

	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2	6	-	6	9	6	6	.	8	1	-	0	6		

A map of the project area showing the intersection of various streets. The project site is a hatched area bounded by Ratón Ave to the north, Río Arriba Ave to the south, and Wagon Train Dr. to the east. SAGEBRUSH TRAIL is to the west, CAUTRO CERRITOS TRAIL is to the northeast, and MATADOR AVE. is to the east. A north arrow is in the bottom left corner.

ZONE ATLAS M-22

GENERAL NOTES

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEGINNING ANY WORK WITHIN THE CITY RIGHT-OF-WAY.
2. 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 STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS REVISED THROUGH UPDATE #6.
3. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (280-1990) FOR LOCATION OF EXISTING UTILITIES.
4. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
5. FIVE (5) WORKING DAYS PRIOR TO BEGINNING OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO CONSTRUCTION COORDINATION DIVISION A DETAILED CONSTRUCTION SCHEDULE.
2 (2) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN A BARRICADING PERMIT FROM THE CONSTRUCTION COORDINATION DIVISION. CONTRACTOR SHALL NOTIFY THE CONSTRUCTION COORDINATION ENGINEER (924-3400) PRIOR TO OCCUPYING AN INTERSECTION. REFER TO SECTION 19.19 OF THE GENERAL CONDITIONS OF THE STANDARD SPECIFICATIONS.
6. ALL WORK AFFECTING ARTERIAL ROADWAYS REQUIRES TWENTY-FOUR HOUR CONSTRUCTION.
7. ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED WITH PLASTIC REPAVING TAPE. ANY STREET MARKING BY CONTRACTOR TO THE SAME LOCATION AS WAS EXISTING, OR AS INDICATED BY THIS PLAN SET.
8. CONTRACTOR SHALL NOTIFY THE ENGINEER NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE CITY SURVEYOR MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE CITY SURVEYOR AND SHALL NOTIFY THE CITY SURVEYOR AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED. WITHOUT NOTICE, ANY SURVEY SHALL BE DONE ONLY BY THE CITY SURVEYOR WHEN A CHANGE IS MADE IN THE FINISHED ELEVATIONS OF THE PAVEMENT OF ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED, CONTRACTOR SHALL, AT HIS OWN EXPENSE, ADJUST THE MONUMENT TO COVER THE NEW GRADE UNLESS OTHERWISE SPECIFIED. REFER TO SECTION 4.4 OF THE GENERAL CONDITIONS OF THE STANDARD SPECIFICATIONS.
9. CONTRACTOR SHALL RECORD DATA ON ALL UTILITY LINES AND ACCESSORIES AS REQUIRED BY THE CITY OF ALBUQUERQUE FOR THE PREPARATION OF "AS CONSTRUCTED" DRAWINGS. CONTRACTOR SHALL NOT COVER UTILITY LINES AND ACCESSORIES UNTIL ALL DATA HAVE BEEN RECORDED.
10. CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORK SITE. CONTRACTOR SHALL PROMPTLY REMOVE ANY GRAFFITI FROM ALL EQUIPMENT, WHETHER PERMANENT OR TEMPORARY.
11. CONTRACTOR SHALL COORDINATE WITH THE CITY OF ALBUQUERQUE WATER SYSTEMS DIVISION (857-8200) SEVEN (7) WORKING DAYS IN ADVANCE OF ANY WORK THAT MAY AFFECT EXISTING PUBLIC WATER OR SEWER UTILITIES. EXISTING VALVES TO BE OPERATED BY CITY PERSONNEL ONLY. CONTRACTOR SHALL CONTACT THE WATER SYSTEMS DIVISION SEVEN (7) WORKING DAYS PRIOR TO BEGINNING OF ANY VALVE TURNING.
12. FORM DRAIN CONSTRUCTION, RCP JOINTS SHALL NOT BE GROUTED PRIOR TO FINAL INSPECTION. FINAL INSPECTION WILL DETERMINE JOINTS TO BE GROUTED FOR FINAL ACCEPTANCE OF THE CONSTRUCTION.

- ☒ ALL UTILITY AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING.
- ☒ BACKFILL COMPACTION SHALL BE ACCORDING TO SPECIFIED STREET USE.
- ☐ TACK COAT REQUIREMENTS SHALL BE DETERMINED BY THE ENGINEER.
- ☒ SIDEWALK AND WHEELCHAIR RAMPS WITHIN THE CURB RETURNS SHALL BE CONSTRUCTED WHEREVER A NEW CURB RETURN IS CONSTRUCTED.
- ☐ IF CURB IS DERESSED FOR A DRIVEPAD, THE DRIVEPAD SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF CURB AND GUTTER.
- ☒ ALL STORM DRAINAGE FACILITIES SHALL BE COMPLETED PRIOR TO FINAL ACCEPTANCE.

SHEET NO.	SHEET
1	TITLE SHEET
2-4	PLAT
5-6	GRADING AND DRAINAGE PLAN
7	MASTER PAVING PLAN
8-11	PAVING IMPROVEMENTS
12	MASTER UTILITY PLAN
13-16	UTILITY IMPROVEMENTS
17	WATER DETAILS
18-19	TRAFFIC CONTROL

APPROVED AS RECORD DRAWINGS
DESIGN REVIEW SECTION
CITY CONSTRUCTION ENGINEER
Bryak Wolfe **BRYAK WOLFE P.E.**
DATE: **11/27/2006**

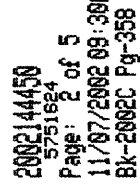
CAUTION:
NOTE THAT ALL EXISTING UTILITIES MAY NOT BE SHOWN. ALL EXISTING SERVICE CONNECTIONS ARE NOT SHOWN. ANY EXISTING UTILITIES THAT ARE SHOWN ARE APPROXIMATE LOCATION ONLY. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT ALL THE UTILITY OWNERS AND TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATIONS TO DETERMINE THE ACTUAL LOCATION OF UTILITIES AND OTHER IMPROVEMENTS.

dmg D. MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P. O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9533

I, Amy L. Driscoll, NMP# 15334, of the firm Mark Goodwin & Associates, PA, a Registered Professional Engineer in the State of New Mexico, do hereby certify, to the best of my knowledge and belief, that the infrastructure installed as part of this project has been inspected by me or by a qualified person under my direct supervision, and has been constructed in accordance with the plans and specifications approved by the City Engineer and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings. This Certification is based on site inspections by me or personnel under my direction, and survey information provided by ALS Inc., NMP# number 2719.

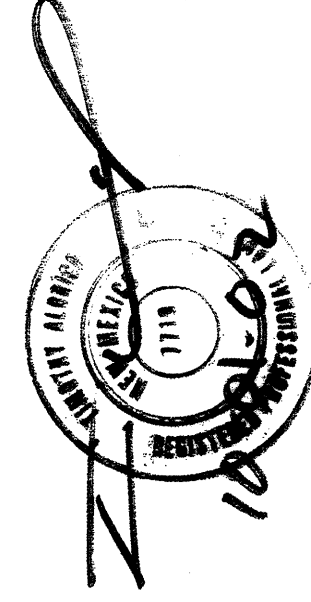
REV.	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE
ENGINEERS STAMP & SIGNATURE		APPROVALS	ENGINEER	DATE	*****		
 11/15/02 REVISED		ORC CHAIRMAN	<i>[Signature]</i>	11-25-02	APPROVED FOR CONSTRUCTION		
		TRANSPORTATION	<i>[Signature]</i>	11/12/02			
		WATER/WASTEWATER	<i>[Signature]</i>	11/12/02			
		HYDROLOGY	<i>[Signature]</i>	11-12-02			
		CIP	<i>[Signature]</i>				
		CONSTR. MNGMT.	<i>[Signature]</i>	11-25-02			
		CONSTR. COORD.	<i>[Signature]</i>				
		CITY PROJECT NO.	696681		SHEET OF		
					1 19		

A1038SFH/PLANS/A01038COVER/10-29-02/ACH



SECTION 34, TOWNSHIP 10 NORTH, RANGE 4 EAST, NMPM
WITHIN
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO
SEPTEMBER, 2002

FOUR HILL VILLAGE TENTH
INSTALLMENT BLOCK '28
(02-22-72, D4-194)



A01038PLAT.dwg	Drawn: STEPHEN	Checked: ALS	Sheet 2 of 5
Scale: AS SHOWN	Date: 09/17/02	Job: A01038	

SECTION 34, TOWNSHIP 10 NORTH, RANGE 3 EAST, NMPM
WITHIN
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO
SEPTEMBER, 2002

APPROVAL AND CONDITIONAL ACCEPTANCE as specified by the Albuquerque subdivision Ordinance, Chapter 14 Article 14 of the Revised Ordinances of Albuquerque, New Mexico, 1994.

Bruce L. Byham 11-5-02
City Engineer, City of Albuquerque, N.M. Date

[Signature]
Transportation Development, City of Albuquerque, N.M.

Christine Sandoral
Parks and Recreation
Date 11/5/02

<i>N/A</i>	Property Management, City of Albuquerque, N.M.	Date _____
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PNM Electric	10-10-02	Date
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<u>Pita Eicko</u> Comcast Cable	10-7-02 Date
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I, Timothy Aldrich, a duly qualified Registered Professional Land Surveyor under the laws of the State of New Mexico, do hereby certify that this plat and description were made by me or under my supervision, as well as all easements as shown on the plat or record or made known to me by the owners and/or proprietors of the subdivision shown hereon, and that I and the other parties expressing an interest and meets the minimum requirements for subdivision and surveys of the Albuquerque Subdivision Ordinance, and further meets the Minimum Standards for Land Surveying in the State of New Mexico, and is true and correct to the best of my knowledge and belief."

Date _____

A01038PLAT.dwg	Drawn: STEPHEN	Checked: ALS	Sheet I of 5
Scale: AS SHOWN	Date: 09/17/02	Job: A01038	

A tract of land situate within Section 34, Township 10 North, Range 4 East, New Mexico Principal Meridian, City of Albuquerque, Bernalillo County, New Mexico being all of TRACT A, BLOCK 28, FOUR HILLS VILLAGE, FIFTH INSTALLMENT as the same is shown and designated on said plat filed for record in the office of the County Clerk of Bernalillo County, New Mexico on September 23, 1963 in Volume D3, Folio 78 and containing 16,961.4 acres more or less.

1. Bearings are New Mexico State Plane Grid Bearings (Central Zone).
2. Distances are ground distances.

3. Bearings and distances in parenthesis are record.
4. Bas's α° boundary are the following plats and documents of record entitled:

PLAT OF "FOUR HILLS VILLAGE, FIFTH INSTALLMENT" (09-23-63, D3-78) PLAT OF "FOUR HILLS VILLAGE, FIFTH INSTALLMENT" (07-30-70, D4-90) PLAT OF "FOUR HILLS VILLAGE, TENTH INSTALLMENT" (02-22-72, D4-194) PLAT OF "FOUR HILLS VILLAGE, SIXTEENTH INSTALLMENT" (03-01-73, D5-105)

all being records of Bernalillo County, New Mexico.

1. Subdivide a single Tract into 61 residential Lots and 1 Tract

1. Subdivide a single Tract into 61 residential Lots and 1 Tract
2. Dedicate Right-of-way as shown
3. Grant easements as shown
4. Vacate Easements as shown

SCALE: NONE

Plat Case No's.	Project Case	1001562
		02DRB-01096
		02DRB-01097
		02DRB-01098
		02DRB-01263
Gross acreage		16.9614 AC
Zone		M-22-Z
Zone Alias No.		1 TRACT
No. of existing Tracts/Lots		1 TRACT/161 LOTS
No. of Tracts/Lots created		1 TRACT
No. of Tracts/Lots eliminated		0.61 Miles
Miles of full width streets created		3.9834 AC
Area dedicated to the City of Albuquerque		SEPTEMBER 2001
Date of Survey		2002200682
Utility Control Location System Log Number		R-1
Zoned		

The subdivision herein described is with the free consent and in accordance with the desires of the undersigned owner(s) and/or proprietor(s) thereof and said owner(s) and/or proprietor(s) to hereby devote all waters, rights, ways, and easements appurtenant to the City of Albuquerque in fee simple with warranty, to and for the use and benefit of the City of Albuquerque in fee simple with warranty, including the right to public utility, all access, utility and drainage easements shown herein, including the right to public utility, construct, operate, inspect, and maintain facilities therein, and the right to use and easements shown herein for the common and joint use of gas, electrical power and communication services for buried distribution lines, conduits and pipes for underground utilities where shown or indicated, and the right of ingress and egress for construction and maintenance, and the right to trim interfering trees and shrubs. Said owner(s) and/or proprietor(s) do hereby consent to all of the foregoing and do hereby certify that this subdivision is their free act and deed. Said owner(s) warrant that they hold among them complete and indefeasible title to the land subdivided.

John Hardin
John Hardin, President

STATE OF NEW MEXICO
COUNTY OF BERNALILLO

This instrument was acknowledged before me on 9-19-2002
By John Hardin, President of Savage Thomas Homes, Inc. A New Mexico Corporation on behalf
of said Corporation

4-25-2006
MY COMMISSION EXPIRES

THIS IS TO CERTIFY THAT THIS IS THE CURRENT AND
 FINAL COPY OF RECORD
 FILED ONLY UNDER NO. 1023-055-24606-30236
 Board of Education
 OFFICE OF THE CLERK
 COUNTY OF ALBERTA
 11/27/02

OFFICIAL SEAL
S. J. Bennett
NOTARY PUBLIC
STATE OF N. MEXICO
Commission Expires: 4-28-2006

0007-05-4
MY COMMISSION EXPIRES

SHEET 2 OF 19

DRC # 69668

200214459
Page 1 of 5
11/17/2002 09:58
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Scale: 1" = 50'

PLAT for
**RESERVE AT FOUR HILLS
SUBDIVISION**

SECTION 34, TOWNSHIP 10 NORTH, RANGE 4 EAST, NMPM
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO
SEPTEMBER, 2002

SCANNED BY
PLANNING

50' 25' 0 50' 100'
SCALE: 1" = 50'

LANDSCAPING IN PUBLIC ROW, WHIRLAWAY DRIVE,
TO BE MAINTAINED BY THE HOMEOWNERS
ASSOCIATION

NOTE: ▲
CENTERLINE (IN LIEU OF R/W) MONUMENTATION IS TO BE INSTALLED
AT ALL CENTERLINE PC'S, PT'S, ANGLE POINTS AND STREET
INTERSECTIONS AS SHOWN HEREON, AND WILL CONSIST OF A FOUR
INCH (4") ALUMINUM ALLOY CAP STAMPED "CITY OF ALBUQUERQUE",
"CENTERLINE MONUMENT", "DO NOT DISTURB", "PLS # 7719".

ABBREVIATIONS

10' PUE = PUBLIC UTILITY EASEMENTS
GRANTED WITH THIS PLAT
ROW = RIGHT-OF-WAY

ALL STREETS SHOWN
HEREON ARE HEREBY
DEDICATED AS PUBLIC
RIGHT-OF-WAY

10-17-02

SEE SHEET 5 OF 5 FOR CURVE TABLE

Scale: AS SHOWN Date: 10/16/02 Job: A01038
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A01038PLAT.dwg

Sheet 4 of 5

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Page 3 of 5
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Drawn: S. J. 11/17/2002
Scale: 1" = 50'

PLAT for
**RESERVE AT FOUR HILLS
SUBDIVISION**

SECTION 34, TOWNSHIP 10 NORTH, RANGE 4 EAST, NMPM
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO
SEPTEMBER, 2002

* TRACT A - IS ENCUMBERED WITH A TEMPORARY
PUBLIC BLANKET DRAINAGE EASEMENT GRANTED
TO COA AND TO BE MAINTAINED BY THE
HOMEOWNERS ASSOCIATION

50' 25' 0 50' 100'
SCALE: 1" = 50'

NOTE: ▲
CENTERLINE (IN LIEU OF R/W) MONUMENTATION IS TO BE INSTALLED
AT ALL CENTERLINE PC'S, PT'S, ANGLE POINTS AND STREET
INTERSECTIONS AS SHOWN HEREON, AND WILL CONSIST OF A FOUR
INCH (4") ALUMINUM ALLOY CAP STAMPED "CITY OF ALBUQUERQUE",
"CENTERLINE MONUMENT", "DO NOT DISTURB", "PLS # 7719".

ABBREVIATIONS

10' PUE = PUBLIC UTILITY EASEMENTS
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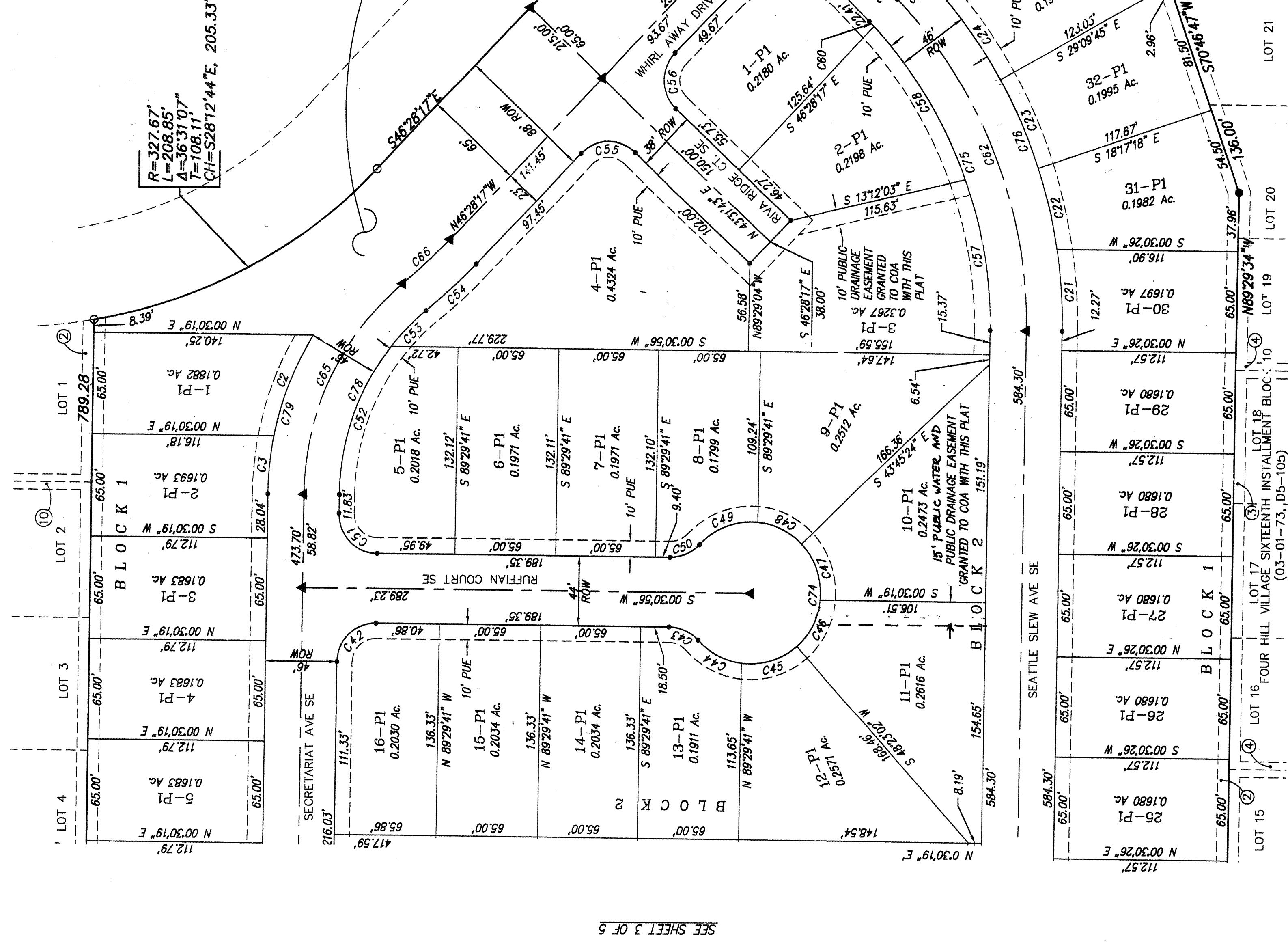
ALL STREETS SHOWN
HEREON ARE HEREBY
DEDICATED AS PUBLIC
RIGHT-OF-WAY

10-17-02

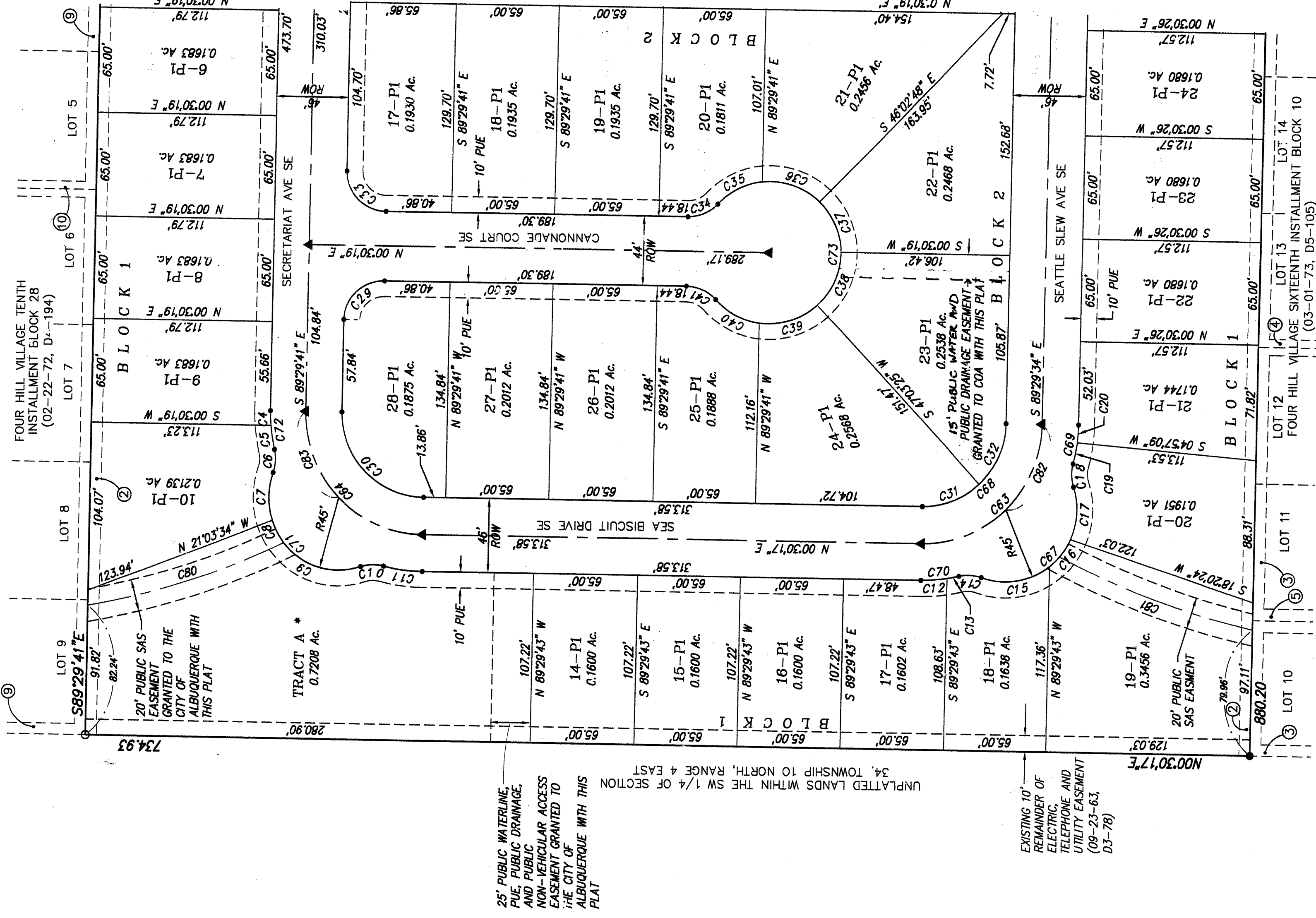
SEE SHEET 5 OF 5 FOR CURVE TABLE

Scale: AS SHOWN Date: 10/16/02 Job: A01038
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A01038PLAT.dwg

Sheet 3 of 5



SEE SHEET 3 OF 5



25' PUBLIC WATERLINE,
PUE, PUBLIC DRAINAGE,
AND PUBLIC
NON-VEHICULAR ACCESS
EASEMENT GRANTED TO
THE CITY OF
ALBUQUERQUE WITH THIS
PLAT

UNPLATTED LANDS WITHIN THE SW 1/4 OF SECTION
34, TOWNSHIP 10 NORTH, RANGE 4 EAST

EXISTING 10'
REMAINDER OF
ELECTRIC,
TELEPHONE AND
UTILITY EASEMENT
(09-25-63,
D3-78)

DKC #676681

SHEET 3 OF 19



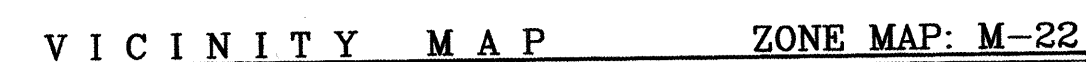
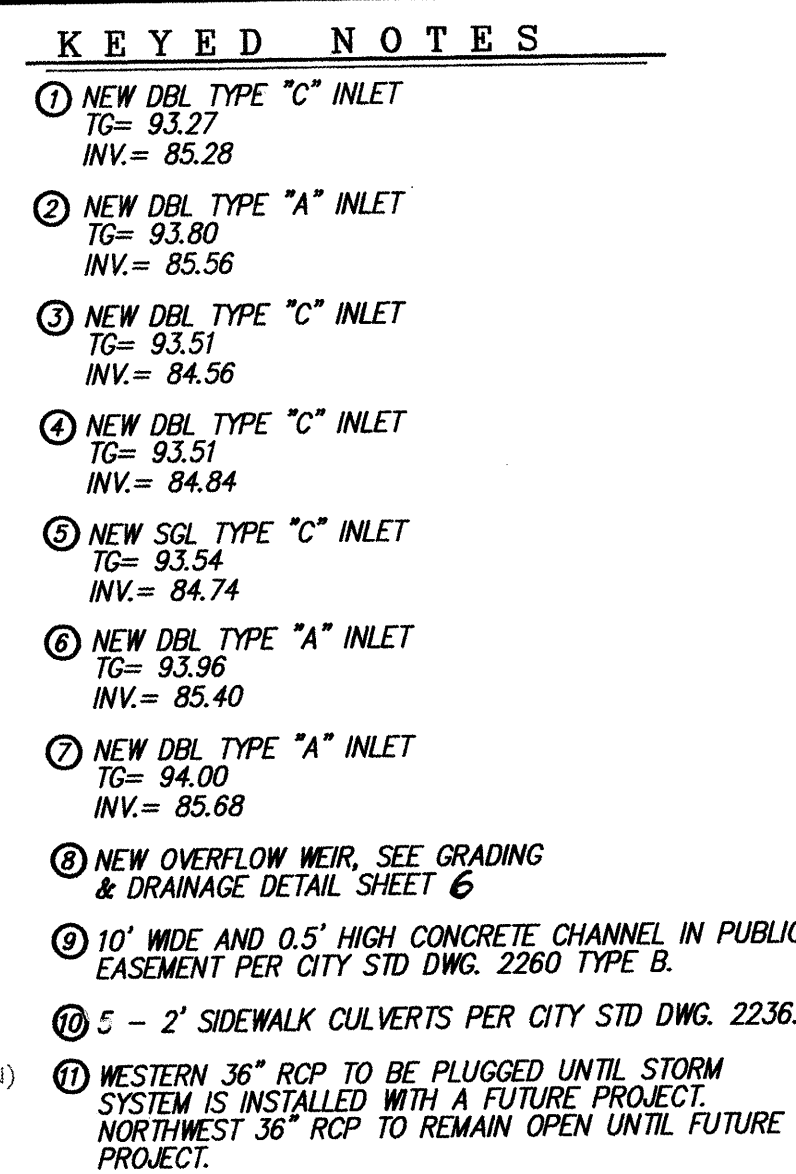
PLAT for
**RESERVE AT FOUR HILLS
SUBDIVISION**
WITHIN
SECTION 34, TOWNSHIP 10 NORTH, RANGE 4 EAST, NMPM
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO
OCTOBER, 2002

CURVE	RAJUS	LENGTH	DELTA	TANGENT	CH-BEARING	CHORD
C1	327.67	208.65	36.31/07°	108.11	S207°12'44"E	205.33
C2	203.00	68.66	18°39'36"	35.17	N49°10'23"W	69.37
C3	203.00	37.17	10°29'01"	18.64	N8°14'58"W	37.12
C4	98.00	9.35	5°28'04"	4.68	S87°46'17"W	9.35
C5	98.00	15.00	6°46'12"	7.51	S80°39'09"W	14.99
C6	25.00	14.50	33°13'51"	7.46	S87°02'01"E	14.30
C7	45.00	30.02	39°13'02"	15.59	N89°36'37"W	29.46
C8	45.00	70.50	12°45'39"	5.03	S44°54'02"W	10.00
C9	45.00	14.50	89°49'09"	44.82	S28°23'47"W	63.51
C10	25.00	14.50	33°13'51"	7.46	N01°52'22"W	14.30
C11	98.00	24.35	14°14'16"	12.24	S07°37'55"W	24.29
C12	98.00	16.61	9°42'36"	8.32	S04°21'01"E	16.59
C13	98.00	7.97	4°31'35"	3.87	S11°28'06"E	7.74
C14	25.00	14.50	33°13'51"	7.46	N02°53'02"E	14.30
C15	45.00	45.78	58°17'08"	23.09	S09°38'37"E	43.83
C16	45.00	21.63	27°32'25"	11.03	S52°33'23"E	21.42
C17	45.00	33.11	42°09'39"	17.35	S87°24'25"E	32.37
C18	25.00	14.50	33°13'51"	7.46	S88°07'41"W	14.30
C19	98.00	13.33	7°47'36"	6.68	S7°10'11"E	13.32
C20	98.00	11.02	6°28'35"	5.52	S86°16'17"E	11.01
C21	323.00	52.96	9°23'41"	26.54	N65°48'35"E	52.90
C22	323.00	53.00	9°24'03"	26.56	N76°24'43"E	52.94
C23	323.00	61.30	10°52'27"	30.74	N66°16'28"E	61.21
C24	323.00	61.59	10°55'26"	30.88	N55°22'32"E	61.49
C25	323.00	24.46	4°20'21"	12.24	N47°44'38"E	24.46
C26	98.00	15.99	9°20'58"	8.01	N40°53'59"E	15.97
C27	98.00	48.52	28°22'01"	24.77	N22°02'29"E	48.03
C28	98.00	25.62	14°58'49"	12.88	N00°22'04"E	25.55
C29	25.00	39.27	9°07'00"	25.00	N44°29'41"W	35.36
C30	52.00	81.68	9°07'00"	52.00	S45°30'18"W	73.54
C31	52.00	36.36	43°22'25"	20.68	S21°10'55"E	38.43
C32	52.00	42.31	46°37'36"	22.41	S86°10'51"E	41.16
C33	25.00	39.27	9°07'00"	25.00	S45°30'19"W	35.36
C34	25.00	20.27	47°49'21"	11.08	S23°24'21"E	20.27
C35	45.00	32.23	41°02'12"	16.84	N28°47'56"W	31.55
C36	45.00	39.45	50°14'02"	21.10	N48°50'11"E	38.20
C37	45.00	35.54	45°14'41"	18.75	N66°34'33"E	34.62
C38	45.00	37.59	47°51'32"	19.97	S86°59'21"E	36.51
C39	45.00	39.45	50°13'59"	21.10	S17°49'35"E	38.20
C40	45.00	32.23	41°02'12"	16.84	S27°48'32"E	31.55
C41	25.00	20.87	47°49'20"	11.08	N44°25'00"E	20.27
C42	25.00	39.27	9°07'00"	25.00	N44°29'41"W	35.36
C43	25.00	20.87	47°49'21"	11.08	N44°25'00"E	20.27
C44	45.00	38.47	49°52'56"	18.81	S27°50'43"W	37.49
C45	45.00	33.82	49°58'43"	20.30	S17°07'37"E	37.31
C46	45.00	43.11	43°11'28"	21.81	S83°12'42"E	33.12
C47	45.00	36.31	48°58'57"	20.48	N70°43'05"E	37.29
C48	45.00	32.19	40°59'28"	16.82	N25°44'52"E	31.51
C49	45.00	41.29	52°34'10"	22.23	N21°01'57"W	38.65
C50	25.00	39.27	9°07'00"	25.00	S45°30'19"W	35.36
C51	25.00	39.27	9°07'00"	25.00	S89°31'43"W	35.36
C52	157.00	102.41	37°22'25"	49.78	N80°19'22"E	97.96
C53	157.00	32.02	17°10'5"	53.89	N00°26'54"W	74.84
C54	45.67	43.08	6°02'06"	27.91	S43°27'14"E	43.76
C55	25.00	39.27	9°07'00"	25.00	N07°28'17"W	35.36
C56	25.00	39.27	9°07'00"	25.00	S89°31'43"W	35.36
C57	277.00	96.49	20°22'08"	49.78	N80°19'22"E	113.46
C58	277.00	114.27	23°58'10"	57.96	N59°19'12"E	113.46
C59	52.00	83.54	9°02'45"	53.89	N00°26'54"W	74.84
C60	277.00	4.48	0°55'39"	2.24	N46°02'18"E	4.48
C61	75.00	120.49	9°02'45"	77.73	N00°26'54"W	107.94
C62	300.00	235.27	44°55'59"	124.06	N88°02'27"E	229.28
C63	75.00	117.81	90°00'02"	75.00	S44°29'38"E	73.54
C64	75.00	117.81	90°00'02"	75.00	S45°30'18"W	106.07
C65	180.00	154.12	49°03'30"	82.14	N64°57'56"W	149.46
C66	392.67	41.36	6°02'06"	20.70	S43°27'14"E	41.34
C67	45.00	100.52	127°59'12"	92.24	S44°29'38"E	80.89
C68	52.00	81.68	89°59'52"	52.00	S44°29'38"E	73.54
C69	98.00	24.35	14°14'11"	12.24	S82°22'29"E	24.29
C70	98.00	24.35	14°14'11"	12.24	S06°46'49"E	24.29
C71	45.00	100.52	127°59'12"	92.24	S45°30'18"W	80.89
C72	98.00	24.35	14°14'16"	12.24	S83°23'11"W	24.29
C73	45.00	216.49	27°53'43"	40.77	S89°29'41"E	60.43
C74	45.00	216.49	27°53'43"	40.77	S89°29'41"E	60.43
C75	277.00	217.23	44°55'59"	114.55	N88°02'27"E	211.71
C76	323.00	253.30	44°55'59"	133.57	N88°02'27"E	246.86
C77	98.00	90.13	52°14'46"	48.54	N19°13'33"E	88.99
C78	157.00	134.43	49°03'30"	71.65	N64°57'56"W	132.36
C79	203.00	106.83	30°02'08"	54.68	N74°23'08"W	102.60
C80	500.00	130.10	14°54'28"	65.42	S18°07'50"E	129.73
C81	500.00	130.27	14°54'28"	65.73	S20°07'24"W	130.35
C82	75.00	58.90	44°59'56"	31.07	N86°59'36"W	57.40
C83	75.00	58.91	44°00'01"	31.07	S88°00'19"W	57.40

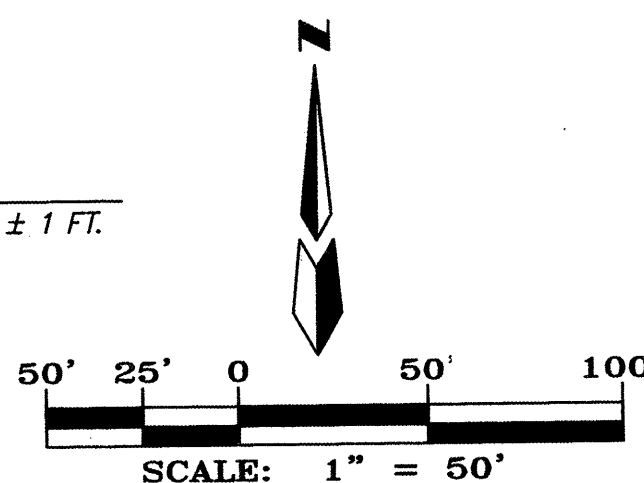
Included, is the right to build, rebuild, construct, reconstruct, locate, relocate, change, remove, modify, renew, operate and maintain facilities for the purposes described above, together with free access to, from and over said easement, including sufficient working area, space for electric transformers, with the right and privilege to trim and remove trees, shrubs or bushes which interfere with the purposes set forth herein. No building, sign, pool (above ground or subsurface), hot tub, concrete or wood pool decking, or other structure shall be erected or constructed on said easements, nor shall any well be drilled or operated thereon. Property owners shall be solely responsible for correcting any violations of National Electrical Safety Code caused by construction of pools, decking or any structures adjacent to within or near easements shown on this plat.

In approving this plat, the utility companies did not conduct a title search. The utility companies do not waive or release any easement rights which may have been granted by prior plat, this plat, or any documents for electric easements on this plat. Easements for electric transformers/switchgears, as installed, shall extend ten feet (10') in front of transformer/switchgear doors and five feet (5') on each side.

- PUBLIC UTILITY EASEMENTS:**
- PUBLIC UTILITY EASEMENTS shown on this plat are granted for the common and joint use of:
1. The PNM Electric Services Division for the installation, maintenance and service of overhead and underground electrical lines, transformers, poles and related facilities, equipment, fixtures, structures and related facilities reasonably necessary to provide electrical services.
 2. The PNM Gas Services Division for installation, maintenance and services of natural gas lines, valves and other equipment and facilities reasonably necessary to provide natural gas.
 3. Qwest for installation, maintenance and service of all buried and aerial communication lines and other related equipment and facilities reasonably necessary to provide communication services, including but not limited to above ground pedestals and closures.
 4. Comcast cable for installation, maintenance and service of such lines, cable and other related equipment and facilities reasonably necessary to provide Cable TV service.



	EXISTING CONTOUR (MAJOR)
	EXISTING CONTOUR (MINOR)
	EXISTING SPOT ELEVATION
	EXISTING CONCRETE CURB
	EXISTING WALL OR HEAD WALL
	EXISTING SIGN
	EXISTING WOOD FENCE
	EXISTING CHAIN LINK FENCE
	EXISTING TREE
	EXISTING SANITARY SEWER MANHOLE
	EXISTING FIRE HYDRANT
	EXISTING ELECTRIC TRANSFORMER
	EXISTING OVERHEAD ELECTRIC LINE
	EXISTING POWER POLE
	EXISTING TELEPHONE BOX
	EXISTING CONCRETE SUPPORT
	EXISTING MAILBOX
	EXISTING BASKETBALL GOAL SUPPORT
	NEW CURB & GUTTER
	NEW STANDARD CURB & GUTTER
	NEW SIDEWALK
	NEW RIGHT-OF-WAY
	NEW CENTERLINE
	NEW LOT LINES
	NEW EASEMENTS
	NEW GARDEN WALL
	NEW PERIMETER RETAINING WALL
	NEW SIDE LOT RETAINING WALL
	NEW SPOT ELEVATIONS
	NEW FLOW
	NEW ROCK SWALE
	NEW SLOPE
	NEW GROUND
	NEW 8:1 SIN BOUNDARY
	NEW CHAIN LINK FENCE



dmg MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539



CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

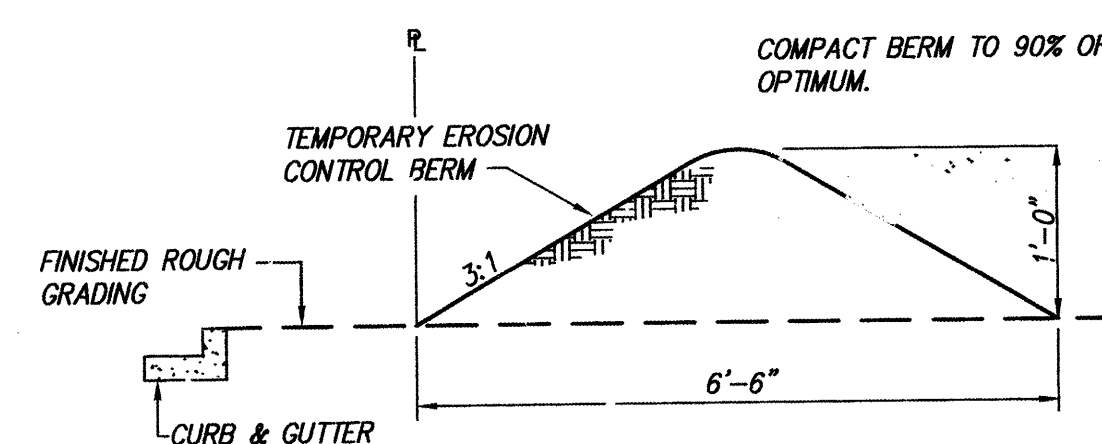
TITLE: ***RESERVE AT FOUR HILLS
GRADING & DRAINAGE PLAN***

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	UPDATE	MO./DAY/YR.	MO./DAY/YR.
FOR INFORMATION ONLY				

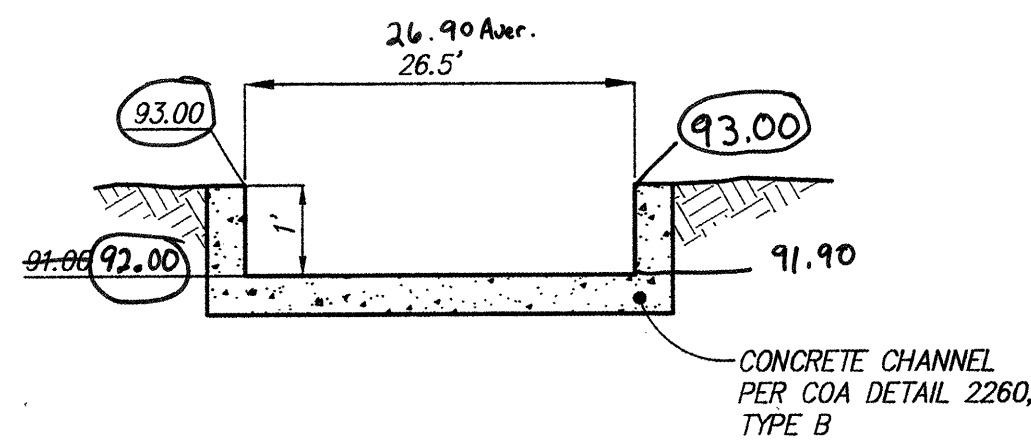
CITY PROJECT NO.	696681	ZONE MAP NO.	M-22	SHEET	5	OF	19
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1. CONTRACTOR MUST OBTAIN A TOPSOIL DISTURBANCE PERMIT FROM THE ENVIRONMENTAL HEALTH DIVISION PRIOR TO CONSTRUCTION.
2. CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION SHALL GOVERN ALL WORK.
3. THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE AND FEDERAL DUST CONTROL MEASURES AND REQUIREMENTS AND WILL BE RESPONSIBLE FOR PREPARING AND OBTAINING ALL NECESSARY APPLICATIONS AND APPROVALS.
4. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE LOTS INTO PUBLIC RIGHT-OF-WAY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AND WETTING THE SOIL TO KEEP IT FROM BLOWING.
5. THE EARTHWORK CONTRACTOR SHALL STOCKPILE ENOUGH MATERIAL ADJACENT TO RETAINING WALL LOCATIONS TO BE UTILIZED FOR WALL BACKFILL.
6. SITE DOES NOT LIE IN A 100 YEAR FLOOD ZONE.

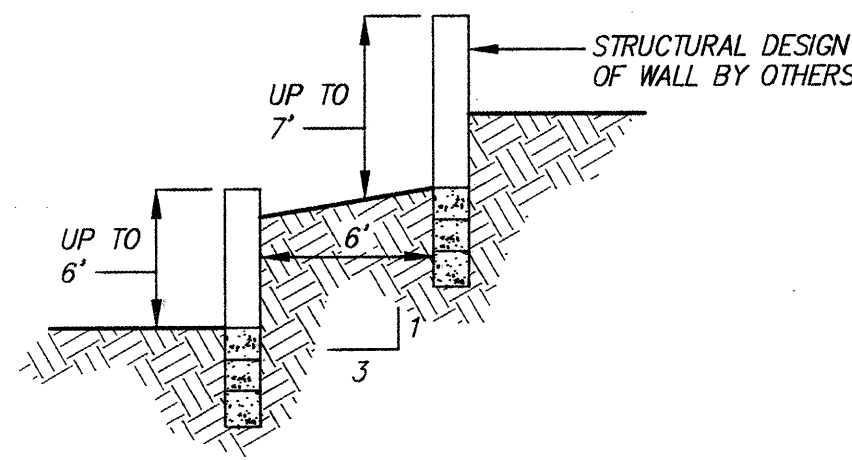
1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
2. CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL SEDIMENT OUT OF EXISTING RIGHT-OF-WAY.
3. CONTRACTOR IS RESPONSIBLE FOR CLEANING UP ANY SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
4. EROSION CONTROL BERMS ARE REQUIRED AROUND THE ENTIRE SITE.
5. ALL EROSION CONTROL BERMS MUST BE IN PLACE AND ENGINEER CERTIFIED PRIOR TO BUILDING PERMIT RELEASE.



EROSION CONTROL BERM DETAIL

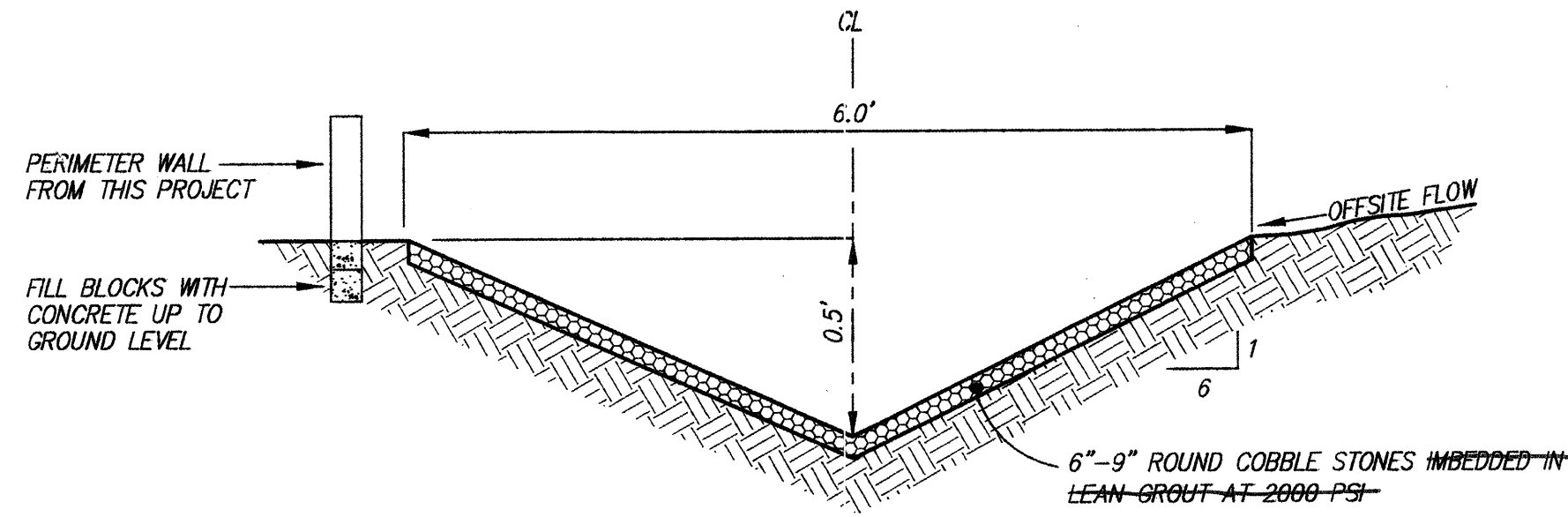


WEIR DETAIL
N.T.S.

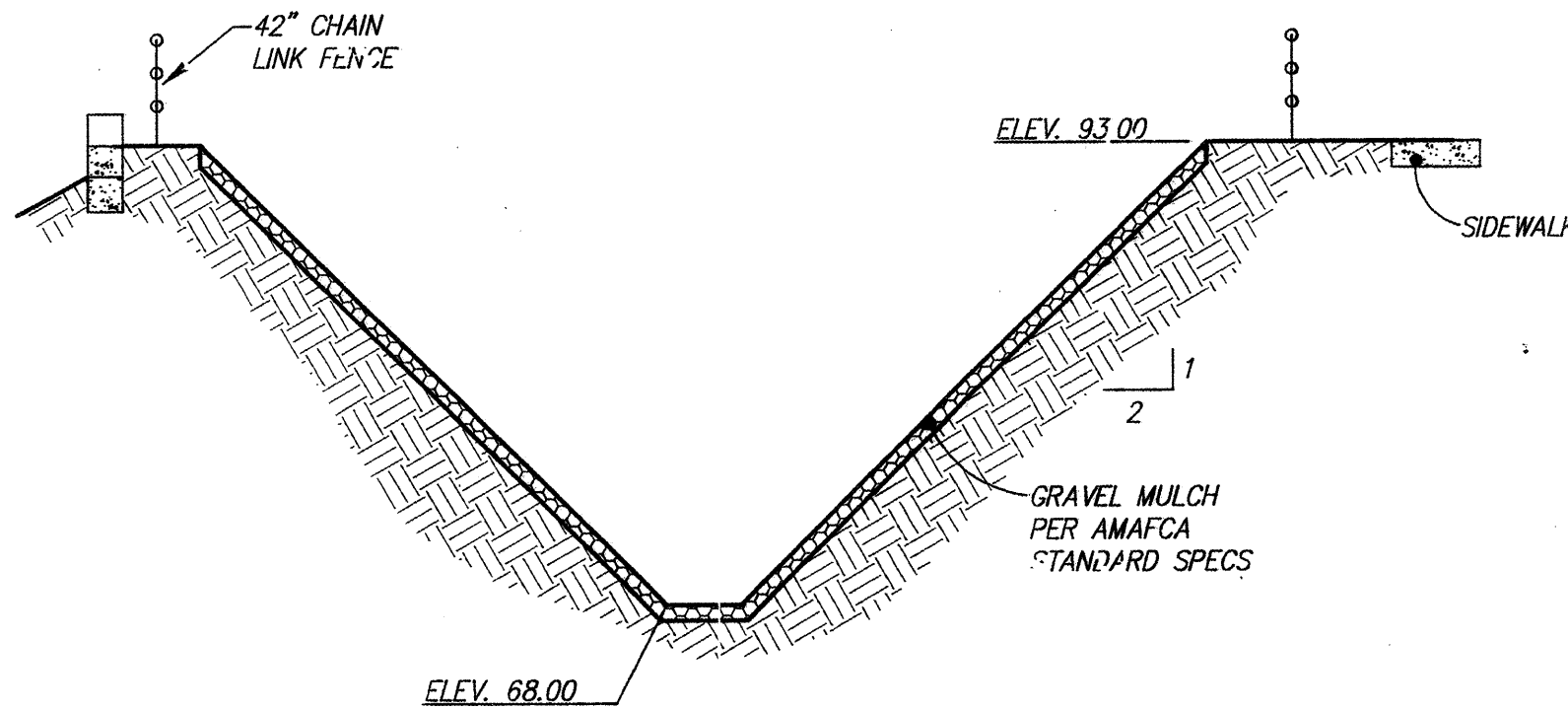


RETAINING WALLS
N.T.S.

SECTION A-A

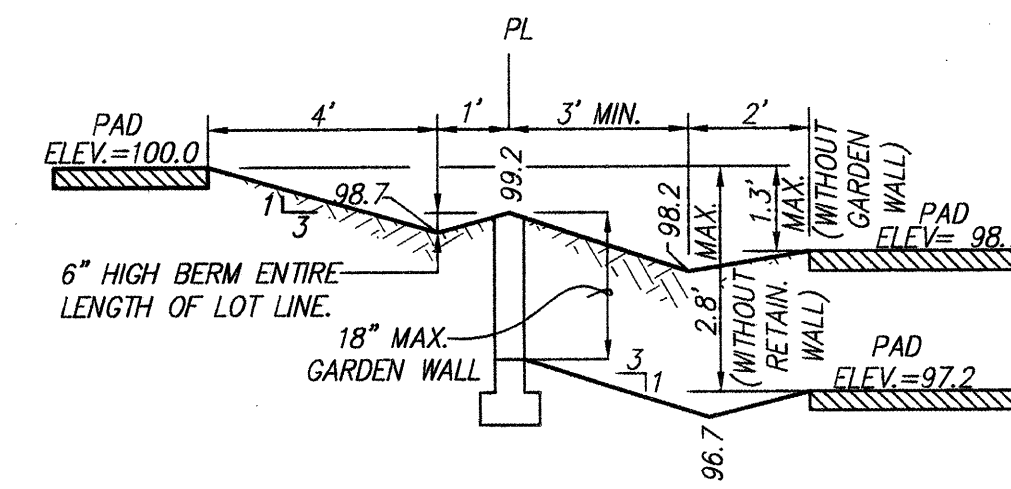


SWALE DETAIL
N.T.S.



RETENTION POND
N.T.S.

SECTION B-B



NOTES:

1. A BLOCK WALL WILL BE CONSTRUCTED ALONG THE ENTIRE PERIMETER BOUNDARY. (PART BY DEVELOPER, PART BY BUILDER.)
2. WHERE THE DIFFERENCE IN ADJACENT PAD ELEVATIONS IS GREATER THAN 1.3' AND LESS THAN 2.8' A GARDEN WALL SHALL BE CONSTRUCTED TO ACCOMMODATE PROPER SIDEYARD LOT DRAINAGE AS SHOWN ON THE SIDEYARD LOT DETAIL.
3. WHERE THE DIFFERENCE IN ADJACENT PAD ELEVATIONS IS GREATER THAN 2.8' A RETAINING WALL SHALL BE CONSTRUCTED TO ACCOMMODATE PROPER SIDEYARD LOT DRAINAGE AS SHOWN ON THE SIDEYARD LOT DETAIL.

TYPICAL SIDEYARD GARDEN BLOCKWALL DETAIL

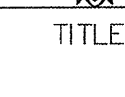
N.T.S. ANY DIFFERENCE IN PAD ELEVATIONS BETWEEN ADJACENT LOTS GREATER THAN 2.8' WILL REQUIRE RETAINING WALLS



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**CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT**



**RESERVE @ FOUR HILLS
GRADING & DRAINAGE DETAILS**

DESIGN REVIEW COMMITTEE CITY ENGINEER APPROVAL

FOR INFORMATION ONLY

LAST DESIGN UPDATE

MO./DAY/YR.

MO./DAY/YR.

CITY PROJECT NO.

696681

ZONE MAP NO.

M-22

SHEET

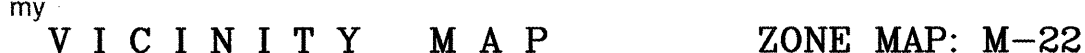
OF

19

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL		REVISIONS		DESIGN		DATE		DATE		DATE	
CONTRACTOR		TOTAL UTILITIES		FIELD NOTES		ENGINEER'S SEAL		REVISIONS		DESIGN		DATE		DATE		DATE	
WORK		DATE		BY		DATE		REMARKS		REVISIONS		DATE		DATE		DATE	
STATED BY		DATE		NO.		DATE		NO.		DATE		DATE		DATE		DATE	
ACCEPTANCE BY		DATE		BY		DATE		NO.		DATE		DATE		DATE		DATE	
FIELD		DATE		BY		DATE		NO.		DATE		DATE		DATE		DATE	
DRAWINGS		DATE		BY		DATE		NO.		DATE		DATE		DATE		DATE	
CORRECTED BY		DATE		BY		DATE		NO.		DATE		DATE		DATE		DATE	
MICRO-FILM INFORMATION		DATE		BY		DATE		NO.		DATE		DATE		DATE		DATE	
RECORDED BY		DATE		BY		DATE		NO.		DATE		DATE		DATE		DATE	

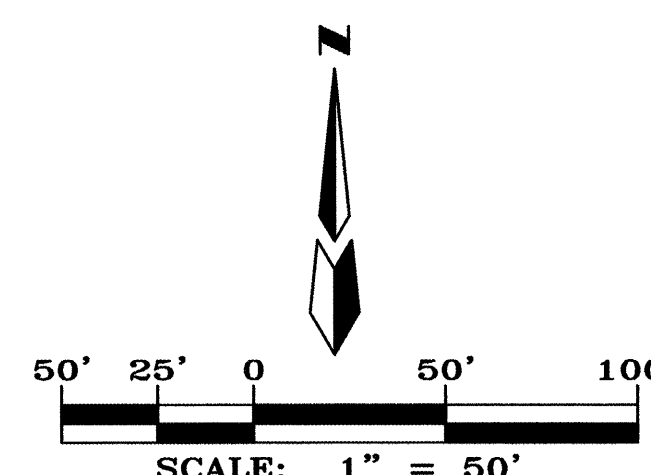
1. ALL SIDEWALKS PER CITY OF ALBUQUERQUE STANDARD DRAWING 2430.
2. ALL 10" VALLEY GUTTERS PER CITY OF ALBUQUERQUE STANDARD DRAWING 2422.
3. ALL 6" VALLEY GUTTERS PER CITY OF ALBUQUERQUE STANDARD DRAWING 2420.
4. ALL 4" VALLEY GUTTERS PER CITY OF ALBUQUERQUE STANDARD DRAWING 2421
5. ALL HANDICAP RAMPS, EXCEPT UNIDIRECTIONAL RAMP ARE PER DETAIL ON THIS SHEET.
6. TRANSITION FROM MOUNTABLE CURB TO STANDARD CURB SHALL BE 10 FEET, PER COA STD DWG 2418.
7. TRANSITION SECTION FROM FULL CROWN TO NO CROWN TO BE A MINIMUM OF 50 FEET, PER COA STD DWG 2401
8. UNIDIRECTIONAL HANDICAP RAMP PER COA DETAIL 2426.
9. SOIL NOT HAVING THE MINIMUM R - VALUE OF 50 FOR STREETS SHALL BE REMOVED TO A DEPTH OF 2 FEET AND REPLACED, BY THE CONTRACTOR, WITH SUITABLE MATERIAL, OR A PAVEMENT SECTION SHALL BE DESIGNED BY THE CONSULTANT ACCOMMODATING THE EXISTING R - VALUE PER C.O.A. STANDARD SPECIFICATIONS.

I, Amy L. Driscoll, NMP# 15334, of the firm Mark Goodwin & Associates, PA, a Registered Professional Engineer in the State of New Mexico, do hereby certify, to the best of my knowledge and belief, that the infrastructure installed as part of this project has been inspected by me or by a qualified person under my direct supervision, and has been constructed in accordance with the plans and specifications approved by the City Engineer and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings. This Certification is based on site inspections by me or personnel under my direction, and survey information provided by ALS, Inc., NMP# number 7749.



	EXISTING CONCRETE CURB
	EXISTING WALL OR HEAD WALL
	EXISTING SIGN
	EXISTING WOOD FENCE
	EXISTING CHAIN LINK FENCE
	EXISTING TREE
	EXISTING SANITARY SEWER MANHOLE
	EXISTING FIRE HYDRANT
	EXISTING ELECTRIC TRANSFORMER
	EXISTING OVERHEAD ELECTRIC LINE
	EXISTING POWER POLE
	EXISTING TELEPHONE BOX
	EXISTING CONCRETE SUPPORT
	EXISTING MAILBOX
	EXISTING BASKETBALL GOAL SUPPORT
	NEW CURB & GUTTER
	NEW STANDARD CURB & GUTTER
	NEW SIDEWALK
	NEW RIGHT-OF-WAY
	NEW PROPERTY LINE
	NEW CENTERLINE
	NEW LOT LINES
	NEW EASEMENTS
	NEW GARDEN WALL
	NEW PERIMETER RETAINING WALL
	NEW SIDE LOT RETAINING WALL
	NEW HIGH POINT

Meandering Sidewalk
built in lieu of standard
sidewalk locations on
Wagontrain and Whirl
Away.



A = CURB RETURN POINT
B = QUARTER POINTS
C = 5' BEHIND FACE OF CURB RETURN
D = RIGHT OF WAY RETURN POINT

 GRADE IN THESE AREAS IS NOT CRITICAL.

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE: **RESERVE AT FOUR HILLS
MASTER PAVING PLAN**

CITY ENGINEER APPROVAL

A P P R O V E D

JAN 22 2003

CITY ENGINEER

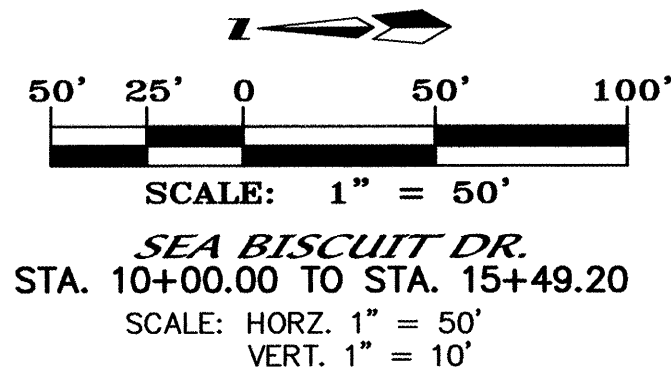
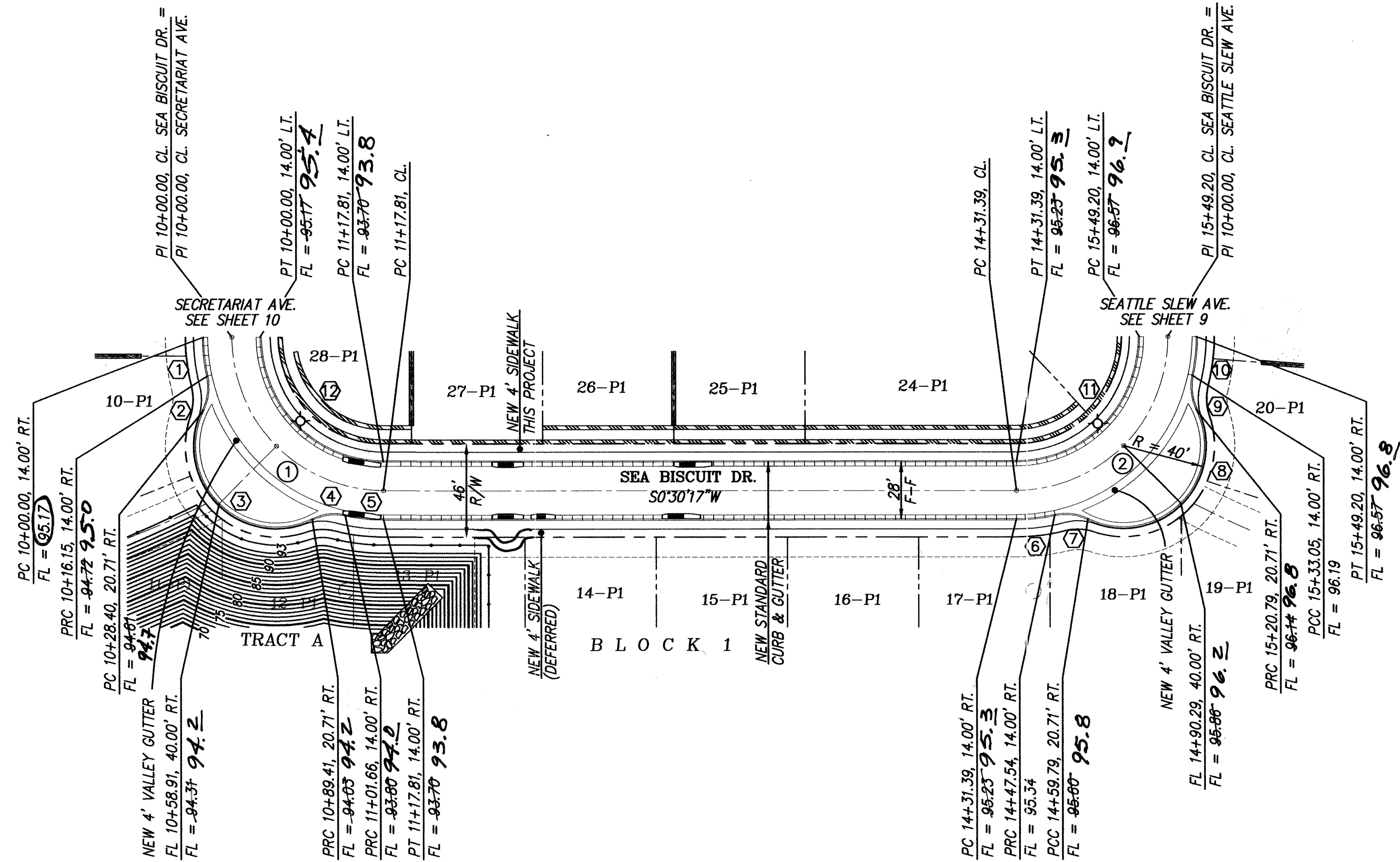
CITY PROJECT NO.

ZONE MAP NO.	
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SHEET OF

7 19

SCANNED BY
PLANNING



NOTES

1. ALL STATIONING IS CENTERLINE STATIONING.

CURVE DATA - DESCRIBES FACE OF CURB

① $\Delta = 12'20''19''$ $R = 89.00'$ $L = 19.17'$ $T = 9.62'$	② $\Delta = 38'30''50''$ $R = 25.00'$ $L = 16.80'$ $T = 8.73'$
③ $\Delta = 142'21''05''$ $R = 40.00'$ $L = 99.38'$ $T = 117.34'$	④ $\Delta = 38'30''50''$ $R = 25.00'$ $L = 16.80'$ $T = 8.73'$
⑤ $\Delta = 12'20''19''$ $R = 89.00'$ $L = 19.17'$ $T = 9.62'$	⑥ $\Delta = 12'20''13''$ $R = 89.00'$ $L = 19.16'$ $T = 9.62'$
⑦ $\Delta = 38'30''50''$ $R = 25.00'$ $L = 16.80'$ $T = 8.73'$	⑧ $\Delta = 142'21''05''$ $R = 40.00'$ $L = 99.38'$ $T = 117.34'$
⑨ $\Delta = 38'30''50''$ $R = 25.00'$ $L = 16.80'$ $T = 8.73'$	⑩ $\Delta = 12'20''13''$ $R = 89.00'$ $L = 19.16'$ $T = 9.62'$
⑪ $\Delta = 90'00''02''$ $R = 61.00'$ $L = 95.82'$ $T = 61.00'$	⑫ $\Delta = 90'00''02''$ $R = 61.00'$ $L = 95.82'$ $T = 61.00'$

CURVE DATA - DESCRIBES CENTERLINE

① $\Delta = 90'00''02''$ $R = 75.00'$ $L = 117.81'$ $T = 75.00'$	② $\Delta = 90'00''02''$ $R = 75.00'$ $L = 117.81'$ $T = 75.00'$
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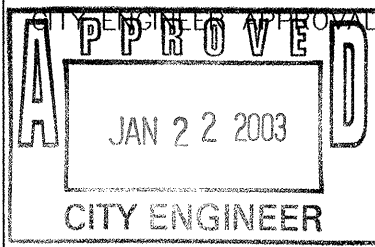
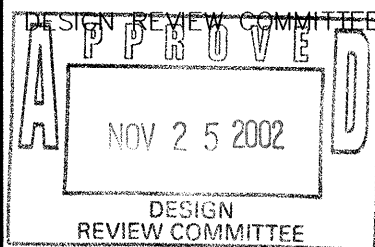
CERTIFICATION OF SUBSTANTIAL COMPLIANCE ON PLANS
I, Amy L. Driscoll, NMPE 15334, of the firm, Mark Goodwin & Associates, P.A., a Registered Professional Engineer in the State of New Mexico, do hereby certify, to the best of my knowledge and belief, that the infrastructure installed as part of this project has been inspected by me or by a qualified person under my direct supervision, and has been constructed in accordance with the plans and specifications approved by me as an Engineer and that the original design of the project was prepared by me or by a qualified person under my direct supervision. This certification is based on site inspections by me or personnel under my direction, and survey information provided by ALS INC., NMPS number 14271.

dmg MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539



CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE: RESERVE AT FOUR HILLS
SEA BISCUIT DR.
PAVING IMPROVEMENTS



CITY PROJECT NO.

ZONE MAP NO.

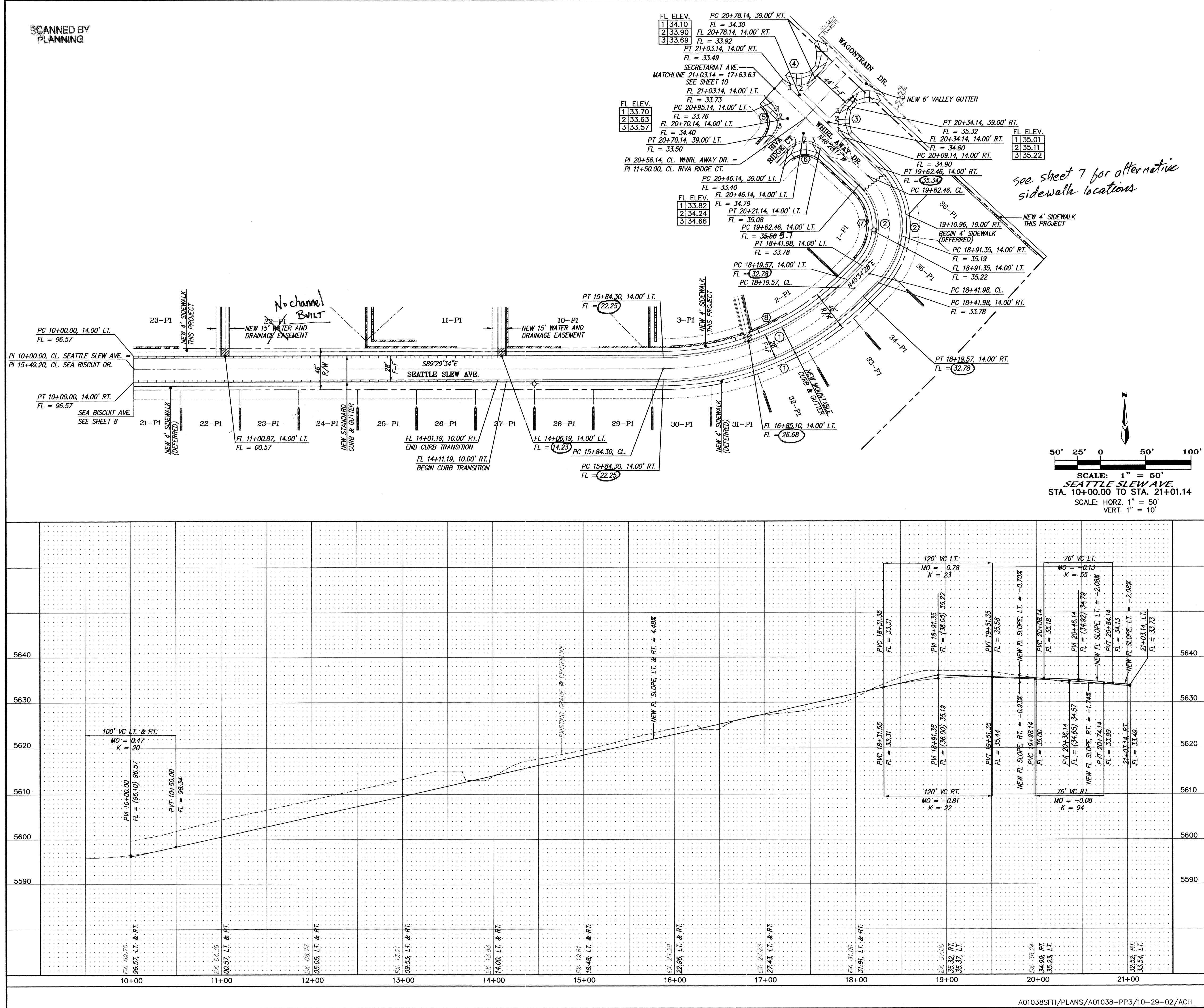
SHEET OF

696681

M-22

8 19

A01038SFH/PLANS/A01038-PP2/10-29-02/ACH



NOTES

1. ALL STATIONING IS CENTERLINE STATIONING.

① $\Delta = 44^{\circ}55'58''$ $R = 314.00'$ $L = 246.25'$ $T = 129.85'$	② $\Delta = 92^{\circ}02'45''$ $R = 89.00'$ $L = 142.98'$ $T = 92.20'$
③ $\Delta = 90^{\circ}00'00''$ $R = 25.00'$ $L = 39.27'$ $T = 25.00'$	④ $\Delta = 90^{\circ}00'00''$ $R = 25.00'$ $L = 39.27'$ $T = 25.00'$
⑤ $\Delta = 90^{\circ}00'00''$ $R = 25.00'$ $L = 39.27'$ $T = 25.00'$	⑥ $\Delta = 90^{\circ}00'00''$ $R = 25.00'$ $L = 39.27'$ $T = 25.00'$
⑦ $\Delta = 92^{\circ}02'45''$ $R = 61.00'$ $L = 98.00'$ $T = 63.19'$	⑧ $\Delta = 44^{\circ}55'58''$ $R = 286.00'$ $L = 224.29'$ $T = 117.17'$

① $\Delta = 44^{\circ}55'58''$ $R = 300.00'$ $L = 235.27'$ $T = 122.90'$	② $\Delta = 92^{\circ}02'45''$ $R = 75.00'$ $L = 120.49'$ $T = 77.70'$
---	---

CERTIFICATION OF SUBSTANTIAL COMPLIANCE ON PLANS

I, Arny L. Driscoll, NMPE 15334, of the firm, Mark Goodwin & Associates, P.A., a Registered Professional Engineer in the State of New Mexico, do hereby certify, to the best of my knowledge and belief, that the project has been inspected by me or by a qualified person under my direct supervision, and that the original design intent of the approved plans and specifications approved by the City Engineer and that the original design intent of the approved plans and specifications as noted by me on the as-built construction drawings. This Certification is based on site inspections by me or personnel under my direction and survey information provided by NMPS number 2718.

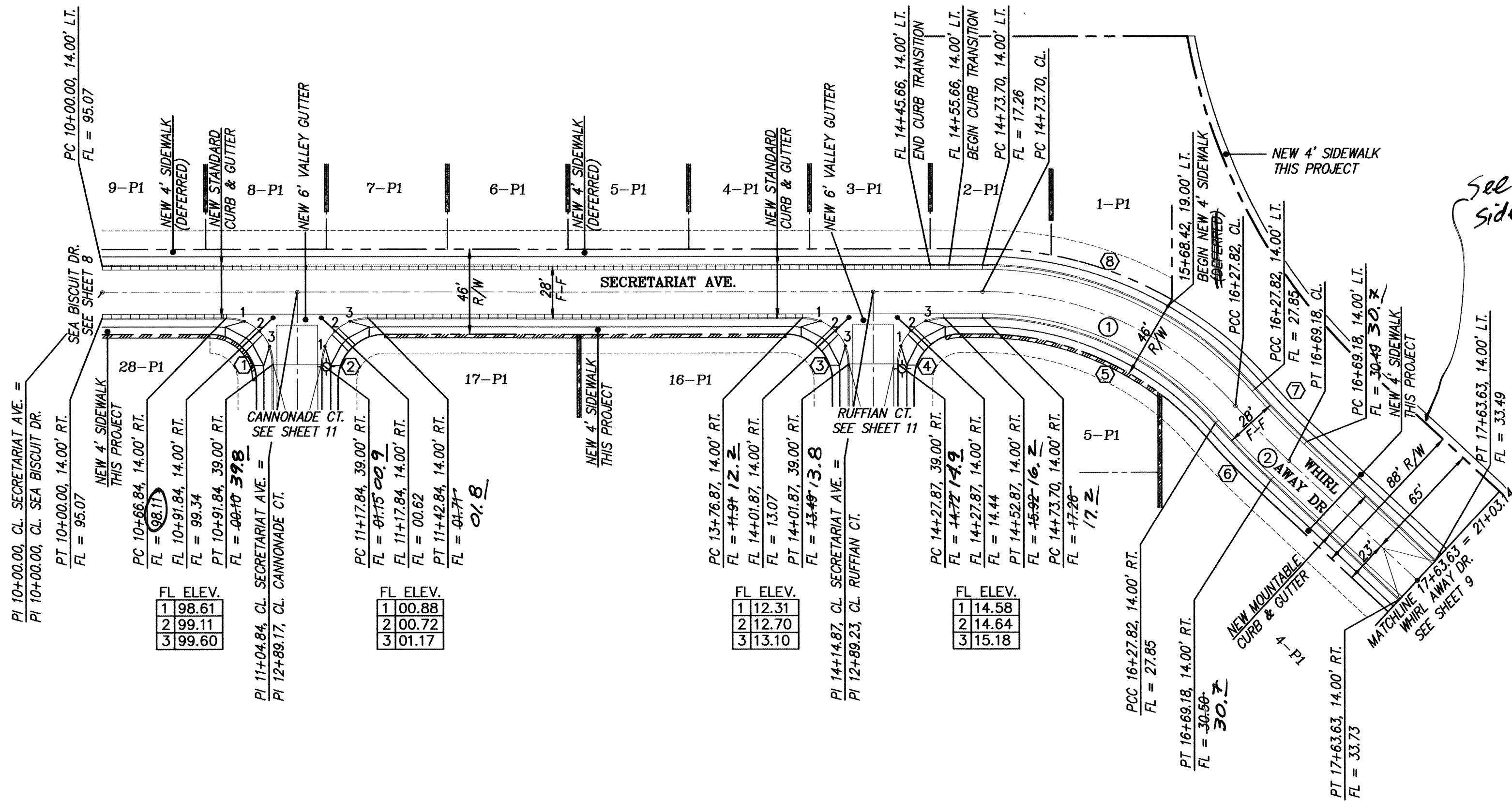
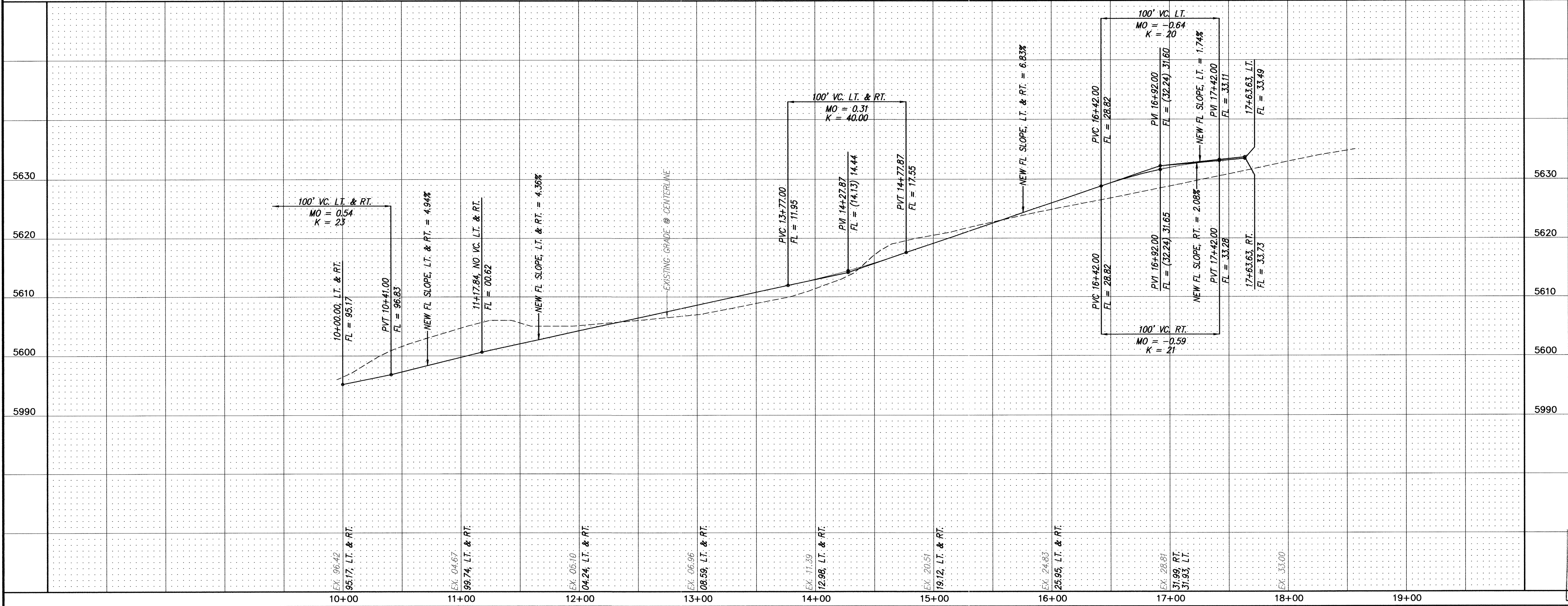
Arny L. Driscoll
14271

**CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT**

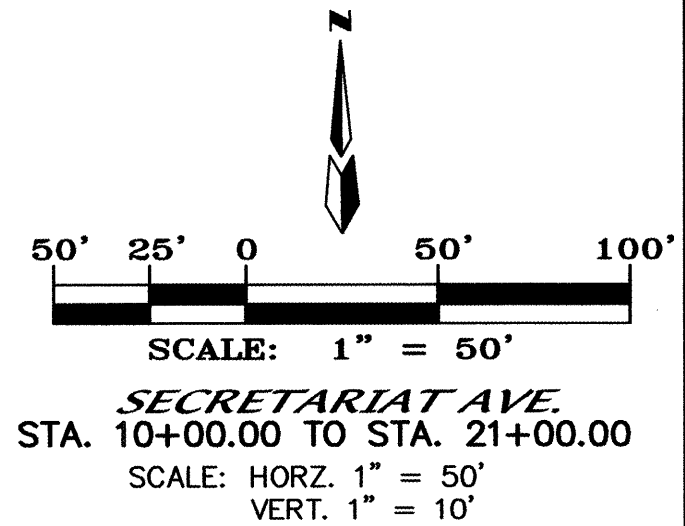
TITLE: **RESERVE AT FOUR HILLS
SEATTLE SLEW AVE.
PAVING IMPROVEMENTS**

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAY/YR.	MO./DAY/YR.
APPROVE NOV 2 5 2002	APPROVE JAN 2 2 2003		
DESIGN REVIEW COMMITTEE	CITY ENGINEER		

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
696681	M-22	9	19



See sheet 7 for alternative
sidewalk locations



NOTES

1. ALL STATIONING IS CENTERLINE STATIONING.

CURVE DATA - DESCRIBES FACE OF CURB

① $\Delta = 90^{\circ}00'00''$ $R = 25.00'$ $L = 39.27'$ $T = 25.00'$	② $\Delta = 90^{\circ}00'00''$ $R = 25.00'$ $L = 39.27'$ $T = 25.00'$
③ $\Delta = 90^{\circ}00'00''$ $R = 25.00'$ $L = 39.27'$ $T = 25.00'$	④ $\Delta = 90^{\circ}00'00''$ $R = 25.00'$ $L = 39.27'$ $T = 25.00'$
⑤ $\Delta = 49^{\circ}03'30''$ $R = 166.00'$ $L = 142.13'$ $T = 75.75'$	⑥ $\Delta = 6^{\circ}02'06''$ $R = 406.67'$ $L = 42.84'$ $T = 21.44'$
⑦ $\Delta = 6^{\circ}02'06''$ $R = 378.67'$ $L = 39.89'$ $T = 19.96'$	⑧ $\Delta = 49^{\circ}03'30''$ $R = 194.00'$ $L = 166.11'$ $T = 88.53'$

CURVE DATA - DESCRIBES CENTERLINE

① $\Delta = 49^{\circ}03'30''$ $R = 180.00'$ $L = 154.12'$ $T = 82.14'$	② $\Delta = 6^{\circ}02'06''$ $R = 392.67'$ $L = 41.36'$ $T = 20.70'$
--	--

CERTIFICATION OF SUBSTANTIAL COMPLIANCE ON PLANS

L. Amy L. Driscoll, N.M.P.E. 15324, of the firm Mark Goodwin & Associates, P.A., a Registered Professional Engineer in the State of New Mexico, do hereby certify, to the best of my knowledge and belief, that the infrastructure installed as part of this project has been inspected by me or by a qualified person under my direct supervision, and has been constructed in accordance with the plans and specifications approved by the City Engineer, and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings. This Certification is based on site inspections by me or personnel under my direction, and survey information provided by DMG. NMPS number 14271

dmg

MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE: **RESERVE AT FOUR HILLS
SECRETARIAT AVE.
PAVING IMPROVEMENTS**

DESIGN REVIEW COMMITTEE
APPROVED
NOV 25 2002
DESIGN REVIEW COMMITTEE

CITY ENGINEER
APPROVED
JAN 22 2003
CITY ENGINEER

LAST DESIGN UPDATE

MO./DAY/YR.	MO./DAY/YR.

ENGINEER'S SEAL

NO.

BY

DATE

REMARKS

REVISIONS

DESIGN

DESIGNED BY

DRAWN BY

CHECKED BY

DATE

DATE

DATE

ENGINEER'S SEAL

NO.

BY

DATE

REMARKS

REVISIONS

DESIGN

DESIGNED BY

DRAWN BY

CHECKED BY

DATE

DATE

DATE

AS BUILT INFORMATION

CONTRACTOR

WORK

DATE

ACCEPTANCE

DATE

VERIFICATION

DATE

CORRECTION

DATE

RECORDED

DATE

SURVEY INFORMATION

FIELD NOTES

NO.

BY

DATE

LOCATED AT THE INTERSECTION OF SAGEBRUSH TR. SE AND RATON AVE. SE. IN THE NE QUADRANT OF THE INTERSECTION.

ACS MONUMENT "10-M22" 1975

ELEVATION = 5597.53 (MSD 1929)

CITY PROJECT NO.

696681

ZONE MAP NO.

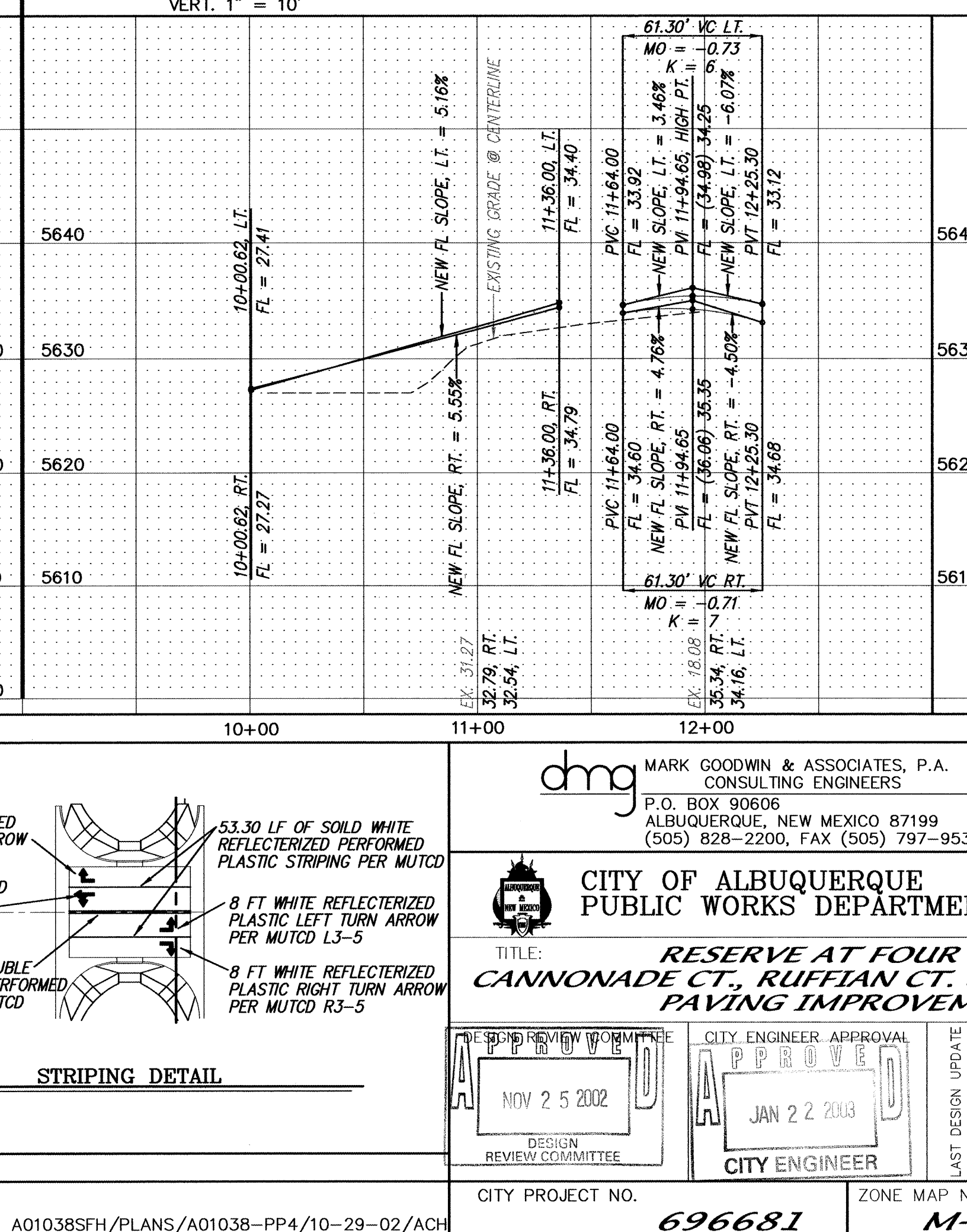
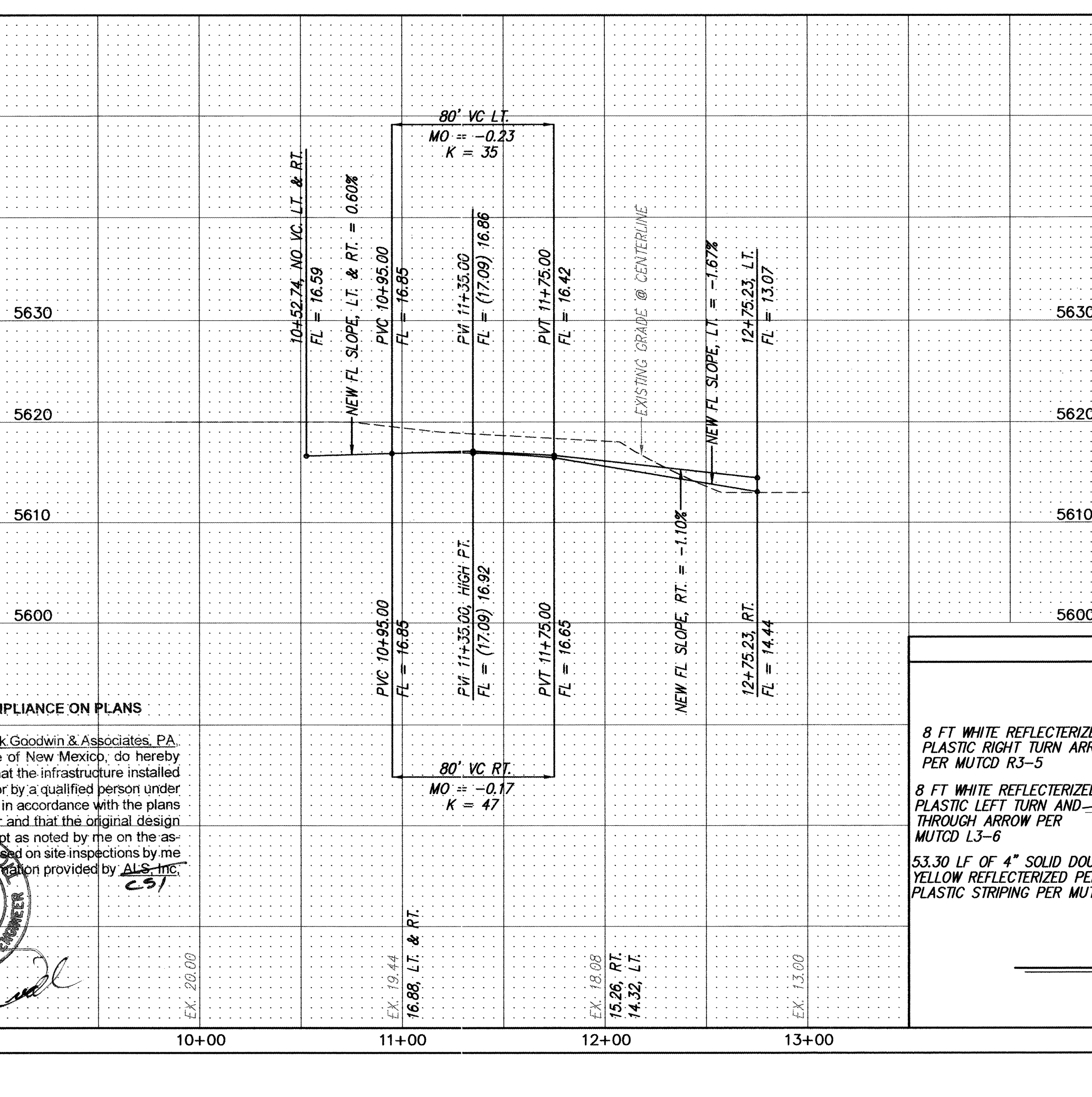
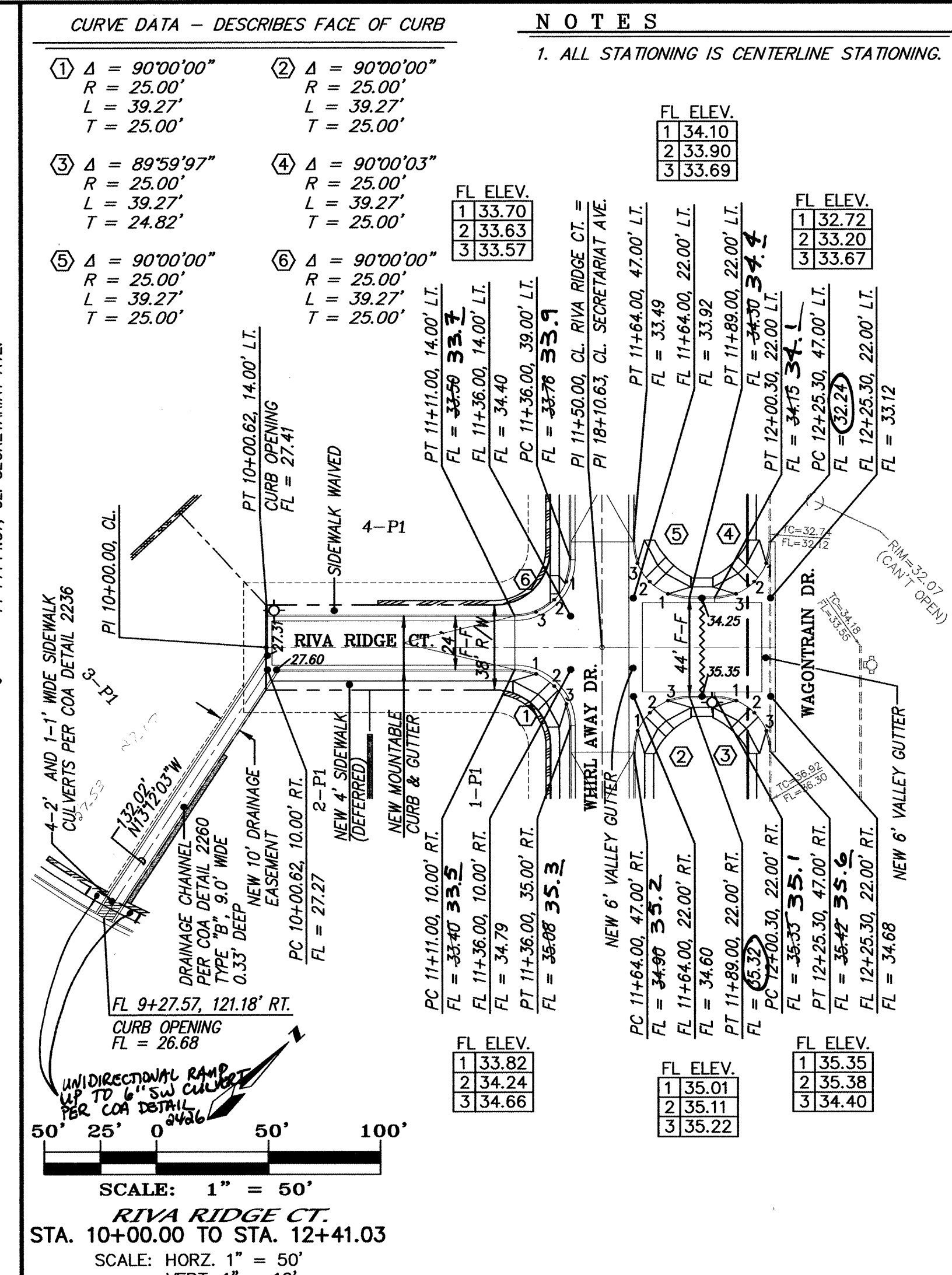
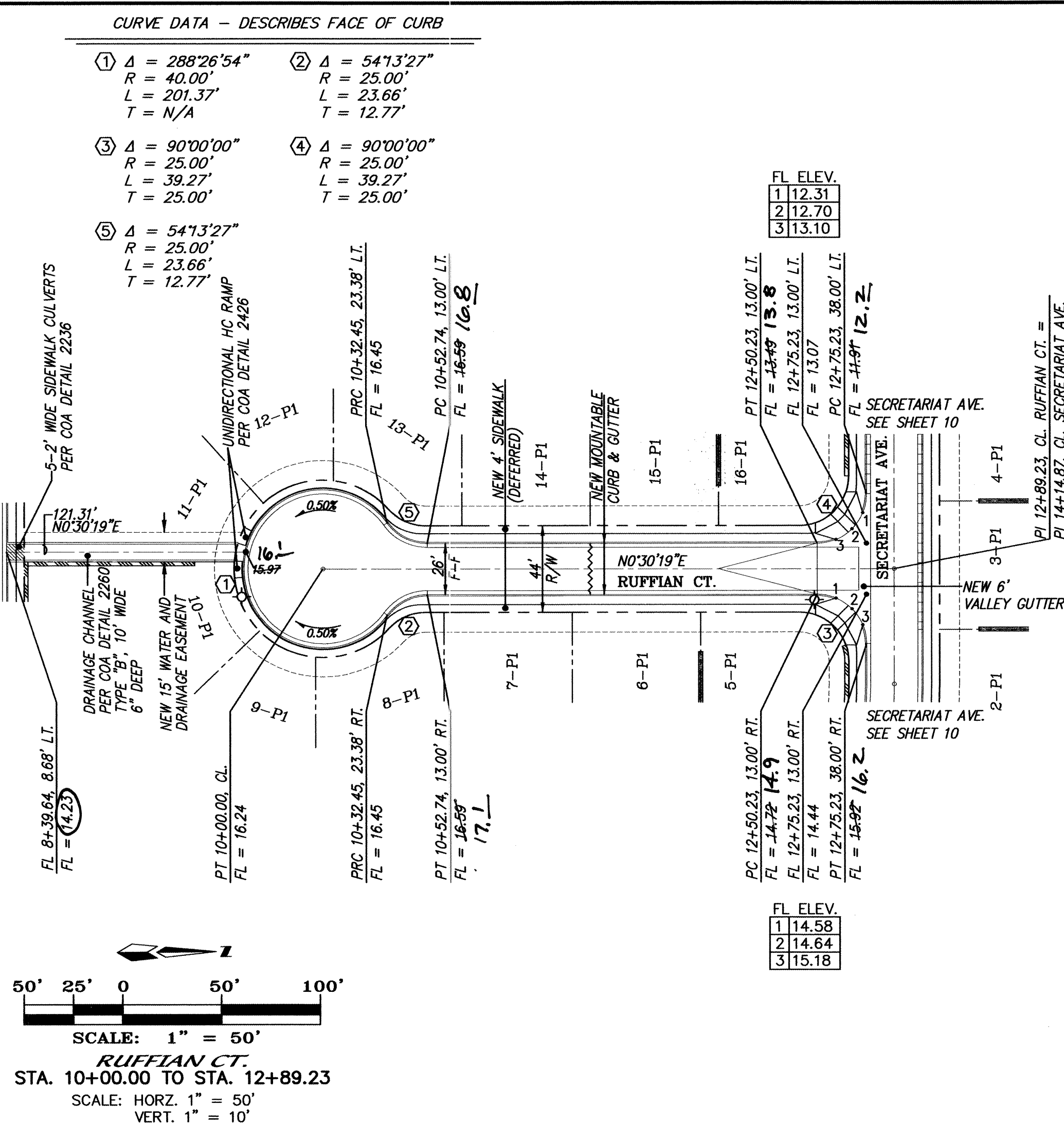
M-22

SHEET

10

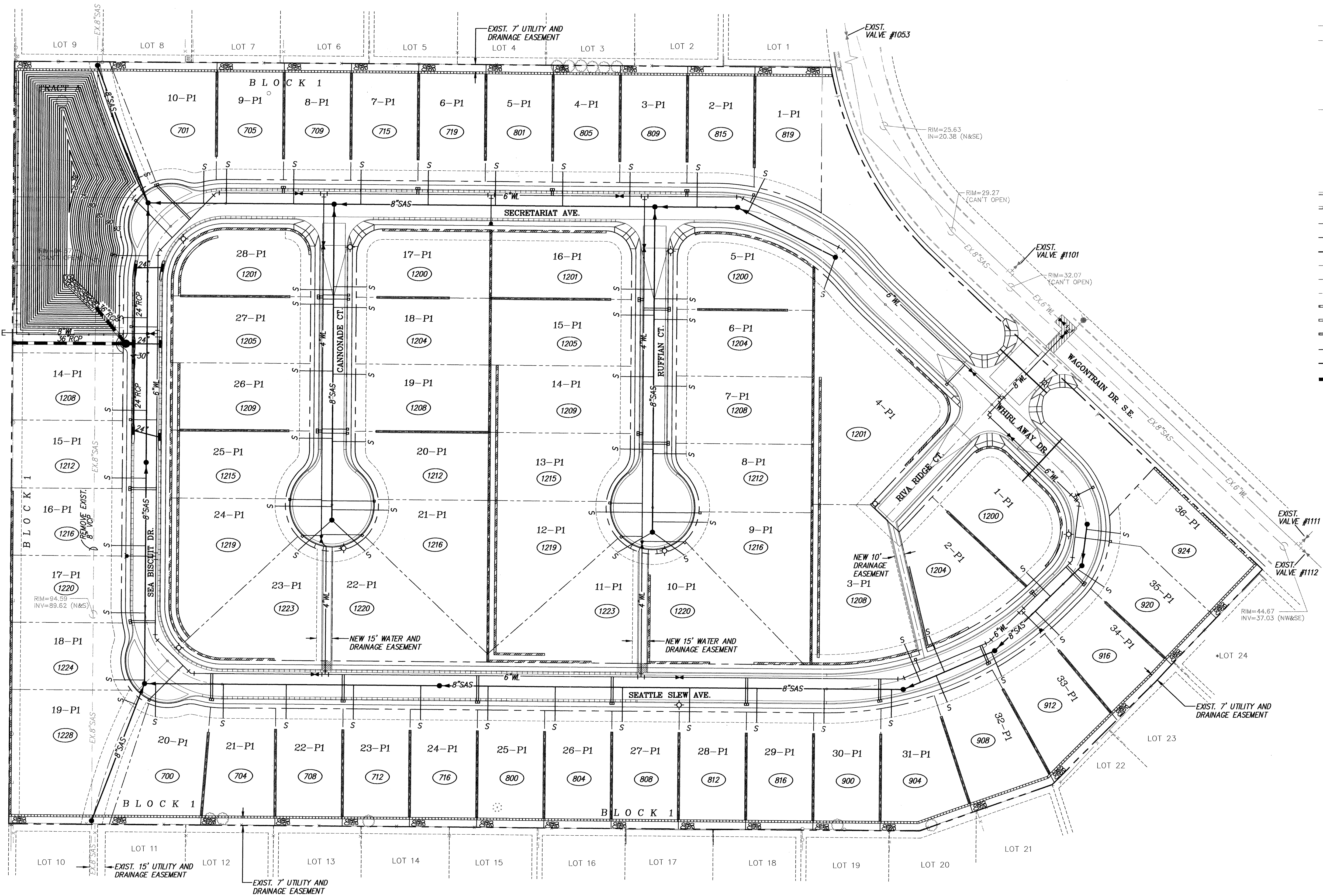
OF

19

[illegible]

F:\A01038\A01038SFH\PLANS\A01038-MUT50.dwg Fr:1 Nov 19 12:27:28 2002 D. MARK GOODWIN & ASSOCIATES, PLTTED BY: KJS

SCANNED BY
PLANNING



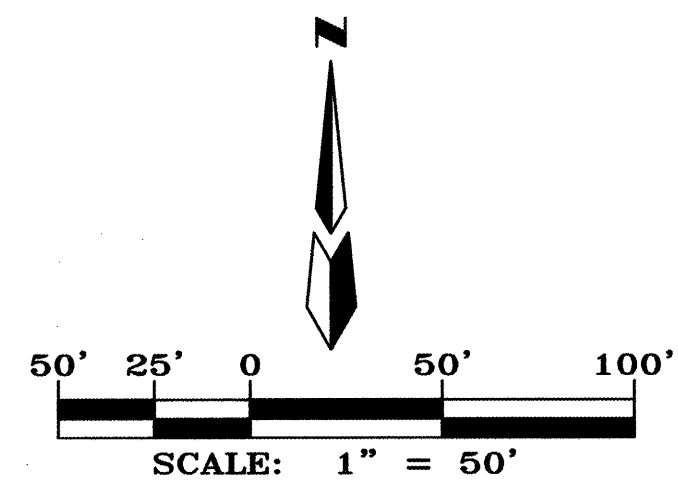
LEGEND	
	EXISTING CONCRETE CURB
	EXISTING WALL OR HEAD WALL
	EXISTING SIGN
	EXISTING WOOD FENCE
	EXISTING CHAIN LINK FENCE
	EXISTING TREE
	EXISTING SANITARY SEWER MANHOLE
	EXISTING FIRE HYDRANT
	EXISTING ELECTRIC TRANSFORMER
	EXISTING OVERHEAD ELECTRIC LINE
	EXISTING POWER POLE
	EXISTING TELEPHONE BOX
	EXISTING CONCRETE SUPPORT
	EXISTING MAILBOX
	EXISTING BASKETBALL GOAL SUPPORT
	NEW CURB & GUTTER
	NEW STANDARD CURB & GUTTER
	NEW SIDEWALK
	NEW RIGHT-OF-WAY
	NEW PROPERTY LINE
	NEW CENTERLINE
	NEW LOT LINES
	NEW EASEMENTS
	NEW GARDEN WALL
	NEW PERIMETER RETAINING WALL
	NEW SIDE LOT RETAINING WALL
	NEW WATERLINE
	NEW SAS
	NEW STORM DRAIN
	NEW SAS MH
	NEW SD MH
	NEW SAS SERVICES
	NEW WATER METERS
	NEW WATERLINE BENDS
	NEW LOT ADDRESS
	NEW STREET LIGHTS

- WATER SHUT-OFF PLAN**
- CONTRACTOR WILL CONTACT WATER SYSTEMS AT 857-8200, SEVEN (7) DAYS PRIOR TO NECESSARY SHUT-OFF.
 - VALVES SHALL ONLY BE OPERATED BY CITY WATER EMPLOYEES. SHUT VALVES 1053, 1101, 1111 AND 1112 AS SHOWN ON THIS SHEET.
 - WATER CONNECTION FOR THIS SITE WILL BE NON-PRESSURE CONNECTION TO THE EXISTING 6" WATERLINE IN WAGONTRAIN DR.

CERTIFICATION OF SUBSTANTIAL COMPLIANCE ON PLANS

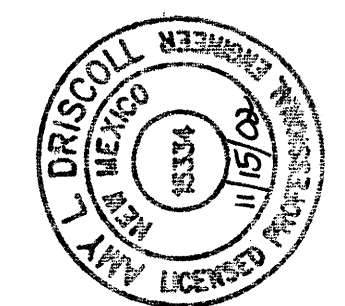
I, Amy L. Driscoll, NMPE 15334, of the firm, Mark Goodwin & Associates, P.A., a Registered Professional Engineer in the State of New Mexico, do hereby certify, to the best of my knowledge and belief, that the infrastructure installed as part of this project has been inspected by me or by a qualified person under my direct supervision, and has been constructed in accordance with the plans and specifications approved by the City Engineer and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings. This Certification is based on site inspections by me or personnel under my direction, and survey information provided by ALS, Inc., NMPS number 7719.

ALS, Inc. 14271



dmg MARK GOODWIN & ASSOCIATES, P.A. CONSULTING ENGINEERS P.O. BOX 90606 ALBUQUERQUE, NEW MEXICO 87199 (505) 828-2200, FAX (505) 797-9539	
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT	
TITLE: RESERVE AT FOUR HILLS MASTER UTILITY PLAN	
DESIGN REVIEW COMMITTEE APPROVED NOV 2 5 2002	CITY ENGINEER APPROVAL APPROVED JAN 22 2003 CITY ENGINEER
DESIGNED BY ALD DATE 05/02	DRAWN BY ACH DATE 05/02
CHECKED BY DMG	DATE 05/02
CITY PROJECT NO. 696681	ZONE MAP NO. M-22
SHEET 12 OF 19	

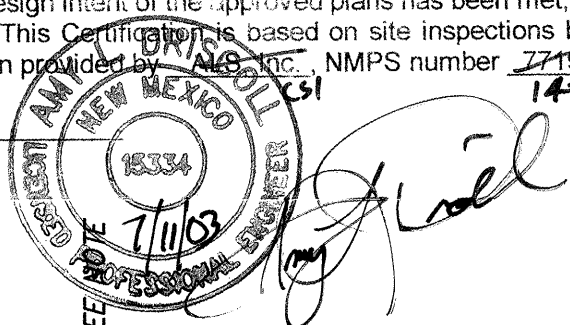
AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	TOPOL UTILITIES	LOCATED AT THE INTERSECTION OF SAGEBRUSH TR. SE AND RATON AVE. SE. IN THE NE QUADRANT OF THE INTERSECTION.	DATE	NO.	BY	NO.	BY
WORK STARTED BY	AS-BUILT	DATE					
ACCEPTANCE BY	DMG	DATE					
FIELD CATCH BY	ALD	DATE					
DRAWINGS	AS-BUILT	DATE					
CORRECTED BY	AS-BUILT	DATE					
MICRO-FILM INFORMATION		REVISIONS		DESIGN		DATE	
RECORDED BY		DATE		DATE		DATE	
NO.							



SCANNED BY
PLANNING

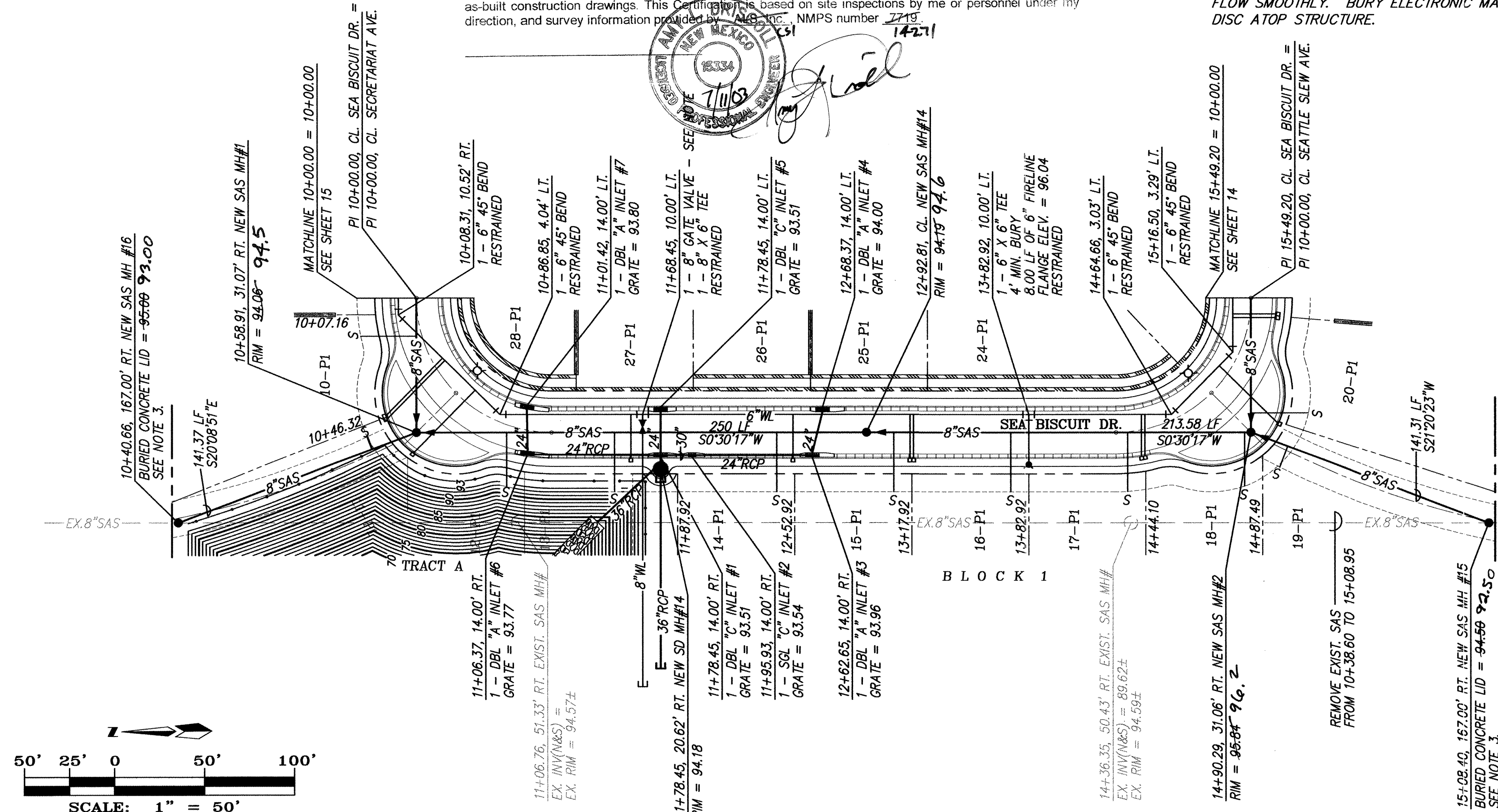
CERTIFICATION OF SUBSTANTIAL COMPLIANCE ON PLANS

I, Amy L. Driscoll, NMPE 15334, of the firm Mark Goodwin & Associates, P.A., a Registered Professional Engineer in the State of New Mexico, do hereby certify, to the best of my knowledge and belief, that the infrastructure installed as part of this project has been inspected by me or by a qualified person under my direct supervision, and has been constructed in accordance with the plans and specifications approved by the City Engineer and that the original design intent of the approved plans has been met except as noted by me on the as-built construction drawings. This Certificate is based on site inspections by me or personnel under my direction, and survey information provided by the contractor, NMPS number 2719 14-271

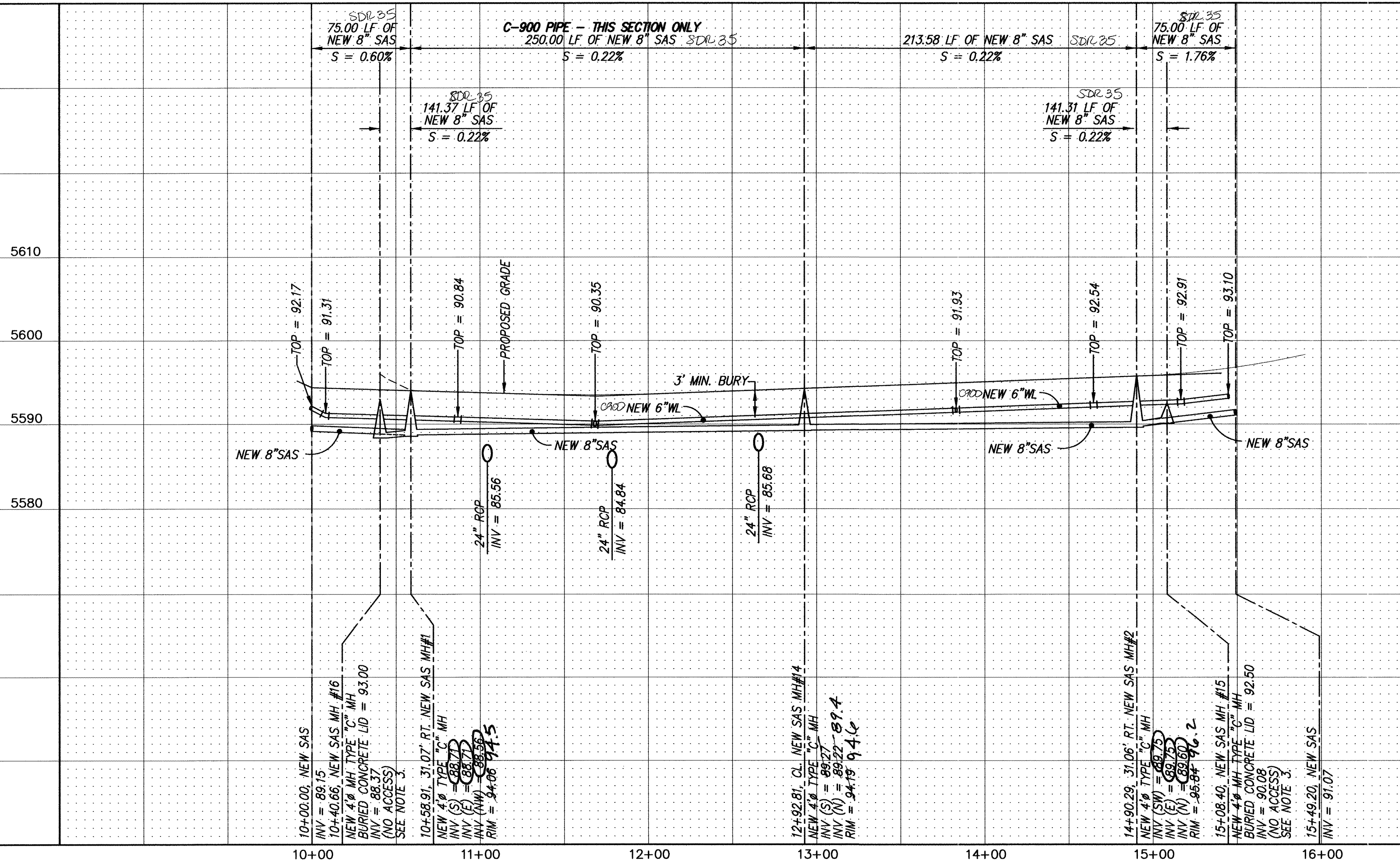


NOTES

1. ALL STATIONING IS CENTERLINE STATIONING.
2. SEE GATE VALVE BOX DETAIL ON SHEET 17.
3. "MANHOLE" FOR SAS MH #15 & MH #16 SHALL BE JUNCTION BOXES ONLY, W/SEALED CONCRETE LID, (3" MIN. BURY, GROUT INSIDE TROUGH TO FLOW SMOOTHLY. BURY ELECTRONIC MARKER DISC ATOP STRUCTURE.

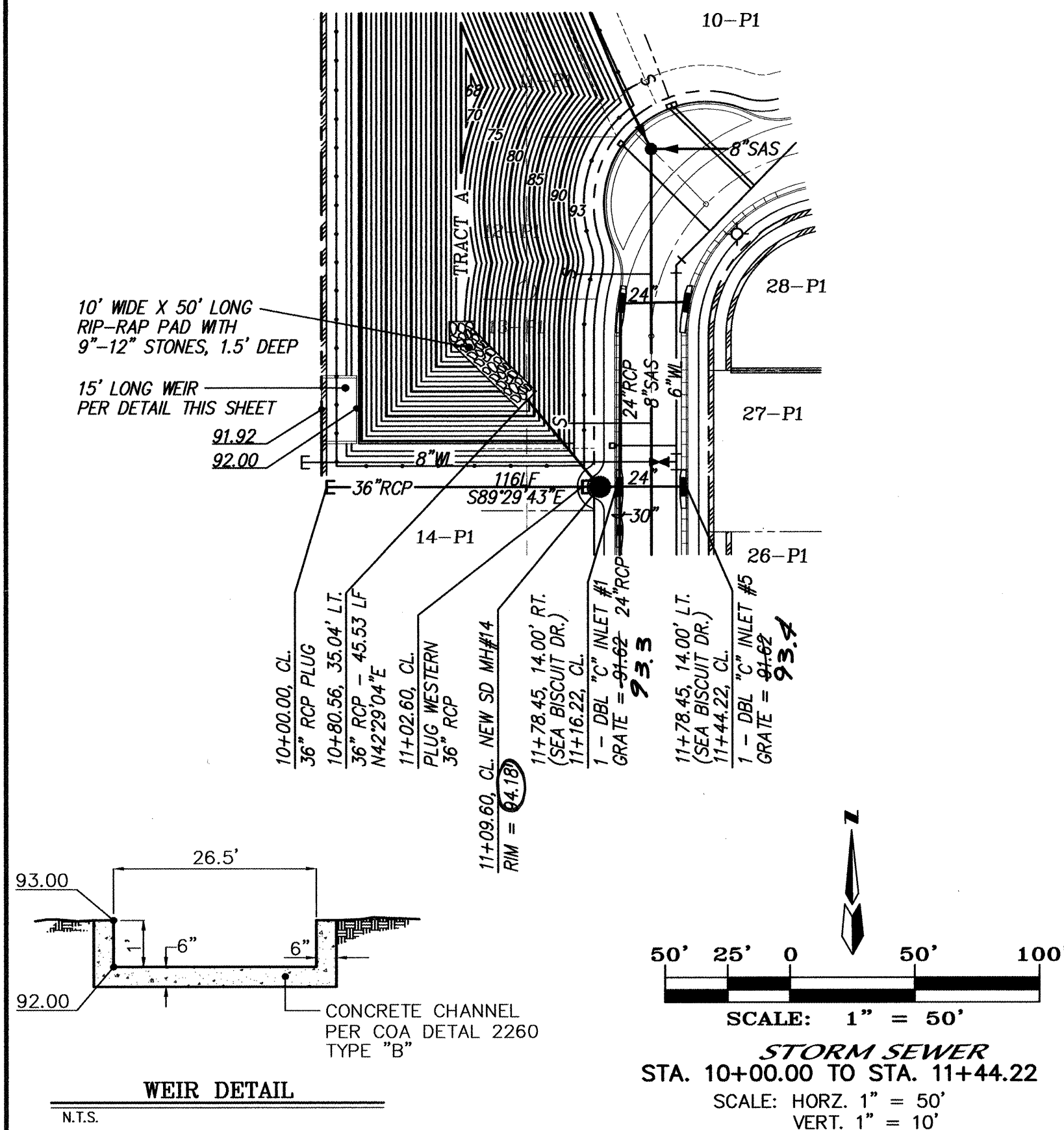


SEA BISCUIT DR.
STA. 10+00.00 TO STA. 15+49.20
SCALE: HORIZ. 1" = 50'
VERT. 1" = 10'



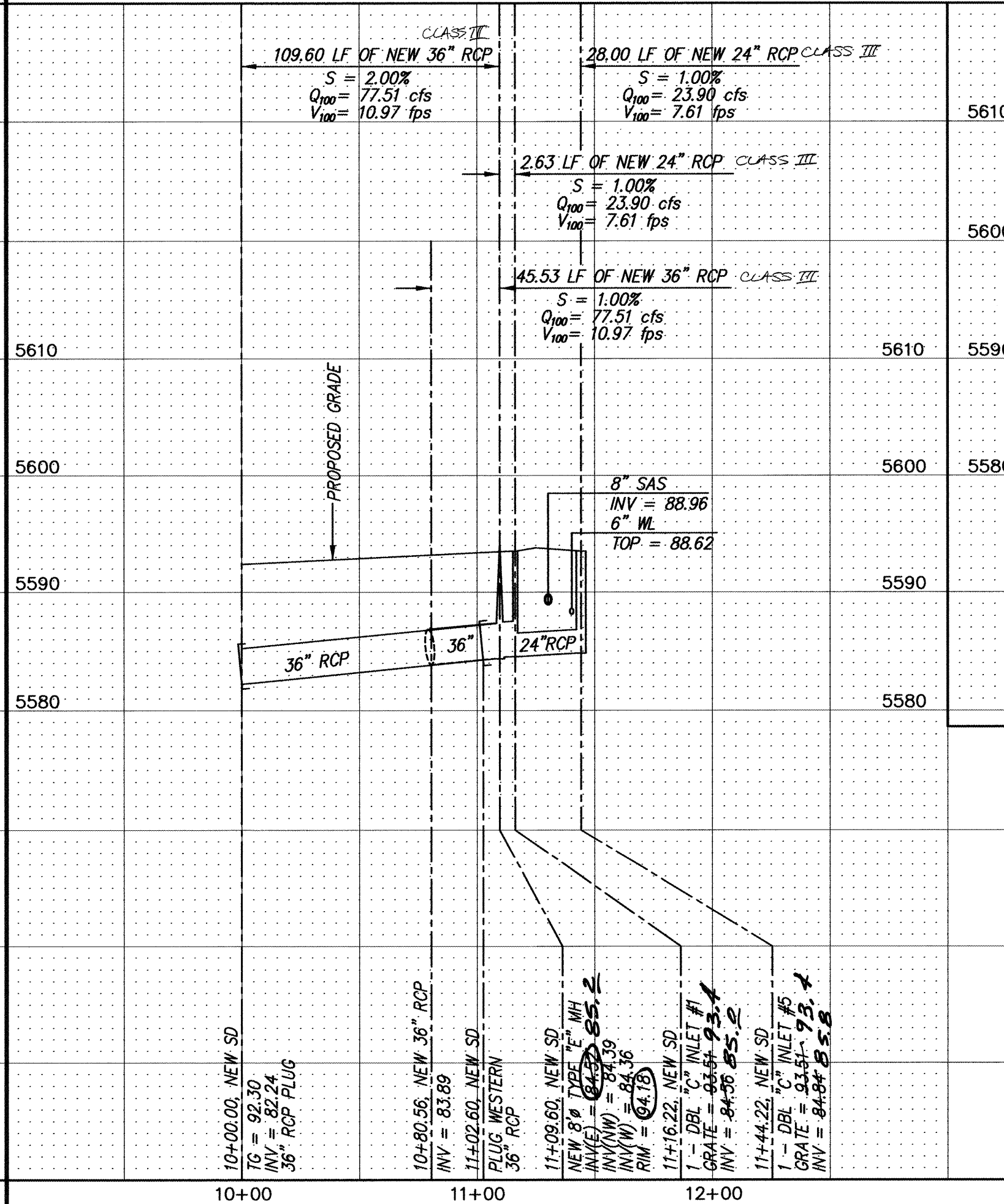
NOTES

1. ALL STATIONING IS STORM SEWER STATIONING.



WEIR DETAIL
N.T.S.

STORM SEWER
STA. 10+00.00 TO STA. 11+44.22
SCALE: HORIZ. 1" = 50'
VERT. 1" = 10'



SANITARY SEWER SERVICES

BLOCK	LOT	STATION AT PUE	INV. ELEV. AT PUE	LENGTH AT PUE
1	10	10+14.92	89.27	30.87'
1	11	10+48.56	89.07	10.00'
1	12	11+00.37	88.76	30.09'
1	13	11+52.92	88.52	33.00'
1	14	12+42.92	88.88	33.00'
1	15	13+07.92	89.37	33.00'
1	16	13+72.92	89.85	33.00'
1	17	14+35.93	90.32	33.00'
1	18	14+76.30	90.63	29.83'
1	19	14+88.86	90.72	10.00'
1	20	15+08.00	90.93	31.88'

RESTRAINED JOINT LENGTH FOR BENDS, VALVES, DEAD ENDS (FT.)

PIPE SIZE	90°	45°	22.5°	11.25°	VALVE
6"	17'	7'	3'	2'	46'
8"	22'	9'	4'	2'	60'
10"	-	11'	5'	3'	72'

LENGTH OF RESTRAINED PIPE ON EACH SIDE OF THE BEND. RESTRAIN BRANCH AT FITTING ONLY MINIMUM ATTACHED PIPE LENGTH, RUN SIDE OF TEE: 10.00 FEET.

RESTRAINED JOINT LENGTHS FOR REDUCERS (FT.)

PIPE SIZE	LARGE SIDE	SMALL SIDE
10" X 6"	44'	-

RESTRAINED JOINT LENGTH FOR TEES (FT.)

PIPE SIZE	RUN	BRANCH
10"x10"x10"	15'	5'
10"x10"x6"	6'	1'
6"x6"x8"	10'	2'
6"x6"x6"	10'	2'

STORM DRAIN INLETS

STATION	PIPE SIZE	LENGTH	INVERT	VELOCITY
10+00.00	36" RCP	109.60 LF	89.27	10.97 fps
10+48.56	36" RCP	28.00 LF	89.07	7.61 fps
11+00.37	24" RCP	2.63 LF	88.76	7.61 fps
11+52.92	36" RCP	45.53 LF	88.52	10.97 fps
12+42.92	24" RCP	72.08 LF	88.88	7.64 fps
13+07.92	24" RCP	66.72 LF	89.37	7.00 fps
13+72.92	24" RCP	23.70 LF	89.85	5.02 fps

MARK GOODWIN & ASSOCIATES, P.A.
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

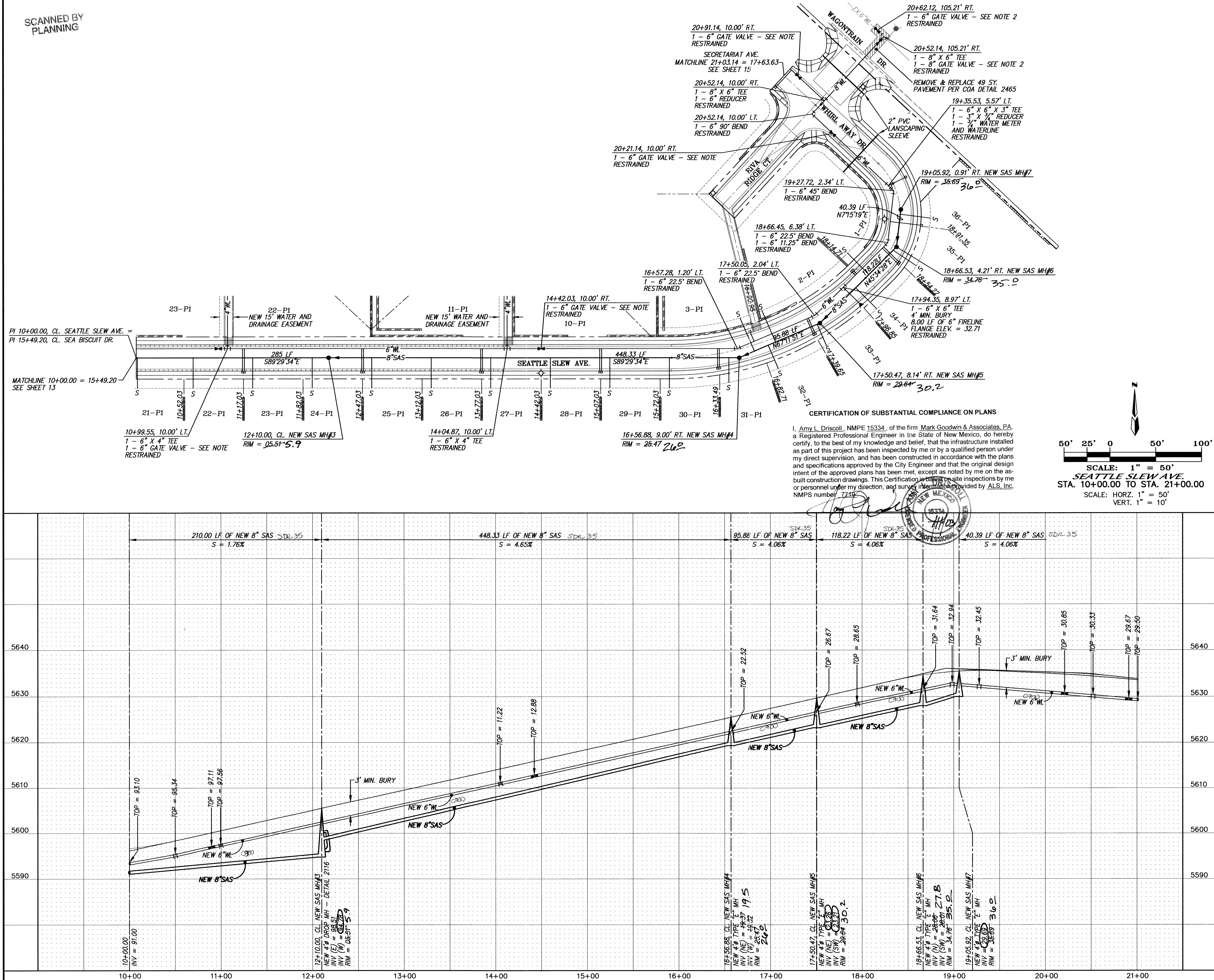
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE: RESERVE AT FOUR HILLS
SEA BISCUIT DR. & STORM SEWER PROFILE
UTILITY IMPROVEMENTS

DESIGN	REVIEW	DATE
NOV 25 2002	JAN 22 2003	

CITY PROJECT NO. 696681
ZONE MAP NO. M-22
SHEET 13 OF 19

CONTRACTOR: D.M.G. UTILITIES		DATE: 1/23/03	
STAKED BY: D.M.G.		DATE: 1/23/03	
ACCEPTED BY: D.M.G.		DATE: 1/23/03	
FIELD ENGINEER: D.M.G.		DATE: 1/23/03	
DRAWING: D.M.G.		DATE: 1/23/03	
CORRECTED BY: D.M.G.		DATE: 1/23/03	
MICRO-FILM INFORMATION		DATE: 1/23/03	
RECORDED BY: D.M.G.		DATE: 1/23/03	
NO. 13		DATE: 1/23/03	



NOTES

1. ALL STATIONING IS CENTERLINE STATIONING.
2. SEE GATE VALVE BOX DETAIL ON SHEET 17.

SANITARY SEWER SERVICES

BLOCK	LOT	STATION AT PUE	INV. ELEV. AT PUE	LENGTH AT PUE
1	21	9+98.76	91.04'	32.99'
1	22	10+62.03	93.88'	33.00'
1	23	11+27.03	96.79'	33.00'
1	24	11+92.03	99.70'	33.00'
1	25	12+57.03	102.61'	33.00'
1	26	13+22.03	105.51'	33.00'
1	27	13+87.03	108.42'	33.00'
1	28	14+52.03	111.33'	33.00'
1	29	15+17.03	114.24'	33.00'
1	30	15+82.03	117.15'	33.00'
1	31	16+47.15	119.80'	27.04'
1	32	16+91.72	122.06'	27.80'
1	33	17+48.66	124.61'	26.11'
1	34	18+05.86	127.17'	32.65'
1	35	18+60.37	129.61'	30.35'
1	36	18+98.30	131.25'	33.00'
2	1	18+24.73	128.01'	33.00'
2	2	16+97.93	122.34'	37.91'
2	3	16+69.58	121.07'	39.81'

RESTRAINED JOINT LENGTH FOR BENDS, VALVES, DEAD ENDS (FT.)

PIPE SIZE	90°	45°	22.5°	11.25°	VALVE
6"	17'	7'	3'	2'	46'
8"	22'	9'	4'	2'	60'
10"	-	11'	5'	3'	72'

LENGTH OF RESTRAINED PIPE ON EACH SIDE OF THE BEND. RESTRAIN BRANCH AT FITTING ONLY MINIMUM ATTACHED PIPE LENGTH, RUN SIDE OF TEE: 10.00 FEET.

RESTRAINED JOINT LENGTHS FOR REDUCERS (FT.)

PIPE SIZE	LARGE SIDE	SMALL SIDE
10" X 6"	44'	-

RESTRAINED JOINT LENGTH FOR TEES (FT.)

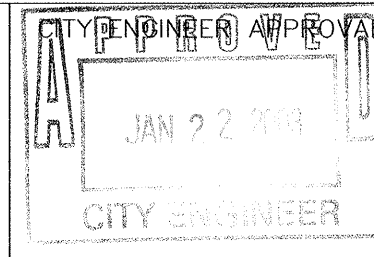
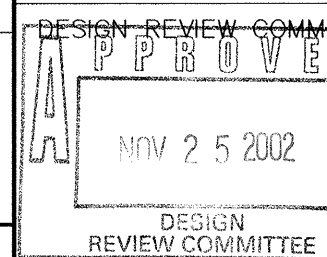
PIPE SIZE	RUN	BRANCH
8"x8"x8"	13'	3'
8"x8"x6"	7'	5'
6"x6"x8"	2'	10'
6"x6"x6"	10'	2'
6"x6"x4"	4'	7'

dmg MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539



**CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT**

TITLE: **RESERVE AT FOUR HILLS
SEATTLE SLEW AVE.
UTILITY IMPROVEMENTS**



LAST DESIGN UPDATE

CONTRACTOR **DMG** **DATE** **11/25/02**

WORK **SEWER** **DATE** **11/25/02**

DESIGNED BY **ACH** **DATE** **06/02**

DRAWN BY **ACH** **DATE** **06/02**

CHECKED BY **DMG** **DATE** **06/02**

REVISIONS

NO. **DATE** **REVISIONS**

1 **11/25/02** **DESIGN**

2 **11/25/02** **DESIGN**

3 **11/25/02** **DESIGN**

4 **11/25/02** **DESIGN**

5 **11/25/02** **DESIGN**

6 **11/25/02** **DESIGN**

7 **11/25/02** **DESIGN**

8 **11/25/02** **DESIGN**

9 **11/25/02** **DESIGN**

10 **11/25/02** **DESIGN**

11 **11/25/02** **DESIGN**

12 **11/25/02** **DESIGN**

13 **11/25/02** **DESIGN**

14 **11/25/02** **DESIGN**

15 **11/25/02** **DESIGN**

16 **11/25/02** **DESIGN**

17 **11/25/02** **DESIGN**

18 **11/25/02** **DESIGN**

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95 **11/25/02** **DESIGN**

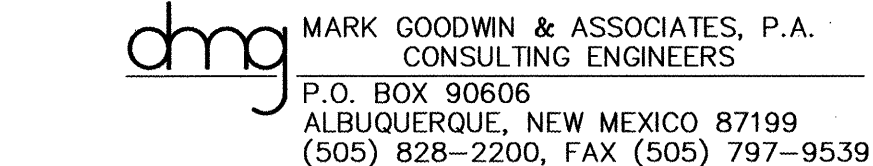
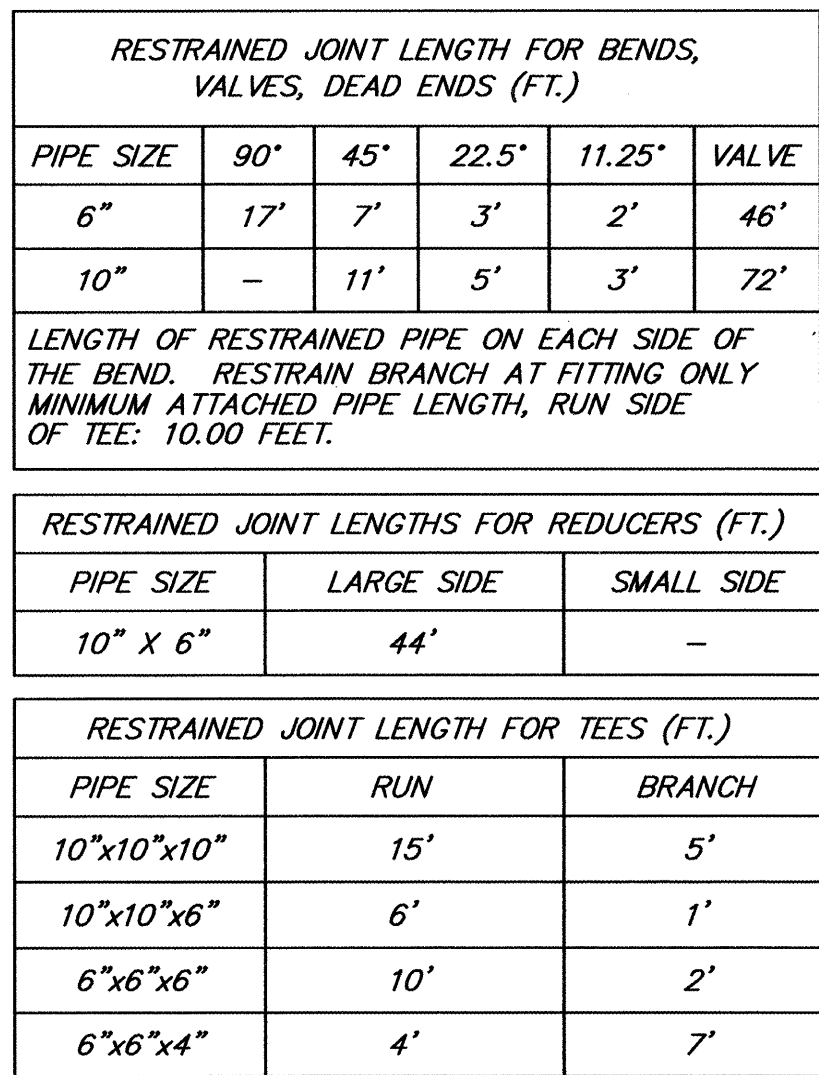
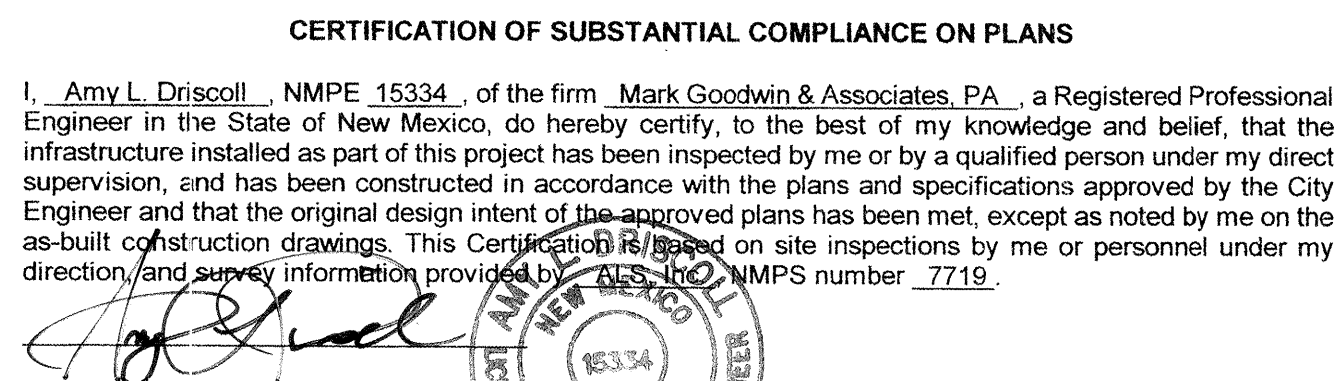
96 **11/25/02** **DESIGN**

97 **11/25/02** **DESIGN**

98 **11/25/02** **DESIGN**

99 **11/25/02** **DESIGN**

100 **11/25/02** **DESIGN**



TITLE: *RESERVE AT FOUR HILLS
SECRETARIAT AVE.
UTILITY IMPROVEMENTS*

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAY
APPROVE	APPROVE	
NOV 25 2002	JAN 22 2003	
DESIGN REVIEW COMMITTEE	CITY ENGINEER	LAST DESIGN UPDATE

CITY PROJECT NO.	ZONE MAP NO.	SHEET OF
696681	M-22	15 19

SANITARY SEWER SERVICES				
BLOCK	LOT	STATION AT PUE	INV. ELEV. AT PUE	LENGTH AT PUE
1	1	15+13.71	15.06'	36.32'
1	2	14+55.66	11.11'	33.00'
1	3	13+90.66	07.55'	33.00'
1	4	13+25.66	04.71'	33.00'
1	5	12+60.66	01.86'	33.00'
1	6	11+95.66	99.02'	33.00'
1	7	11+30.66	96.18'	33.00'
1	8	10+65.66	93.05'	33.00'
1	9	10+00.66	90.10	33.00'
2	4*	15+94.39	20.57'	34.76'

* INSTALL SAS SERVICE INTO MH PER STD. DWG. DWG 2118

NOTES

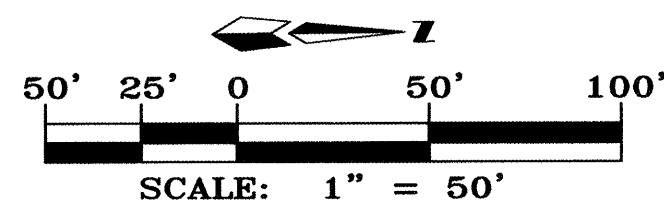
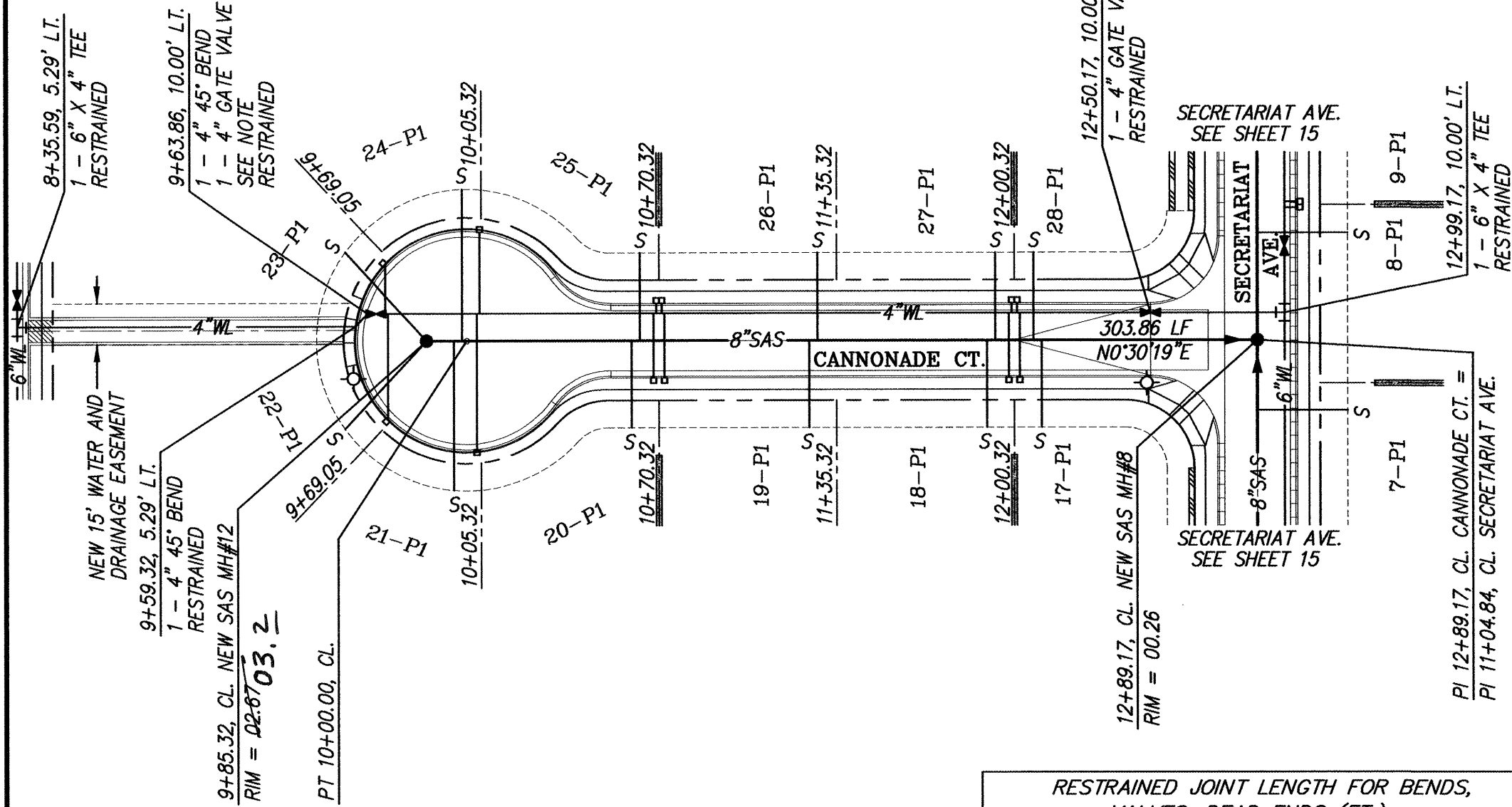
1. ALL STATIONING IS CENTERLINE STATIONING.
2. SEE GATE VALVE BOX DETAIL ON SHEET 17.

ENGINEER'S SEAL		SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION	
		FIELD NOTES		LOCATED AT THE INTERSECTION OF SAGEBRUSH TR. SE AND RATON AVE. SE, IN THE NE QUADRANT OF THE INTERSECTION.		CONTRACTOR	
		NO.	BY	DATE	WORK	TOTAL UTILITIES	
					STARTED BY	ADRIEN CSE	
					ACCEPTANCE BY	DATE	
					FIELD	DATE	
					VERIFICATION BY	DATE	
					DRAWINGS	DATE	
					CORRECTIONS	DATE	
					ELEVATION = 5597.53 (MSL 1929)	MICRO-FILM INFORMATION	
					RECORDED BY	DATE	
					NO.		

SCANNED BY
PLANNING

SANITARY SEWER SERVICES				
BLOCK	LOT	STATION AT PUE	INV. ELEV. AT PUE	LENGTH AT PUE
2	17	12+10.32	96.31'	32.00'
2	18	11+90.32	96.92'	32.00'
2	19	11+25.32	98.55'	32.00'
2	20	10+60.32	98.16'	32.00'
2	21	9+95.32	97.78'	54.80'
2	22	9+55.55	97.55'	43.99'
2	23	9+55.55	97.55'	43.99'
2	24	9+98.32	97.80'	54.97'
2	25	10+63.32	98.18'	32.00'
2	26	11+28.32	98.57'	32.00'
2	27	11+93.32	96.83'	32.00'
2	28	12+07.32	96.41'	32.00'

* INSTALL SAS SVC INTO MH PER STD DWG 2118



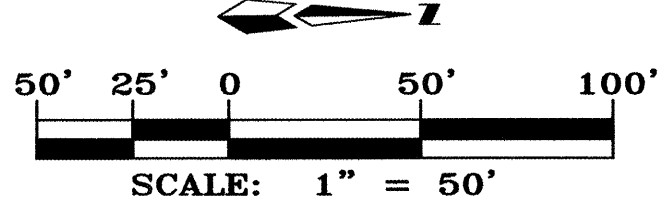
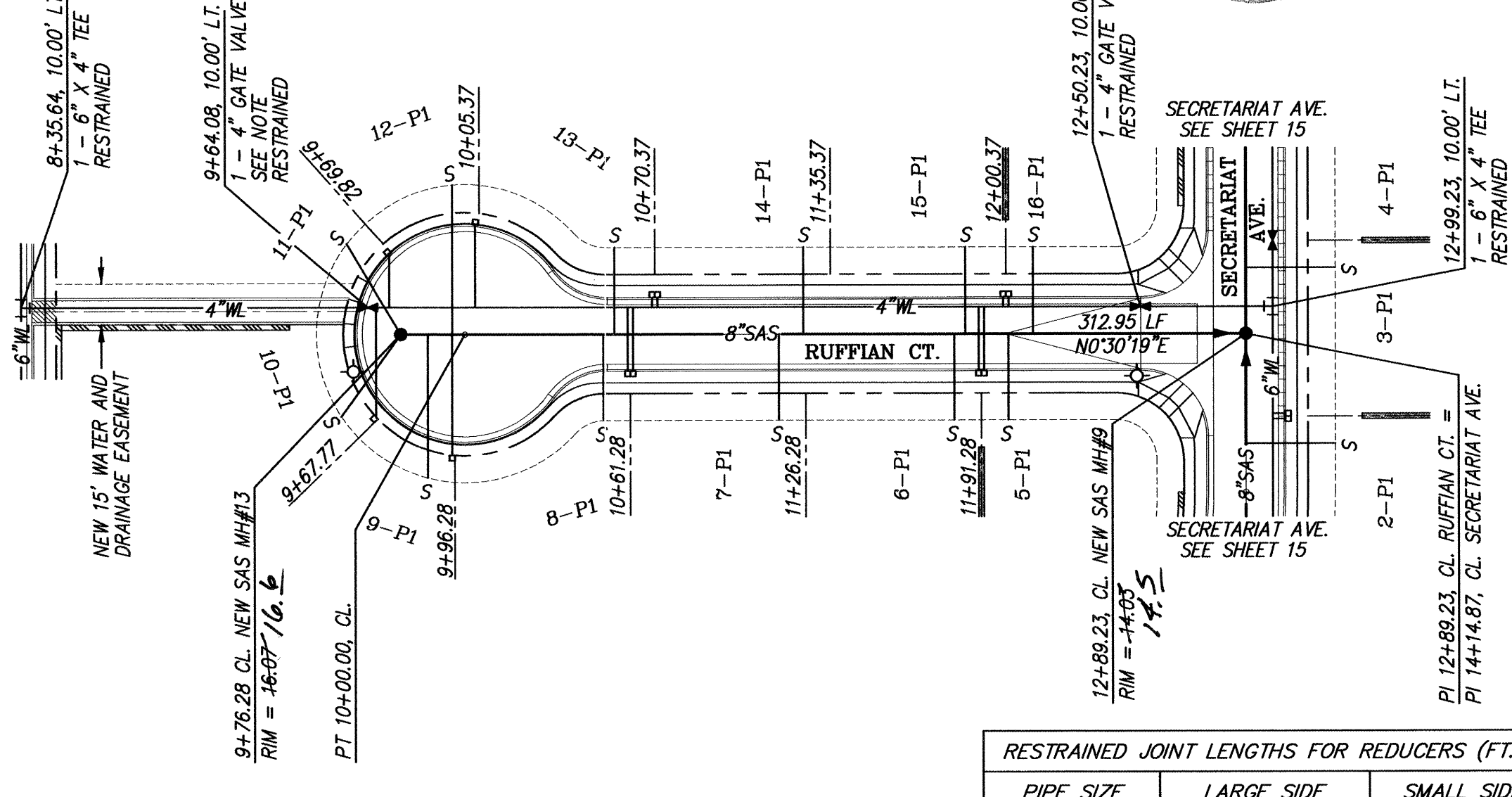
SCALE: 1" = 50'
CANNONADE CT.
STA. 10+00.00 TO STA. 12+89.17
SCALE: HORZ. 1" = 50'
VERT. 1" = 10'

RESTRAINED JOINT LENGTH FOR BENDS, VALVES, DEAD ENDS (FT.)					
PIPE SIZE	90°	45°	22.5°	11.25°	VALVE
4"	12'	5'	2'	1'	32'
6"	17'	7'	3'	2'	46'
10"	-	11'	5'	3'	72'

LENGTH OF RESTRAINED PIPE ON EACH SIDE OF THE BEND. RESTRAIN BRANCH AT FITTING ONLY MINIMUM ATTACHED PIPE LENGTH, RUN SIDE OF TEE: 10.00 FEET.

SANITARY SEWER SERVICES				
BLOCK	LOT	STATION AT PUE	INV. ELEV. AT PUE	LENGTH AT PUE
2	5	12+01.28	10.54'	32.00'
2	6	11+81.28	11.21'	32.00'
2	7	11+16.28	11.98'	32.00'
2	8	10+51.28	11.58'	32.00'
2	9	9+86.28	11.18'	53.26'
2	10	9+54.29	10.98'	37.67'
2	11	9+56.31	10.99'	38.92'
2	12	9+95.37	11.24'	54.80'
2	13	10+60.37	11.64'	32.00'
2	14	11+25.37	12.03'	32.00'
2	15	11+90.37	10.91'	32.00'
2	16	12+10.37	10.24'	32.00'

* INSTALL SAS SVC INTO MH PER STD DWG 2118



SCALE: 1" = 50'
AFFIRMED CT.
STA. 10+00.00 TO STA. 12+89.23
SCALE: HORZ. 1" = 50'
VERT. 1" = 10'

RESTRAINED JOINT LENGTHS FOR REDUCERS (FT.)		
PIPE SIZE	LARGE SIDE	SMALL SIDE
10" X 6"	44'	-

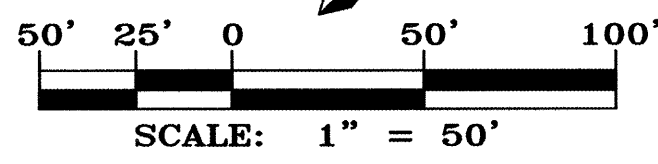
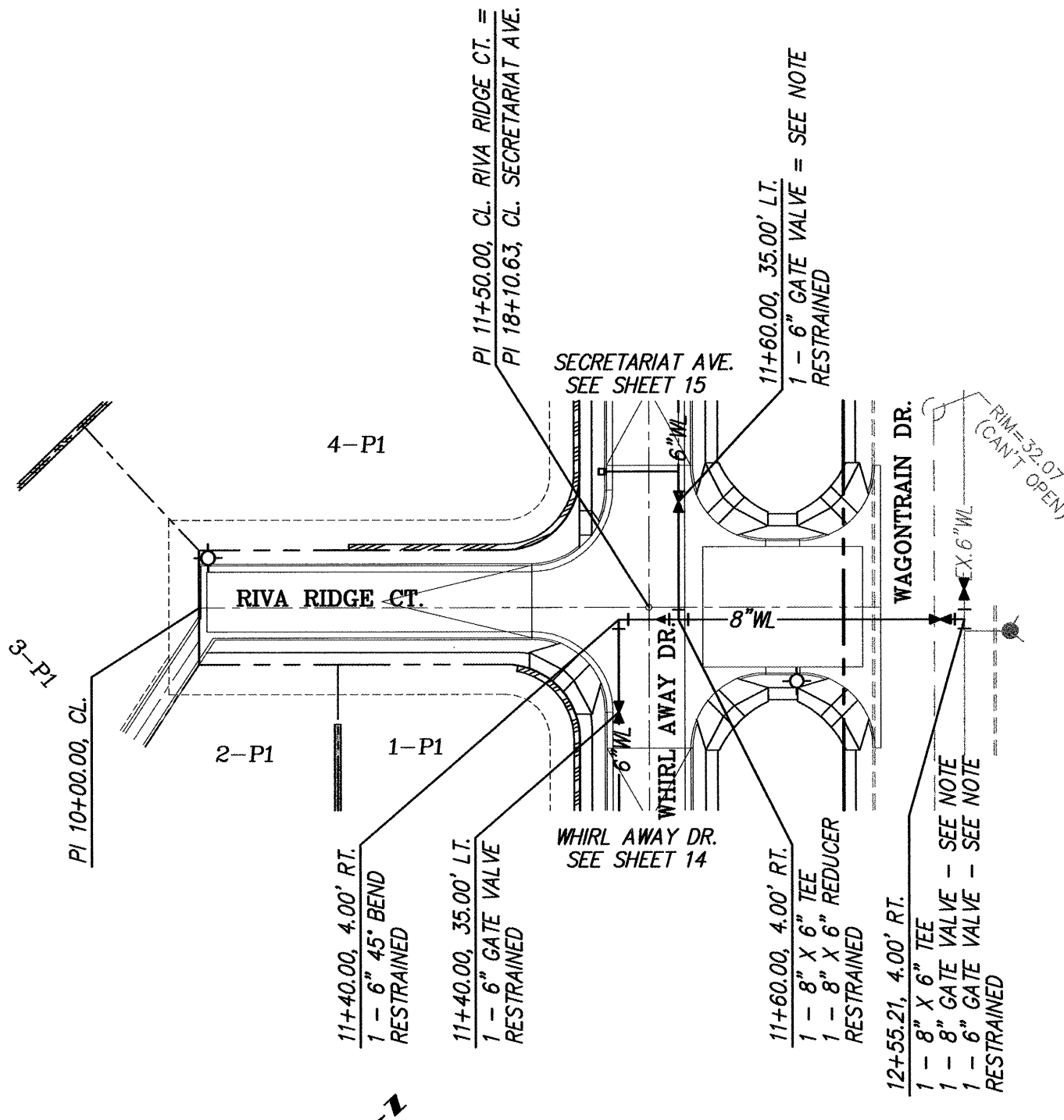
RESTRAINED JOINT LENGTH FOR TEES (FT.)		
PIPE SIZE	RUN	BRANCH
10"x10"x10"	15'	5'
10"x10"x6"	6'	1'
8"x8"x6"	7'	5'
6"x6"x6"	10'	2'
6"x6"x4"	4'	7'

CERTIFICATION OF SUBSTANTIAL COMPLIANCE ON PLANS
I, Amy L. Driscoll, NMPE 15334, of the firm Mark Goodwin & Associates, P.A., a Registered Professional Engineer in the State of New Mexico, do hereby certify, to the best of my knowledge and belief, that the infrastructure installed as part of this project has been inspected by me or by a qualified person under my direct supervision, and has been constructed in accordance with the plans and specifications approved by the City Engineer and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings. This Certification is based on site inspections by me or personnel under my direction, and survey information provided by A.S. Inc. NMPS number 1719/1401
CS1

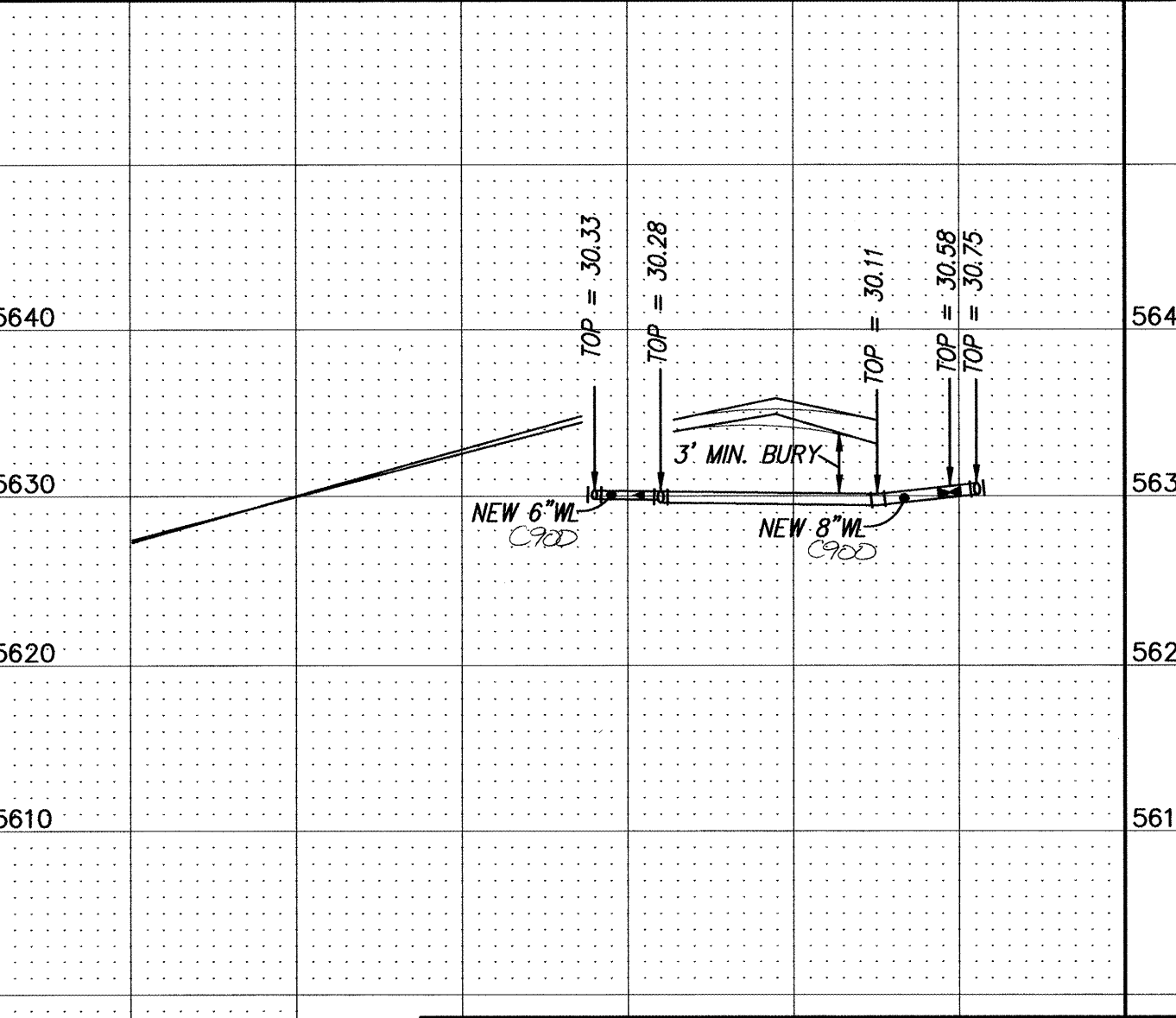
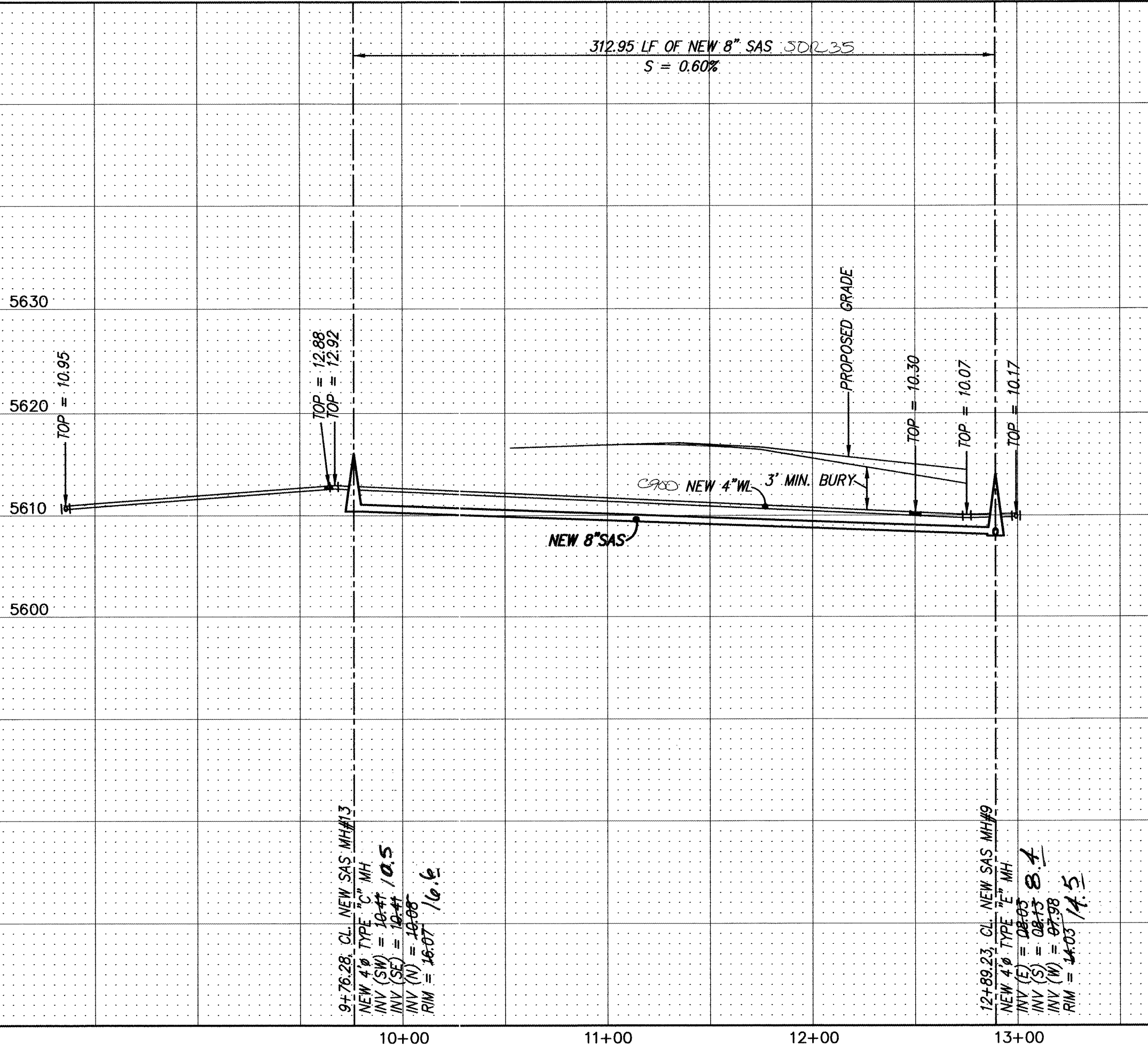
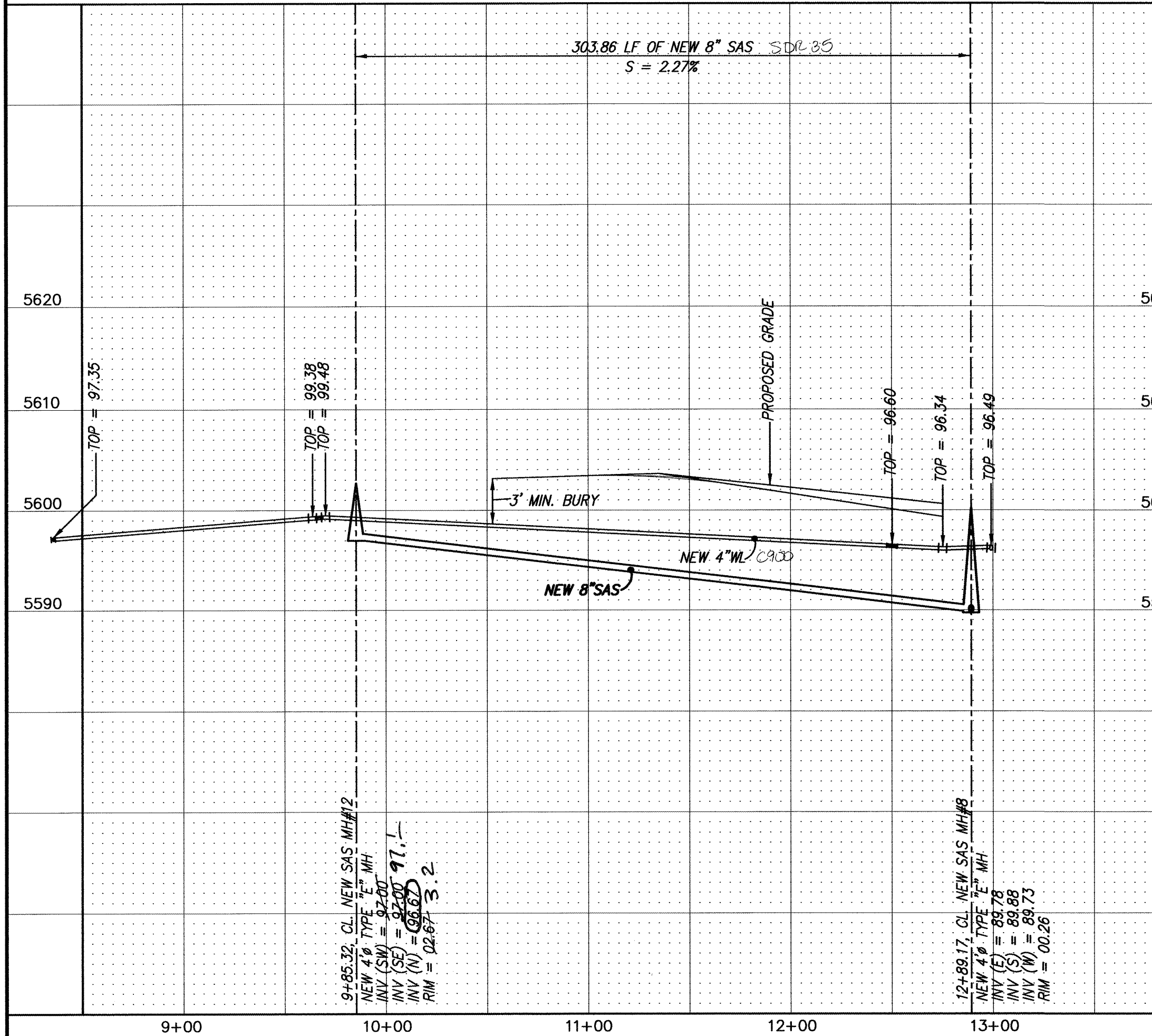


NOTES

- ALL STATIONING IS CENTERLINE STATIONING.
- SEE GATE VALVE BOX DETAIL ON SHEET 17.



SCALE: 1" = 50'
RIVA RIDGE CT.
STA. 10+00.00 TO STA. 12+41.03
SCALE: HORZ. 1" = 50'
VERT. 1" = 10'



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CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200, FAX (505) 797-9539

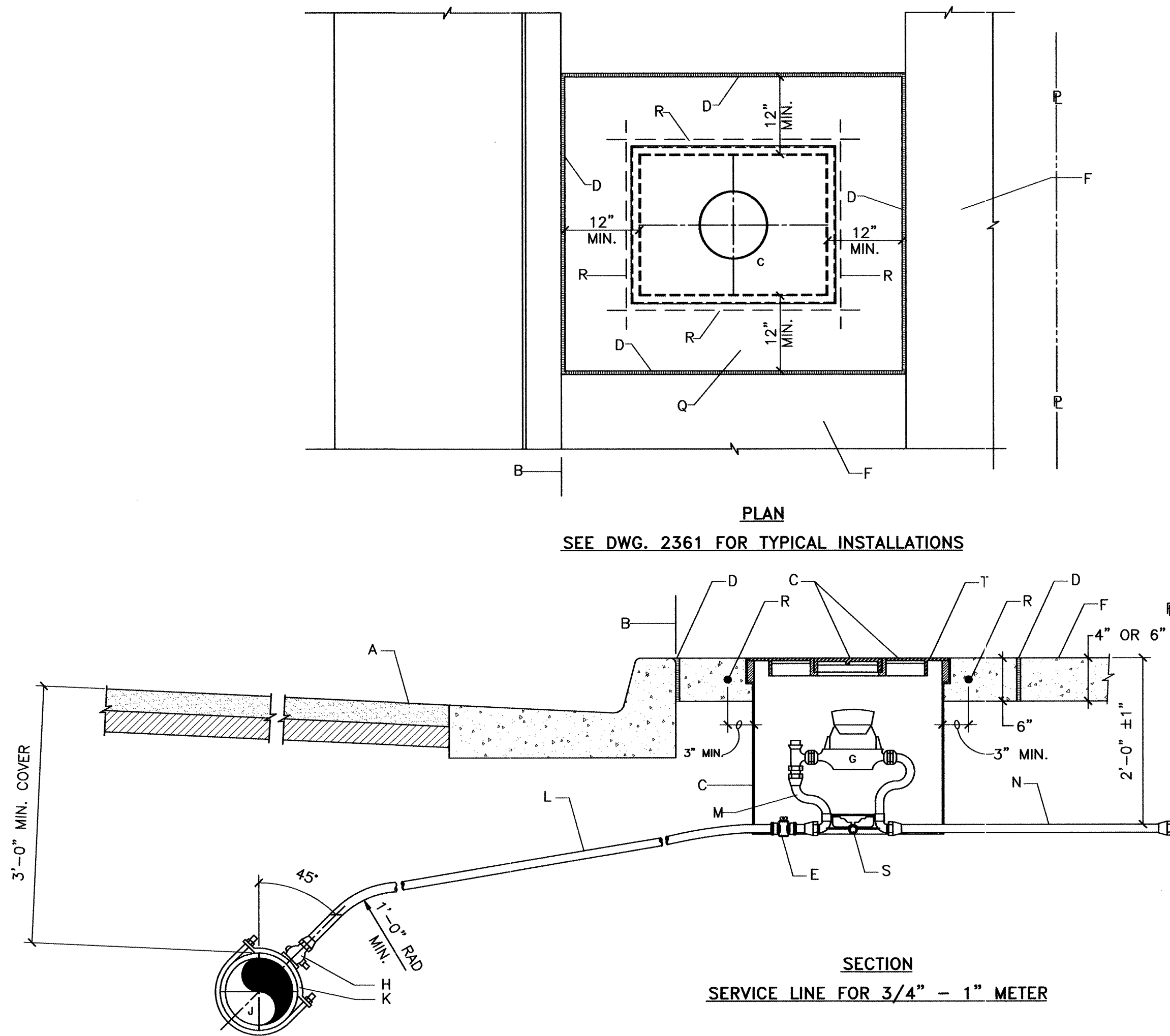
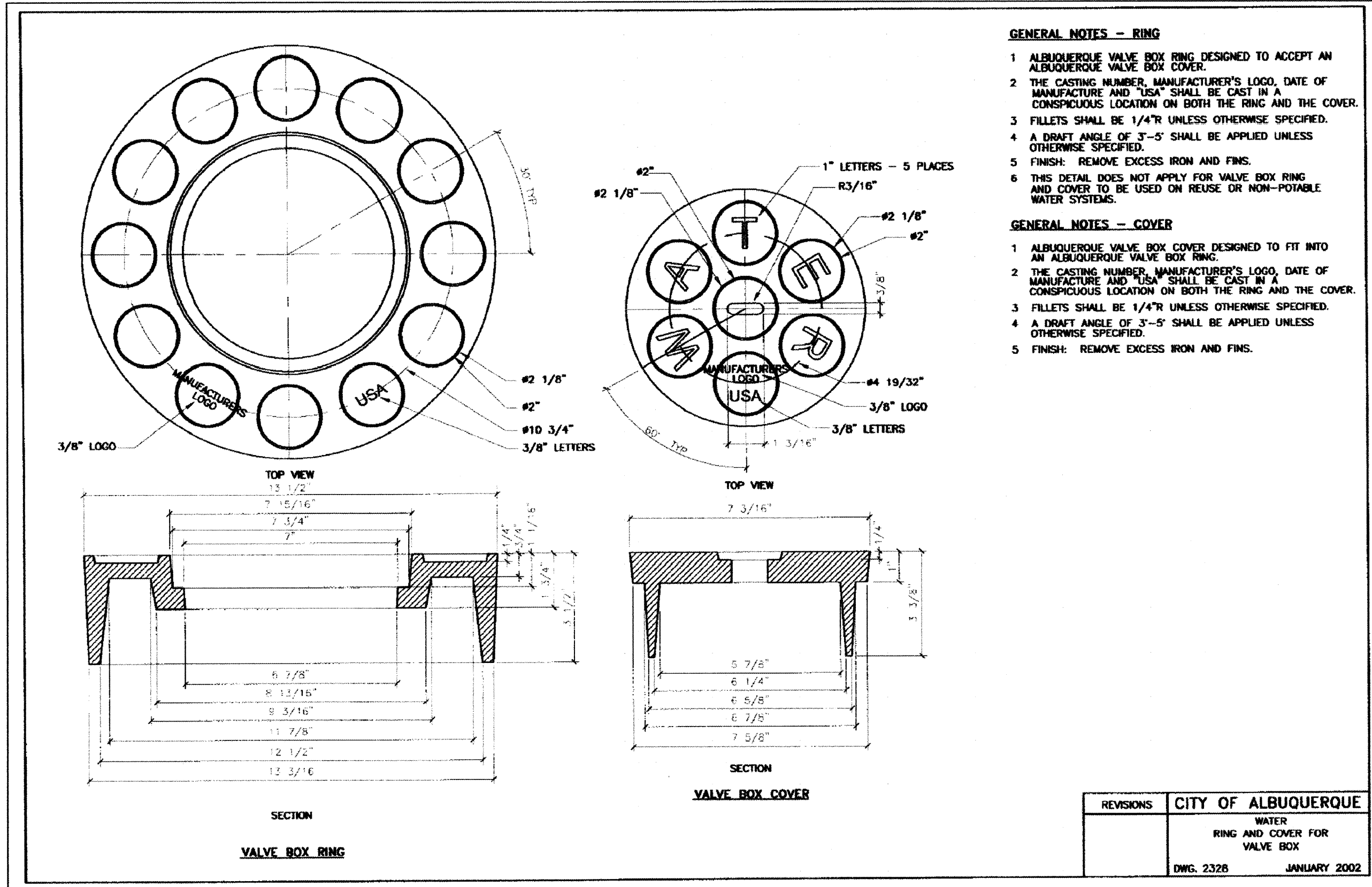
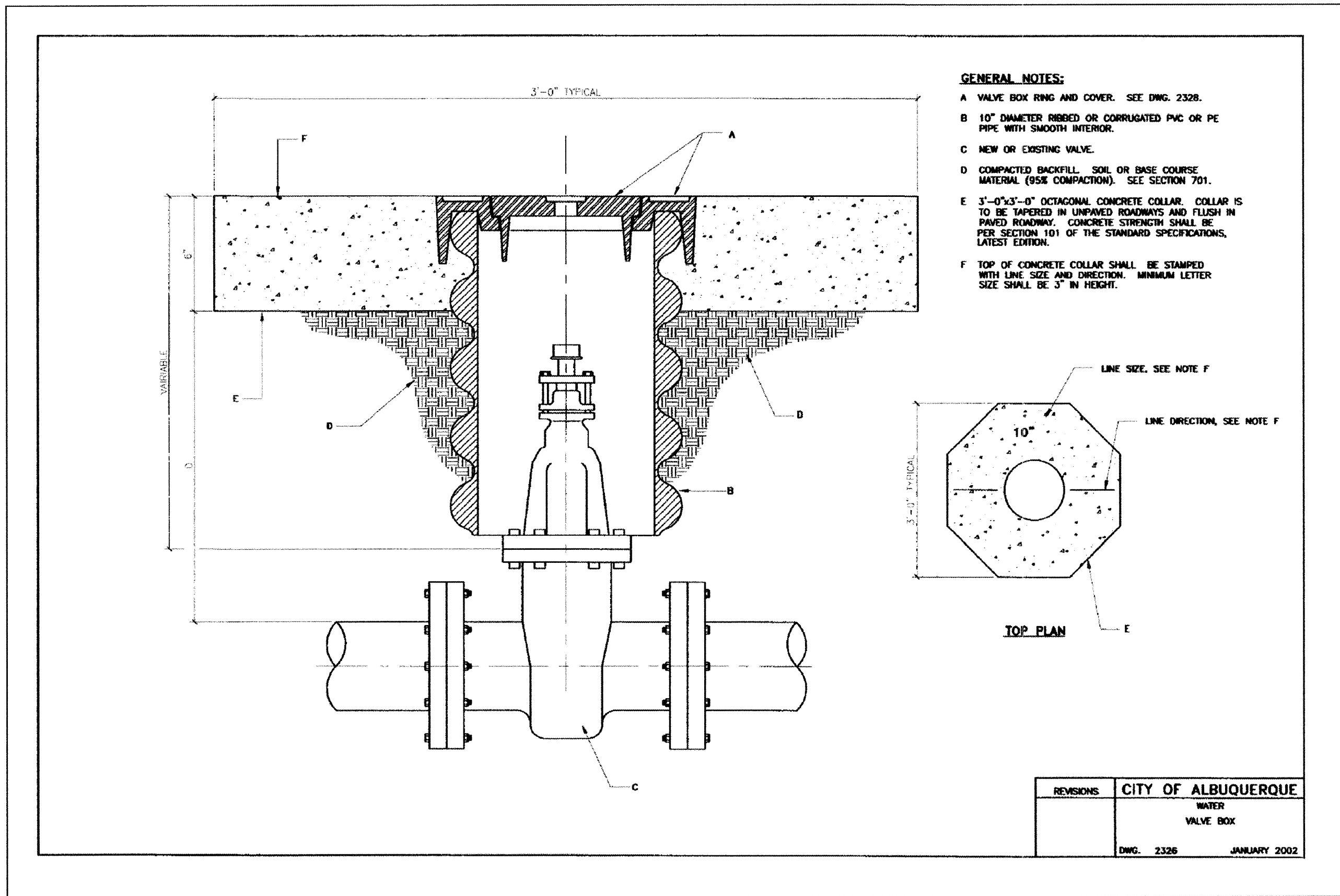
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE: RESERVE AT FOUR HILLS
CANNONADE CT., RUFFIAN CT. & RIVA RIDGE CT.
UTILITY IMPROVEMENTS

DESIGN REVIEW COMMITTEE APPROVED NOV 25 2002
CITY ENGINEER APPROVAL JAN 22 2003
DESIGN REVIEW COMMITTEE CITY ENGINEER

CITY PROJECT NO. 696681 ZONE MAP NO. M-22 SHEET 16 OF 19

AS BUILT INFORMATION				BENCH MARKS				SURVEY INFORMATION				ENGINEER'S SEAL			
CONTRACTOR	DATE	TIME	LOCATION	NO.	BY	DATE	LOCATED AT THE INTERSECTION OF SAGEBRUSH TR. SE AND RATON AVE. SE, IN THE NE QUADRANT OF THE INTERSECTION.	NO.	BY	DATE	LOCATED AT THE INTERSECTION OF SAGEBRUSH TR. SE AND RATON AVE. SE, IN THE NE QUADRANT OF THE INTERSECTION.	NO.	BY	DATE	LOCATED AT THE INTERSECTION OF SAGEBRUSH TR. SE AND RATON AVE. SE, IN THE NE QUADRANT OF THE INTERSECTION.
WORK	DATE	TIME	LOCATION	NO.	BY	DATE	LOCATED AT THE INTERSECTION OF SAGEBRUSH TR. SE AND RATON AVE. SE, IN THE NE QUADRANT OF THE INTERSECTION.	NO.	BY	DATE	LOCATED AT THE INTERSECTION OF SAGEBRUSH TR. SE AND RATON AVE. SE, IN THE NE QUADRANT OF THE INTERSECTION.	NO.	BY	DATE	LOCATED AT THE INTERSECTION OF SAGEBRUSH TR. SE AND RATON AVE. SE, IN THE NE QUADRANT OF THE INTERSECTION.
ACCEPTANCE BY	DATE	TIME	LOCATION	NO.	BY	DATE	LOCATED AT THE INTERSECTION OF SAGEBRUSH TR. SE AND RATON AVE. SE, IN THE NE QUADRANT OF THE INTERSECTION.	NO.	BY	DATE	LOCATED AT THE INTERSECTION OF SAGEBRUSH TR. SE AND RATON AVE. SE, IN THE NE QUADRANT OF THE INTERSECTION.	NO.	BY	DATE	LOCATED AT THE INTERSECTION OF SAGEBRUSH TR. SE AND RATON AVE. SE, IN THE NE QUADRANT OF THE INTERSECTION.
FIELD CHECK BY	DATE	TIME	LOCATION	NO.	BY	DATE	LOCATED AT THE INTERSECTION OF SAGEBRUSH TR. SE AND RATON AVE. SE, IN THE NE QUADRANT OF THE INTERSECTION.	NO.	BY	DATE	LOCATED AT THE INTERSECTION OF SAGEBRUSH TR. SE AND RATON AVE. SE, IN THE NE QUADRANT OF THE INTERSECTION.	NO.	BY	DATE	LOCATED AT THE INTERSECTION OF SAGEBRUSH TR. SE AND RATON AVE. SE, IN THE NE QUADRANT OF THE INTERSECTION.
DRAWINGS	DATE	TIME	LOCATION	NO.	BY	DATE	LOCATED AT THE INTERSECTION OF SAGEBRUSH TR. SE AND RATON AVE. SE, IN THE NE QUADRANT OF THE INTERSECTION.	NO.	BY	DATE	LOCATED AT THE INTERSECTION OF SAGEBRUSH TR. SE AND RATON AVE. SE, IN THE NE QUADRANT OF THE INTERSECTION.	NO.	BY	DATE	LOCATED AT THE INTERSECTION OF SAGEBRUSH TR. SE AND RATON AVE. SE, IN THE NE QUADRANT OF THE INTERSECTION.
CORRECTED BY	DATE	TIME	LOCATION	NO.	BY	DATE	LOCATED AT THE INTERSECTION OF SAGEBRUSH TR. SE AND RATON AVE. SE, IN THE NE QUADRANT OF THE INTERSECTION.	NO.	BY	DATE	LOCATED AT THE INTERSECTION OF SAGEBRUSH TR. SE AND RATON AVE. SE, IN THE NE QUADRANT OF THE INTERSECTION.	NO.	BY	DATE	LOCATED AT THE INTERSECTION OF SAGEBRUSH TR. SE AND RATON AVE. SE, IN THE NE QUADRANT OF THE INTERSECTION.
RECORDED BY	DATE	TIME	LOCATION	NO.	BY	DATE	LOCATED AT THE INTERSECTION OF SAGEBRUSH TR. SE AND RATON AVE. SE, IN THE NE QUADRANT OF THE INTERSECTION.	NO.	BY	DATE	LOCATED AT THE INTERSECTION OF SAGEBRUSH TR. SE AND RATON AVE. SE, IN THE NE QUADRANT OF THE INTERSECTION.	NO.	BY	DATE	LOCATED AT THE INTERSECTION OF SAGEBRUSH TR. SE AND RATON AVE. SE, IN THE NE QUADRANT OF THE INTERSECTION.
NO.	DATE	TIME	LOCATION	NO.	BY	DATE	LOCATED AT THE INTERSECTION OF SAGEBRUSH TR. SE AND RATON AVE. SE, IN THE NE QUADRANT OF THE INTERSECTION.	NO.	BY	DATE	LOCATED AT THE INTERSECTION OF SAGEBRUSH TR. SE AND RATON AVE. SE, IN THE NE QUADRANT OF THE INTERSECTION.	NO.	BY	DATE	LOCATED AT THE INTERSECTION OF SAGEBRUSH TR. SE AND RATON AVE. SE, IN THE NE QUADRANT OF THE INTERSECTION.



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**CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT**

**TITLE: RESERVE AT FOUR HILLS
WATER DETAILS**

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.
C.O.A. STANDARD	C.O.A. STANDARD			
CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF	
696681	M-22	17	19	

SURVEY INFORMATION		BENCH MARKS		AS-BUILT INFORMATION	
NO.	FIELD NOTES	NO.	DATE	CONTRACTOR	DATE
	BY		DATE	STANDARD UTILITIES	DATE
			INTERSECTION	STANDARD UTILITIES	DATE
			ACS MONUMENT "10-M22" 1975	INSPECTOR'S	DATE
			ELEVATION = 5597.53 (MSLD 1929)	FIELD	DATE
				VERIFICATION BY	DATE
				AD-DET-107	DATE
				CORRECTED BY	DATE
				AD-DET-107	DATE
				MICRO-FILM INFORMATION	DATE
				RECORDED BY	DATE
				NO.	DATE

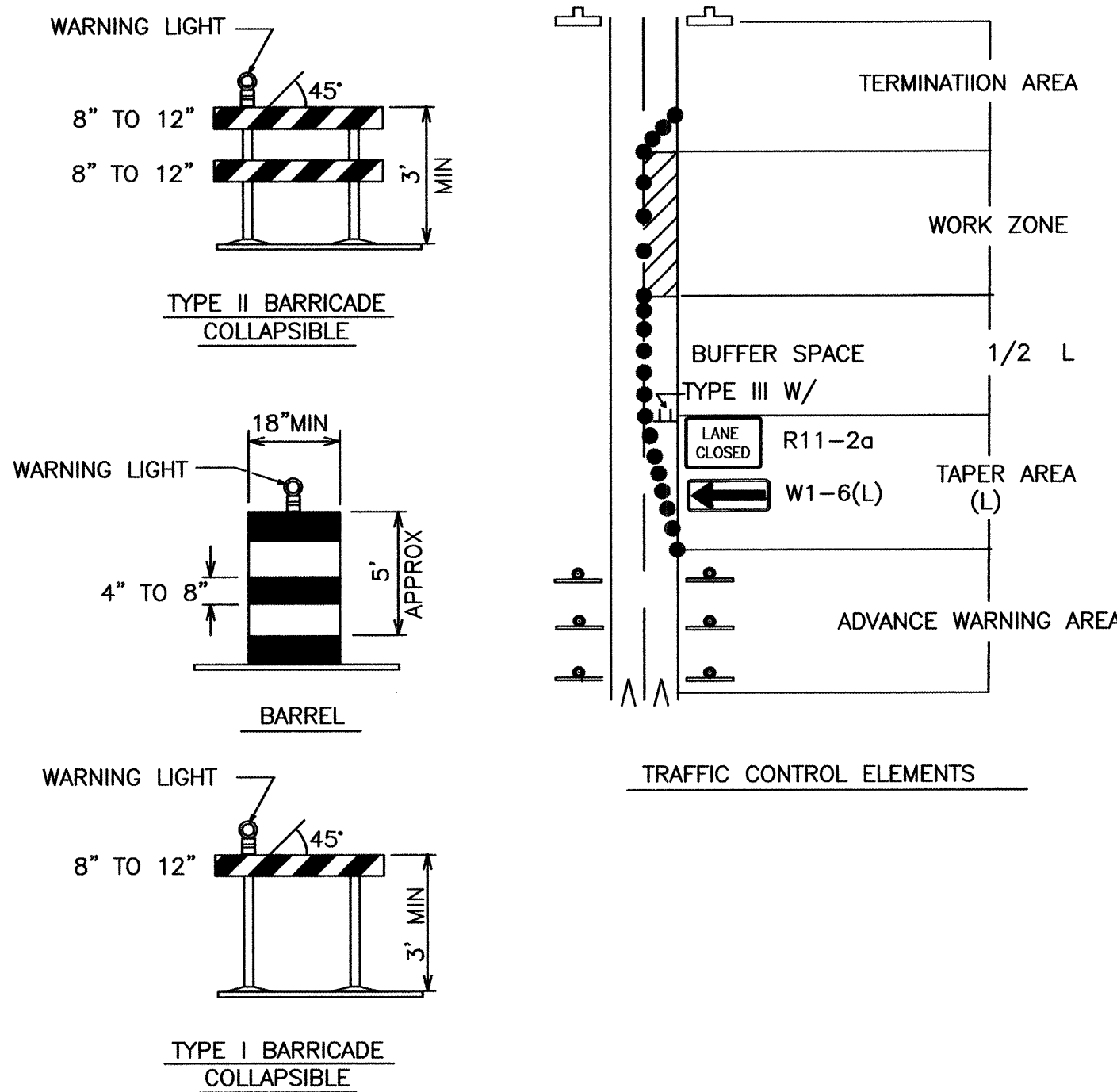
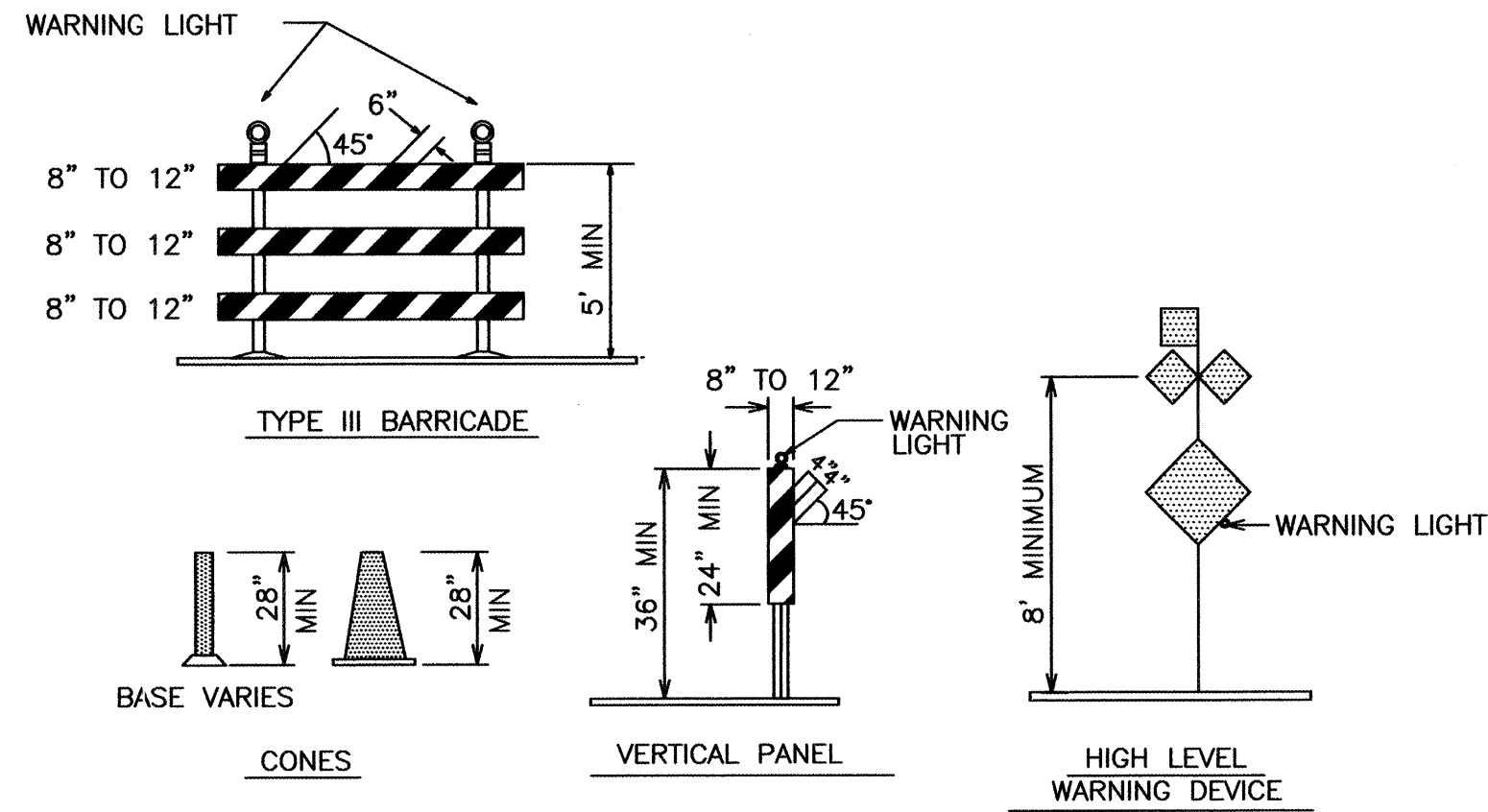
C.O.A. STANDARD

NO.	DATE	REMARKS	REVISIONS	DESIGN	DATE
					05/02
					05/02
					05/02

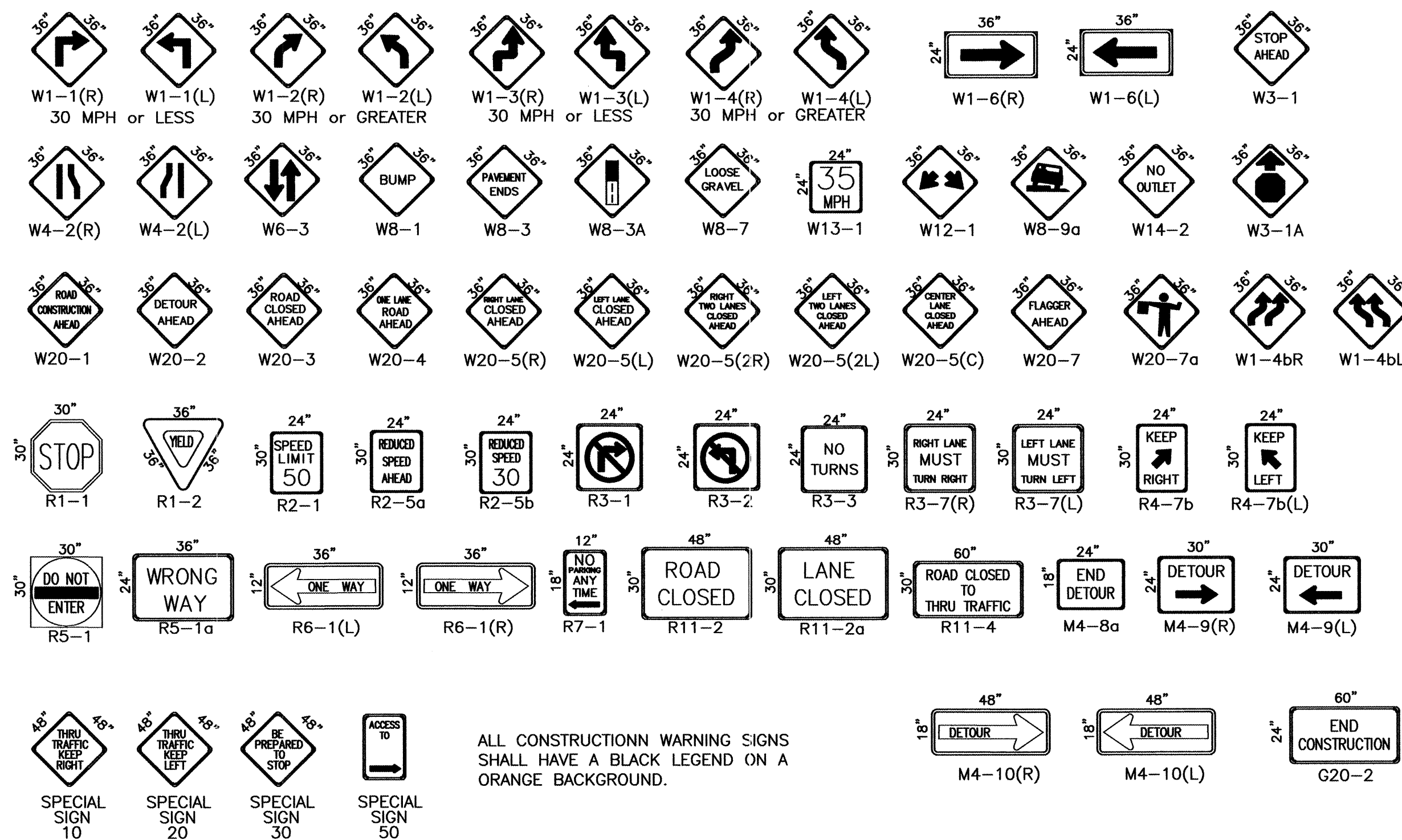
CONSTRUCTION TRAFFIC CONTROL GENERAL NOTES

1. CONTRACTOR MUST OBTAIN FROM CONSTRUCTION COORDINATION, AN EXCAVATION/BARRICADING PERMIT BEFORE ENGAGING IN ANY CONSTRUCTION, MAINTENANCE OR REPAIR WORK IN ANY OF THE CITY OF ALBUQUERQUE'S RIGHTS-OF-WAY. EMERGENCY WORK THAT WOULD PRESERVE LIFE OR PROPERTY IS EXCLUDED WITHIN THE UNDERSTANDING, THAT A PERMIT SHALL BE OBTAINED WITHIN 24 TO 48 HOURS.
2. CONTRACTOR SHALL AT THE TIME OF PERMIT REQUEST, SUBMIT FOR APPROVAL BY CONSTRUCTION COORDINATION, A TRAFFIC CONTROL PLAN DETAILING ALL EXISTING TOPOGRAPHY SUCH AS LANE WIDTHS, DRIVEWAYS, AND BUSINESS/RESIDENTIAL ACCESSES. THE TRAFFIC CONTROL PLAN SHALL INCLUDE ALL PHASES OF WORK AND SCHEDULES INVOLVED IN THE CONSTRUCTION PROJECT. ANY SEPARATE PHASES OF A CONSTRUCTION PROJECT SHALL BE GIVEN AN INDIVIDUAL PERMIT EACH. BLANKET PERMITS WILL NOT BE ISSUED.
3. THESE TYPICAL TRAFFIC CONTROL PLANS DO NOT REFLECT THE EXISTING TOPOGRAPHY SUCH AS DRIVEWAYS, LANE WIDTHS, AND BUSINESS/RESIDENTIAL ACCESSES. EVERY LOCATION THAT REQUIRES CONSTRUCTION TRAFFIC CONTROL SHALL HAVE A DETAILED TRAFFIC CONTROL PLAN SHOWING ALL EXISTING TOPOGRAPHY.
4. CONSTRUCTION SHALL NOT BEGIN UNLESS A TRAFFIC CONTROL PLAN HAS BEEN APPROVED AND VERIFIED BY CONSTRUCTION COORDINATION.
5. CONSTRUCTION COORDINATION SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY TRAFFIC CONTROL CHANGES NEEDED BY CONTRACTOR, THAT WERE NOT PREVIOUSLY APPROVED. THESE TRAFFIC CONTROL CHANGES SHALL BE REQUESTED IN WRITING ACCOMPANIED WITH A TRAFFIC CONTROL PLAN REFLECTING SUCH CHANGES.
6. ALL CONSTRUCTION TRAFFIC CONTROL DEVICES SHALL COMPLY TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL, SERVICE AND MAINTAIN ALL TRAFFIC CONTROL DEVICES. TRAFFIC CONTROL DEVICES SHALL NOT BE REMOVED OR ALTERED IN ANY WAY WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION, PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.
7. THE CONSTRUCTION TRAFFIC CONTROL INITIAL SET-UP SHALL BE BY AN AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) CERTIFIED WORKSITE TRAFFIC SUPERVISOR. THE MAINTENANCE AND SERVICING SHALL ALSO BE DONE BY AN ATSSA CERTIFIED WORKSITE TRAFFIC SUPERVISOR OR EQUIVALENT.
8. CONTRACTOR IS RESPONSIBLE TO MAINTAIN AND SERVICE ALL TRAFFIC CONTROL DEVICES 24 HOURS A DAY, 7 DAYS A WEEK THROUGHOUT LENGTH OF PROJECT. CONTRACTOR IS RESPONSIBLE THAT ALL TRAFFIC CONTROL DEVICES COMPLY WITH THE MUTCD, LATEST EDITION.
9. ALL ADVANCE WARNING SIGNS SHALL BE DOUBLE INDICATED WHENEVER THERE ARE MULTI-LANE TRAFFIC IN ANY ONE GIVEN DIRECTION AND THERE IS SUFFICIENT MEDIAN SPACE.
10. ALL BARRICADES IN ALL TAPERS AND TANGENTS SHALL BE PLACED APART, A DISTANCE MEASURED IN FEET, EQUAL TO THAT OF THE POSTED SPEED LIMIT. NO EXCEPTIONS UNLESS APPROVED BY CONSTRUCTION COORDINATION PER MUTCD SECTION 6A-4.
11. ALL WORK IN ARTERIAL ROADWAYS SHALL BE ON A CONTINUOUS 24 HOUR PER DAY BASIS UNTIL COMPLETED.
12. CONTRACTOR IS RESPONSIBLE TO PROVIDE CONSTRUCTION COORDINATION, A WEEKLY LOG OF DAILY INSPECTIONS OF BARRICADE AND MAINTENANCE SCHEDULES ON PROJECTS THAT ARE OVER ONE WEEK DURATION.
13. EQUIPMENT OR MATERIALS SHALL NOT BE STORED WITHIN 15 FEET OF A TRAVELED TRAFFIC LANE DURING NON-WORKING HOURS WITHOUT THE APPROVAL OF CONSTRUCTION COORDINATION.
14. CONTRACTOR SHALL PROVIDE AND MAINTAIN A SAFE AND ADEQUATE MEANS OF CHANNELIZING PEDESTRIAN TRAFFIC AROUND AND THROUGH THE CONSTRUCTION AREA.
15. CONTRACTOR IS RESPONSIBLE FOR OBLITERATION OF ANY CONFLICTING STRIPING AND RESPONSIBLE FOR ALL TEMPORARY STRIPING.
16. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL FACILITIES, BUSINESSES AND/OR RESIDENTS AT ALL TIMES.
17. CONTRACTOR SHALL PROVIDE ACCESS SIGNS FOR BUSINESSES LOCATED WITHIN THE CONSTRUCTION AREA UNDER THE SUPERVISION OF CONSTRUCTION COORDINATION. EACH ACCESS SIGN SHALL HAVE 5 INCH, WHITE OPAQUE LETTERING ON BLUE REFLECTORIZED BACKGROUND. ACCESS SIGNS SHALL BE CONSIDERED INCIDENTAL TO THE BID AND NOT PART OF THE CONTRACT UNLESS OTHERWISE STATED. NO MORE THAN 3 BUSINESSES SHALL BE LISTED ON A ACCESS SIGN. SHOPPING CENTERS AND MALLS SHALL BE LISTED AS SUCH.
18. ALL ADVANCE WARNING SIGNS SHALL MEET THE MINIMUM REFLECTIVE INTENSITY REQUIREMENTS SET FORTH BY THE CITY OF ALBUQUERQUE. CONSTRUCTION COORDINATION SHALL DETERMINE ALL REQUIREMENTS AND APPROVE OR DISAPPROVE ANY ADVANCE WARNING SIGN PER SECTION 6A-4 OF THE MUTCD, LATEST EDITION.
19. 48 HOURS PRIOR TO OCCUPYING OR CLOSING OF A RIGHT-OF-WAY, CONTRACTOR SHALL NOTIFY: POLICE, FIRE DEPARTMENT, SCHOOLS, HOSPITALS, TRANSIT AUTHORITY, BUSINESSES AND/OR RESIDENTS THAT WILL BE AFFECTED BY THE CONSTRUCTION.
20. ANY FIELD ADJUSTMENTS SHALL BE APPROVED BY CONSTRUCTION COORDINATION.

21. EXCAVATIONS SHALL BE PLATED, TEMPORARILY PATCHED OR RESURFACED PRIOR TO OPENING OF TRAFFIC. A MINIMUM OF 11 FEET SHALL BE PROVIDED FOR TRAFFIC IN ANY GIVEN DIRECTION. CONTRACTOR IS RESPONSIBLE FOR ANY WORK INVOLVED IN SATISFYING THESE REQUIREMENTS.
22. CONTRACTOR SHALL AT ALL TIMES COMPLY WITH THE FOLLOWING:
 1. STANDARDS AND REQUIREMENTS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
 2. THE CITY OF ALBUQUERQUE TRAFFIC CODE, LATEST EDITION.
23. SECTION 19 OF THE CITY OF ALBUQUERQUE'S STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION, AS WELL AS OTHER SECTIONS.
23. FAILURE TO COMPLY WITH ANY OF THE ABOVE MENTIONED, WILL BE ADEQUATE CAUSE TO CEASE ALL WORK ON ANY CONSTRUCTION PROJECT. WORK WILL NOT RESUME UNTIL ALL REQUIREMENTS ARE ADDRESSED AND APPROVED BY CONSTRUCTION COORDINATION.
24. ALL TRAFFIC CONTROL DEVICES SHALL BE KEPT IN NEW--CLEAN CONDITION, WASHING OF EQUIPMENT IS INCIDENTAL TO IT'S PLACEMENT AND MAINTENANCE.
25. TRAFFIC CONTROL STANDARDS APPLY ONLY WHERE THE CONSTRUCTION TRAFFIC CONTROL PLANS ARE NOT SPECIFIC.



SIGN FACE DETAILS



ALL CONSTRUCTION WARNING SIGNS SHALL HAVE A BLACK LEGEND ON A ORANGE BACKGROUND.

LEGEND

- | | |
|---|--|
|  | WORK AREA |
| • | BARRICADE — TYPE I, TYPE II, OR BARREL |
| ⊥ | BARRICADE — TYPE III |
| × | VERTICAL PANEL |
| ⚠ | WARNING SIGN |
| D | DISTANCE BETWEEN SIGNS — A DISTANCE MEASURED IN FEET EQUAL TO A VALUE OF TEN TIMES THE SPEED LIMIT OF THE STREET |
| S | FLAGMAN POSITION |
| N | SPACING BETWEEN BARRICADES — A DISTANCE MEASURED IN FEET EQUAL TO THE STREET LIMIT OF THE STREET |
| L | TAPER LENGTH — SEE CHART BELOW |
- THE TANGENT LENGTH IS EQUAL TO THE TAPER LENGTH FOR A GIVEN STREET.

TAPER REQUIREMENT

SPEED LIMIT (MPH)	TAPER LENGTH(L) (FEET)			MINIMUM NUMBER OF DEVICES PER TAPER	MAXIMUM DEVICE SPACING IN FEET	
	10' LANE	11' LANE	12' LANE		ALONG TAPER	AFTER TAPER
20	70	75	80	5	20	20
25	105	115	125	6	25	25
30	150	165	180	7	30	30
35	205	225	245	8	35	35
40	270	295	320	9	40	40
45	450	495	540	13	45	45
50	500	550	600	13	50	50
55	550	605	660	13	55	55

RECOMMENDED SIGN SPACING(D) FOR ADVANCE WARNING SIGN SERIES

SPEED MILES PER HOUR	MINIMUM BETWEEN SIGNS	DISTANCE IN FEET FROM LAST SIGN TO TAPER
0-20	10 X SPEED LIMIT	10 X SPEED LIMIT
25-30	10 X SPEED LIMIT	10 X SPEED LIMIT
30-35	10 X SPEED LIMIT	10 X SPEED LIMIT
40-45	10 X SPEED LIMIT	10 X SPEED LIMIT
50-60	10 X SPEED LIMIT	10 X SPEED LIMIT

TAPER CRITERIA

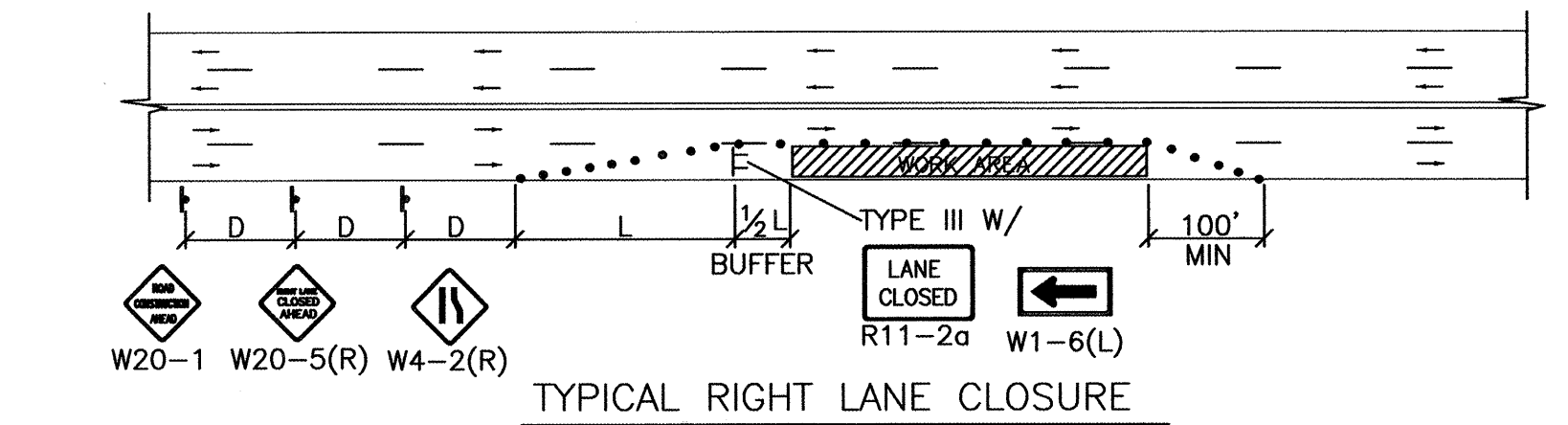
TYPE OF TAPER	TAPER LENGTH
UPSTREAM TAPER:	
MERGING TAPER	L MINIMUM
SHIFTING TAPER	1/2 L MINIMUM
SHOULDER TAPER	1/2 L MINIMUM
TWO-WAY TRAFFIC TAPER	100 FEET MAXIMUM
DOWNSTREAM TAPERS	100 FEET PER LANE

TAPER LENGTH COMPUTATION

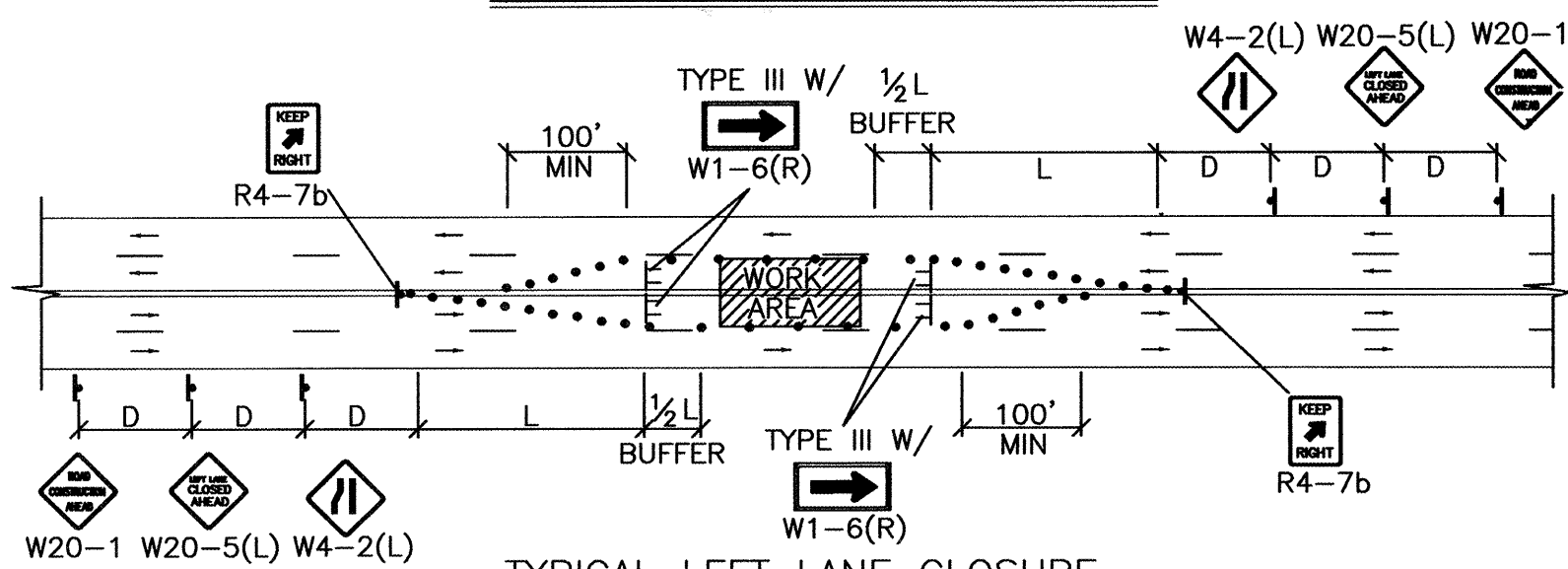
SPEED LIMIT	
40 MPH OR LESS	$L = \frac{WS^2}{60}$
40 MPH OR GREATER	$L = W \times S$

L = TAPER LENGTH
W = WIDTH OF OFFSET IN FEET
S = POSTED SPEED OR OFF-PEAK
85-PERCENTILE SPEED IN MPH

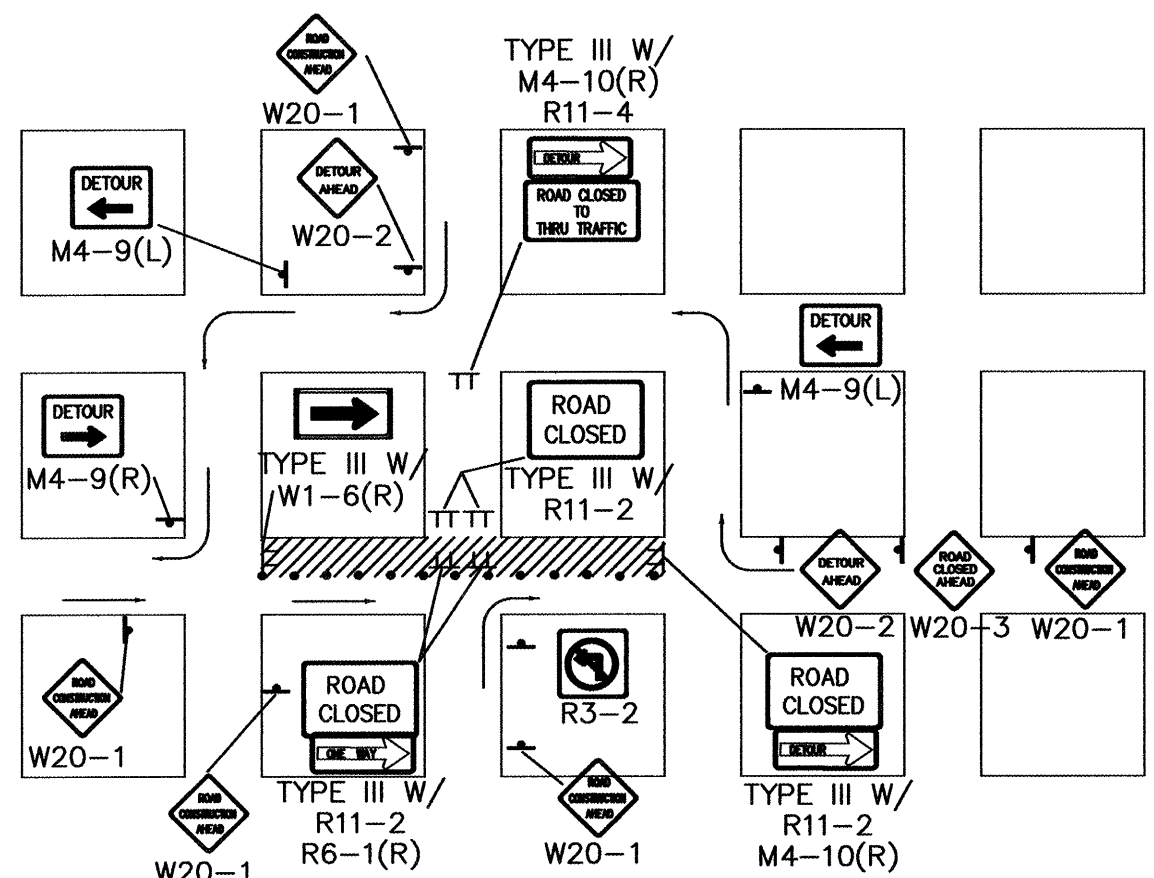
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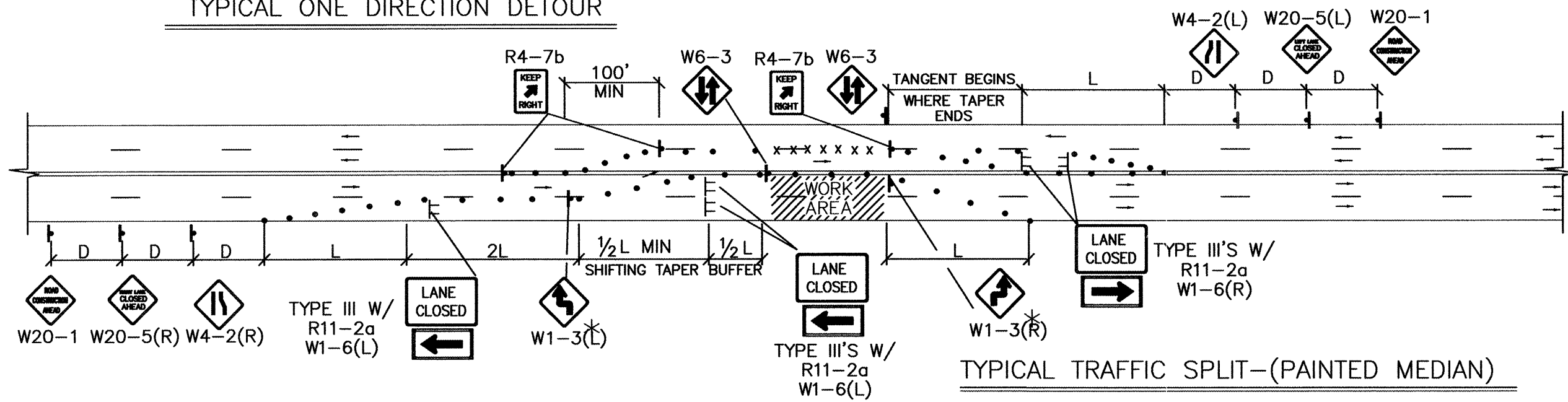
TYPICAL RIGHT LANE CLOSURE



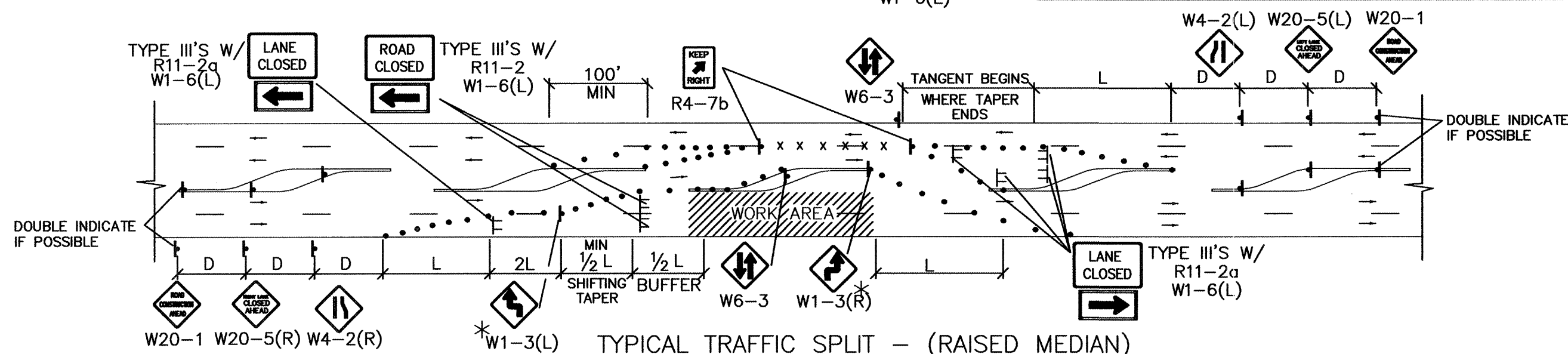
TYPICAL LEFT LANE CLOSURE



TYPICAL ONE DIRECTION DETOUR



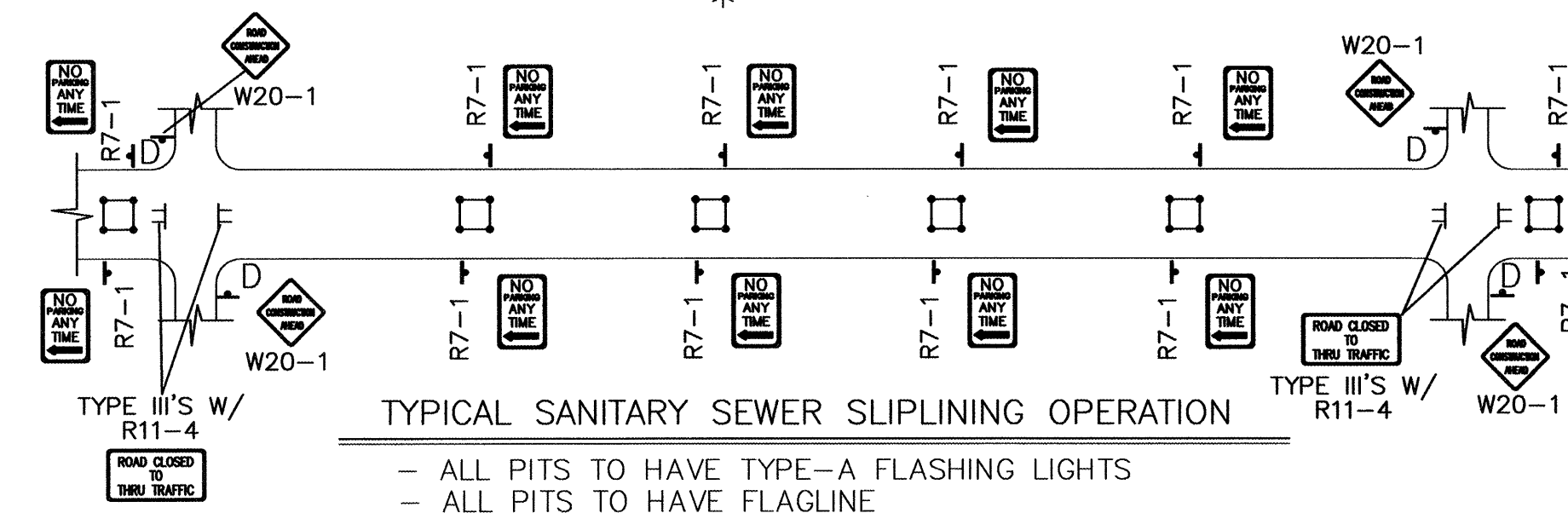
TYPICAL TRAFFIC SPLIT - (PAINTED MEDIAN)



TYPICAL TRAFFIC SPLIT - (RAISED MEDIAN)

TRAFFIC SPLIT NOTES:

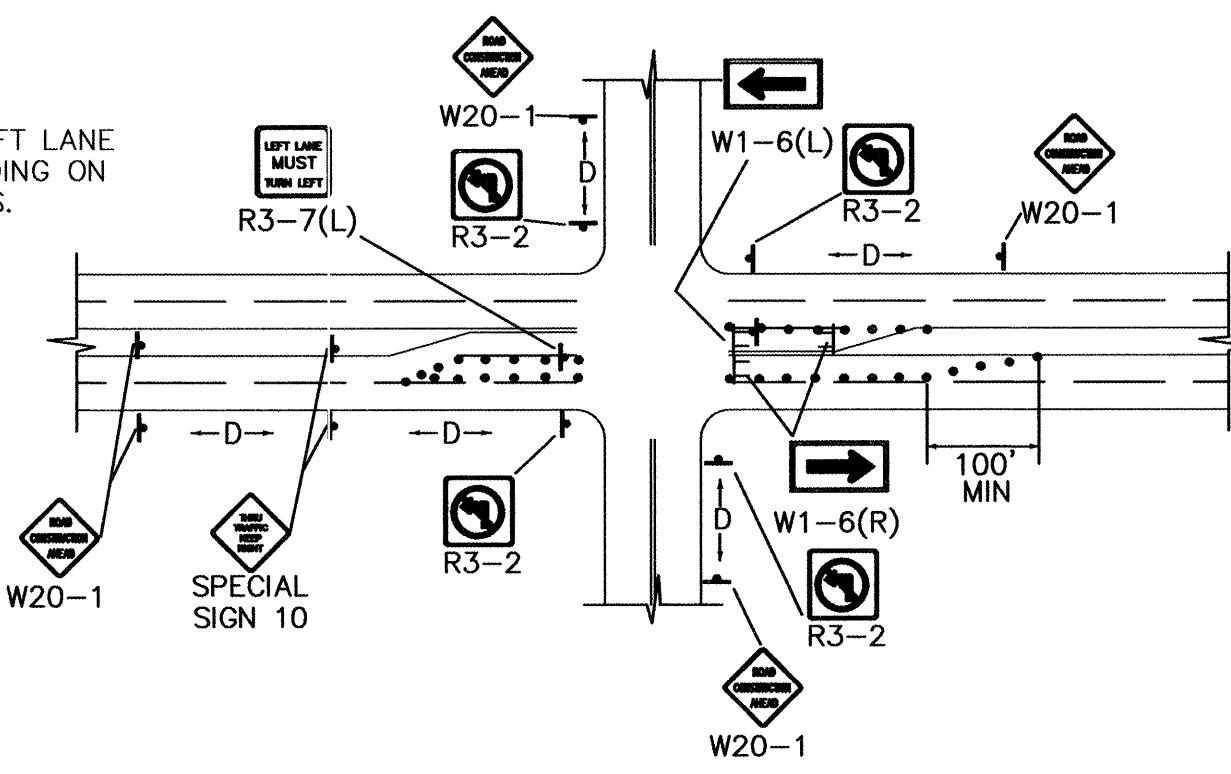
1. THE OFFSET DISTANCE MUST BE CALCULATED IN ALL SHIFTING TAPERS. THE OFFSET DISTANCES SHALL INCLUDE LANE WIDTHS PLUS MEDIAN WIDTHS.
2. 1/2 L IS THE MINIMUM DISTANCE FOR SHIFTING TAPERS.
3. REVERSE CURVES MAY BE IMPLEMENTED. ALL CURVE DATA SHALL BE CALCULATED.
4. MEDIAN REMOVAL SHALL BE REQUIRED IF 1/2 L OR REVERSE CURVE IS NOT SUFFICIENT. MEDIAN REMOVAL SHALL TAKE PLACE BEFORE SPLITS.
5. REDUCED SPEED MAY BE CONSIDERED.
6. * USE W1-3 FOR 30 MPH OR LESS, W1-4 FOR SPEED 35 MPH OR GREATER.



TYPICAL SANITARY SEWER SLIPLINING OPERATION

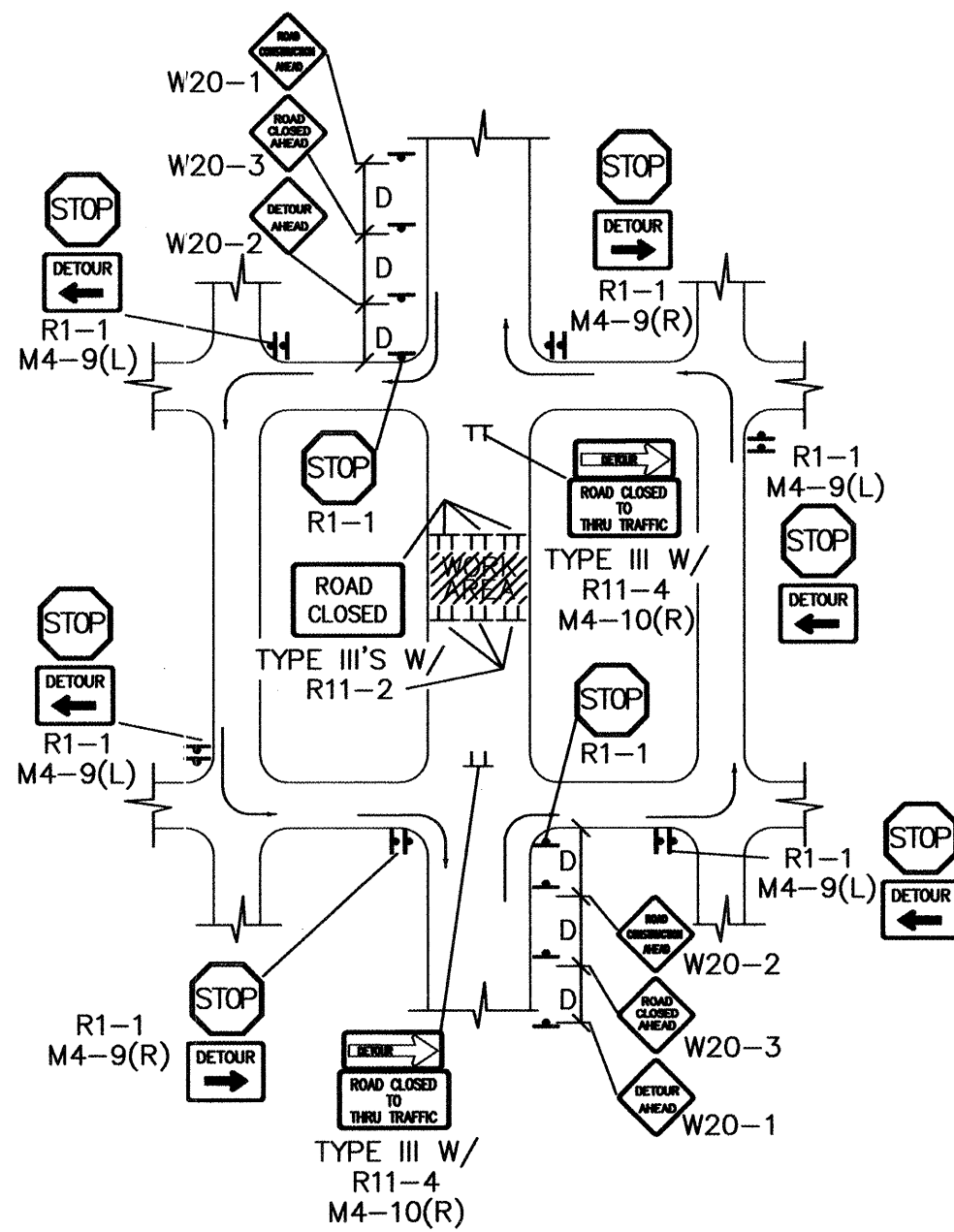
- ALL PITS TO HAVE TYPE-A FLASHING LIGHTS
- ALL PITS TO HAVE FLAGLINE

NOTE:
MAY REQUIRE LEFT LANE
CLOSURE DEPENDING ON
FIELD CONDITIONS.



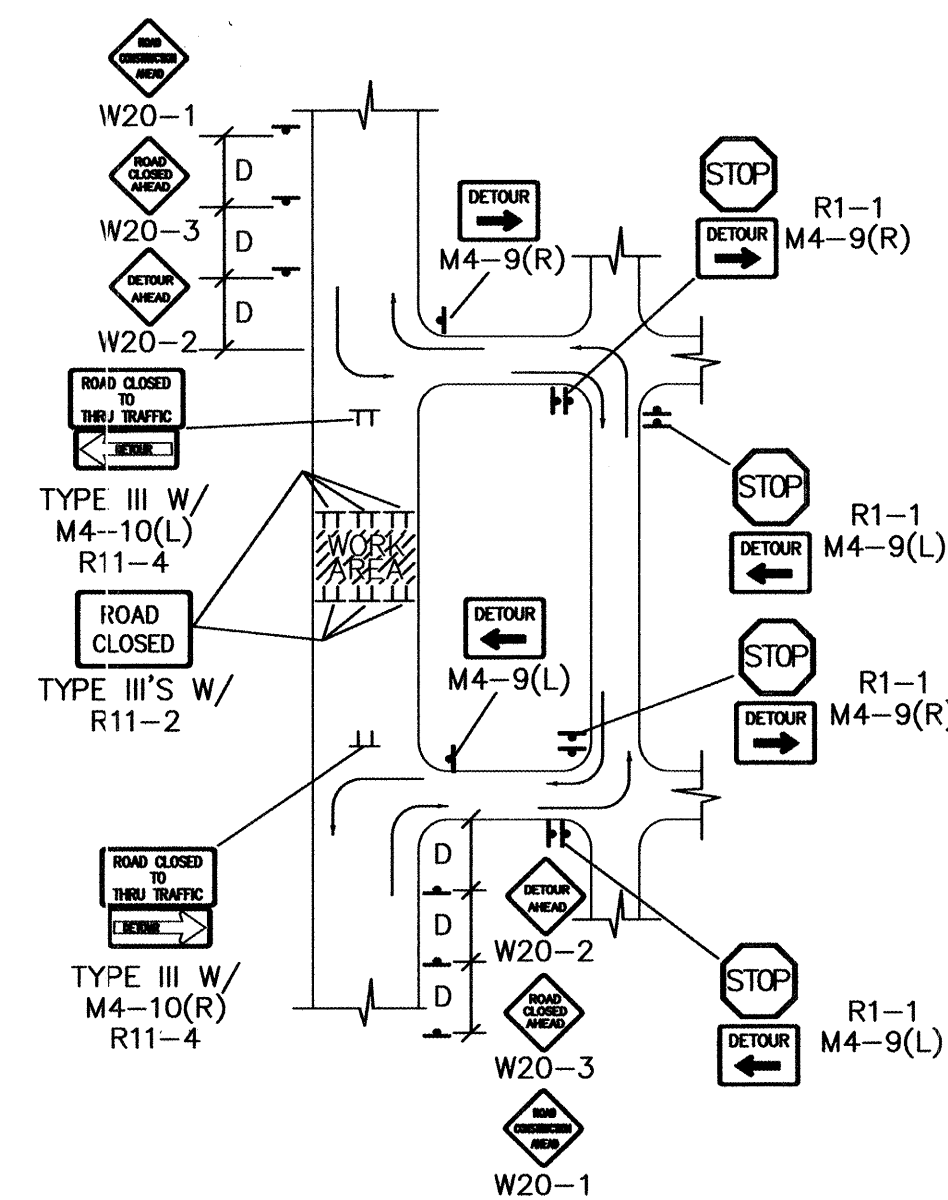
TYPICAL LANE CLOSURE AT INTERSECTION

NOTE: DEPENDING ON WORK ZONE LOCATION.



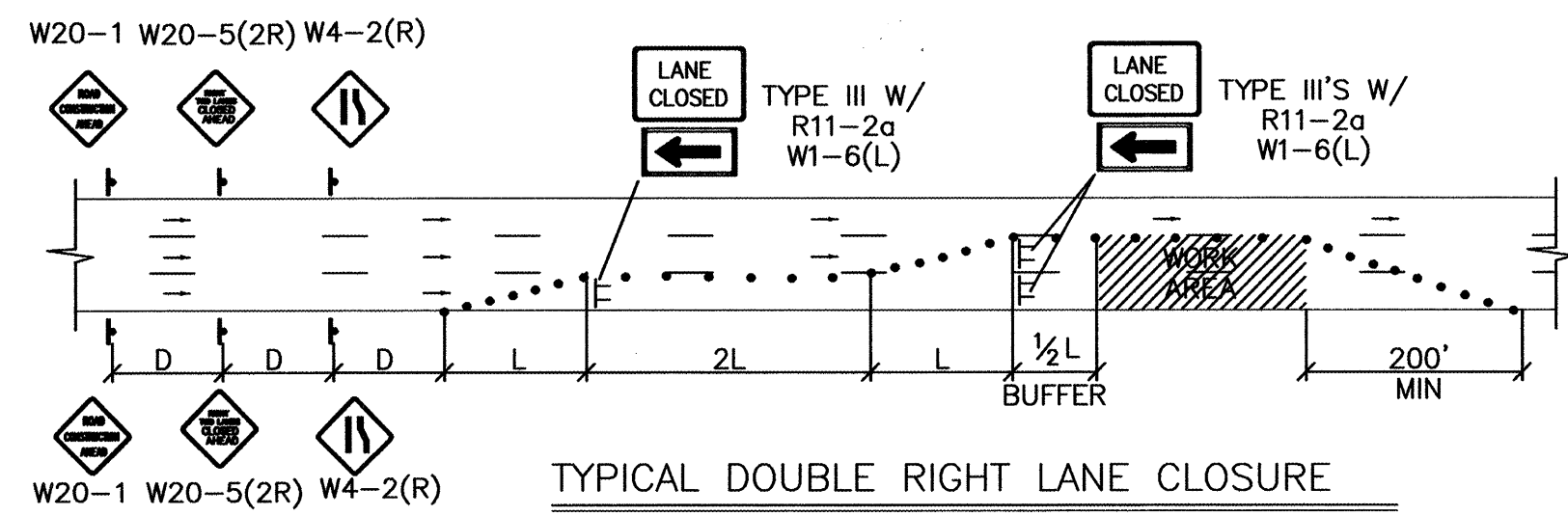
TYPICAL MID-BLOCK CLOSURE

NOTE: (R1-1) BASED ON FIELD CONDITIONS.

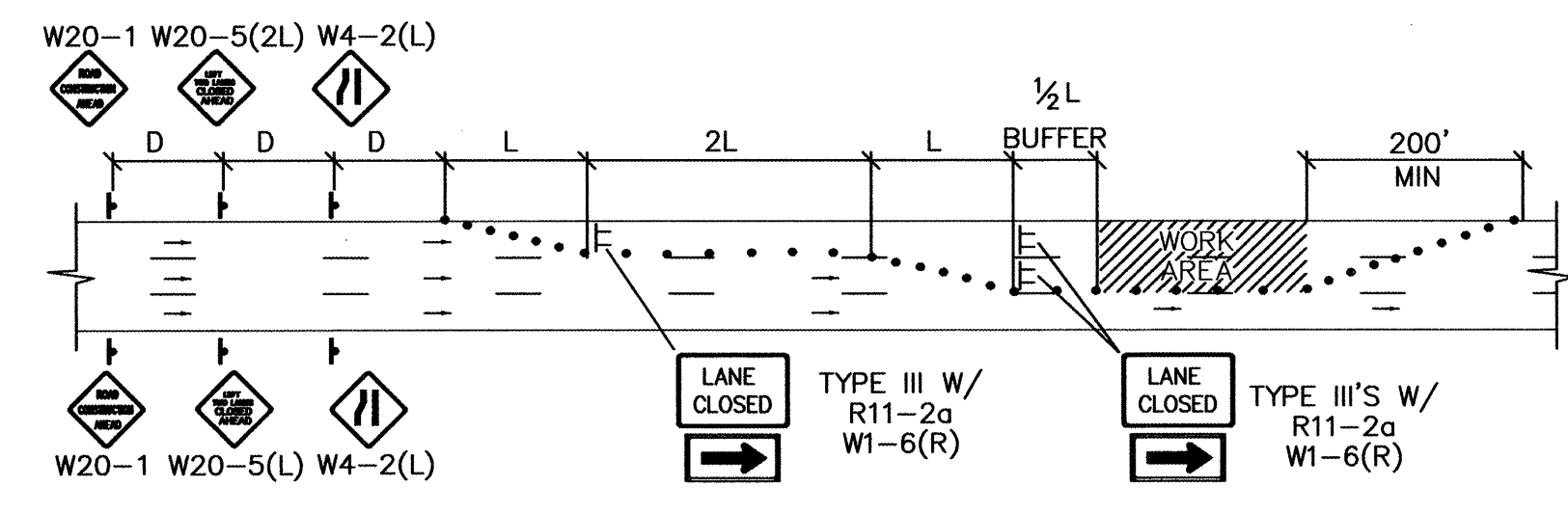


TYPICAL STREET CLOSURE

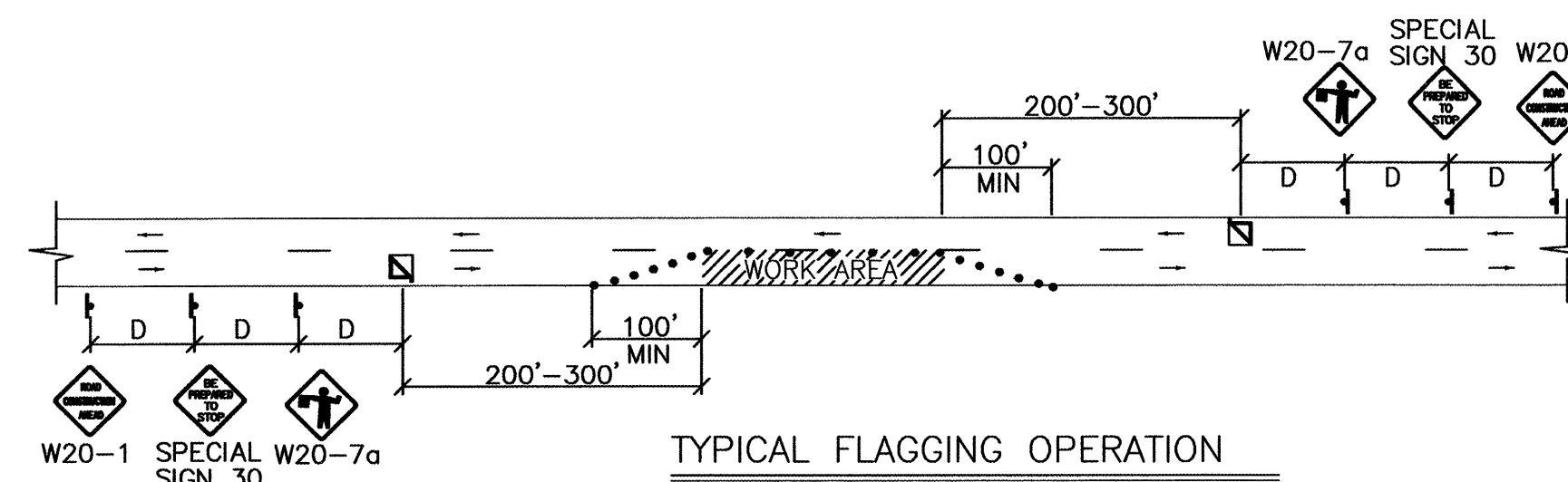
NOTE: (R1-1) BASED ON FIELD CONDITIONS.



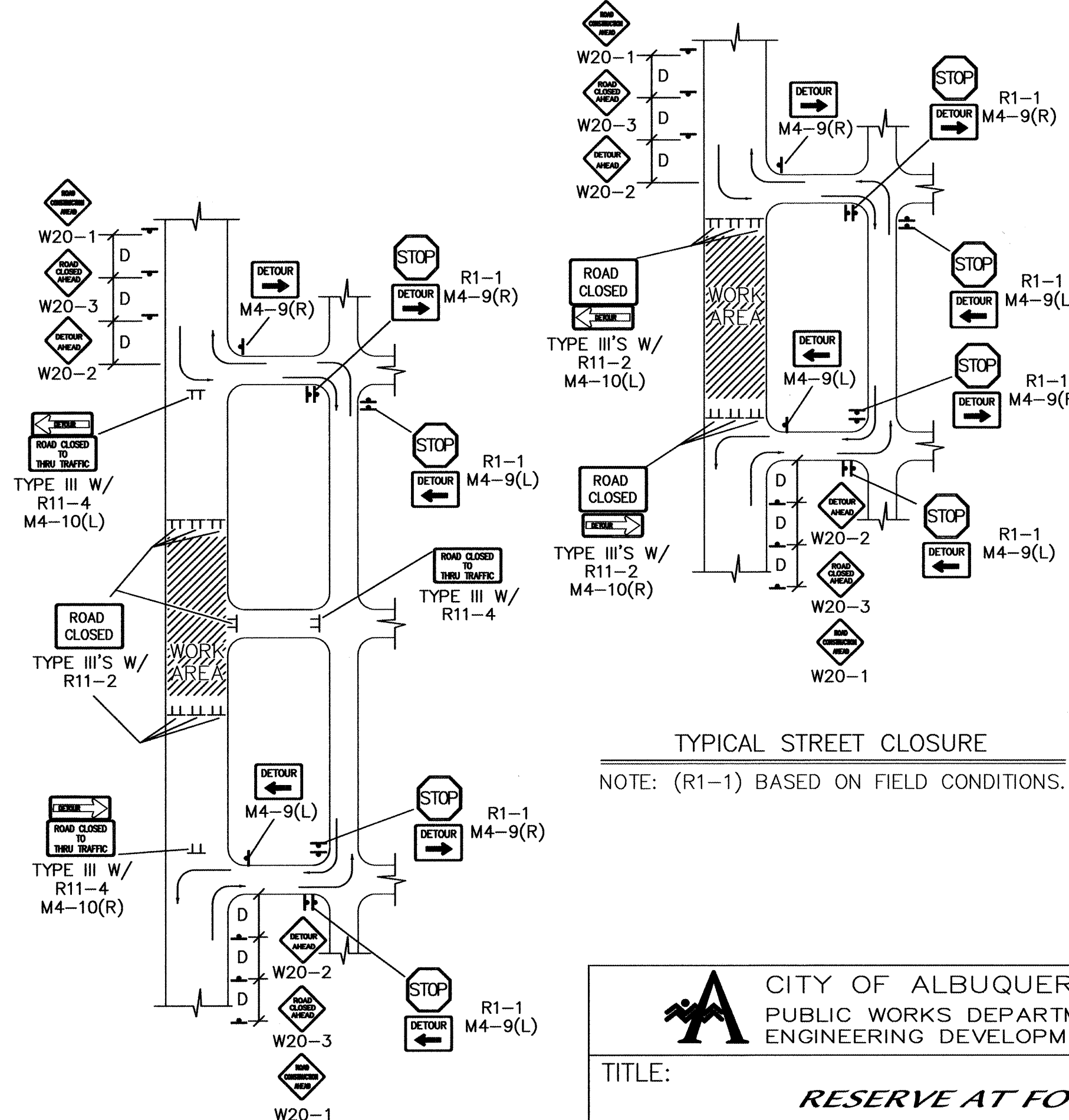
TYPICAL DOUBLE RIGHT LANE CLOSURE



TYPICAL DOUBLE LEFT LANE CLOSURE



TYPICAL FLAGGING OPERATION



TYPICAL STREET CLOSURE

NOTE: (R1-1) BASED ON FIELD CONDITIONS.



CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: **RESERVE AT FOUR HILLS**

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAY/YR.	MO./DAY/YR.
C.O.A. STANDARD	C.O.A. STANDARD		

CITY PROJECT NO.	ZONE MAP NO.	SHEET	OF
696681	M-22	19	19

AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	DATE	LOCATED AT THE INTERSECTION OF SAGEBRUSH TR. SE AND RATON AVE. SE. IN THE NE QUADRANT OF THE	DATE	NO.	BY		
INSPECTOR	DATE		DATE				
FIELD	DATE		DATE				
VERIFICATION BY	DATE		DATE				
CONNECTED BY	DATE		DATE				
MICRO-FILM INFORMATION	DATE		DATE				
RECORDED BY	DATE		DATE				
NO.							

C.O.A. STANDARD

GENERAL NOTE	REMARKS	REVISIONS	DESIGN
DESIGNED BY BOHANNAN HUSTON	DATE 5-97		
DRAWN BY BOHANNAN HUSTON	DATE 5-97		
CHECKED BY BOHANNAN HUSTON	DATE 5-97		