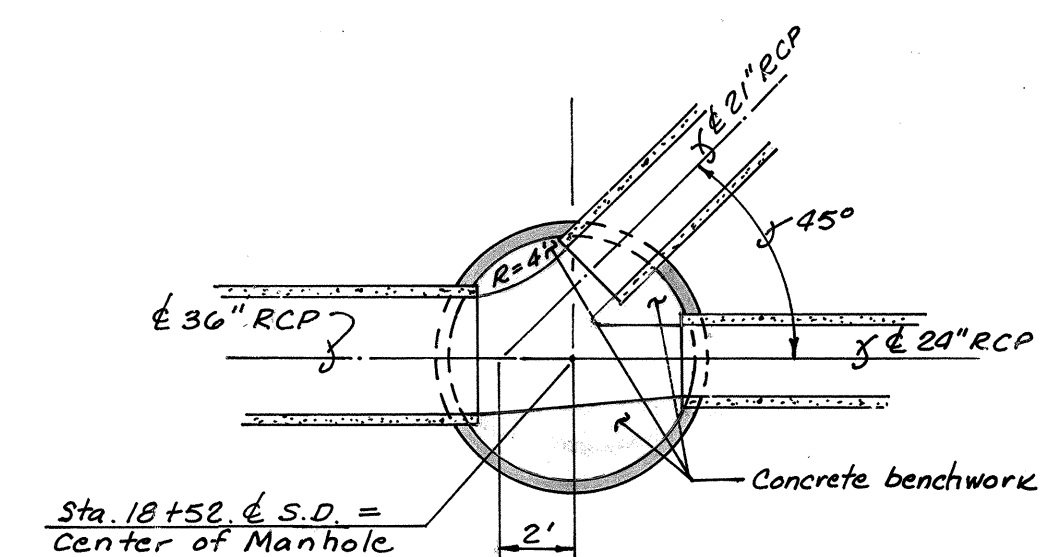
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FROM STA. 9+50.00 TO STA. 17+ 12.23

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	<i>[Signature]</i>	1/12/87			
A.C.E.-Design	<i>[Signature]</i>	1/6/87	Traffic	N A D W H	12/3/86
A.C.E.-Hydrology	<i>[Signature]</i>		Water Utilities	W W	12-3-86

DRAWING NO.	3070	MAP NO.	D-11, E-12	SHEET	7	OF	13
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LA ORILLA ROAD, NW.



BENCHWORK DETAIL MH#10

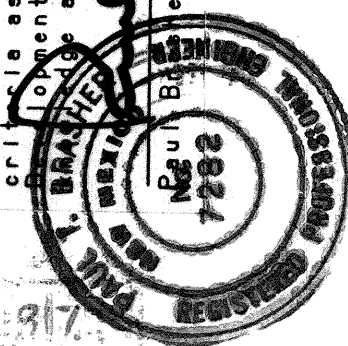
RECORD DRAWING

This drawing as modified shows public improvements as indicated on the record drawing. Each modification has been made using the information and recommendations of the Engineer, the Contractor and City Inspector. The modifications conform to the minimum requirements for record drawing as set forth in the latest edition of the American Institute of Professional Surveyors Manual Section 27.4 to the best of my knowledge and belief.

James H. ...

7-17-87

Date



SCALE:
1" = 50'
HOR.
1" = 10'
VERT.

community
sciences
corporation

LAND PLANNING ENGINEERING SURVEYING
P.O. Box 132B Corrales, N.M. 87048

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

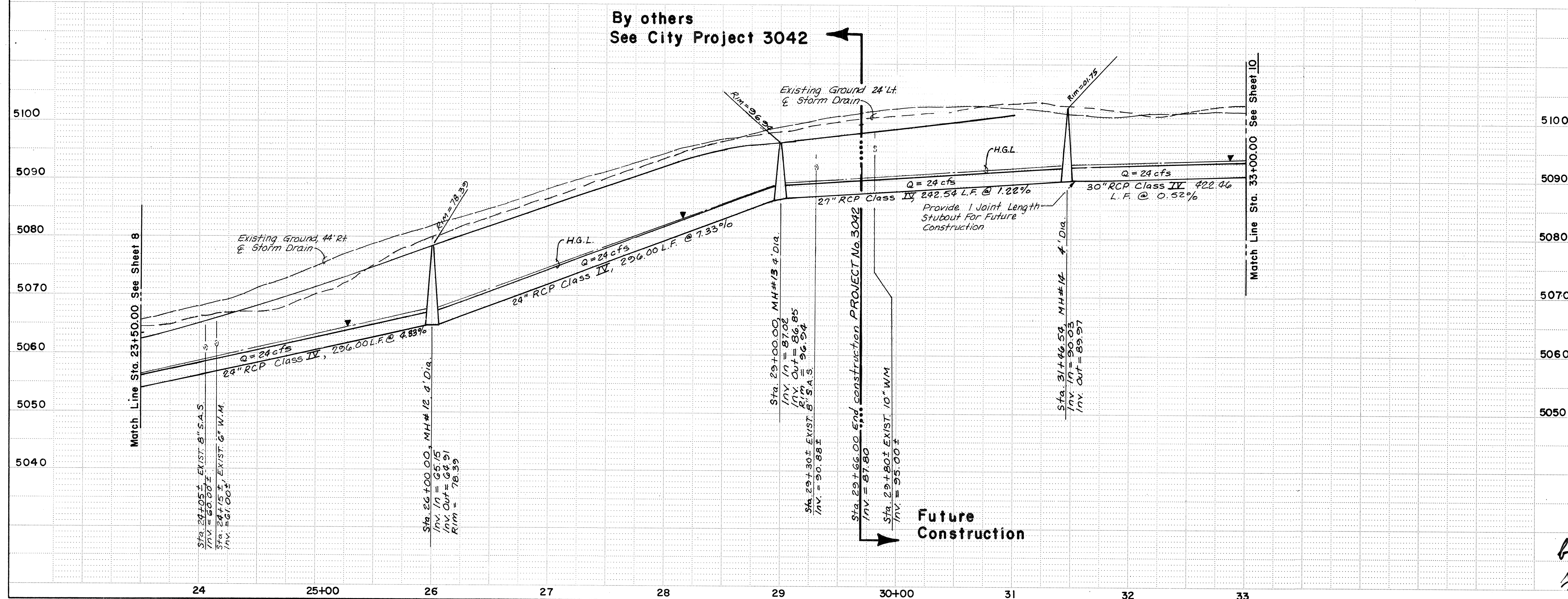
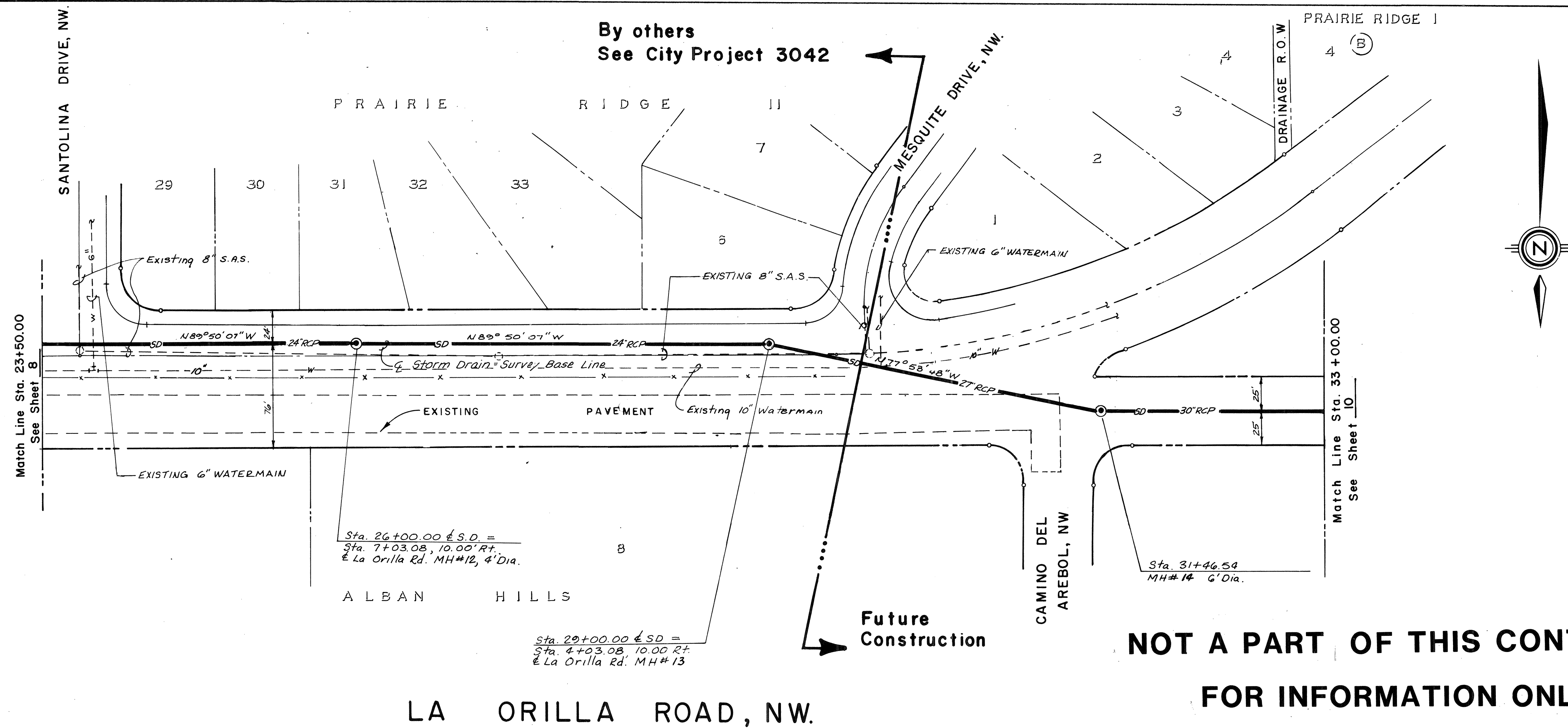
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FROM STA. 17+12.23 TO STA. 23+50.00

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	<i>[Signature]</i>	1/12/87			
A.C.E.-Design	<i>[Signature]</i>	1/14/87	Traffic	NA DW4	12/3/86
A.C.E.-Hydrology	<i>[Signature]</i>	"	Water Utilities	W/W	12-3-86

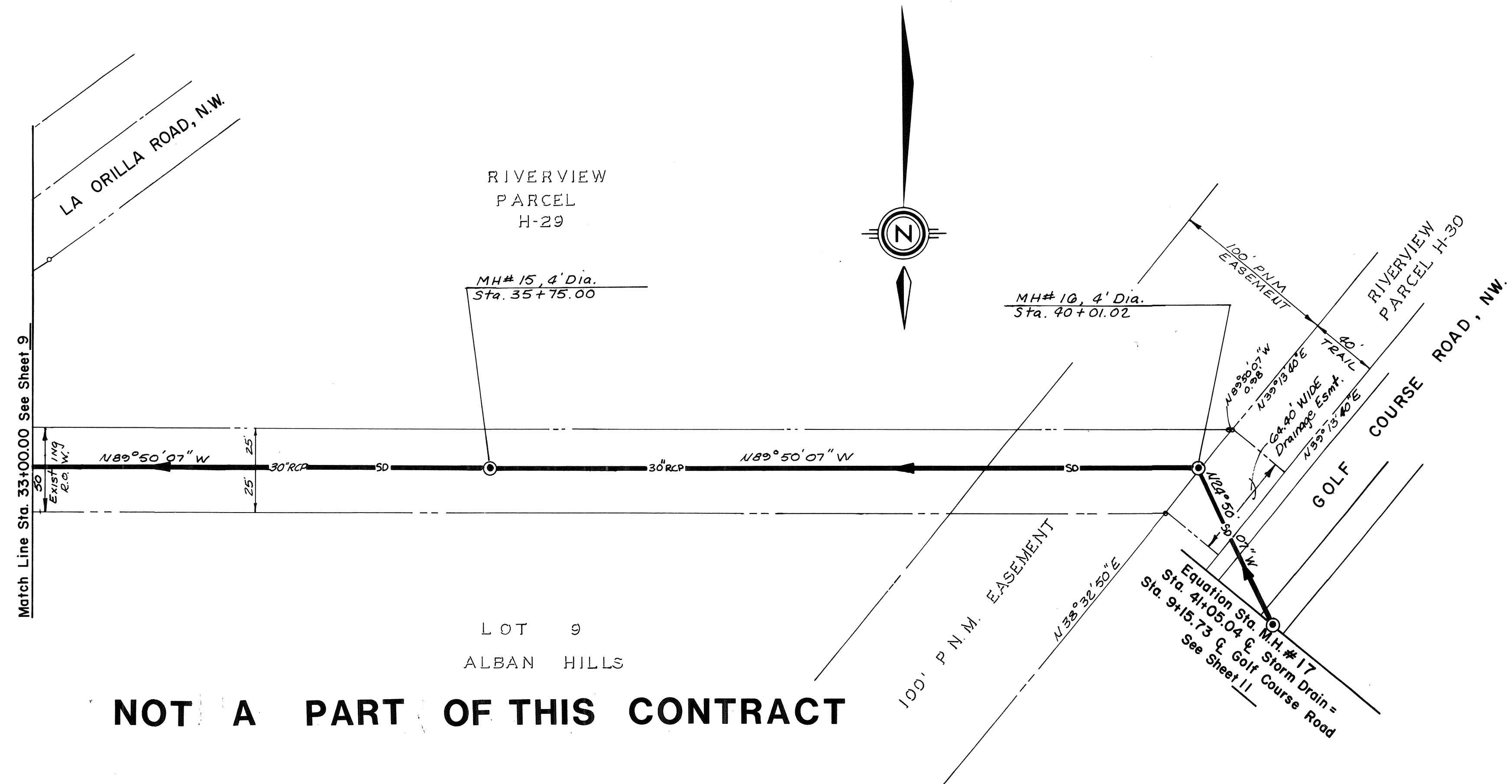
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SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION	
NO.	FIELD NOTES	DATE	A STANDARD USGLO SECTION CORNER MONUMENT (2 1/2" INCH BRASS TABLET) FOR SECTIONS 23, 24, 25 AND 26, T11N, R2E, N.M.P.-M. AND LOCATED APPROXIMATELY 310' DUE NORTH OF INTERSECTION OF GOLF COURSE ROAD N.W. AND TAYLOR RANCH DRIVE, N.W. WITHIN RIVERVIEW PARCEL H-28 ELEV.=5,112.53	WORK INSTALLED BY STATIONED BY ACCEPTANCE BY	DATE
				CONTRACTOR <i>CCM</i> <i>ETH-A</i>	<i>87</i>
				FIELD VERIFICATION BY CORRECTED BY	<i>ETH-A</i> <i>ETH-A</i>
				<i>MICRO-FILM INFORMATION</i>	<i>87</i>
				RECORDED BY	DATE
				NO	

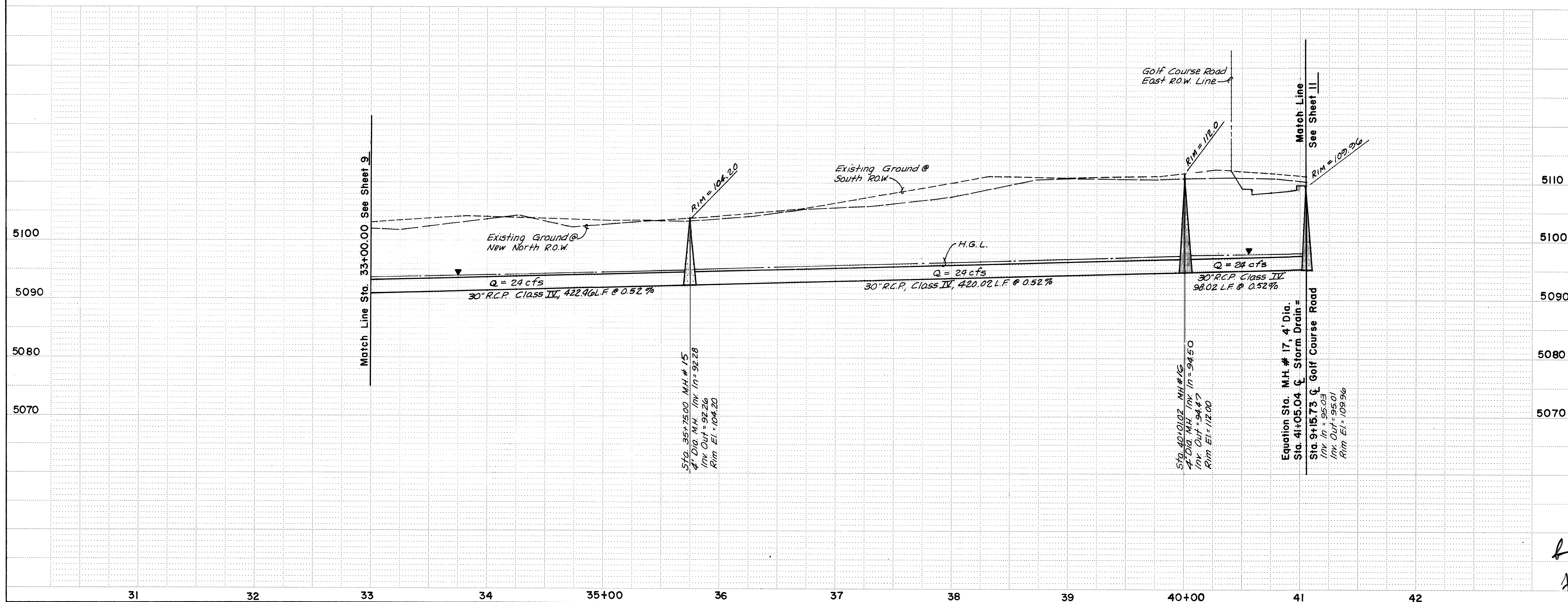
NO.	DATE	REMARKS	BY
<i>REVISIONS</i>			
DESIGN			
DESIGNED BY	G.A.		DATE <i>October, 1986</i>
DRAWN BY	M.J.W.		DATE <i>October, 1986</i>
CHECKED BY	M.J.Y.		DATE <i>November, 1986</i>



1 2 3 4 5 6 7 8 9 10 11 12 26 30700987 SCALE: 1" = 50' HOR. 1" = 10' VER. community sciences corporation LAND PLANNING P.O. Box 1128 ENGINEERING CORRALES, N.M. 87048												CITY OF ALBUQUERQUE MUNICIPAL DEVELOPMENT DEPARTMENT ENGINEERING DIVISION																							
TITLE: STORM SEWER IMPROVEMENTS-GOLF COURSE/LA ORILLA FROM STA. 23+50.00 TO STA. 33+00.00																																			
APPROVALS				ENGINEER				DATE				APPROVALS				ENGINEER				DATE															
City Engineer				<i>[Signature]</i>				1/12/87																											
A.C.E.-Design				<i>[Signature]</i>				1/11/87				Traffic				NADWH				12/5/86															
A.C.E.-Hydrology				<i>[Signature]</i>								Water Utilities				WJW				12-3-86															
DRAWING NO. 3070												MAP NO. DII-EI2												SHEET 9 OF 13											



NOT A PART OF THIS CONTRACT
FOR INFORMATION ONLY



1 2 3 4 5 6 7 8 9 10 11 12
26 30701087

SCALE:
1" = 50'
HORIZ.
1" = 10'
VERT.

community
sciences
corporation

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

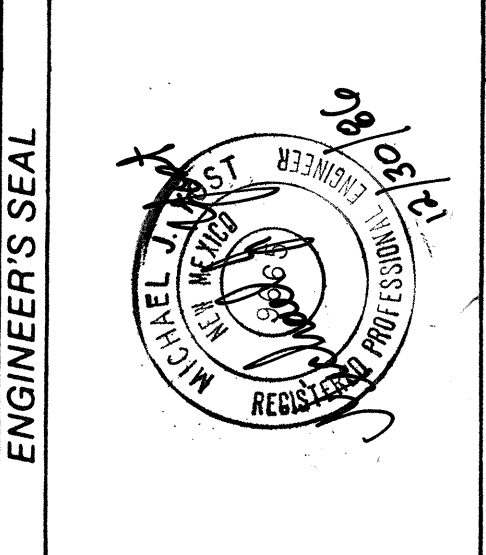
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FROM STA. 33+00.00 TO EQUATION STA. 41+05.04

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	<i>[Signature]</i>	11/26/77	Traffic	NAPW4	12/3/76
A.C.E. - Design	<i>[Signature]</i>	1/1/77	Water Utilities	WJW	12-3-86
A.C.E. - Hydrology	<i>[Signature]</i>				

DESIGNED BY G.A.
DRAWN BY WJW
CHECKED BY M.J.Y.
DATE October, 1986
DATE October, 1986
DATE November, 1986

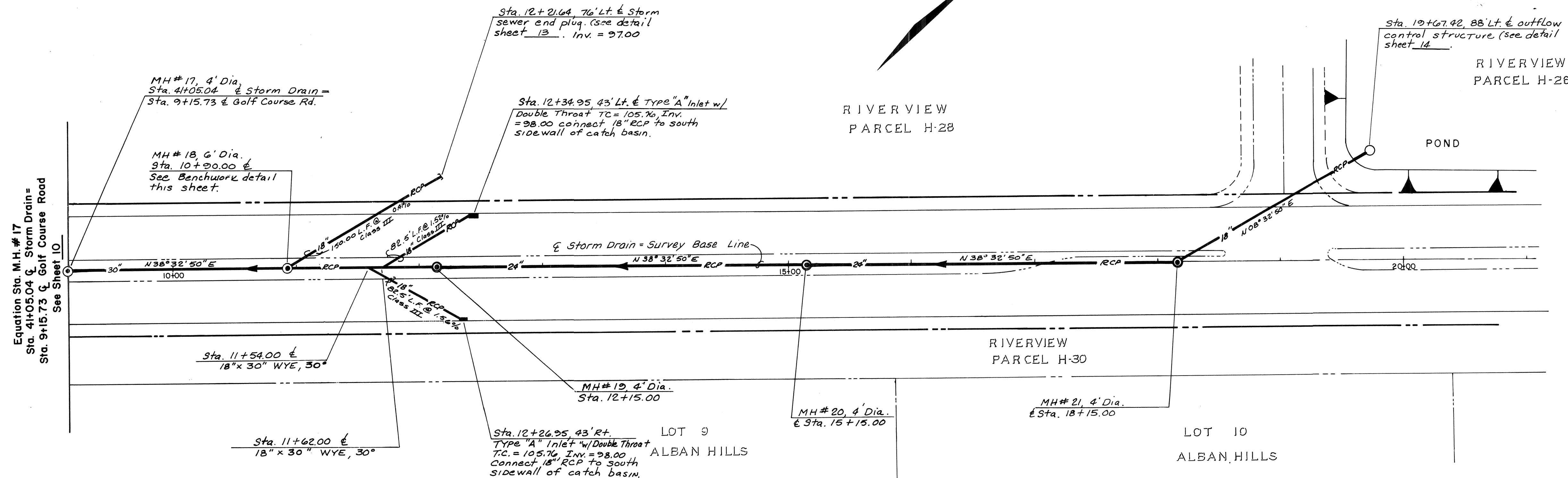
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SURVEY INFORMATION			BENCH MARKS		AS BUILT INFORMATION	
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			WORKED BY _____ DATE _____			
			INSPECTOR'S ACCEPTANCE BY _____ DATE _____			
			DRAWINGS VERIFICATION BY _____ DATE _____			
			CORRECTED BY _____ DATE _____			
			MICRO-FILM INFORMATION			
			RECORDED BY _____ DATE _____			
			NO _____			



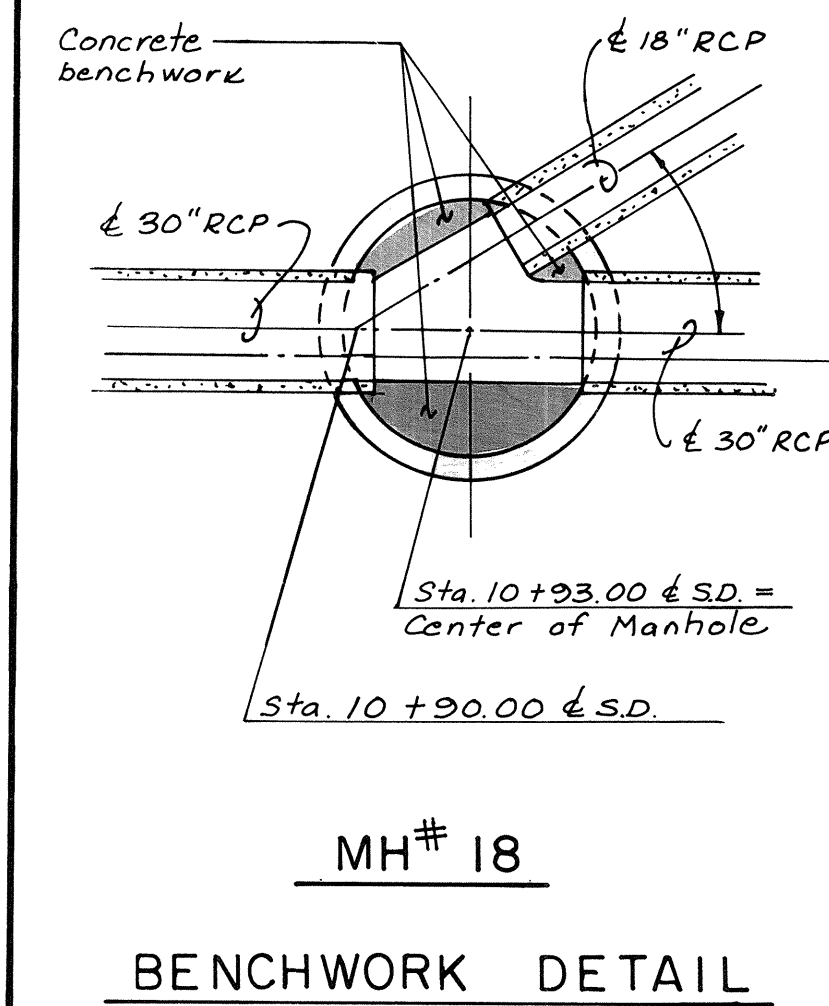
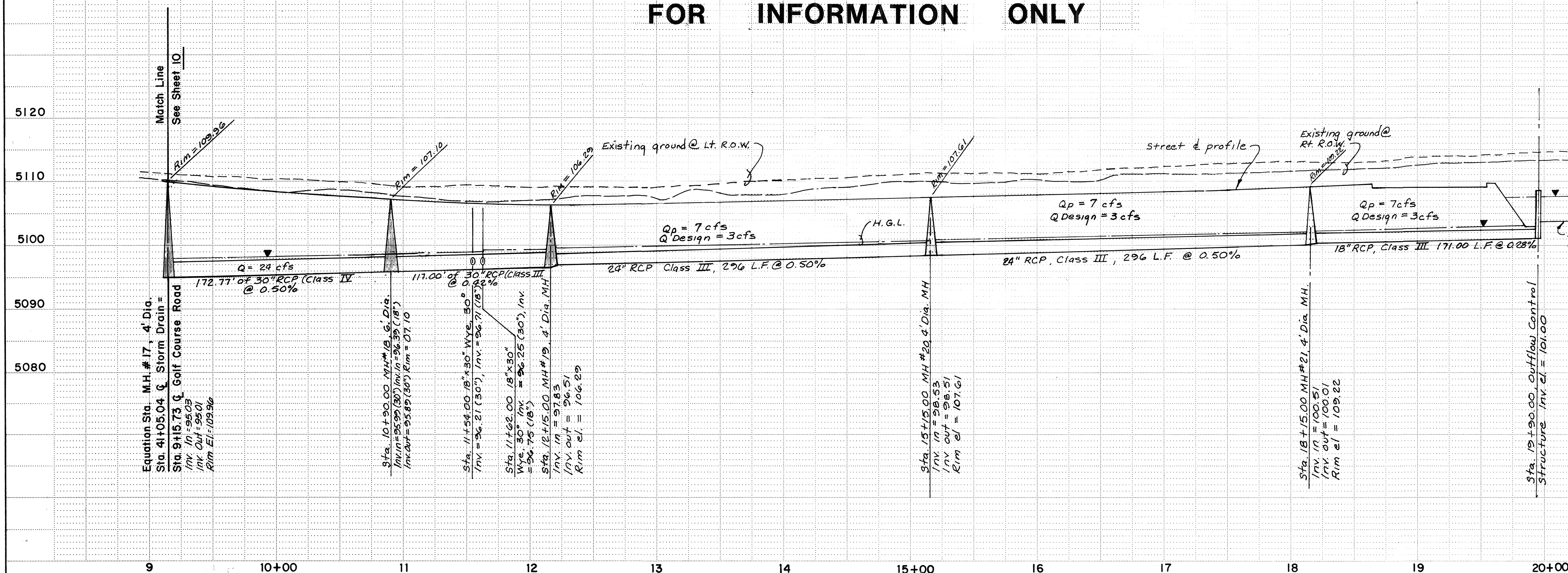
ENGINEER'S SEAL	REVISIONS	NO.	DATE
	DESIGN		

SCANNED BY

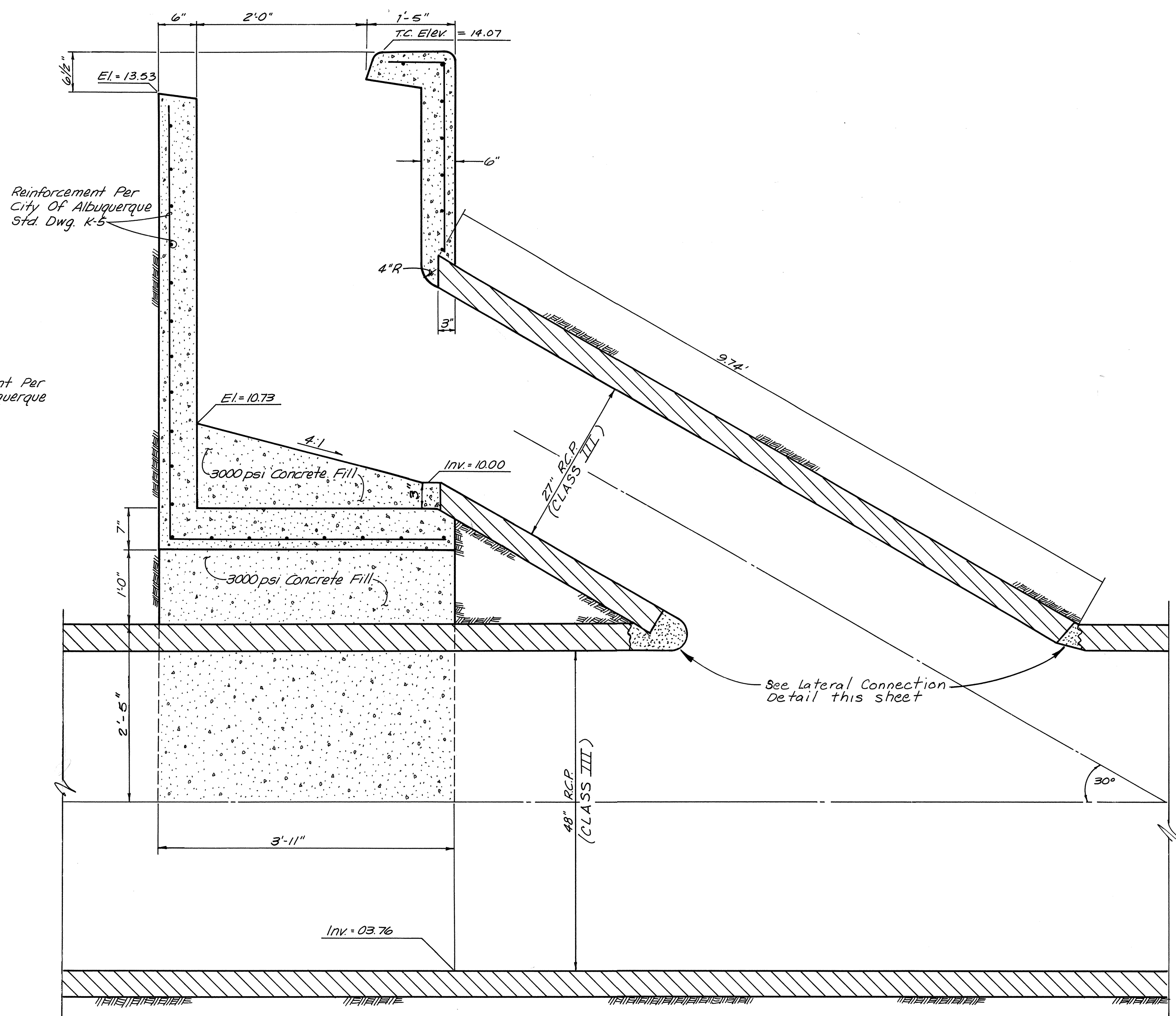


GOLF COURSE ROAD, NW.

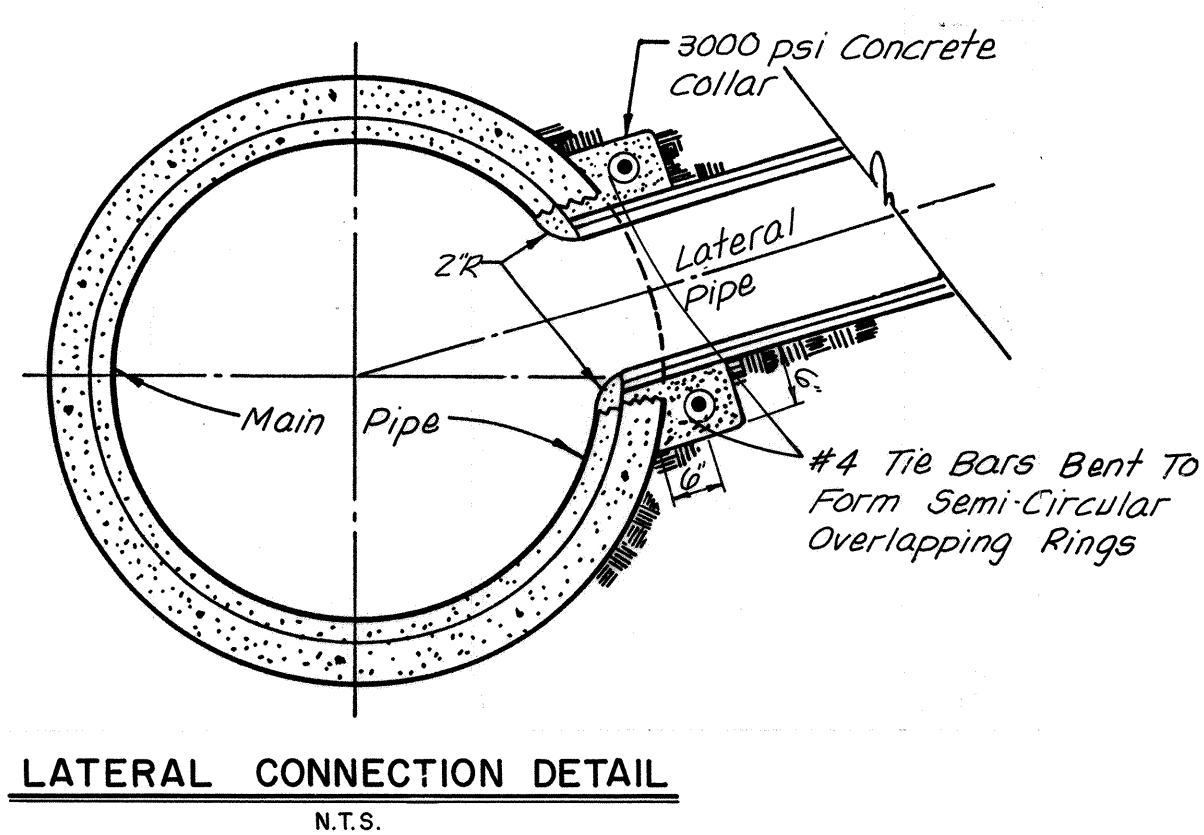
NOT A PART OF THIS CONTRACT
FOR INFORMATION ONLY



ENGINEER'S SEAL		REVISIONS		DESIGN		DATE		BY		REMARKS	
		26		3070		1/18/87					
CITY OF ALBUQUERQUE MUNICIPAL DEVELOPMENT DEPARTMENT ENGINEERING DIVISION TITLE: STORM SEWER IMPROVEMENTS-GOLF COURSE/LA ORILLA FROM EQUATION STA. 9+15.73 TO STA. 19+90.00		APPROVALS City Engineer A.C.E. Design A.C.E. Hydrology		ENGINEER DATE 1/2/87 1/6/87 1/10/87		APPROVALS Traffic Water Utilities		ENGINEER DATE 12/13/86 12/3/86		DESIGNED BY: G.A. DRAWN BY: M.J.H. CHECKED BY: M.J.H.	



SECTION A
N.T.S.



NOTES:

1. Cut Circular Opening In Main Pipe With Chisel Tipped Jack Hammer To A Diameter 4" Wider Than O.D. of Lateral. Expose Reinforcement In Both Pipes & Spot Weld Main Pipe Reinforcement To Lateral Reinforcement Then Fill All Voids With Concrete.
2. Laterals To Be Connected To Storm Sewer w/Field Fabricated Wye. See This Sheet For Detail. Contractor Shall Place 8' Lengths of RCP Such That Lateral Connections Do Not Occur At Joints. Factory Fabricated Wye Connections Are An Acceptable Option.

SCANNED
BY

1	2	3	4	5	6	7	8	9	10	11	12
26	30	70	12	87							

SCALE
N.T.S.

community
sciences
corporation

LAND PLANNING ENGINEERING SURVEYING
P.O. Box 1328 Corrales, N.M. 87044

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

TITLE: STORM SEWER IMPROVEMENTS-GOLF COURSE/LA ORILLA

DETAILS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	<i>[Signature]</i>	1/12/87			
A.C.E. - Design	<i>[Signature]</i>	1/6/87	Traffic	<i>[Signature]</i>	12/5/86
A.C.E. - Hydrology	<i>[Signature]</i>	1/6/87	Water Utilities	<i>[Signature]</i>	12-3-86

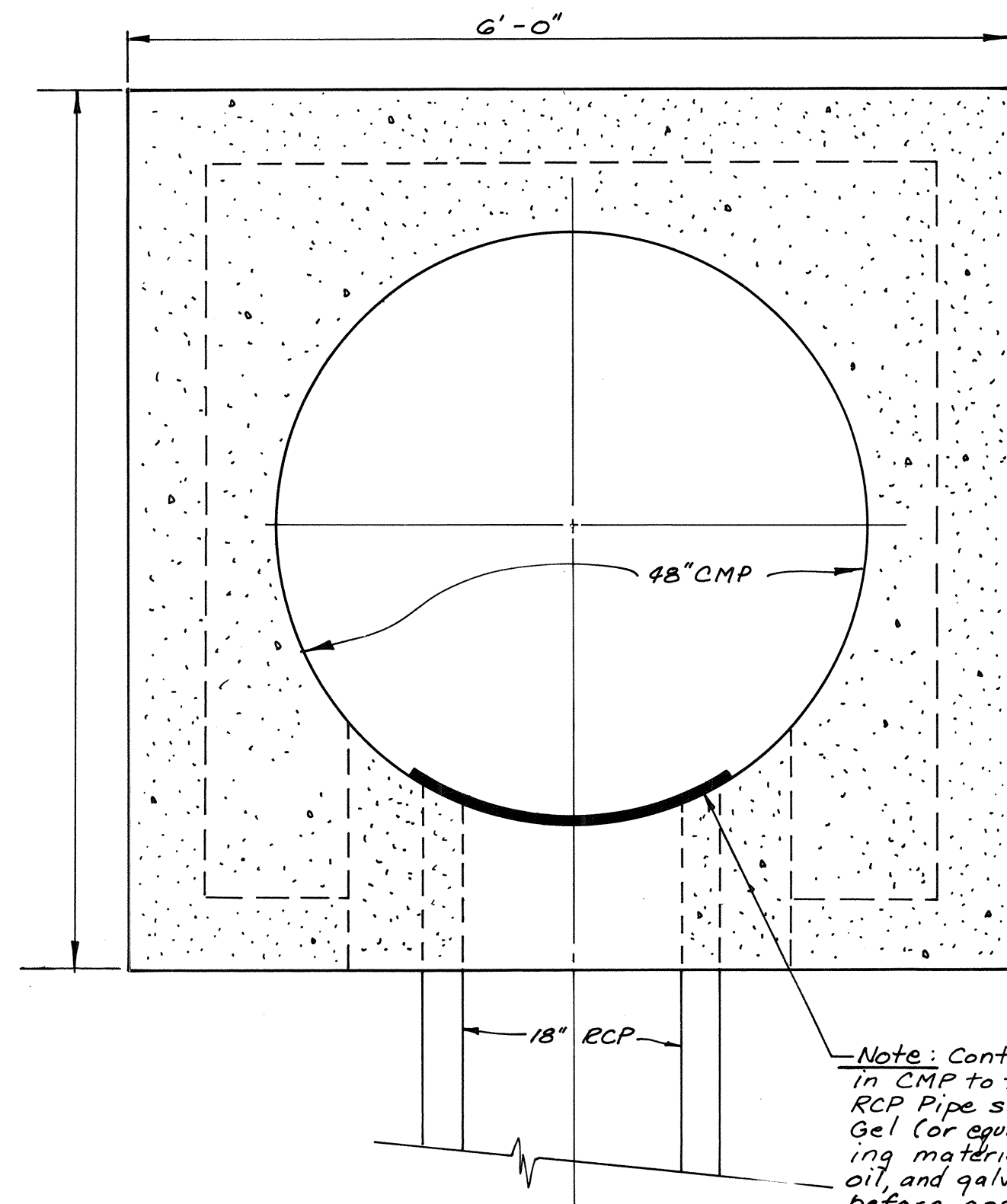
DRAWING NO.	3070	MAP NO.	D-11, E-12	SHEET	12	OF	13
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AS BUILT INFORMATION	
CONTRACTOR	
WORK	DATE
INSTALLED BY	DATE
PLANNED BY	DATE
FIELD	DATE
VERIFICATION BY	DATE
DRAWINGS	DATE
EXAMINED BY	DATE
MICRO-FILM INFORMATION	
RECORDED BY	DATE
40.	

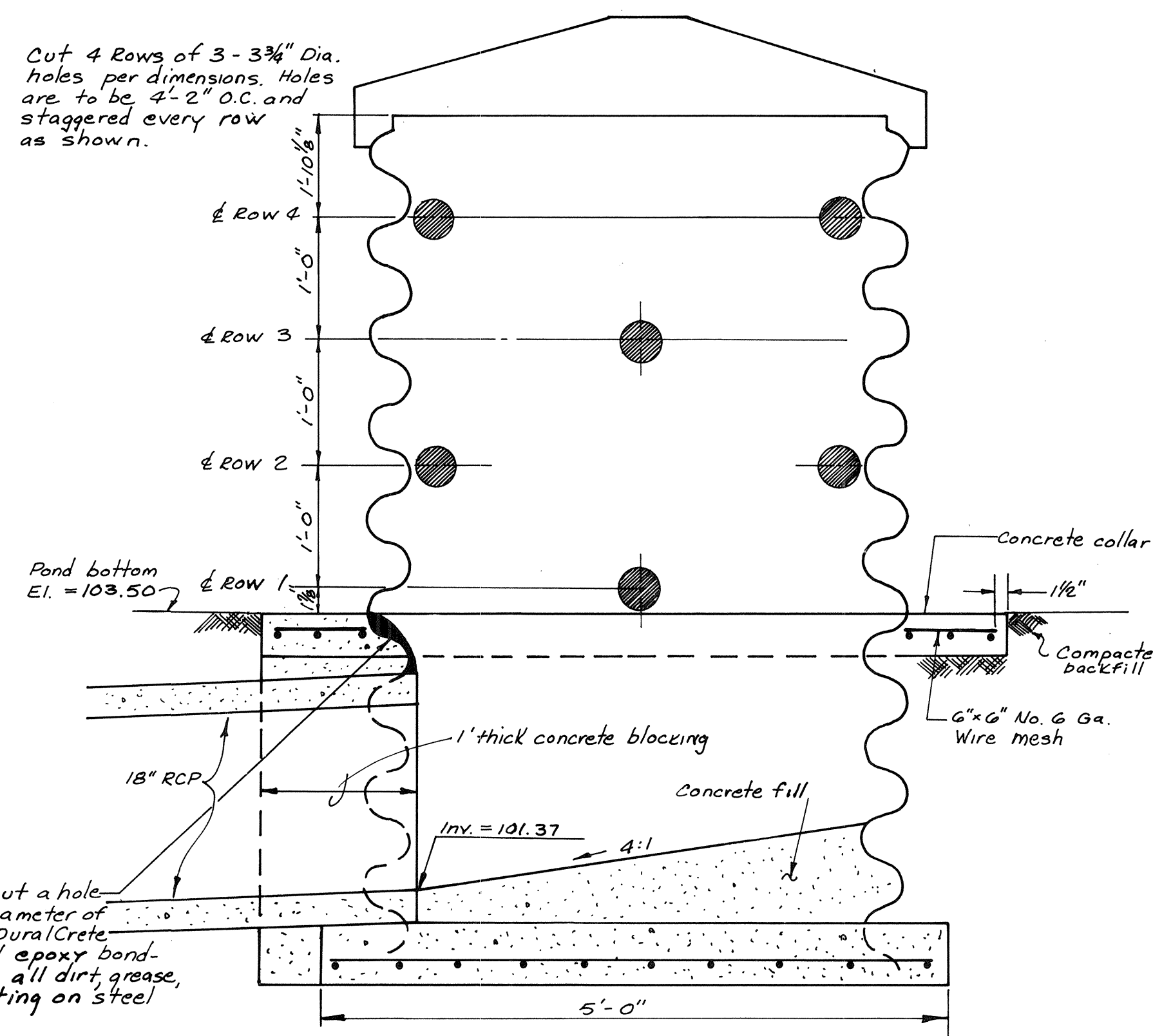
BENCH MARKS
A STANDARD USGLO SECTION CORNER MONUMENT (2 1/2 INCH BRASS TABLET) FOR SECTIONS 23, 24, 25 AND 26, T11N, R2E, S1E, N.M.P.M., AND LOCATED APPROXIMATELY 310' DUE NORTH OF INTERSECTION OF GOLF COURSE ROAD N.W. AND TAYLOR RANCH DRIVE, N.W. WITHIN RIVERVIEW PARCEL H-28 ELEV.=5,112.53

[illegible]

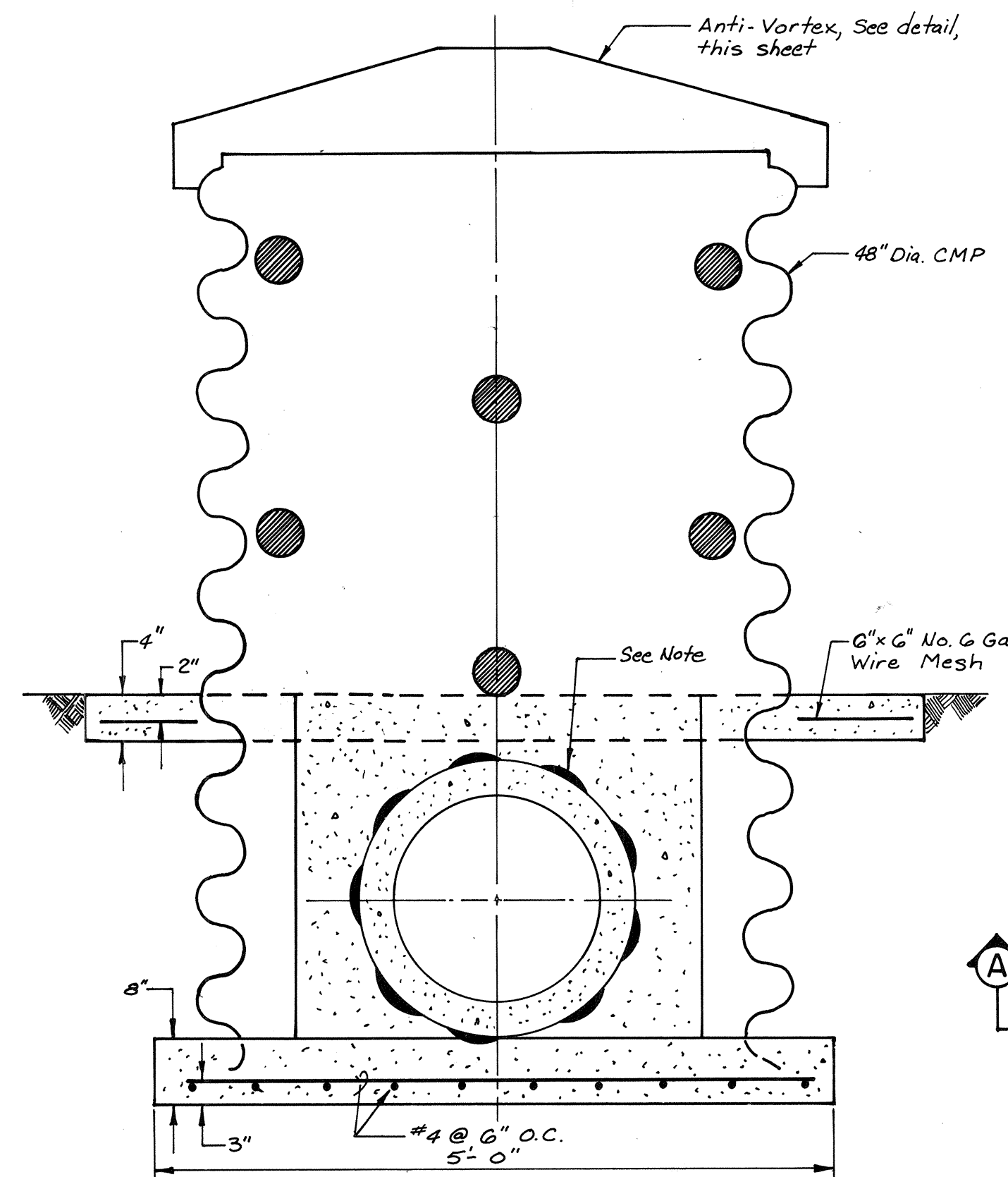
NO.		DATE	REMARKS	BY
<i>REVISIONS</i>				
DESIGN				
DESIGNED BY			M.J.Y.	DATE October, 1986
DRAWN BY			C.S.S.	DATE October, 1986
CHECKED BY			M.J.Y.	DATE November, 1986



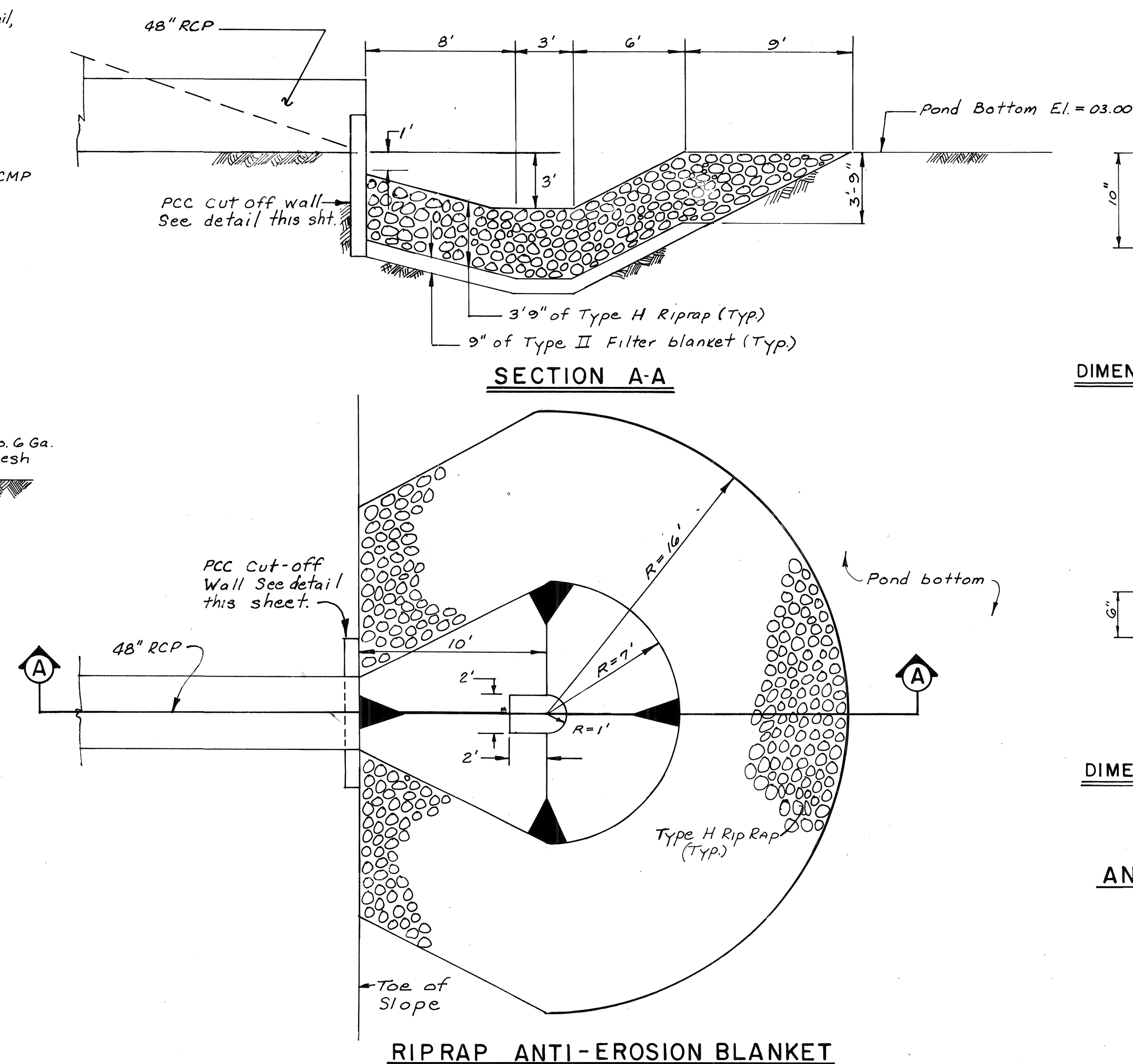
PLAN VIEW
OUTFLOW CONTROL STRUCTURE



SIDE VIEW
OUTFLOW CONTROL STRUCTURE

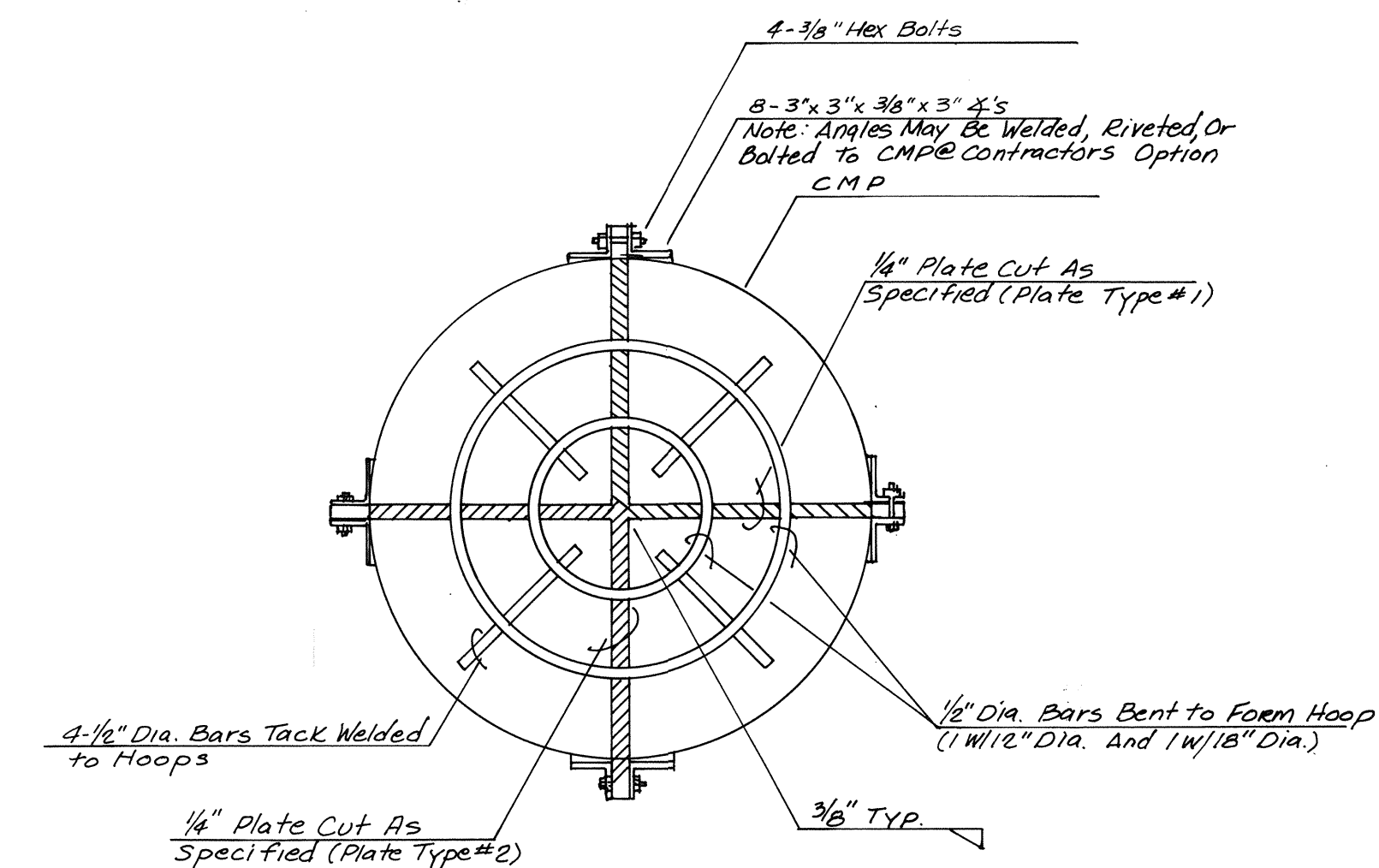


FRONT VIEW
OUTFLOW CONTROL STRUCTURE

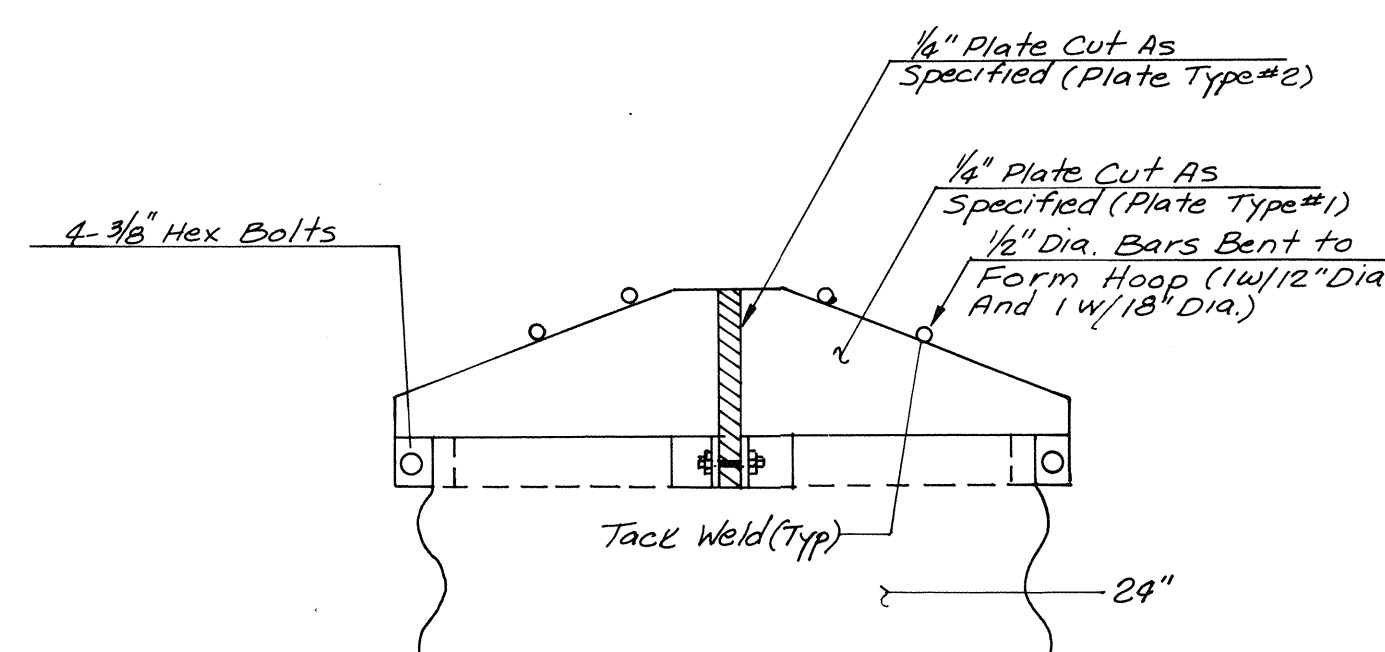


SECTION A-A
RIPRAP ANTI-EROSION BLANKET

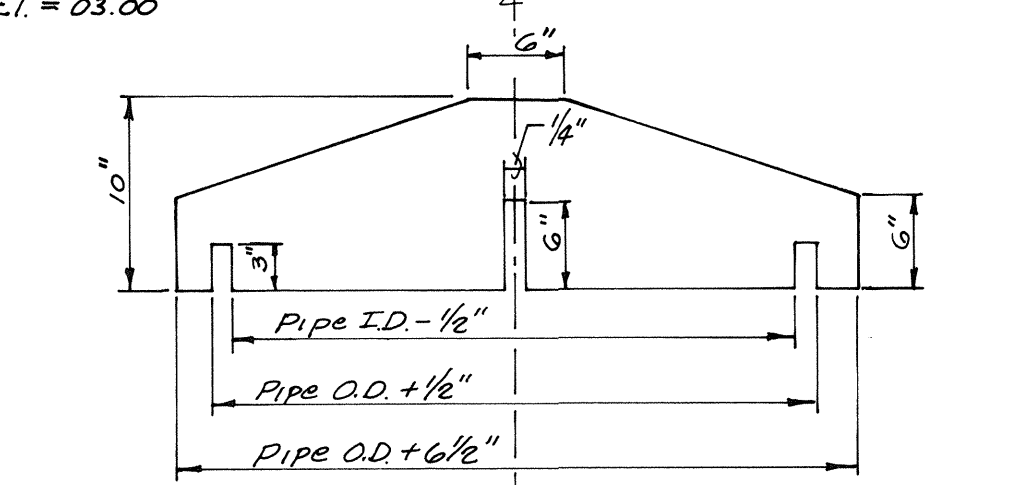
**NOTE: DO NOT CUT HOLES IN
OUTLET CONTROL STRUCTURE
THIS CONTRACT**



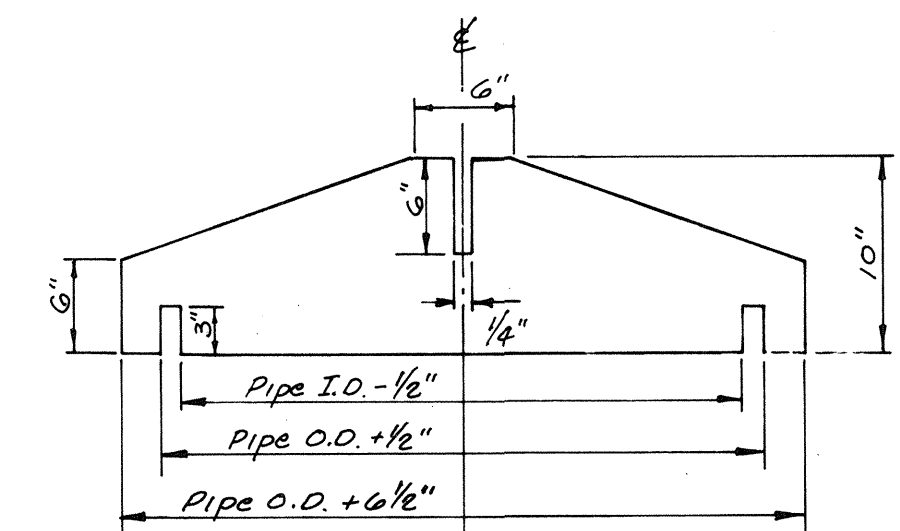
PLAN VIEW
N.T.S.



ELEVATION VIEW
N.T.S.

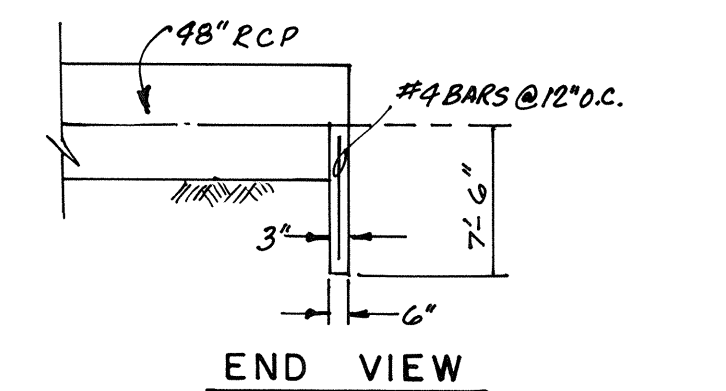


DIMENSIONS - PLATE TYPE #1 (1 PER STRUCTURE)
N.T.S.

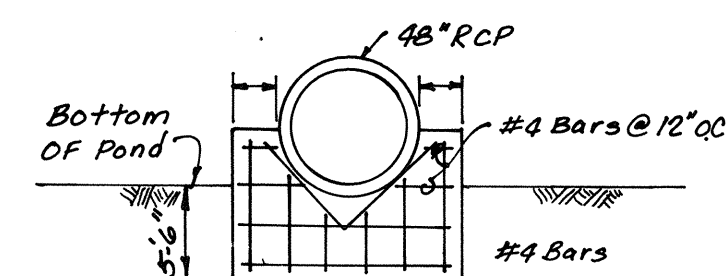


DIMENSION - PLATE TYPE #2 (1 PER STRUCTURE)
N.T.S.

**ANTI-VORTEX RACK FOR OUTFLOW
CONTROL STRUCTURE**



END VIEW
N.T.S.



ELEVATION
N.T.S.

CUT-OFF WALL DETAIL
N.T.S.

TYPE H RIPRAP SPECS		
% SMALLER THAN GIVEN SIZE BY WEIGHT	MINIMUM DIMENSION INCHES	* K _m INCHES
100	3/4	18
35-55	3/8	12
10	3/16	6

TYPE II FILLER SPECS	
SIEVE SIZE	% BY WEIGHT PASSING SQUARE MESH SIEVE
2"	90-100
3/4"	20-90
3/8"	0-20
#200	0-5

* K_m = MEDIAN STONE SIZE
 RIP RAP SHALL BE HARD DURABLE ANGULAR
 STONE WITH A SPECIFIC GRAVITY OF 2.5
 OR GREATER

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SCALE: N.T.S.		community sciences corporation	
CITY OF ALBUQUERQUE MUNICIPAL DEVELOPMENT DEPARTMENT ENGINEERING DIVISION		TITLE: STORM SEWER IMPROVEMENTS - GOLF COURSE/LA ORILLA	
DETAILS			
APPROVALS	ENGINEER	DATE	APPROVALS
City Engineer	12/2/86	12/2/86	12/2/86
A.C.E. - Design	12/2/86	12/2/86	12/2/86
A.C.E. - Hydrology	12/2/86	12/2/86	12/2/86
DRAWING NO. 3070		MAP NO. D-11, E-12	
SHEET 13		OF 13	