[illegible]

THE DESIGN GROUP
 ARCHITECTS • PLANNERS • INTERIOR DESIGN
 202 CENTRAL AVENUE SE SUITE 200
 ALBUQUERQUE, NEW MEXICO 87102
 PHONE: 505.242.6880 FAX: 505.242.6881

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

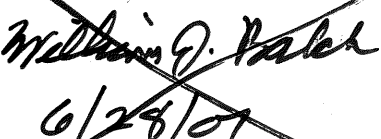
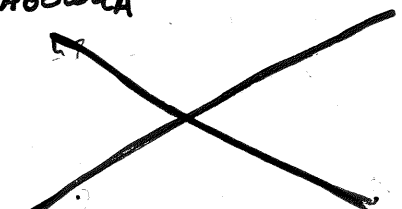
TITLE: SCHOOL ON WHEELS
AT CHAPARRAL ELEMENTARY
UTILITY PLAN and PROFILE (PHASE II)

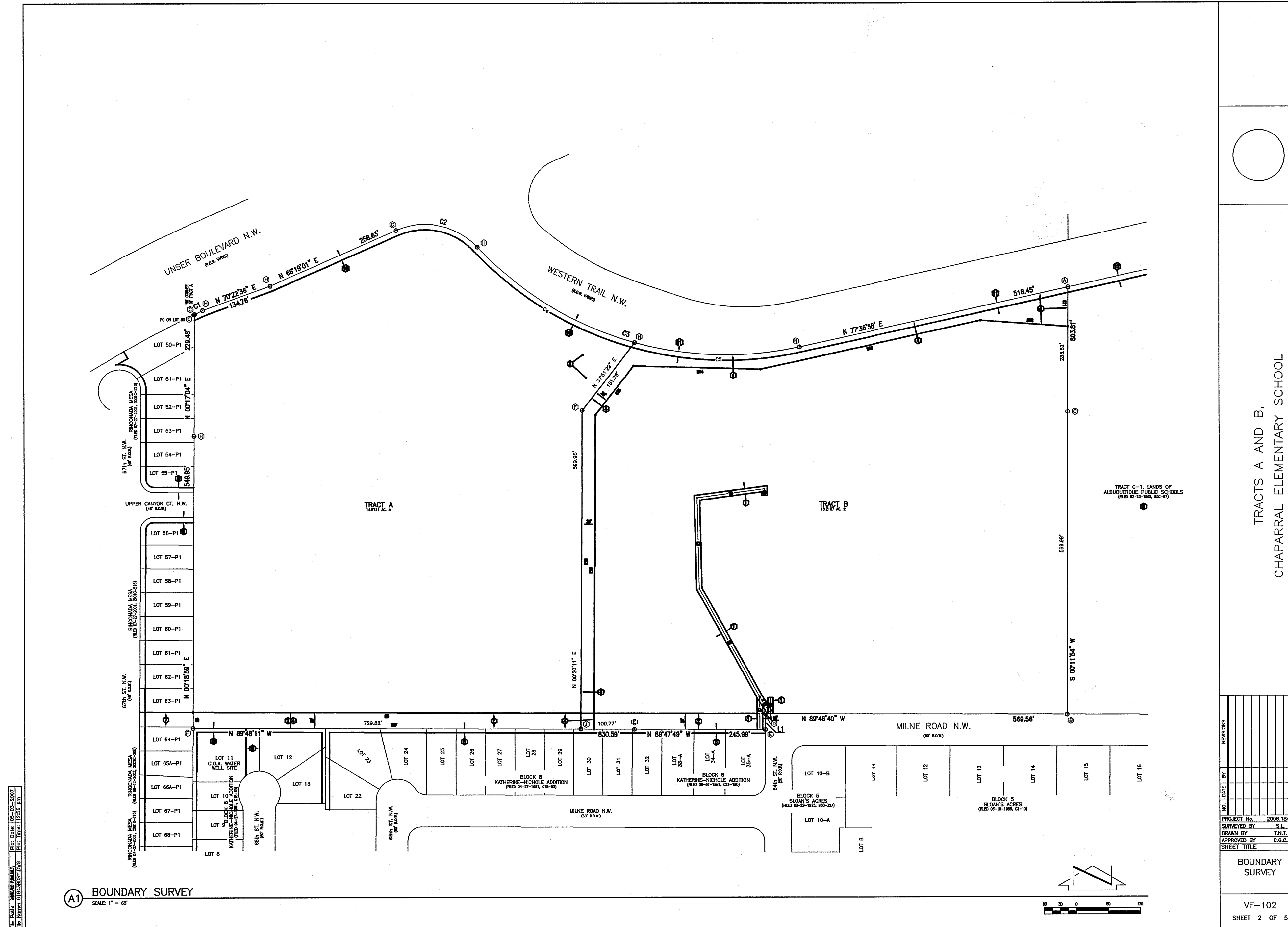
Design Review Committee		City Engineer Approval	Mo./Day/Yr.		Mo./Day/Yr.	
William J. Mahal 6/28/0		ABCWUA Rogert Sheen 10/3/07	Last Design Update			

City Project No.	732661	Zone Map	F-10-Z	Sheet	7	Of	8
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RECORD DRAWING

THE DESIGN GROUP
ARCHITECTS • PLANNERS • INTERIOR DESIGN
202 CENTRAL AVENUE SE SUITE 200
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CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP															
TITLE: SCHOOL ON WHEELS AT CHAPARRAL ELEMENTARY BOUNDARY AND TOPOGRAPHIC SURVEY															
Design Review Committee  6/28/07	City Engineer Approval ABCUNA 	Last Design Update	<table border="1"> <thead> <tr> <th>Mo./Day/Yr.</th> <th>Mo./Day/Yr.</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>	Mo./Day/Yr.	Mo./Day/Yr.										
Mo./Day/Yr.	Mo./Day/Yr.														
City Project No. 732661	Zone Map F-10-Z	Sheet 2	Of 8												

[illegible]

RECORD DRAWING

 THE DESIGN GROUP ARCHITECTS • PLANNERS • INTERIOR DESIGN 202 CENTRAL AVENUE SE SUITE 200 ALBUQUERQUE, NEW MEXICO 87102 PHONE: 505.242.6880 FAX: 505.242.6881									R
									DESIGNED BY: DAVID A.
									DRAWN BY: PMD
									CHECKED BY: DAA
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP									
TITLE: SCHOOL ON WHEELS AT CHAPARRAL ELEMENTARY BOUNDARY AND TOPOGRAPHIC SURVEY									
Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.					
<i>Melvin J. Perez</i> <i>6/28/07</i>									
City Project No.	732661	Zone Map F-10-Z	Sheet 3	Of 8					

UTILITY LEGEND

- PROPERTY LINE
- NEW EASEMENT
- SAS — EXISTING SANITARY SEWER
- WL — EXISTING WATER LINE
- EX SD — EXISTING STORM DRAIN
- SAS — PROPOSED SANITARY SEWER
- 8" WL — PROPOSED WATER LINE
- SD — PROPOSED STORM DRAIN
- ✕ PROPOSED VALVE
- PROPOSED HYDRANT
- PROPOSED SAS CAP
- PROPOSED WATER METER
- PROPOSED SANITARY SEWER MANHOLE
- PROPOSED STORM DRAIN

NOTE:
PUBLIC WATERLINE TO BE CONSTRUCTED FROM PUBLIC WORK ORDER PLANS. CONSTRUCTION NOTES RELATED TO THE PRIVATE SANITARY SEWER LINE CONSTRUCTION ARE SHOWN ON THIS PAGE TO ALLOW FOR IDENTIFICATION OF CONFLICTS AND FOR REFERENCE ONLY. SEE PLANS FOR PORTABLE INSTALLATION FOR CONSTRUCTION NOTES RELATED TO SANITARY SEWER CONSTRUCTION.

RESTRAINED JOINT LENGTHS, L _r , FOR TEES, (FT.)		
ALL JOINTS AT THE TEE MUST BE RESTRAINED.		
SIZE	RUN	BRANCH
12x12x12	15	17
12x12x10	10	18
12x12x8	6	18
12x12x6	3	19
12x12x4	1	19
10x10x10	12	18
10x10x8	8	15
10x10x6	4	16
10x10x4	2	4
8x8x8	9	20
8x8x6	5	17
8x8x4	2	15
6x6x6	6	20
6x6x4	2	20

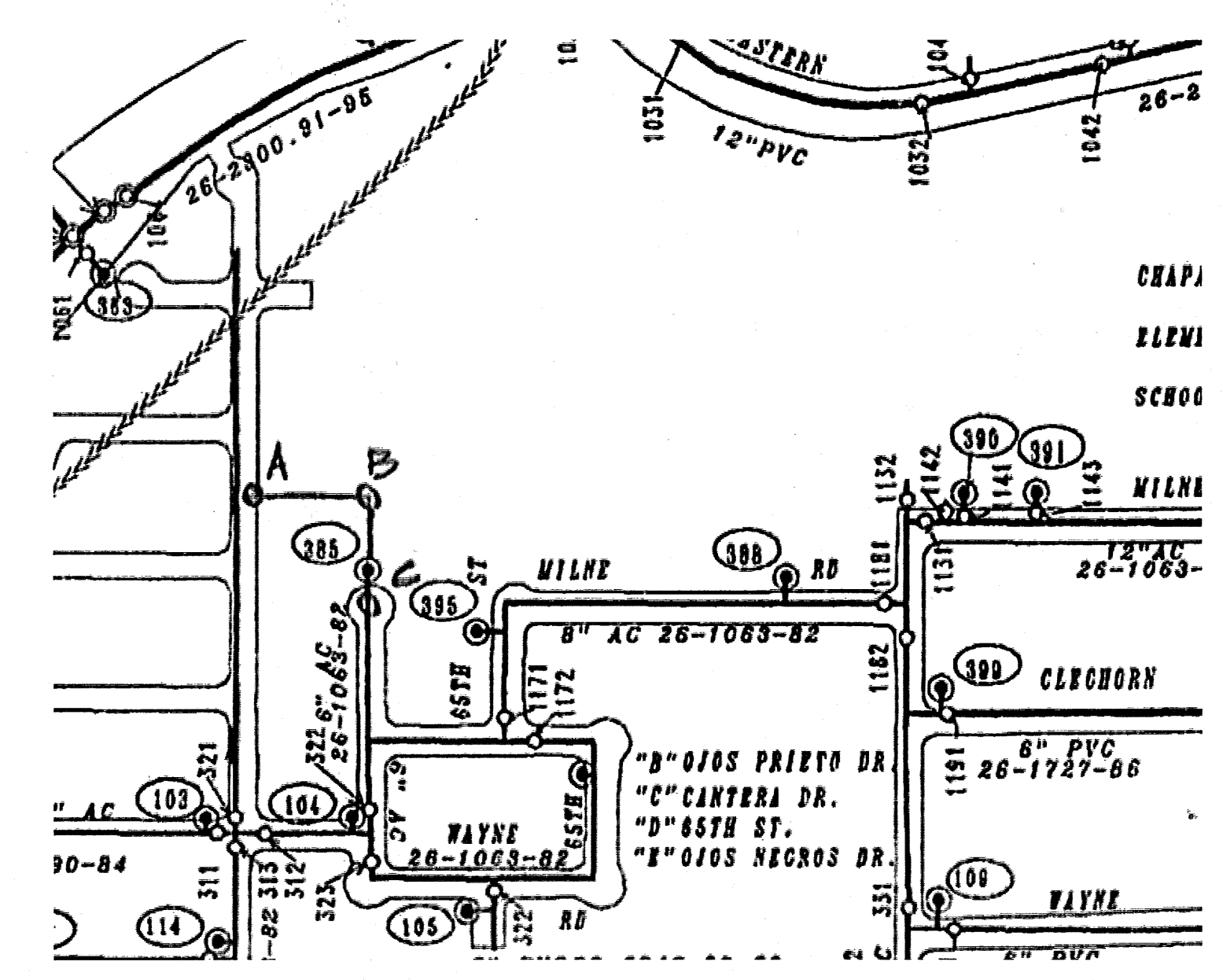
THIS TABLE IS BASED UPON THE FOLLOWING CRITERIA:
DEPTH OF BURY 3.0 FT. MINIMUM
FACTOR OF SAFETY 1.25
MATERIAL PVC PIPE
SOIL TYPE GM/SM - SILTY GRAVELS AND SILTY SANDS, GRAVEL-SAND-SILT MIXTURES.
TEST PRESSURE 150 PSI
TRENCH TYPE 4: PIPE BEDDED IN SAND, GRAVEL, OR CRUSHED STONE TO DEPTH OF 1/8 PIPE DIAMETER, 4 INCH MINIMUM; BACKFILL COMPACTED TO TOP OF PIPE.
DIFFERENT CRITERIA, E.G., DUCTILE IRON PIPE, GREATER DEPTH OF BURY, ETC., WILL REQUIRE DIFFERENT RESTRAINED LENGTHS. THESE MUST BE CALCULATED BY A QUALIFIED PROFESSIONAL ENGINEER AND APPROVED BY THE PUBLIC WORKS DEPARTMENT.

RESTRAINED JOINT LENGTHS, L _r , FOR HORIZONTAL BENDS, VALVES, AND DEAD ENDS, (FT.)					
SIZE	HORZ. BENDS				VALVES & DEAD ENDS
	90°	45°	22 1/2°	11 1/4°	
12	30	12	6	3	85
10	26	11	5	3	72
8	22	9	4	2	60
6	17	7	3	2	48
4	12	5	2	1	32

RESTRAINED JOINT LENGTHS, L _r , FOR REDUCERS, (FT.)					
MINIMUM UNOBSTRUCTED, STRAIGHT-RUN LENGTH; RESTRAIN EITHER LARGE PIPE, OR SMALL PIPE.					
SIZE	LARGE SIDE	SMALL SIDE	SIZE	LARGE SIDE	SMALL SIDE
12x10	25	30	10x8	44	73
12x8	45	68	10x4	58	141
12x6	62	121	8x6	25	33
12x4	74	213	8x4	43	83
10x8	24	30	6x4	24	35

- NOTES:
- ALL MECHANICAL JOINTS SHALL BE RESTRAINED AT THE FITTING.
 - THE CONTRACTOR SHALL PROVIDE A MINIMUM PIPE LENGTH OF 20 LF FROM ALL MECHANICAL JOINTS. ALL PIPE JOINTS WITHIN 20 LF OF A MECHANICAL JOINT SHALL BE RESTRAINED AT THE CONTRACTOR'S EXPENSE.
 - THE CONTRACTOR SHALL RESTRAIN ALL PIPE JOINTS IN THE SPECIFIED DISTANCE LISTED IN THE TABLE ON THIS SHEET.
 - THE CONTRACTOR SHALL RESTRAIN ALL FIRE HYDRANT JOINTS FROM THE TEE ON THE MAIN TO THE FIRE HYDRANT FLANGE.

RESTRAINED JOINT LENGTHS FOR WATERLINE FITTINGS

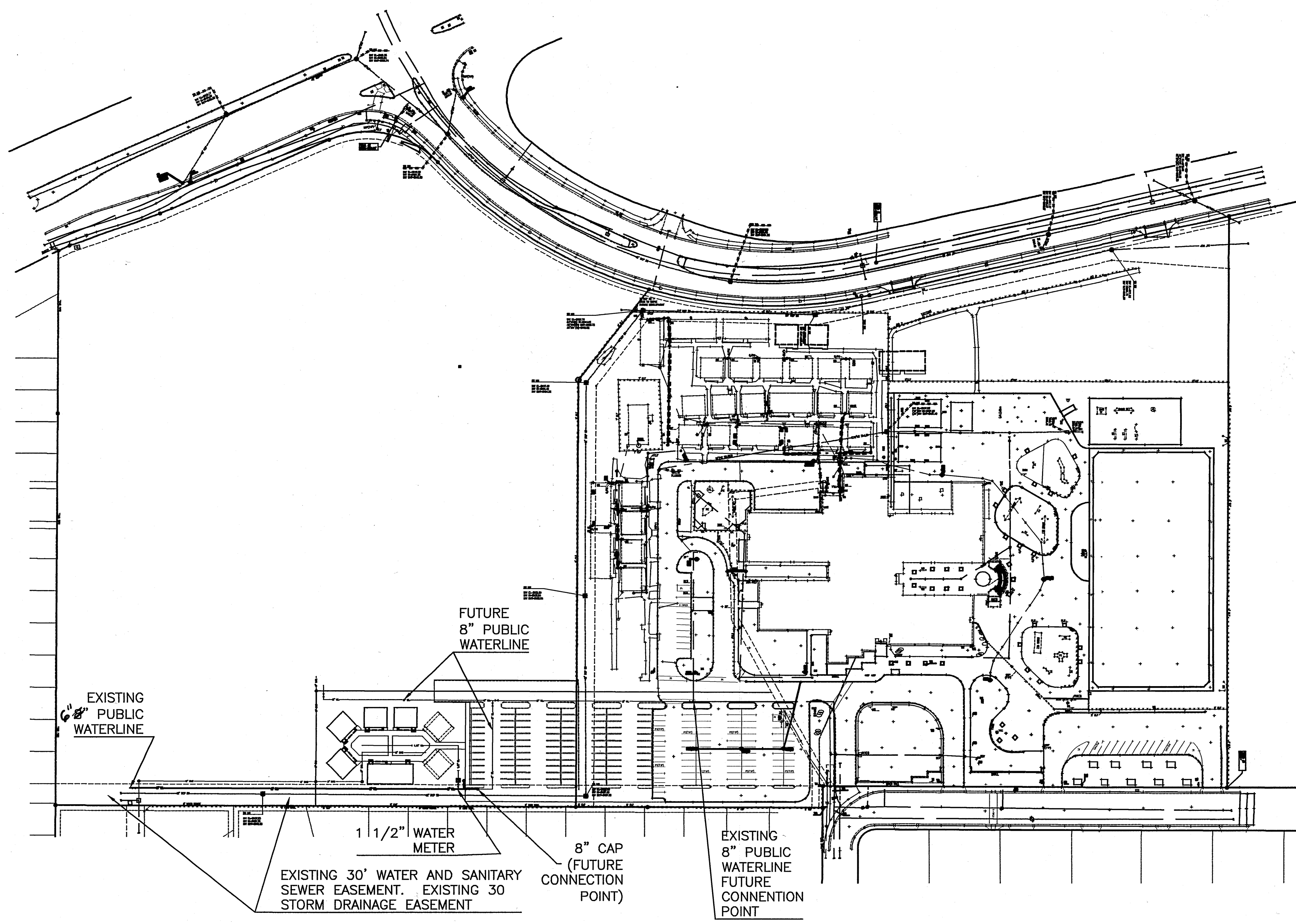


WATER SHUT OFF PLAN

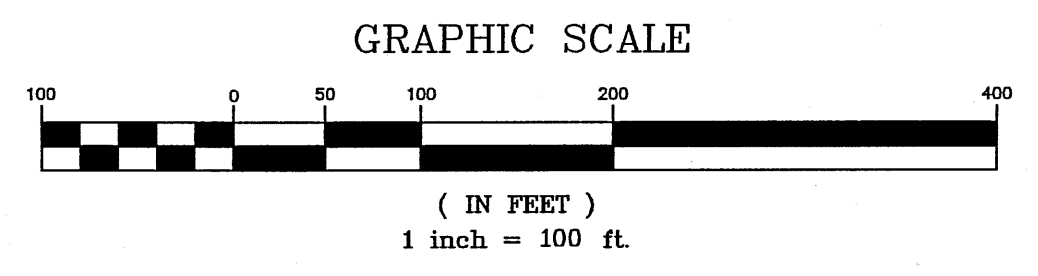
SCALE: NOT TO SCALE

REQUIRED VALVES SHUT OFF TO ISOLATE WEST SIDE ARE VALVES "A", AND "C". VALVE "A" IS DESIGNATED F10-01166 AND IS LOCATED ON THE EAST SIDE OF 67TH. VALVE "C" IS DESIGNATED F10-01167 AND IS LOCATED AT THE NORTH END OF 66TH. THERE IS AN AIR RELIEF VALVE "B" DESIGNATED F10-00165 WITHIN THE LINE SECTION THAT WILL BE SHUT OFF.

REQUIRED VALVES SHUT OFF TO ISOLATE EAST SIDE OF SITE # 1132 IN THE DRIVE WAY FOR CHAPARRAL AT MILNE ROAD.



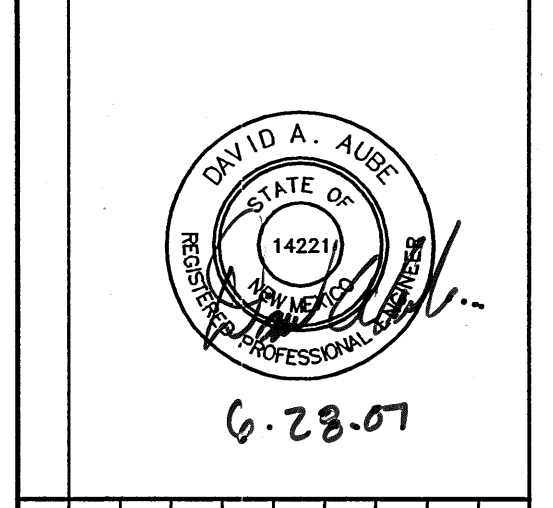
OVERALL UTILITY PLAN



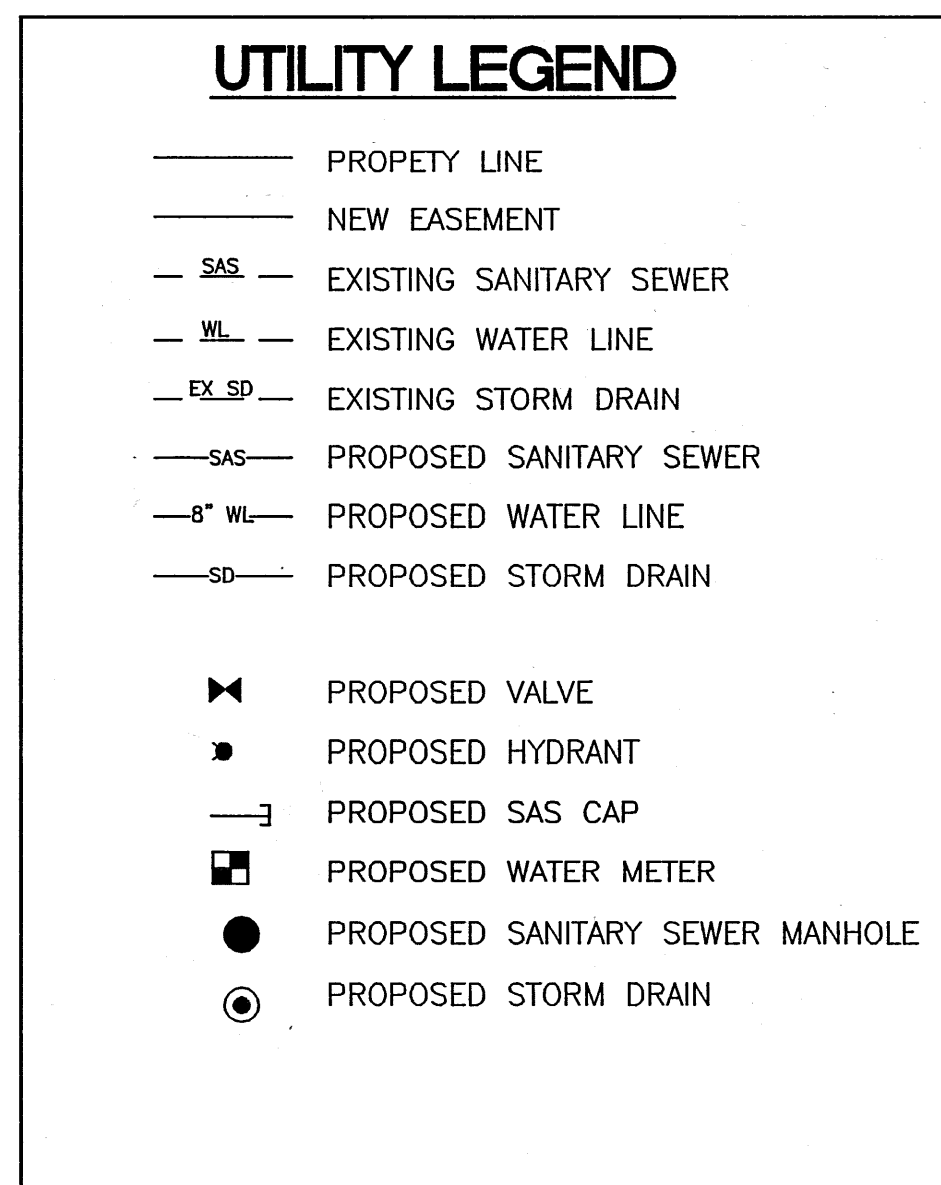
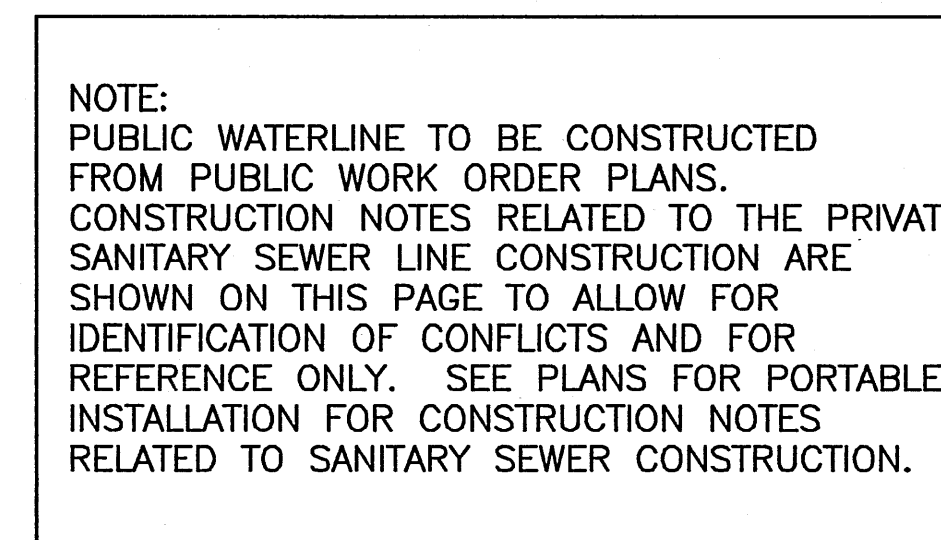
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CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP	
TITLE: SCHOOL ON WHEELS AT CHAPARRAL ELEMENTARY OVERALL UTILITY PLAN	
Design Review Committee <i>William J. Miller</i> 6/28/07	City Engineer Approval <i>Rogel Hinojosa</i> 10/3/07
City Project No. 732661	Zone Map F-10-Z
Sheet 4	Of 8

AS-BUILT INFORMATION	
CONTRACTOR	DATE
WORK STARTED BY	DATE
ACCEPTANCE BY	DATE
FIELD LOCATION BY	DATE
DRAWINGS CORRECTED BY	DATE
MICRO-FILM INFORMATION	
RECORDED BY	DATE
RECORDED BY	DATE
RECORDED BY	DATE



SURVEY INFORMATION	
NO.	DATE
FIELD NOTES	
BY	DATE
REVISIONS	
NO.	DATE
REMARKS	BY
DESIGN	
DESIGNED BY: DAVID A. AUBE, P.E.	DATE 6-23-07
DRAWN BY: PMD	DATE 6-23-07
CHECKED BY: DAA	DATE 6-23-07



SCALE: 1" = 20'-0" HORIZ.
1" = 4'-0" VERT.

6-28-07

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CITY OF ALBUQUERQUE
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ENGINEERING GROUP

TITLE: SCHOOL ON WHEELS
AT CHAPARRAL ELEMENTARY
UTILITY PLAN and PROFILE (PHASE I)

Design Review Committee	City Engineer Approval
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William J. Balc
6/28/07

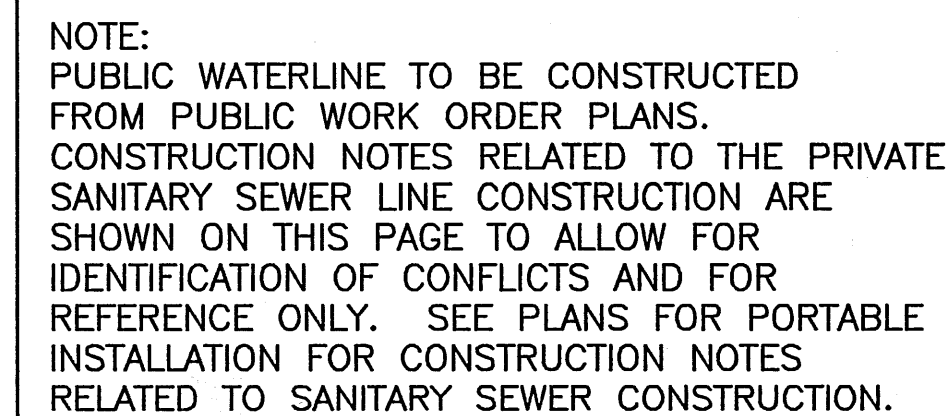
Approved: *Roger Green* 10/3/0

Design	ate
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City Project No. 732661

Zone Map
F-10-

7	Sheet	5	Of	8
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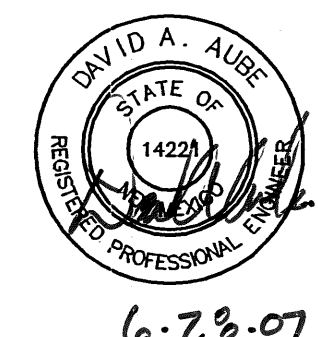


NOTE:

① CONTRACTOR TO CONSTRUCT WATER METER
AND FIRE HYDRANT WITHIN THE EXISTING
30' WATER AND SEWER EASEMENT. SYMBOLS
AREA SHOWN LARGER FOR CLARITY.

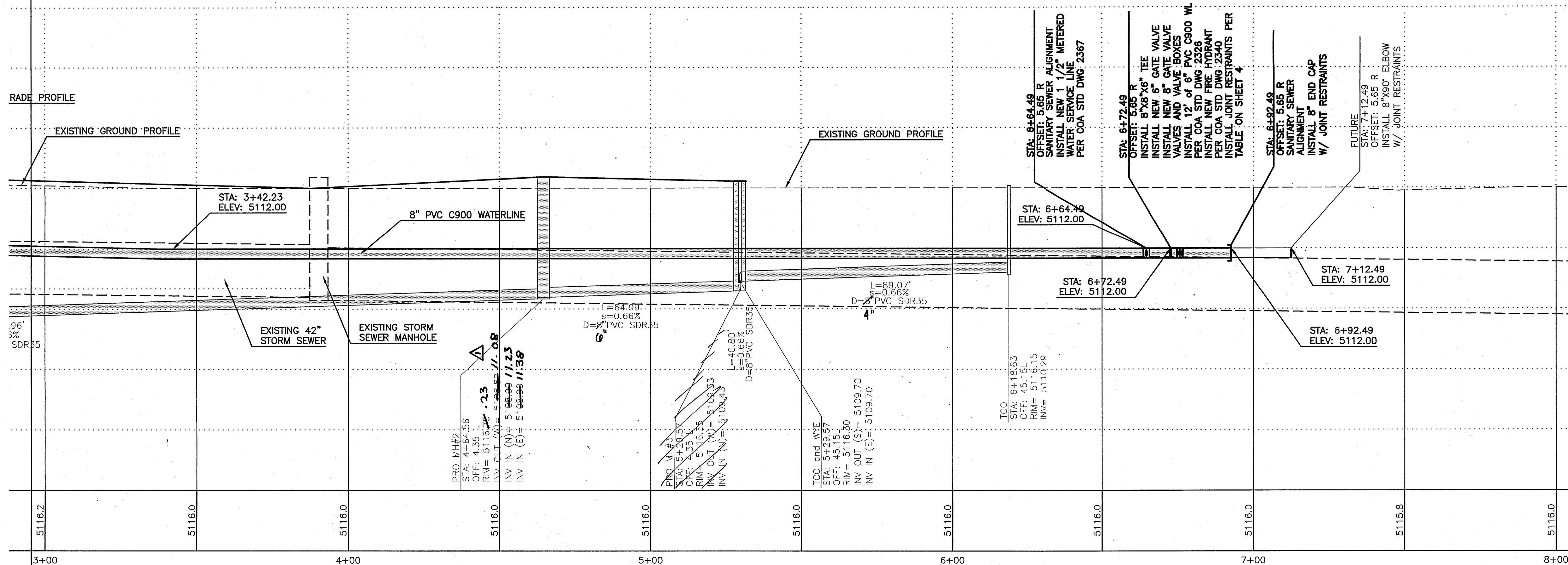
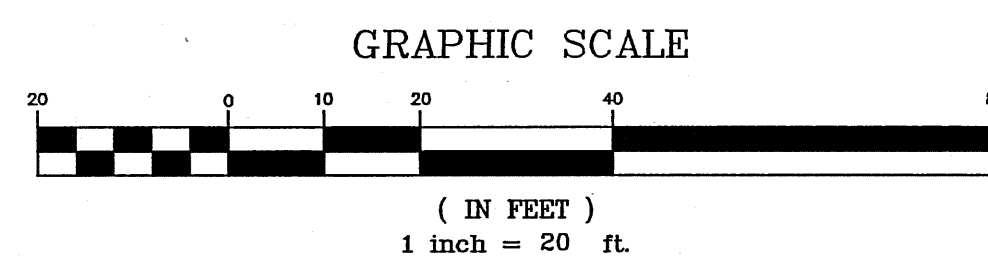
UTILITY LEGEND

- | | |
|-----------|---------------------------------|
| ——— | PROPERTY LINE |
| ——— | NEW EASEMENT |
| — SAS — | EXISTING SANITARY SEWER |
| — WL — | EXISTING WATER LINE |
| — EX SD — | EXISTING STORM DRAIN |
| —— SAS —— | PROPOSED SANITARY SEWER |
| — 8" WL — | PROPOSED WATER LINE |
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| ▶ | PROPOSED VALVE |
| ● | PROPOSED HYDRANT |
| —] | PROPOSED SAS CAP |
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| ⊙ | PROPOSED STORM DRAIN |



UTILITY PLAN

SCALE: 1" = 20'-0"



UTILITY PROFILE

SCALE: 1" = 20'-0" HORIZ.
1" = 4'-0" VERT.

dg

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UTILITY PLAN and PROFILE (PHASE I)

Design Review Committee	By Engineer Approval
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William J. Bask

6/24/07

7/20/01	
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City Project No.	732661	Zo
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Zone Map
E 10 7

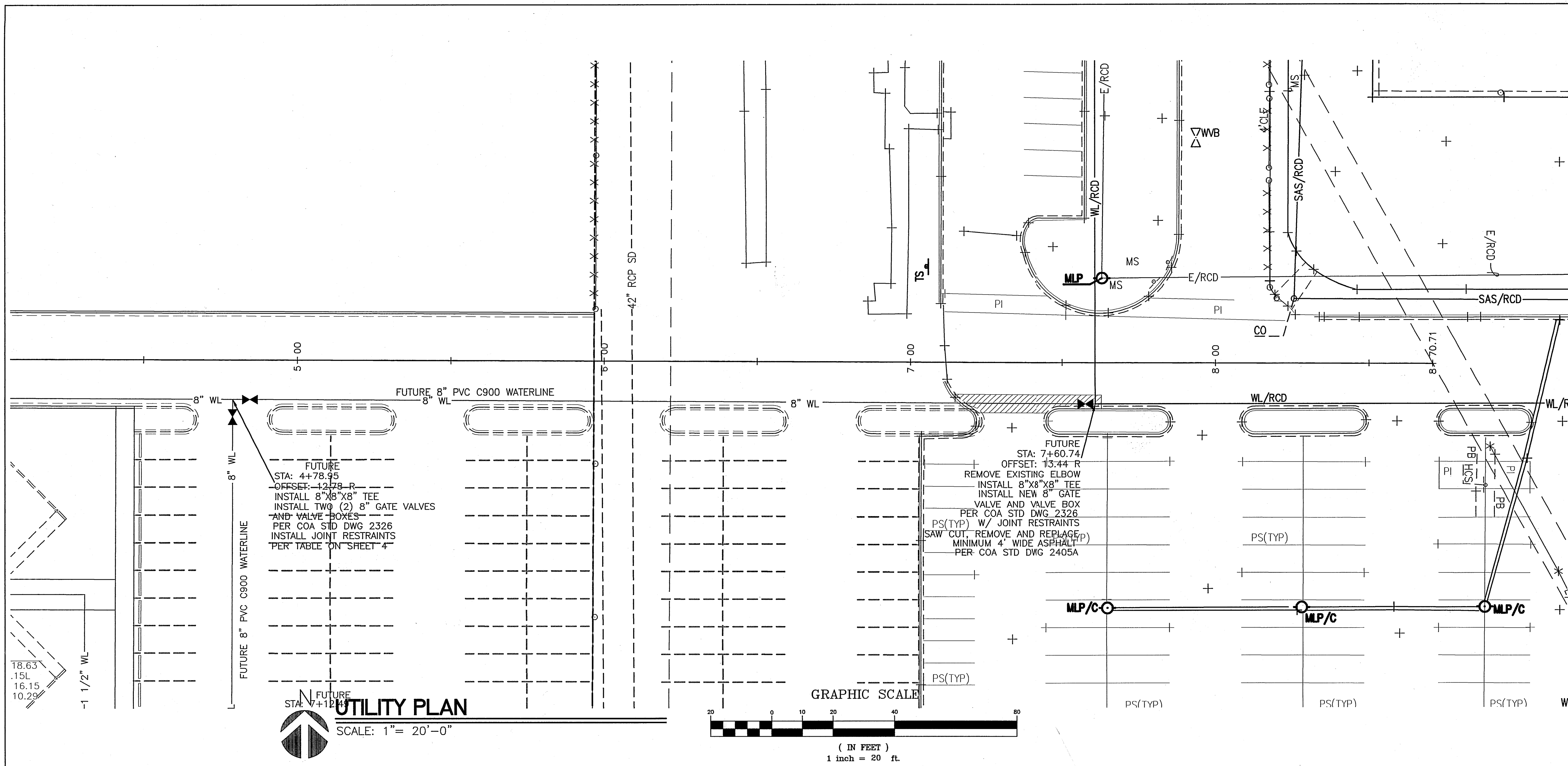
F-10-Z

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Sheet 6

16

Q

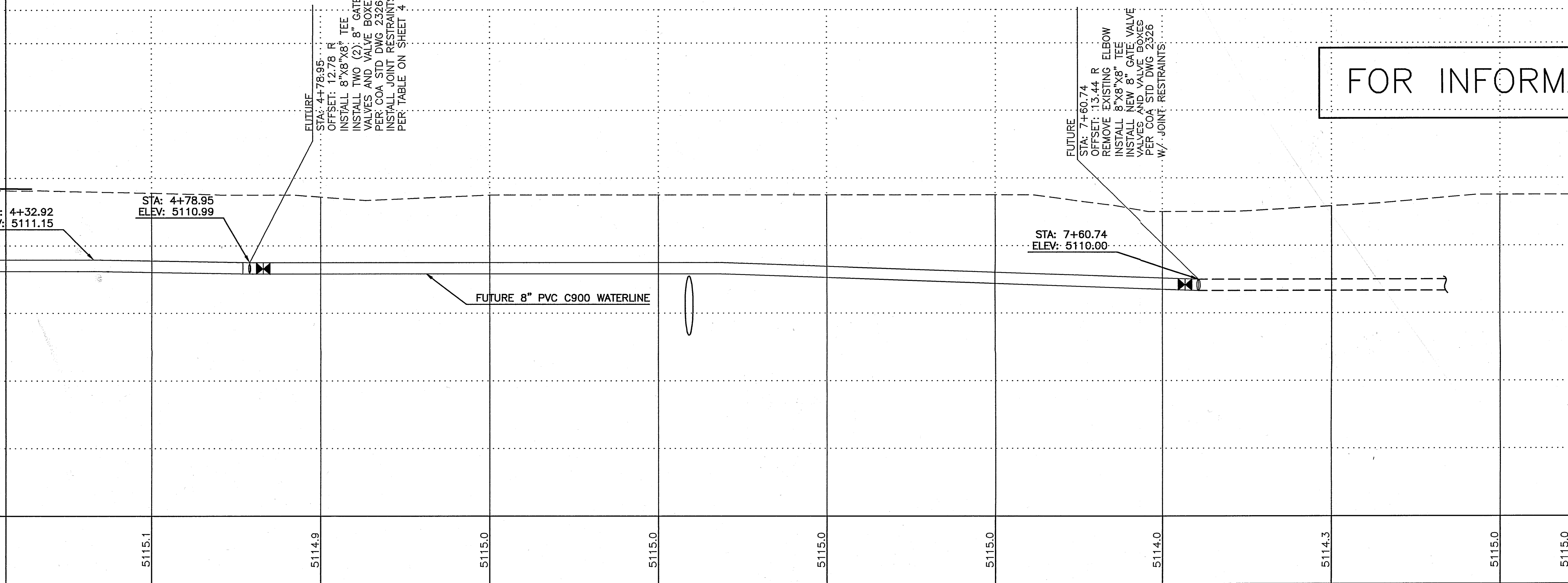


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FOR INFORMATION ONLY (FUTURE)

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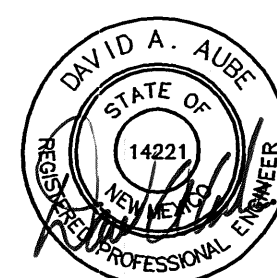
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Design Review	Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
William J. Balala 6/28/07	Reginald R. 10/3/07		

City Project No. 732661 Zone Map F-10-Z Sheet 8 Of 8

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6-28-07

RECORD DRAWING