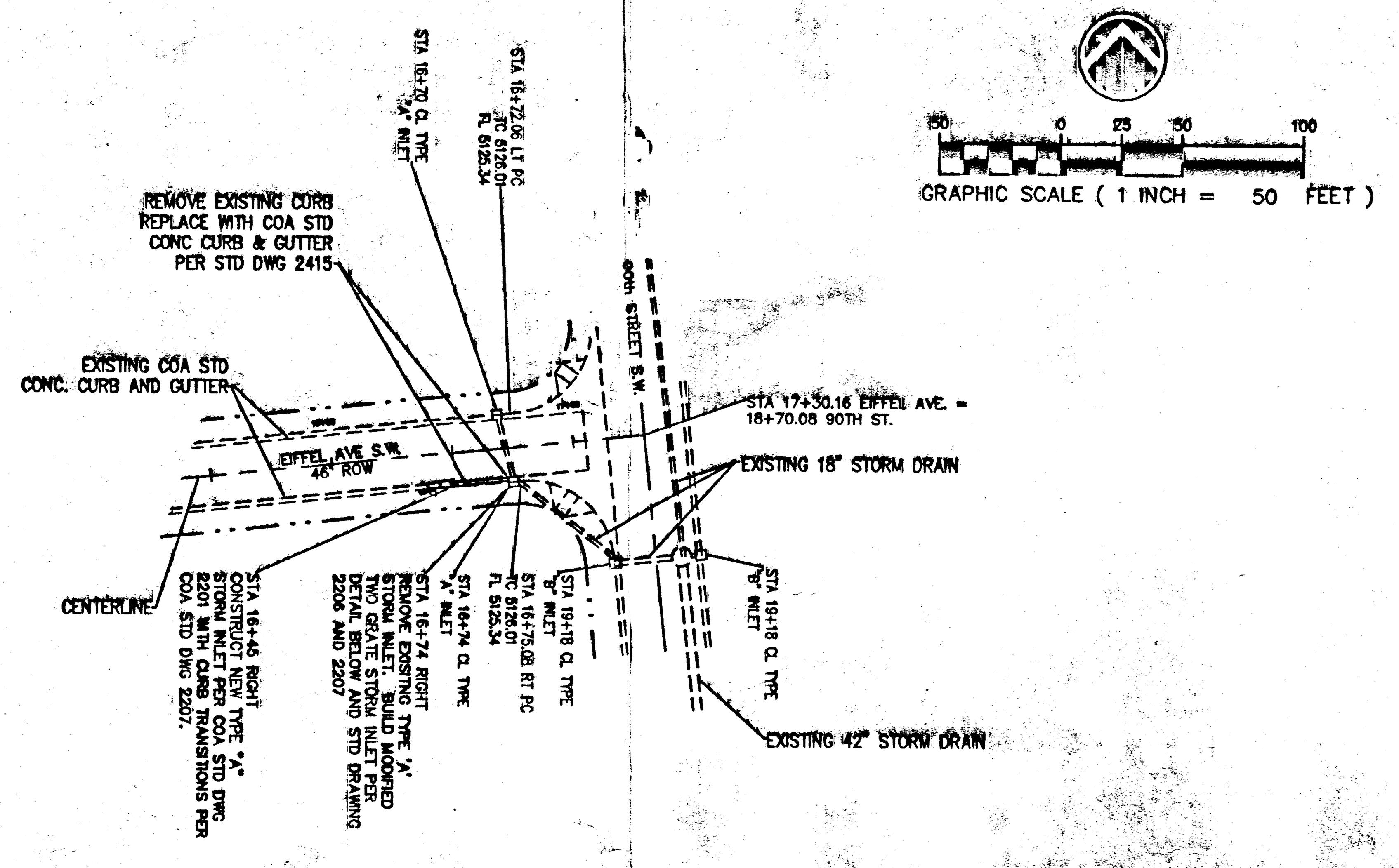

STA 16+70 CL TYPE "A" INLET
STA 16+72.06 LT PC TC 5126.01 FL 5125.34
REMOVE EXISTING CURB REPLACE WITH COA STD CONC CURB & GUTTER PER STD DWG 2415
EXISTING COA STD CONC. CURB AND GUTTER
EIFFEL AVE S.W. 46' ROW
90th STREET S.W.
STA 17+30.16 EIFFEL AVE. = 18+70.08 90TH ST.
EXISTING 18" STORM DRAIN
CENTERLINE
STA 16+45 RIGHT CONSTRUCT NEW TYPE "A" STORM INLET PER COA STD DWG 2201 WITH CURB TRANSITIONS PER COA STD DWG 2207.
STA 16+74 RIGHT REMOVE EXISTING TYPE 'A' STORM INLET. BUILD MODIFIED TWO GRATE STORM INLET PER DETAIL BELOW AND STD DRAWING 2206 AND 2207
STA 16+74 CL TYPE "A" INLET
STA 16+75.08 RT PC TC 5126.01 FL 5125.34
STA 19+18 CL TYPE "B" INLET
STA 19+18 CL TYPE "B" INLET
EXISTING 42" STORM DRAIN
150 0 25 50 100
GRAPHIC SCALE (1 INCH = 50 FEET)

SO-19 FORM

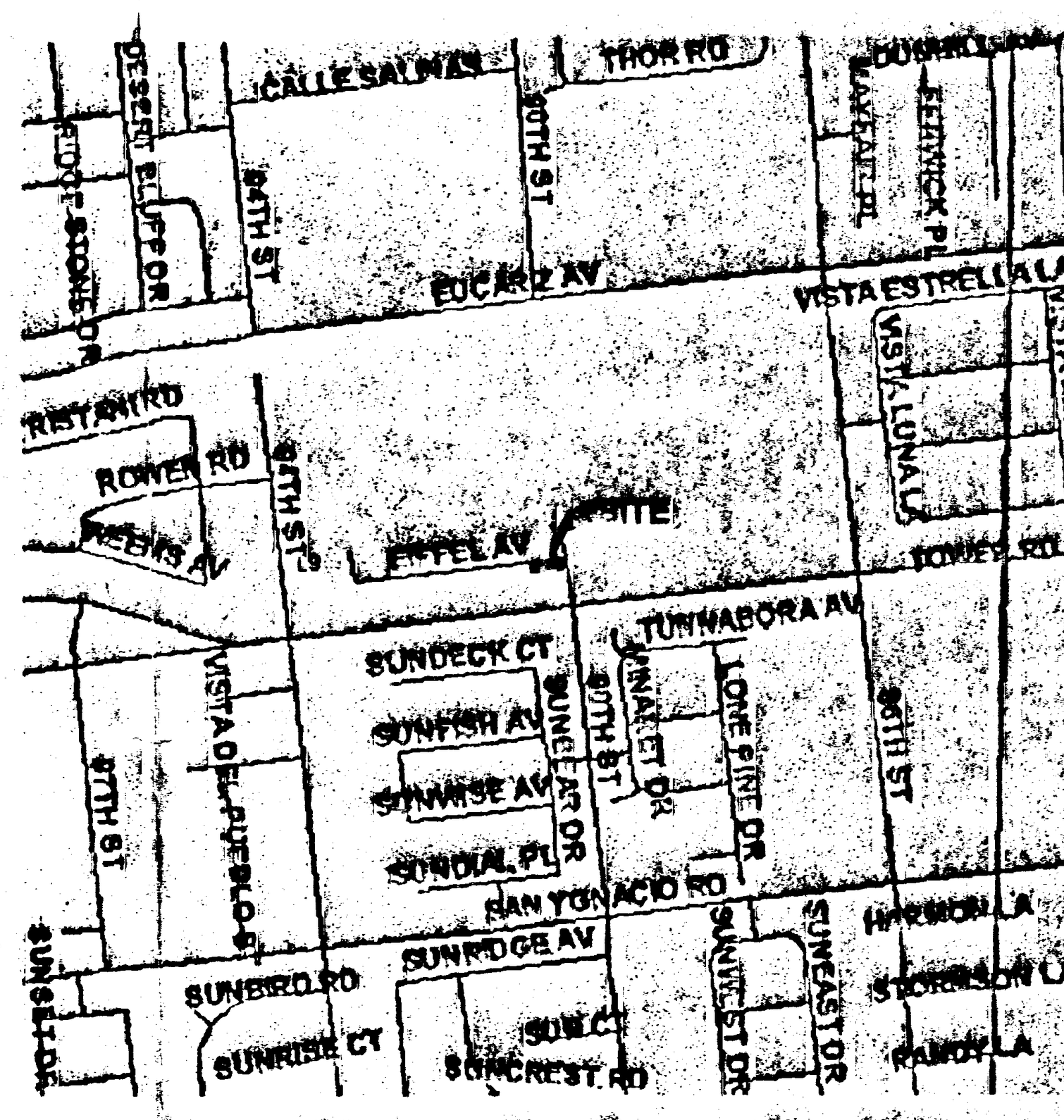
NOTICE TO CONTRACTOR

1. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN THE CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR THIS PERMIT.
2. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED WITHIN THE CITY RIGHT-OF-WAY SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH C.O.A. STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION 1986.
3. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT LINE LOCATING SERVICE 260-1990, 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 OR SURVEYOR SO THAT THE CONFLICT CAN BE RESOLVED WITH MINIMUM AMOUNT OF DELAY.
5. BACKFILL COMPACTION SHALL BE ACCORDING TO ARTERIAL STREET USE.
6. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER SERVED.

THE FOLLOWING NOTES ALSO APPLY WHEN CHECKED

- ○ ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING.
- ☑ BACKFILL COMPACTION SHALL BE ACCORDING TO ARTERIAL STREET USE.
- ○ TACK COAT REQUIREMENTS SHALL BE DETERMINED BY THE CITY ENGINEER.
- ○ SIDEWALKS AND WHEELCHAIR RAMPS WITHIN THE CURB RETURNS SHALL BE CONSTRUCTED WHEREVER A NEW CURB RETURN IS CONSTRUCTED.
- ☑ IF CURB IS DEPRESSED FOR A DRIVEPAD OR A HANDICAP RAMP, THE DRIVEPAD OR RAMP SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF THE CURB AND GUTTER.
- ☑ ALL STORM DRAINAGE FACILITIES SHALL BE COMPLETED, INSPECTED AND APPROVED PRIOR TO FINAL ACCEPTANCE.

APPROVALS	ENGINEERS	DATE	
A.C.E./DESIGN			
INSPECTOR			
A.C.E./FIELD			

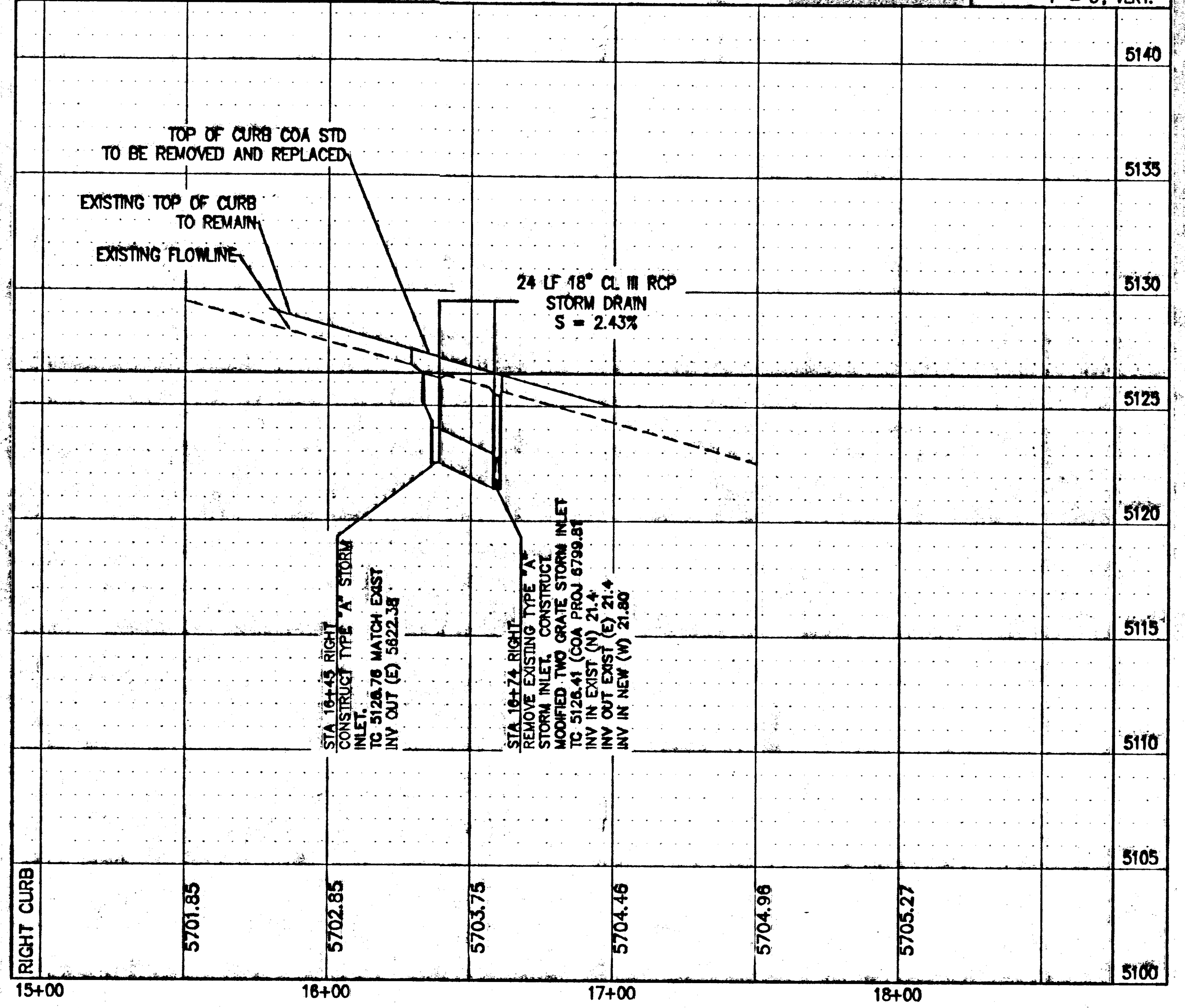

CALLE SALINAS
THOR RD
90TH ST
DESERT BLUFF DR
94TH ST
LUCARIZ AV
VISTA ESTRELLA LA
ROWEN RD
EIFFEL AV
SITE
TOWER RD
TUNNABORA AV
SUNDECK CT
SUNFISH AV
SUNRISE AV
SUNDIAL PL
97TH ST
VISTA DEL PUEBLO
SAN YGNACIO RD
SUNRIDGE AV
SUNBIRD RD
SUNRISE CT
SUNCREST RD
SUNEASTOR
LONE PINE DR

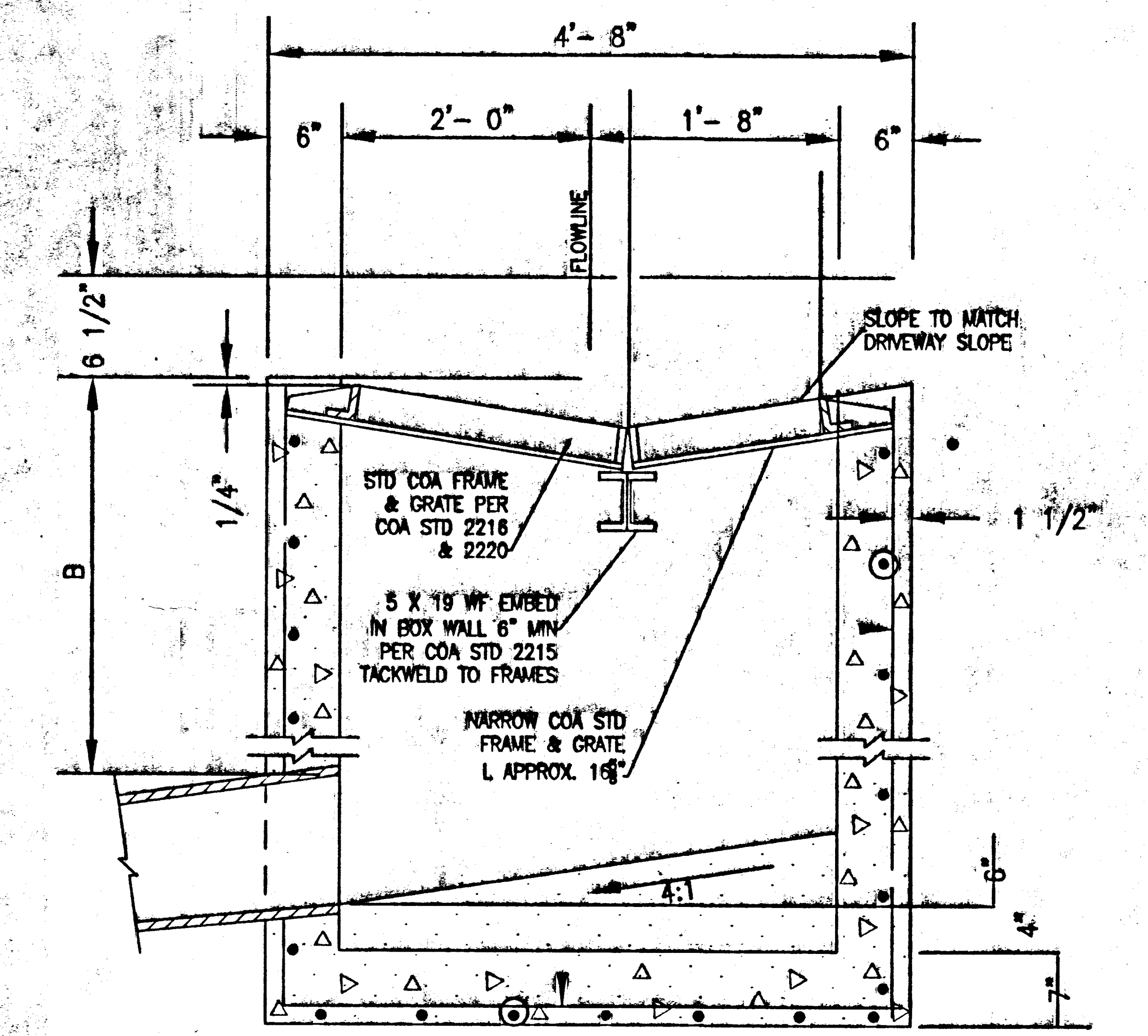
VICINITY MAP

ZONE ATLAS L-9

EIFFEL AVENUE SW

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


TOP OF CURB COA STD TO BE REMOVED AND REPLACED
EXISTING TOP OF CURB TO REMAIN
EXISTING FLOWLINE
24 LF 18" CL III RCP STORM DRAIN S = 2.43%
STA 16+45 RIGHT CONSTRUCT TYPE "A" STORM INLET. TC 5126.78 MATCH EXIST INV OUT (E) 5622.38
STA 16+74 RIGHT REMOVE EXIST. TYPE "A" STORM INLET. CONSTRUCT MODIFIED TWO GRATE STORM INLET TC 5126.41 (COA PROJ 6799.81 INV IN EXIST (N) 21.4 INV OUT EXIST (E) 21.4 INV IN NEW (W) 21.80
5140
5135
5130
5125
5120
5115
5110
5105
5100
RIGHT CURB
5701.85
5702.85
5703.75
5704.46
5704.96
5705.27
15+00
16+00
17+00
18+00


4'- 8"
6"
2'- 0"
1'- 8"
6"
FLOWLINE
6 1/2"
1/4"
B
SLOPE TO MATCH DRIVEWAY SLOPE
STD COA FRAME & GRATE PER COA STD 2216 & 2220
5 X 19 WF EMBED IN BOX WALL 6" MIN PER COA STD 2215 TACKWELD TO FRAMES
NARROW COA STD FRAME & GRATE L APPROX. 16"
1 1/2"
4:1
6"
4"
7"

MODIFICATIONS TO TYPE A BOX

AS BUILT INFORMATION
CONTRACTOR
WORK STAKED BY — DATE
INSPECTOR'S ACCEPTANCE BY — DATE
FIELD VERIFICATION BY — DATE
DRAWINGS CORRECTED BY — DATE

MICROFILM INFORMATION
RECORDED BY — DATE
NO.

BENCH MARKS
ACS STA 7-L9. STD COA BRASS CAP LOCATED IN SW QUADRANT OF 98TH STREET AND TOWER ROAD SW.
ELEV 5175.735 (NGVD 1929)

SURVEY INFORMATION

FIELD NOTES		
NO.	BY	DATE

ENGINEER'S SEAL
LAWRENCE D. READ
10/3/02

NO.	DATE	REMARKS	BY

REVISIONS

DESIGN
DESIGNED BY LRA DATE SEPT 2002
DRAWN BY LRA DATE SEPT 2002
CHECKED BY LDR DATE SEPT 2002

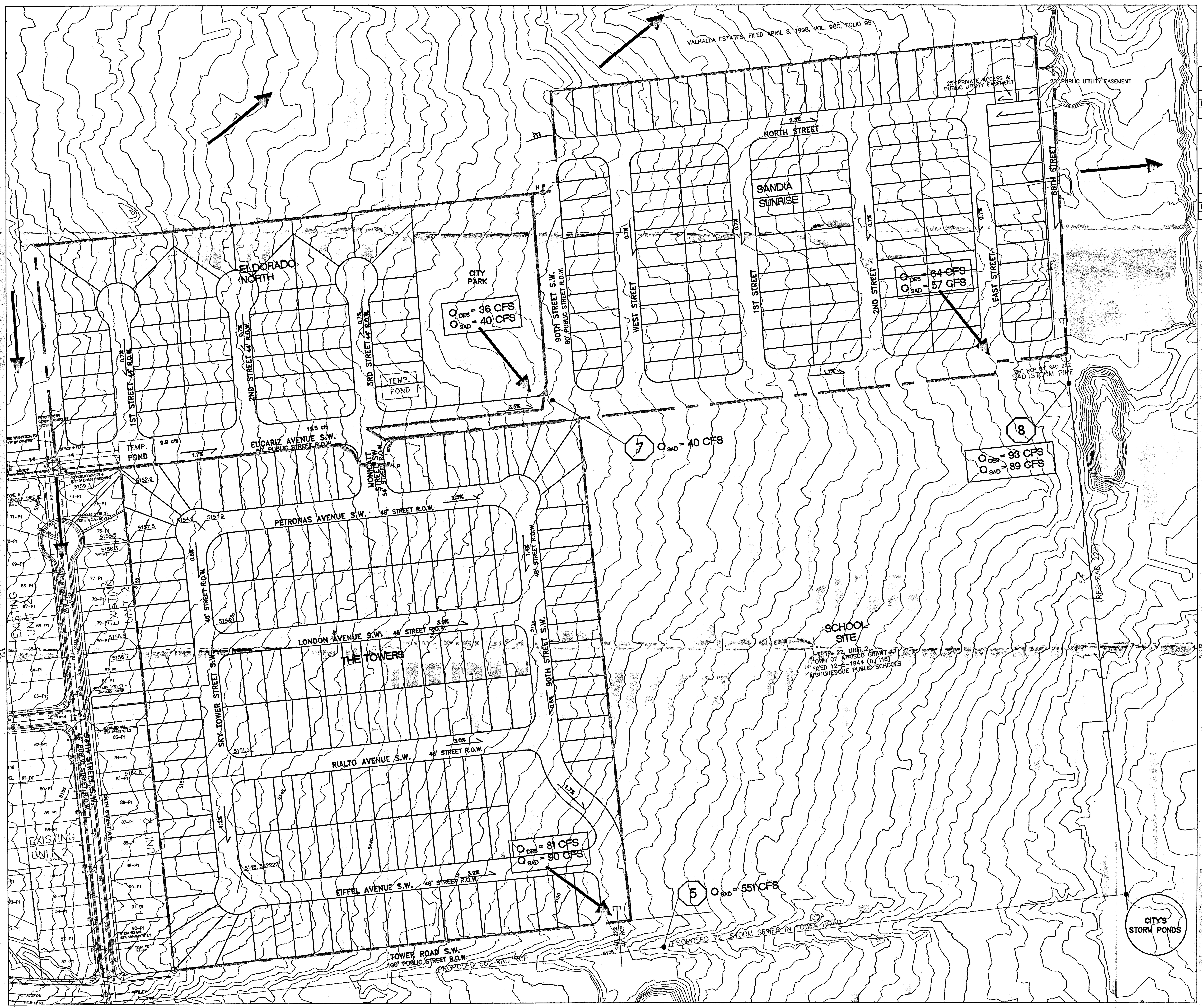
LARRY READ & ASSOCIATES, Inc.
Civil Engineers
4800-C Juan Tabo Blvd. NE
Albuquerque, New Mexico 87111
(505) 237-8421

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: THE TOWERS SUBDIVISION
STORM DRAIN MODIFICATIONS
PLAN AND PROFILE

LAST DESIGN DATE MO./DAY/YR. MO./DAY/YR.

PROJECT NO.
MAP NO. L-9
SHEET 1 OF 1


VALHALLA ESTATES, FILED APRIL 8, 1998, VOL. 98C, FOLIO 95
25' PRIVATE ACCESS & PUBLIC UTILITY EASEMENT
25' PUBLIC UTILITY EASEMENT
NORTH STREET
2.3%
SANDIA SUNRISE
86TH STREET
EAST STREET
2ND STREET
1ST STREET
WEST STREET
90TH STREET S.W.
60' PUBLIC STREET R.O.W.
H P
0.7%
Q DES = 64 CFS
Q SAD = 57 CFS
1.7%
36" RCP BY SAD 222
SAD STORM PIPE
8
Q DES = 93 CFS
Q SAD = 89 CFS
7
Q SAD = 40 CFS
ELDORADO NORTH
CITY PARK
Q DES = 36 CFS
Q SAD = 40 CFS
1ST STREET 44' R.O.W.
2ND STREET 44' R.O.W.
3RD STREET 44' R.O.W.
TEMP. POND
3.5%
19.5 cfs
9.9 cfs
EUCARIZ AVENUE S.W.
60' PUBLIC STREET R.O.W.
MONICATT STREET S.W.
54' STREET R.O.W.
PETRONAS AVENUE S.W. 46' STREET R.O.W.
2.5%
LONDON AVENUE S.W. 46' STREET R.O.W.
3.0%
THE TOWERS
RIALTO AVENUE S.W. 46' STREET R.O.W.
EIFFEL AVENUE S.W. 46' STREET R.O.W.
3.2%
SKY-TOWER STREET S.W.
46' STREET R.O.W.
90TH STREET S.W.
1.4%
0.8%
1.2%
1.7%
Q DES = 81 CFS
Q SAD = 90 CFS
TOWER ROAD S.W.
100' PUBLIC STREET R.O.W.
PROPOSED 66" SAD RCP
SAD 222 42" RCP
PROPOSED 72" STORM SEWER IN TOWER ROAD
5
Q SAD = 551 CFS
CITY'S STORM PONDS
SCHOOL SITE
TR. 22, UNIT 2
TOWN OF ATRISCO GRANT
FILED 12-6-1944 (D, 118)
ALBUQUERQUE PUBLIC SCHOOLS
(REF SAD 222)
EXISTING UNIT 2
94TH STREET S.W.
46' PUBLIC STREET R.O.W.
40' PUBLIC WATER + STORM DRAIN EASEMENT
TYPE A DOUBLE TYPE C INLET
5159.3
5158.5
5158.3
5156.8
5156.7
5154.8
5152.9
5154.9
5157.5
5151.2
5148.5
5125

BASIN RUNOFF SUMMARY

EXISTING CONDITION HYDROLOGY

Basin	Area (ac)	Land Treatment				Qpeak (cfs)		Volume (ac-ft)		
		%A	%B	%C	%D	10-yr 6-hr	100-yr 6-hr	10-yr 6-hr	100-yr 6-hr	100-yr 10-day
The Towers	22.77	100	0	0	0	5.5	12.9	0.152	0.835	0.835
Eldorado North	11.1	100	0	0	0	2.6	14	0.07	0.4	0.4
Colucci	17.44	100	0	0	0	4.2	22.5	0.116	0.641	0.641

FULLY DEVELOPED CONDITION HYDROLOGY

Basin	Area (ac)	Land Treatment				Qpeak (cfs)		Volume (ac-ft)		
		%A	%B	%C	%D	10-yr 6-hr	100-yr 6-hr	10-yr 6-hr	100-yr 6-hr	100-yr 10-day
The Towers	22.77	0	20	20	60	49.7	81	1.662	2.873	4.546
Eldorado North	11.1	0	34	20	46	21	36	0.7	1.2	1.8
Colucci	17.44	0	20	18	60	39.7	64.6	1.343	2.288	3.684

LEGEND

0.7%	APPROXIMATE STREET SLOPE
○	SCHEMATIC OF PROPOSED STORM SEWER SYSTEM BY SAD
▬ ▬	DRAINAGE BASIN BOUNDARY
A Q= 6.8 cfs	100-YR RUNOFF
→	AREA DRAINAGE DIRECTION PER SAD
7	SAD ANALYSIS POINT

N

SCALE: 1" = 100'

0 100 200 300

5501 Jefferson
87109

RECEIVED
DEC 12 2001
HYDROLOGY SECTION

RW, PE sh 200

Resource Technology, Inc.

Civil Engineering
Environmental Sciences
Water Resources
Landscape Architecture
Planning

1720 - B Randolph Road SE
Albuquerque, New Mexico 87106
E-mail: rtl@nmia.com
Telephone: (505) 243-7300
Facsimile: (505) 243-7400

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: MASTER DRAINAGE PLAN
THE TOWERS, NORTH ELDORADO, & SANDIA SUNRISE

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			WATER		
TRANS. DEV.			WASTE WATER		
HYDROLOGY			TRAF. OPER.		
OTHER			OTHER		

PROJECT NO.
MAP NO.
SHEET 1 OF 2

AS BUILT INFORMATION
CONTRACTOR
WORK STAKED BY DATE
INSPECTOR'S ACCEPTANCE BY DATE
FIELD VERIFICATION BY DATE
DRAWINGS CORRECTED BY DATE

MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS
ACS STA Z-L9
GROUND TO GRID 0.99967727
NM STATE PLANE CO-ORD. SYST CENTRAL ZONE
NAD 1927
N: 1478346.71
E: 352978.14
ELEV. 5175.735

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEERS SEAL
JUNE PAGE
NEW MEXICO
14879
REGISTERED PROFESSIONAL ENGINEER
11 Dec '01

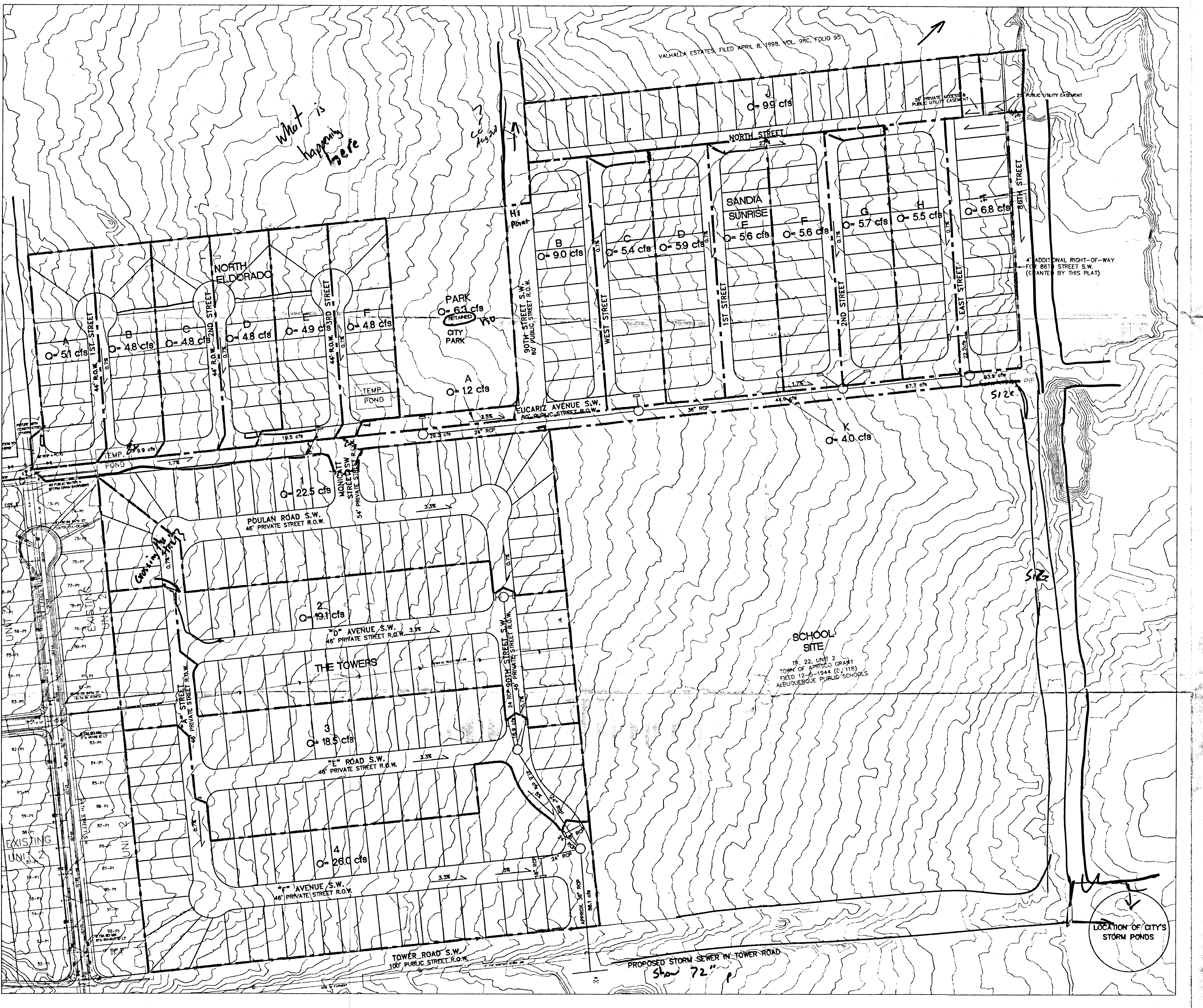
NO.	DATE	REMARKS	BY

REVISIONS

DESIGN

DESIGNED BY DATE 9/2001
DRAWN BY DATE 9/2001
CHECKED BY DATE 9/2001

9806DC203.dwg 9-27-01 2:57:38 pm EST


VALHALLA ESTATES, FILED APRIL 8, 1998, VOL. 98C, FOLIO 95
What is happening here
?
cc Aug 2nd
J
Q= 9.9 cfs
25' PRIVATE ACCESS & PUBLIC UTILITY EASEMENT
25' PUBLIC UTILITY EASEMENT
NORTH STREET
2.7%
Hi Point
NORTH ELDORADO
1ST STREET
44' R.O.W.
0.7%
2ND STREET
44' R.O.W.
3RD STREET
44' R.O.W.
A
Q= 5.1 cfs
B
Q= 4.8 cfs
C
Q= 4.8 cfs
D
Q= 4.8 cfs
E
Q= 4.9 cfs
F
Q= 4.8 cfs
TEMP. POND
PARK
Q= 6.3 cfs
RETAINED
no
CITY PARK
A
Q= 1.2 cfs
90TH STREET S.W.
60' PUBLIC STREET R.O.W.
SANDIA SUNRISE
B
Q= 9.0 cfs
WEST STREET
C
Q= 5.4 cfs
D
Q= 5.9 cfs
1ST STREET
E
Q= 5.6 cfs
F
Q= 5.6 cfs
2ND STREET
G
Q= 5.7 cfs
H
Q= 5.5 cfs
EAST STREET
I
Q= 6.8 cfs
86TH STREET
4' ADDITIONAL RIGHT-OF-WAY FOR 86TH STREET S.W. (GRANTED BY THIS PLAT)
22.2 cfs
93.9 cfs
PIP
Size
67.7 cfs
1.7%
44.9 cfs
36" RCP
K
Q= 4.0 cfs
EUCARIZ AVENUE S.W.
60' PUBLIC STREET R.O.W.
3.5%
29.3 cfs
24" RCP
19.5 cfs
9.9 cfs
TEMP. POND
1.7%
MONICATT STREET SW
54' PRIVATE STREET R.O.W.
1
Q= 22.5 cfs
POULAN ROAD S.W.
46' PRIVATE STREET R.O.W.
3.3%
crossing the street?
0.7%
2
Q= 19.1 cfs
"D" AVENUE S.W.
46' PRIVATE STREET R.O.W.
3.3%
THE TOWERS
"A" STREET
46' PRIVATE STREET R.O.W.
90TH STREET S.W.
46' PRIVATE STREET R.O.W.
24" RCP
18.9 cfs
3
Q= 18.5 cfs
"E" ROAD S.W.
46' PRIVATE STREET R.O.W.
3.3%
41.6 cfs
5%
24" RCP
4
Q= 26.0 cfs
"F" AVENUE S.W.
46' PRIVATE STREET R.O.W.
3.3%
5%
18" RCP
APPROX. 36" RCP
86.1 cfs
SCHOOL SITE
TR. 22, UNIT 2
TOWN OF ATRISCO GRANT
FILED 12-5-1944 (C/118)
ALBUQUERQUE PUBLIC SCHOOLS
EXISTING UNIT 2
UNIT 2
84TH STREET S.W.
TOWER ROAD S.W.
100' PUBLIC STREET R.O.W.
PROPOSED STORM SEWER IN TOWER ROAD
Show 72" p
Size
LOCATION OF CITY'S STORM PONDS

98260CS03.dwg 9-20-01 11:22:07 am EST

98260CS03.dwg 9-20-01 11:22:07 am EST

LEGEND

0.7% → APPROXIMATE STREET SLOPE

SCHEMATIC OF PROPOSED STORM SEWER SYSTEM

— - — DRAINAGE BASIN BOUNDARY

A
Q= 6.8 cfs. 100-YR RUNOFF

N

SCALE: 1" = 100'

0 100 200 300

RECEIVED
OCT 16 2001
HYDROLOGY SECTION

AS BUILT INFORMATION
CONTRACTOR
WORK STAKED BY DATE
INSPECTOR'S ACCEPTANCE BY DATE
FIELD VERIFICATION BY DATE
DRAWINGS CORRECTED BY DATE
MICRO-FILM INFORMATION
RECORDED BY DATE
NO.

BENCH MARKS

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE

ENGINEERS SEAL
JUNE PAGE
14879
25 Sept '01

NO.	DATE	REMARKS	BY

REVISIONS
DESIGN

DESIGNED BY		DATE	9/2001
DRAWN BY		DATE	9/2001
CHECKED BY		DATE	9/2001

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Environmental Sciences
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Facsimile: (505) 243-7400

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE:
MASTER DRAINAGE PLAN
THE TOWERS, NORTH ELDORADO, & SANDIA SUNRISE

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			WATER		
TRANS. DEV.			WASTE WATER		
HYDROLOGY			TRAF. OPER.		
OTHER			OTHER		

PROJECT NO.	MAP NO.	SHEET 1 OF 2