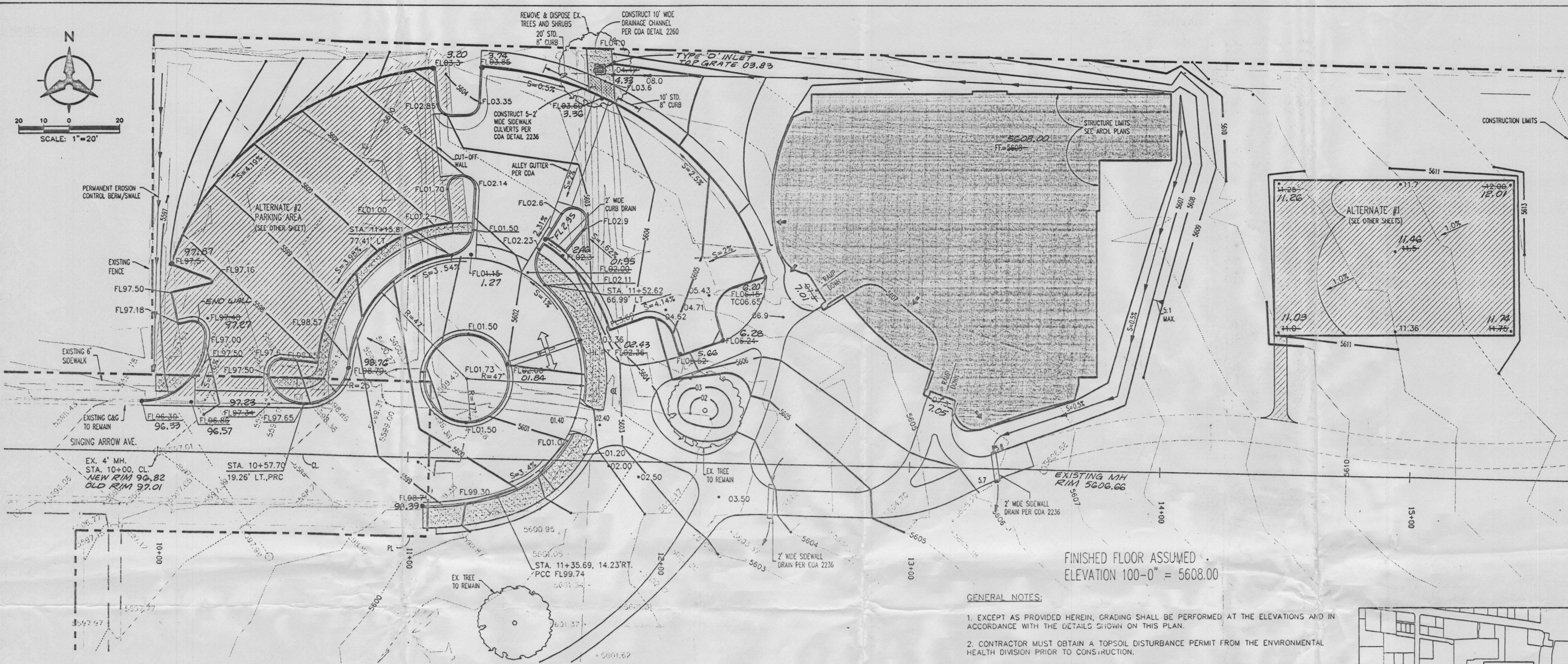
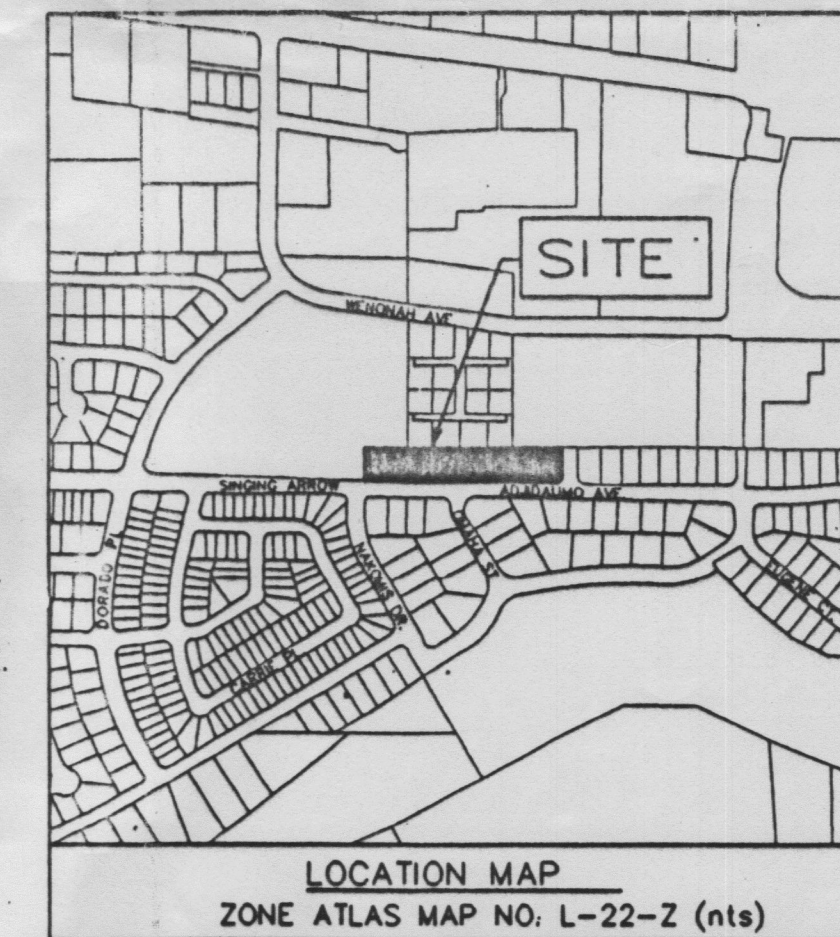


1. EXCEPT AS PROVIDED HEREIN, GRADING SHALL BE PERFORMED AT THE ELEVATIONS AND IN ACCORDANCE WITH THE DETAILS SHOWN ON THIS PLAN.
2. CONTRACTOR MUST OBTAIN A TOPSOIL DISTURBANCE PERMIT FROM THE ENVIRONMENTAL HEALTH DIVISION PRIOR TO CONSTRUCTION.
3. ALL WORK RELATIVE TO FOUNDATION CONSTRUCTION, SITE PREPARATION, AND PAVEMENT INSTALLATION, AS SHOWN ON THIS PLAN, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "GEOTECHNICAL INVESTIGATION," AS PROVIDED BY THE ARCHITECT OR OWNER. ALL OTHER WORK SHALL, UNLESS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE (COA) STANDARD SPECIFICATIONS FOR PUBLIC WORKS.
4. 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.
5. ALL SPOT ELEVATIONS ARE TO FLOWLINE UNLESS OTHERWISE NOTED.
6. EARTH SLOPES SHALL NOT EXCEED 3 HORIZONTAL TO 1 VERTICAL UNLESS SHOWN OTHERWISE.
7. THE CONTRACTOR IS TO ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PROPERTY OR PUBLIC RIGHT-OF-WAY, BY USE OF TEMPORARY EROSION CONTROL BERM/SWALE OR EQUAL.
8. SEE OTHER SHEETS FOR BUILDING FOUNDATION DETAILS.
9. ROW SHOWN AS PROVIDED BY COA SURVEY.

RICK BELTRAMO, R.
N.M.P.E. NO. 10596

ROUGH GRADING APPROVAL

FINISHED FLOOR ASSUMED
ELEVATION 100-0" = 5608.00





CITY OF ALBUQUERQUE

CAPITAL IMPLEMENTATION PROGRAM

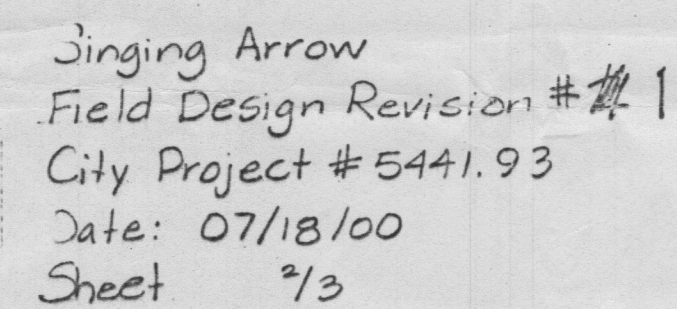
DES. & REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAY/YR.	MO./DAY/YR.
		01 07/10/98	5
		02	5
		03	7
		04	3
CITY PROJECT NO.	5441.93	LAST DESIGN UPDATE	C1. 15 OF 32
	ZONE MAP NO.		
	L-22-Z	SHEET	07 OF 32

SURVEY INFORMATION		BENCH MARKS		AS-BUILT INFORMATION	
NO.	FIELD NOTES		A.C.S. SURVEY MONUMENT "10-J21" LOCATED AT THE INTERSECTION OF EUBANK BLVD. N.E. AND INDIAN SCHOOL RD. N.E. IN THE MEDIAN ON INDIAN SCHOOL RD. N.E. IS A STANDARD "A.C.S. BRASS" TABLET STAMPED "10-J21", 1979"	CONTRACTOR	DATE:
	BY	DATE			
				INSPECTOR'S APPROVED BY	DATE:
				FIELD VERIFICATION BY	DATE:
				CONTRACTOR'S CORRECTED BY	DATE:
			SET FLUSH WITH THE CURB.(ELEV = 54666.372)	MICRO-FILM INFORMATION	
				RECORDED BY	DATE:
				NO.	

[illegible]

Sheet 1/3
N
Scale: 1" = 20'

Existing 6" PVC to remain
Type "D" inlet
culverts
New 6" PVC pipes
Area of field design
revision



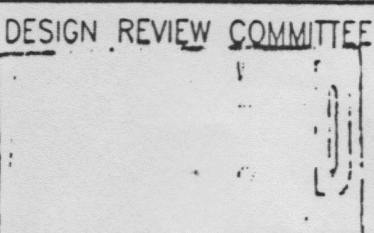
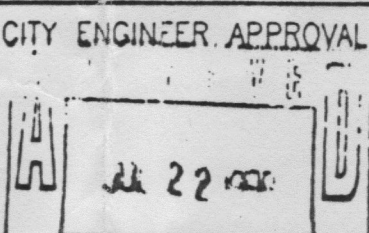
1. Cut existing 6" PVC pipe at property line.
2. Remove & dispose of existing 6" PVC south of property line (AL)
3. Connect new 6" PVC to existing 6" PVC at property line and extend it 3' south of property line. Invert @ south end of pipe = 2.2
4. Build inlet at south end of pipe. Type "D".
Top of grate (TG) = 3.9, Invert (INV) = 2.2
5. Place expansion joint material around inlet.
6. Contractor shall field adjust inlet to match existing invert of drainage channel
7. New pipe shall maintain same slope as existing pipe.

Designed by: CMG
Reviewed by: RLB

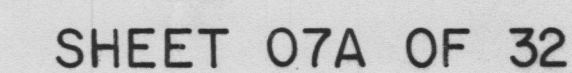
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1. FOR SINGLE GATE TYPE STORM INLET, DISASSEMBLE CENTER SUPPORT AND MOVE ONE END WALL TO FORM NEW SINGLE GATE INLET.
2. STORM INLET GUTTER TRANSITION WILL BE SHOWN ON THE CONSTRUCTION PLANS.
3. OUTLET PIPE SIZE, PER DESIGN REQUIREMENT.
4. FOR FRAME & GRATING, SEE DWG 2210, 2220 & 2221.
5. FOR CENTER SUPPORT ASSEMBLY, SEE DWG 2215.

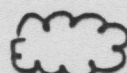
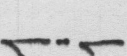
- A. FRAME & GRATE
- B. CENTER SUPPORT ASSEMBLY.
- C. CUT ONE HORIZONTAL AND ONE VERTICAL BAR MAX. AT PIPE OPENING.
- D. NO. 4 BARS A 6" O.C. EACH WAY.
- E. USE STANDARD STEPS, SEE DWG 2229.
- ~~F. CONC. FILL, SEE DWG. 2201.~~
- G. INVERT PER DESIGN.
- H. INSTALL STEPS ON DOWNSTREAM FACE

 Bohannon & Huston		Courtyard One 7500 JEFFERSON NE Albuquerque NEW MEXICO 87109		ENGINEERS PLANNERS PHOTOGRAMMETRISTS SURVEYORS SOFTWARE DEVELOPERS		NO. DATE		CC		DESIGN BY:	
		CITY OF ALBUQUERQUE CAPITAL IMPLEMENTATION PROGRAM						CC		DESIGN BY:	
TITLE:		SINGING ARROW NEIGHBORHOOD PARK GRADING PLAN						CC		DESIGN BY:	
DESIGN REVIEW COMMITTEE		CITY ENGINEER APPROVAL		MO./DAY/YR.		MO./DAY/YR.		CC		DESIGN BY:	
				01 07/10/98		05		CC		DESIGN BY:	
CITY PROJECT NO.		ZONE MAP NO.		02		06		CC		DESIGN BY:	
5441.93		L-22-Z		03		07		CC		DESIGN BY:	
SHEET		OF		04		08		CC		DESIGN BY:	
7		11		05		09		CC		DESIGN BY:	
8		12		06		10		CC		DESIGN BY:	
9		13		07		11		CC		DESIGN BY:	
10		14		08		12		CC		DESIGN BY:	
11		15		09		13		CC		DESIGN BY:	
12		16		10		14		CC		DESIGN BY:	
13		17		11		15		CC		DESIGN BY:	
14		18		12		16		CC		DESIGN BY:	
15		19		13		17		CC		DESIGN BY:	
16		20		14		18		CC		DESIGN BY:	
17		21		15		19		CC		DESIGN BY:	
18		22		16		20		CC		DESIGN BY:	
19		23		17							

Singing Arrow
Field Design Revision # ~~21~~ 1
City Project # 5441.93
Date: 07/18/00
Sht 3/3



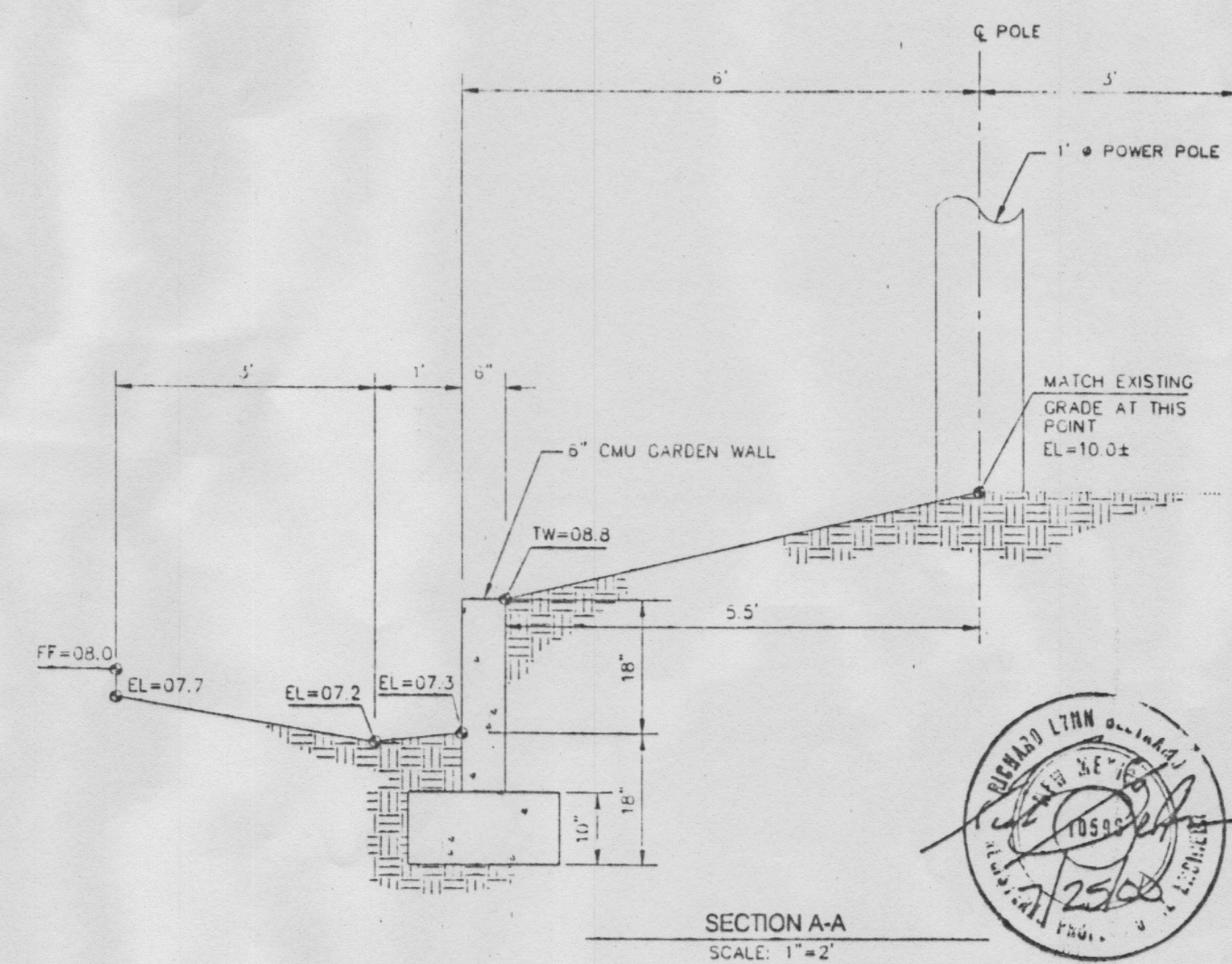
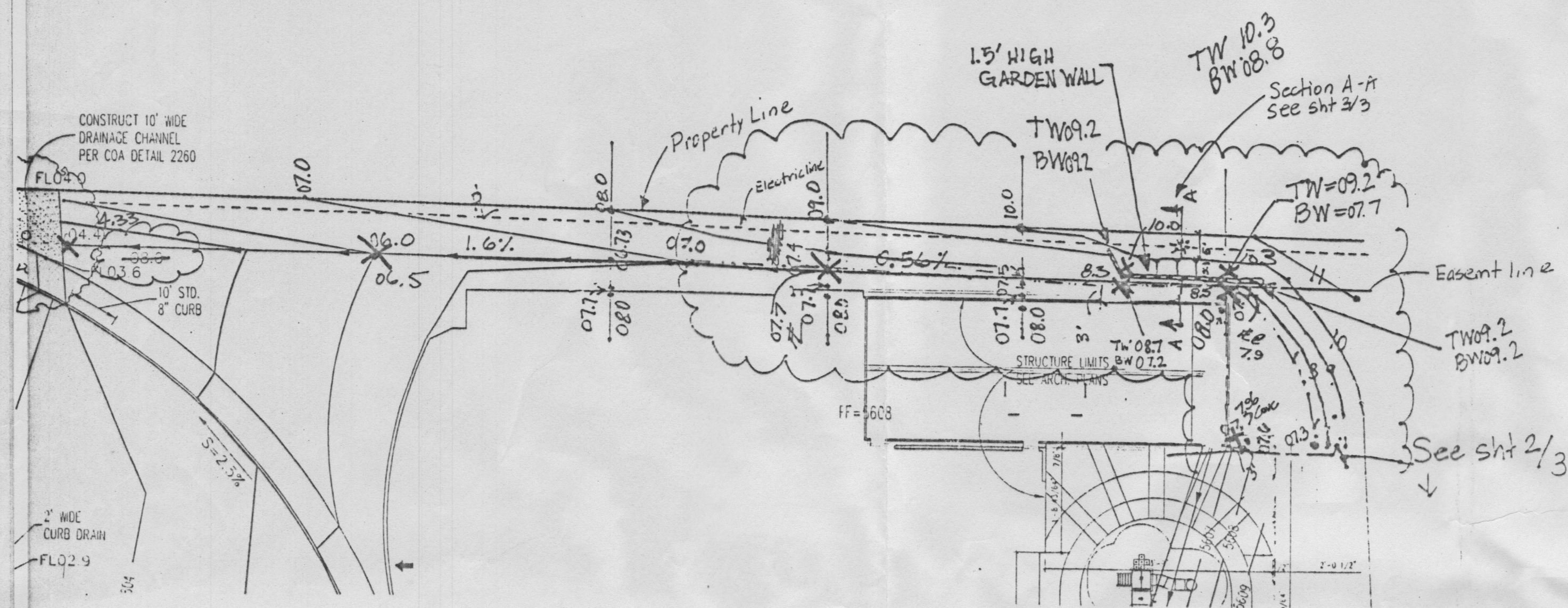
Legend

- * Light pole (existing)
- Garden wall
-  Areas of revision
- Electric Line
-  New swale
- Easment line

Notes. This Field design revision is intended to define the new swale location, a garden retaining wall around existing light pole, ~~adjusted~~ grades

- Contractor shall insure that proposed ground slopes away from the building.
- Contractor shall not exceed a 3:1 slope at any location on site

Singing Arrow
Field Design Revision #2
City Project # 5441.93
Date 07/20/00
Sht 3/3

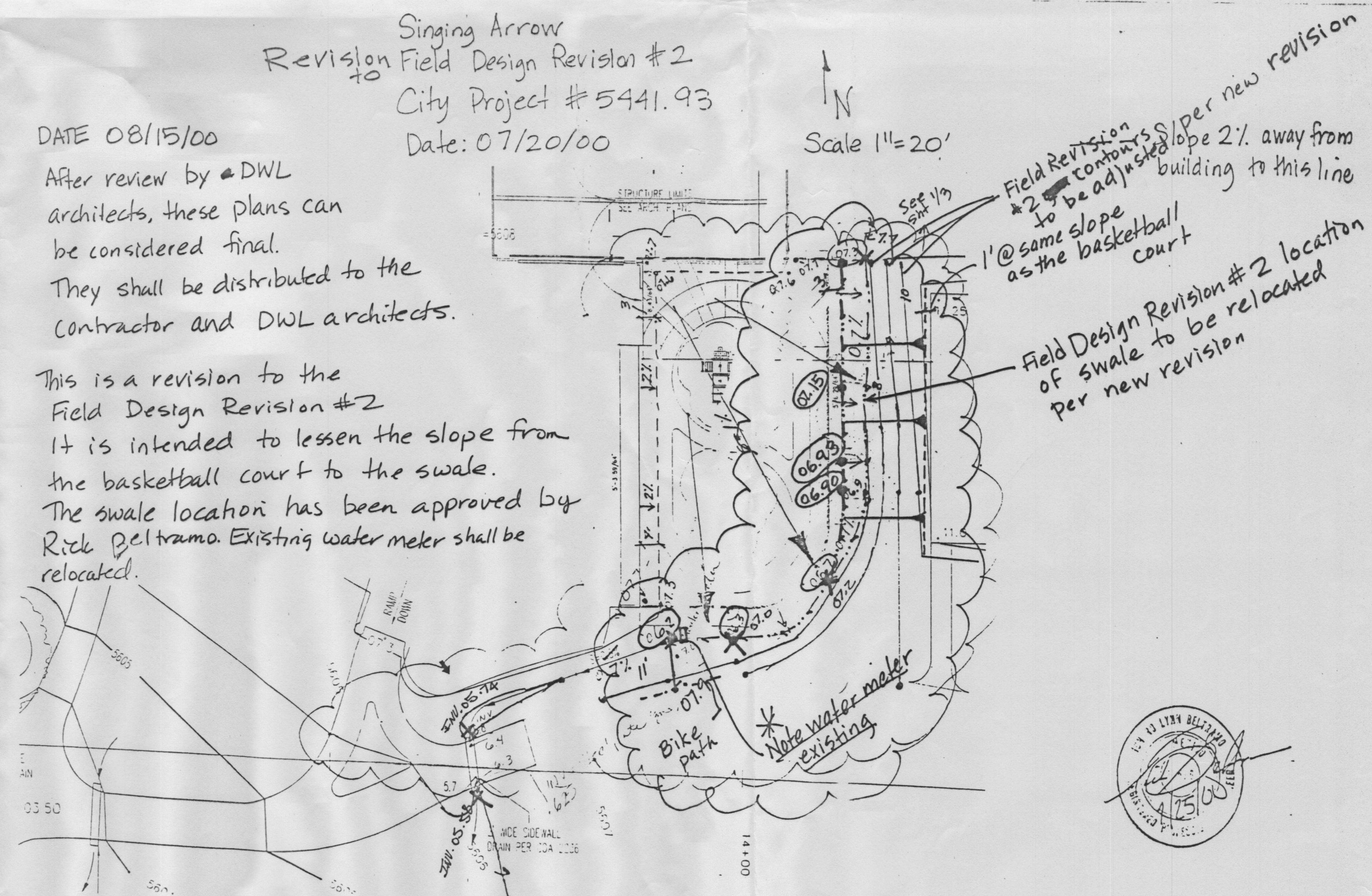


 Borhannan & Huston				DESIGN BY: CC DRAWN BY: JCU CHECKED BY: RB	
Courtyard One 7500 JEFFERSON NE Albuquerque NM 87109					
ENGINEERS PLANNERS PHOTOGRAMMETRISTS SURVEYORS SOFTWARE DEVELOPERS					
NO.	DATE	NO.	DATE	NO.	DATE

DATE 08/15/00

After review by a DWL architects, these plans can be considered final. They shall be distributed to the Contractor and DWL architects.

This is a revision to the
Field Design Revision #2
It is intended to lessen the slope from
the basketball court to the swale.
The swale location has been approved by
Rick Peltramo. Existing water meter shall be
relocated.



Conceptual Drainage Management Plan

I. INTRODUCTION / BACKGROUND / PURPOSE

This study analyzes on-site and off-site hydrology and hydraulics in support of the planned improvements to Singing Arrow Park. The site is located at the northeast corner of the intersection of Singing Arrow and Nakomis Drive in southeast Albuquerque, New Mexico, within Bernalillo County. The site was originally platted and shown in the location map attached. Although the map shows divided lots north and south of Adjudumo Ave (shaded in the basin map below), the improvements are in addition to the existing park currently under construction by another project; they include landscape improvements and a bike trail. The legal description for the site is Lots 1-10, Block 1, Second Unit, Canada Village, Recorded October 6, 1953. It is zoned under RA-2.

The analysis is based on the approved report titled: "South Eubank Area Storm Drainage Analysis", a City of Albuquerque report dated November, 1995.

Proposed improvements include:
The addition of a community center building
The extension of Singing Arrow Road into a cul-de-sac with a median in the middle
The addition of a parking lot surrounding the cul-de-sac
The addition of a hard court sports facility
The relocation of an existing portable building

II. ANALYSIS

This drainage plan analyzes impacts to downstream areas that are currently known to have drainage problems. Analysis is based on utilizing the approved "South Eubank Area Storm Drainage Analysis", by revising the analysis to better reflect current basin conditions and to add proposed improvements. The drainage report determined that a Tomlinson Road storm drain is needed to correct the drainage problems in this area. This storm drain is a plan by the City, but is not programmed for funding and construction in the near future.

This analysis looks at Basin 209 and Analysis Point 25. Under existing conditions (Revised) Basin 209 generates 107 cfs versus 117 cfs per the South Eubank Report. The revisions are due to:

- a) 4.6 acres do not contribute to the peak flow
b) a large portion at Basin 209 is now a park and will not be developed to a density 4-du/acre as the plat indicates

This area is an apartment complex which drains into a pond. The pond is then pumped north out-falling to Wenonah Ave and therefore does not affect peak flows. This is supported by the approved drainage report on file and by site inspections.

The two tables below have been broken into three columns, original, revised, and proposed. The definitions of each of these are:

Original = Analysis provided by Report dated 1995
Revised = Original analysis revised to represent existing conditions as they are today and based on recent site inspections. For the purpose of comparison this is the "existing conditions" analysis.
Proposed = This analysis shows the impact of the proposed improvements with respect to the revised.

In the first table, the existing 100-year peak flow is calculated to be 107 cfs versus 119 cfs from the original study. This indicates that the 12 cfs was contributed by the area which was removed. The proposed flow for basin 209 is 109 cfs versus 107 cfs for a n increase of 2cfs (2%).

In the second table, the existing 100-year flow is 213 cfs, 12 cfs less than the original flow. The proposed flow is 215 cfs, 2 cfs greater than the existing flow, an increase of 1%. This results in an increase in flow depth from existing of 0.84' to proposed of 0.85', a difference of 0.01'. This difference is negligible and does not warrant storm drain improvements.

A sub-basin of .65 acres is contributes flow from the east to the community center building. A swale is designed to divert the flow of 2 cfs to a drain on the south side of this building. Below is a basin map showing the subbasin identified as 209-A. The flow depth in the swale that protects the building is 0.47' which is significantly less than the capacity of the swale which is 0.98'.

III. CONCLUSIONS

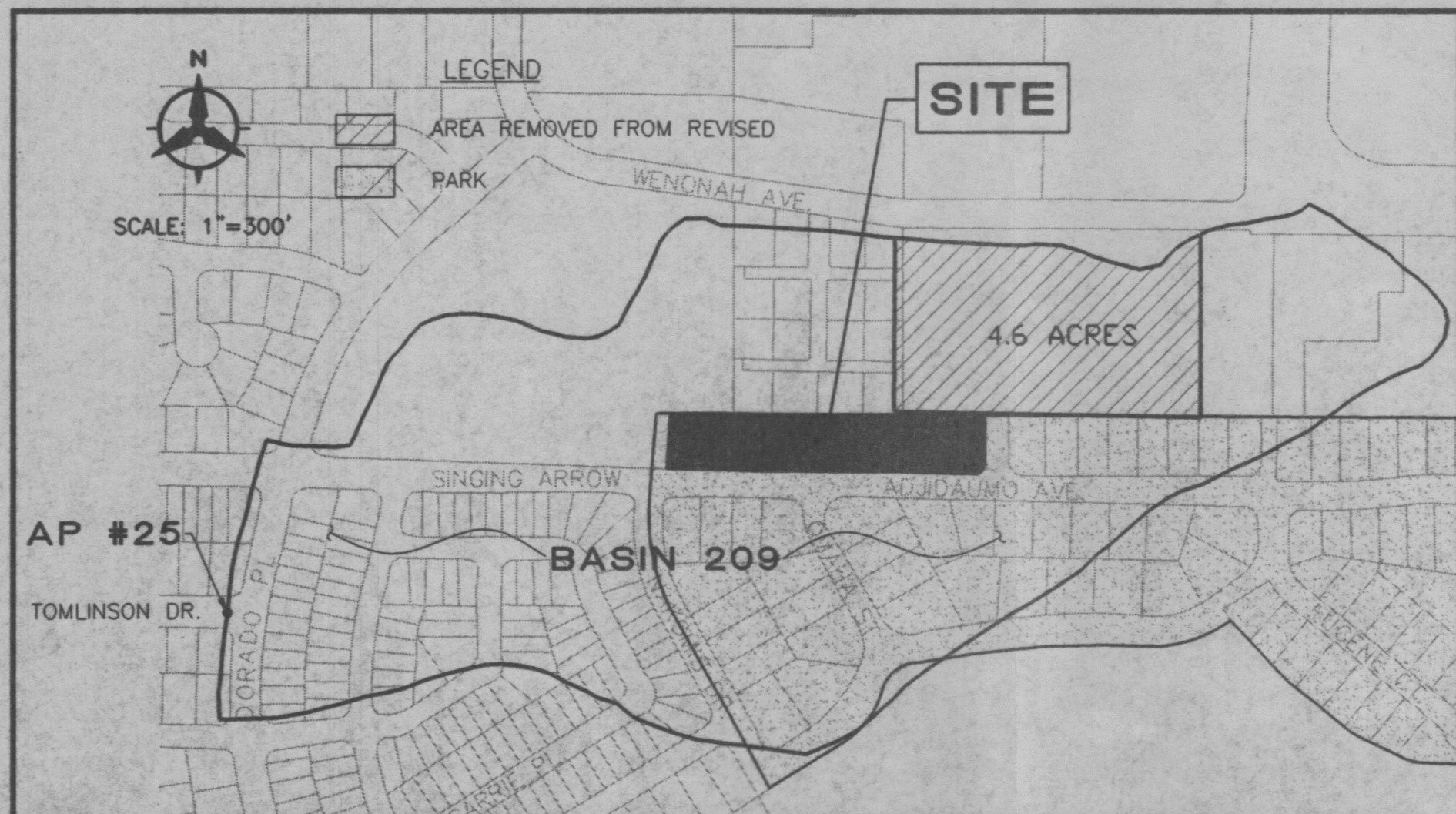
This plan presents a thorough conceptual drainage management plan for the planned community center. The Tomlinson Road storm drain has been proposed. The new improvements listed in this report will not significantly increase the flow of this area. The existing flow into Tomlinson Road is 113 cfs and the proposed flow is 115 cfs. There is less than a 1% increase in flow between existing and proposed flow rates. The flow depth of Tomlinson Road before and after the improvements is less than 0.01' increase. The swale will protect the community center from off-site drainage. The swale is capable of handling the flow of 2 cfs. This report conforms to the Bernalillo drainage requirements. It is recommended that these improvements be added to this site due to no significant impact to the existing condition of this site.

p:[99265.cdp.reports] conceptual drng mngmt plan.rtf

BASIN 209	ORIGINAL	EXISTING	PROP.
AREA (ACRES)	36.9*	32.1	32.1
% IMPERVIOUS	62.0*	34.3	37.2
100 YR. (CFS.)	119*	107	109

ANALYSIS POINT 25	ORIGINAL	EXISTING	PROP.
AREA (ACRES)	80.5	75.9	75.9
100 YR. (CFS.)	225.2	113.0	115.0
FLOW DEPTH (FT.)	-	0.84	0.85

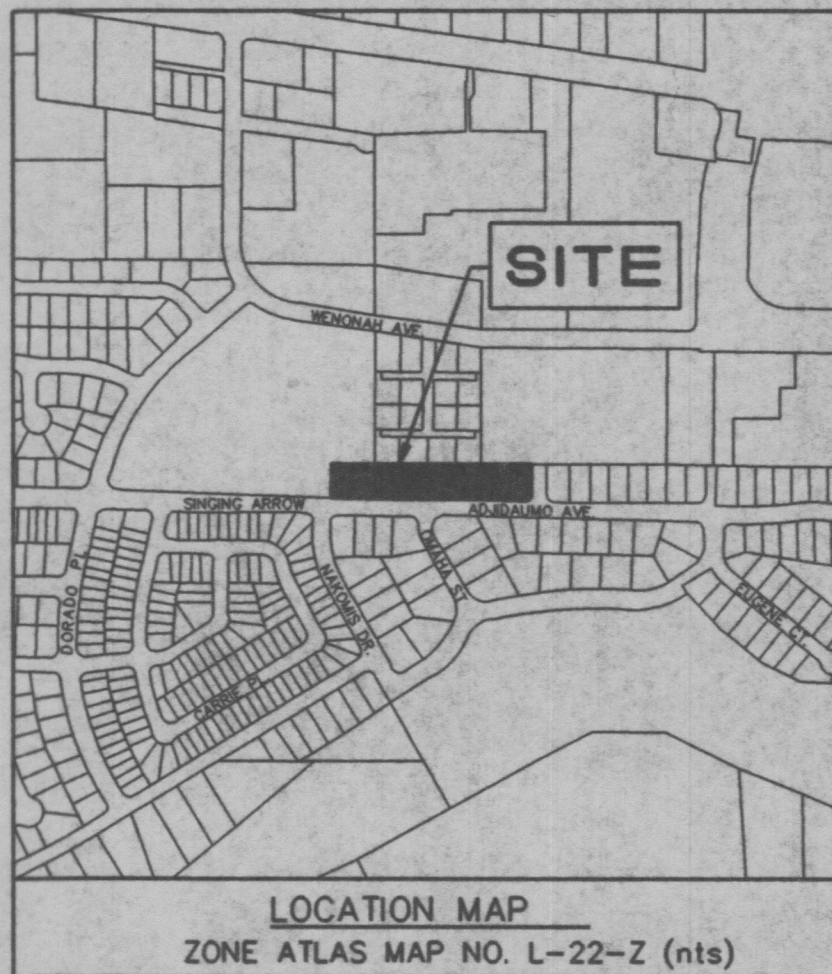
* TAKEN FROM DRAINAGE REPORT



BASIN MAP AND PARAMETERS REVISED FROM STUDY BY THE CITY OF ALBUQUERQUE TITLED "SOUTH EUBANK AREA STORM DRAINAGE ANALYSIS", DATED NOVEMBER 1995.

LEGAL DESCRIPTION

Lots 1-10, Block 1
Second Unit
Canada Village
Recorded October 6, 1953



EXISTING CONDITIONS (SOUTH EUBANK AREA STORM DRAINAGE ANALYSIS)

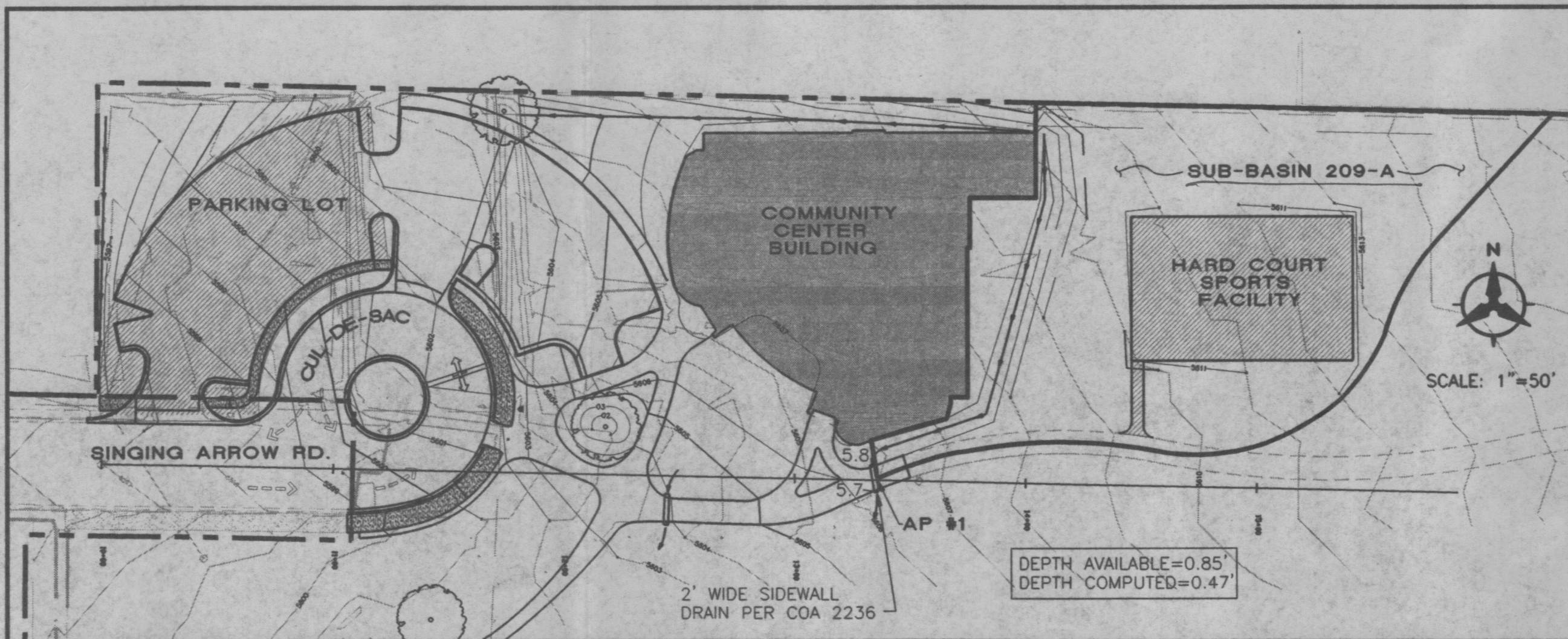
BASIN	AREA	% IMPERVIOUS	LAND TREATMENT	TC	Q100
	(SQ. MI)	%	% A B C D	(HRS)	(CFS)
209	37.1	62	10 21 7 62	0.133	119

EXISTING CONDITIONS (PER THIS STUDY)

BASIN	AREA	% IMPERVIOUS	LAND TREATMENT	TC	Q100
	(SQ. MI)	%	% A B C D	(HRS)	(CFS)
209	32	34.3	0 59 7 34	0.133	107
AP#25	80.5	61.0	8 34.9 7.7 61	0.133	213

PROPOSED CONDITIONS (PER THIS STUDY)

BASIN	AREA	% IMPERVIOUS	LAND TREATMENT	TC	Q100
	(SQ. MI)	%	% A B C D	(HRS)	(CFS)
209	32	37.2	0 56 7 37	0.133	107
AP#25	80.5	61.9	8 34.8 7.8 61.9	0.133	215



SUB-BASIN 209-A

AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ARCHITECT/ENGINEER SEAL		REVISIONS	
CONTRACTOR	DATE	LOCATED	DATE	FIELD NOTES	DATE	SEAL	DATE	DESIGN	DATE
WORK BY	DATE	AT THE INTERSECTION OF EUBANK BLVD. N.E. AND INDIAN SCHOOL RD. N.E. IN THE MEDIAN	DATE	BY	DATE				
FIELD ACCEPTANCE BY	DATE	ON INDIAN SCHOOL RD. N.E. IS A STANDARD	DATE						
DRAWN BY	DATE	A.C.S. BRASS TABLET STAMPED "10-121" 1979"	DATE						
CHECKED BY	DATE	SET FLUSH WITH THE CURB (ELEV = 5466.322)	DATE						
RECORDED BY	DATE								
NO.									



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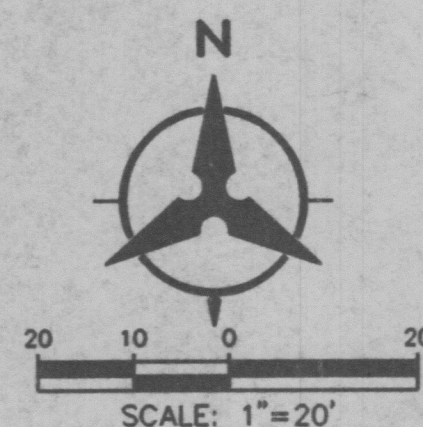
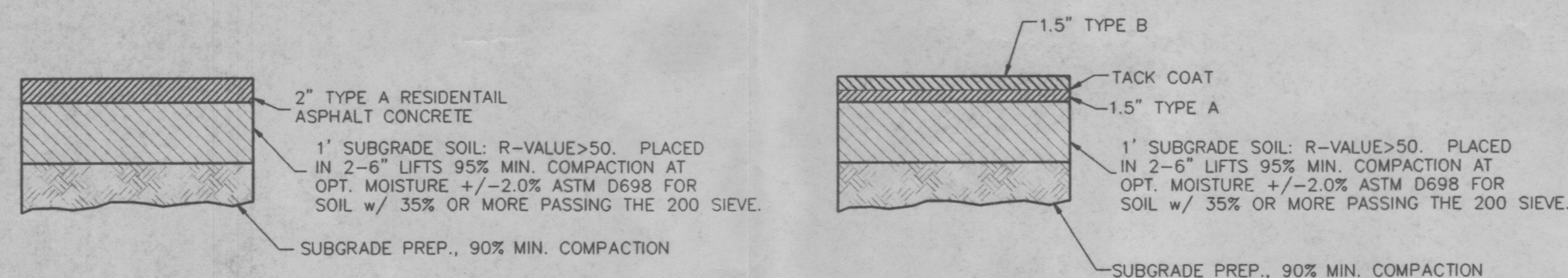
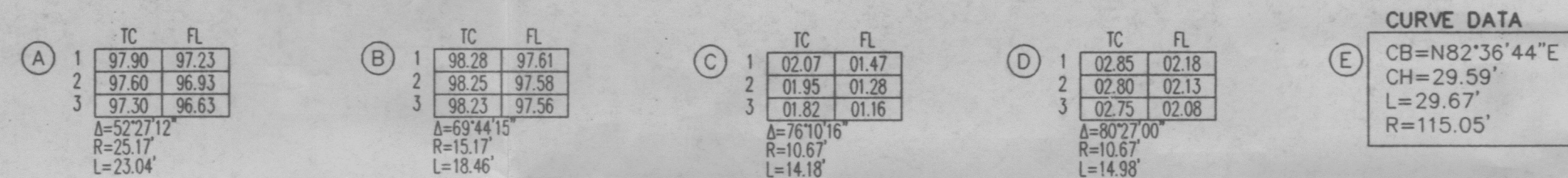
Courtyard One 7500 JEFFERSON NE Albuquerque NEW MEXICO 87109

ENGINEERS PLANNERS PHOTOGRAMMETRISTS SURVEYORS SOFTWARE DEVELOPERS

CITY OF ALBUQUERQUE
CAPITAL IMPLEMENTATION PROGRAM

TITLE: SINGING ARROW
NEIGHBORHOOD PARK
DRAINAGE PLAN

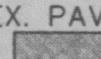
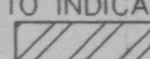
DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	MO./DAY/YR.	MO./DAY/YR.
		01 05	
		02 06	
		03 07/10/98	
		04 08	
CITY PROJECT NO.	5441.93	ZONE MAP NO.	L-22-Z



NOTES

1. ALL CURVE DATA AND DIMENSIONS REFER TO FACE OF CURB UNLESS OTHERWISE SPECIFIED.
2. GRADE ELEVATIONS, WHERE NOTED, ARE FOR FLOWLINE OF CURB UNLESS OTHERWISE SPECIFIED.
3. CONTRACTOR IS RESPONSIBLE FOR REPAIR AND/OR REPLACEMENT OF ALL UTILITY CONDUITS AND EXISTING LINES.
4. ANY ADDITIONAL GRADING REQUIRED TO MATCH PROPOSED STREET GRADES SHALL BE INCIDENTAL TO PAVING ITEMS.
5. CONTRACTOR SHALL PROVIDE THE INSPECTORS, (CITY AND PRIVATE) WITH THE PROPOSED HYDROSTATIC TESTING PLAN. THE PLAN MUST BE APPROVED BEFORE TESTING OPERATIONS BEGIN.
6. CONTRACTOR SHALL PARK EQUIPMENT AND VEHICLES AS NOT TO INTERFERE WITH NORMAL ACTIVITIES OF RESIDENTS OR OTHER CONTRACTORS ON SITE.
7. ANY DAMAGE TO THE EXISTING FACILITIES (CURB & GUTTER), PAVEMENT, CONDUITS, LANDSCAPING, UTILILITY LINES, ETC.) DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTORS' EXPENSE.
8. REMOVAL OF THE EXISTING CURB AND GUTTER SHALL BE AS PER COA STD. DWG. 2415 (SAW CUT ONLY).
9. WHEELCHAIR RAMPS SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF CURB & GUTTER.
10. STATIONING BASED ON CENTERLINE STATIONING SET FOR CITY PROJECT #5441.92
11. ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED W/ PLASTIC REFLECTORIZED PAVEMENT MARKING BY CONTRACTOR TO LOCATION AS EXISTING OR AS INDICATED BY THIS PLAN SET.
12. SEE ENLARGED SITE PLAN FOR PARKING LOT LAYOUT AND DIMENSIONS.

KEYED NOTES

- [1] BUILD CONCRETE VALLEY GUTTER
AS PER STD. DWG. 2420
- [2] BUILD WHEELCHAIR RAMP AS PER STD. DWG. 2441,
CASE II WITH ALTERNATE SECTION AA
- [3] BUILD STD. CURB & GUTTER AS PER STD. DWG. 2415
- [4] BUILD MEDIAN CURB & GUTTER AS PER STD. DWG.
2415
- [5] BUILD 4' SIDEWALK
- [6] BUILD 8' SIDEWALK
- [7] REMOVE AND DISPOSE RT. EX. SIDEWALK AND
BOLLARDS.
- [8] SAWCUT AND REMOVE EX. PAVEMENT, 2' MIN. WIDTH
CLEAR TO NEW GUTTER. 
- [9] BUILD 47'R STD. TYPE CURB & GUTTER. CENTER OF
CUL-DE-SAC AT STA. 11+22.53, 30.89' LT. (CENTER
OF CUL-DE-SAC)
- [10] BUILD 17'R F-F STD. TYPE CURB & GUTTER. CENTER
OF CUL-DE-SAC AT STA. 11+22.53, 30.89' LT.
(CENTER OF ISLAND)
- [11] STA. 9+93.41, 19.17' LT. MATCH EXISTING PAVEMENT
GRADE AND LOCATION FL ELEV.=5596.35 CONTRACTOR
TO VERIFY PRIOR TO CONSTRUCTION.
- [12] STA. 11+35.00, 10' LT. ADJUST EXISTING VALVE TO
NEW PAVEMENT GRADE.
- [13] STA. 11+65.00, 17' LT. REMOVE EXISTING FIRE
HYDRANT INSTALL 6"-90° BEND 20'-6" PVC CLASS
C-900 WATERLINE. REINSTALL FIRE HYDRANT AT
STATION 11+85.00, 17' LT. w/ ALL JOINTS RESTRAINED.
FLANGE ELEVATION=03.40
- [14] STA. 12+70.00, 10' LT. EXISTING 10' LT. 4" WATERLINE
AND ELECTRONIC MARKER DISK.
- [15] EXISTING PAVEMENT TO BE REMOVED AND DISPOSED.
- [16] NEW PAVEMENT AS PER SINGING ARROW PAVEMENT
SECTION ON THIS SHEET.
- [17] NEW PAVEMENT AS PER PARKING LOT PAVEMENT
SECTION ON THIS SHEET.
- [18] STA. 11+06.45, 18.69' RT. TO STA. 11+35.94, 14.23'
RT. BUILD 115.05' RADIUS CUL-DE-SAC, STD. CURB
AND GUTTER.
- [19] ADJUST EXISTING WATER METER LOCATION TO NE
CURBS
- [20] EXISTING SIDEWALK TO REMAIN
- [21] PAVEMENT MARKING TO INDICATE MEDIAN AND TRAFFIC
DIRECTION.
- [22] CURB PAINTED RED TO INDICATED FIRE LANE. (-----)
- [23] 3" WIDE PAVEMENT STRIPES/MARKINGS TO INDICATE
DROP-OFF ZONE AND FIRE LANE ZONE. 
- [24] "NO PARKING ANYTIME" SIGN.

[illegible]

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ENGINEERS PLANNERS PHOTOGRAMMETRISTS SURVEYORS SOFTWARE DEVELOPERS

CITY OF ALBUQUERQUE
CAPITAL IMPLEMENTATION PROGRAM

TITLE: SINGING ARROW
NEIGHBORHOOD PARK
SINGING ARROW AVE. PUBLIC PAVING AND WATER PLAN

DESIGN REVIEW COMMITTEE		CITY ENGINEER APPROVAL		MO./DAY/YR. 01 07/10/98 02 03 04		MO./DAY/YR. 05 06 07 08	
CITY PROJECT NO.		5441.93 1-22-Z		LAST DESIGN UPDATE		C1.06 SHEET 08 OF 31	

THE FOLLOWING NOTES ALSO APPLY WHEN CHECKED

- ☒ BACKFILL COMPACTION SHALL BE ACCORDING TO SPECIFIED 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.