

• L E G E N D •

**MATERIALS**

CONCRETE

RIP-RAP



**LINES**

SUBDIVISION BOUNDARY

PROPERTY LINE (PLAN)

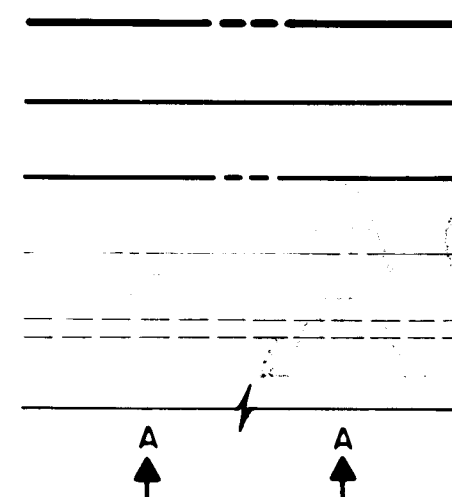
PROPERTY LINE (SECTION)

CENTERLINE

EASEMENT LINE

MATCH LINE

SECTION CUT LINE



**EARTHWORK**

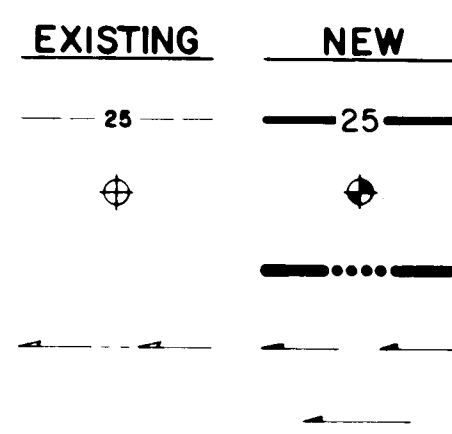
CONTOUR LINE

SPOT ELEVATION

PROJECT / PHASE BOUNDARY

SWALE

DIRECTION OF FLOW



**MISCELLANEOUS UTILITIES**

GAS LINE

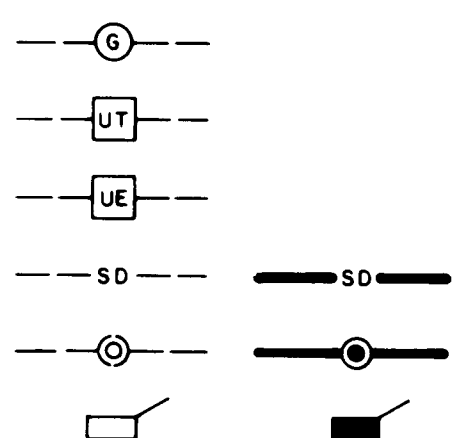
UNDERGROUND TELEPHONE

UNDERGROUND ELECTRICAL

STORM DRAIN

STORM DRAIN MANHOLE

STORM DRAIN INLET



**SANITARY SEWER**

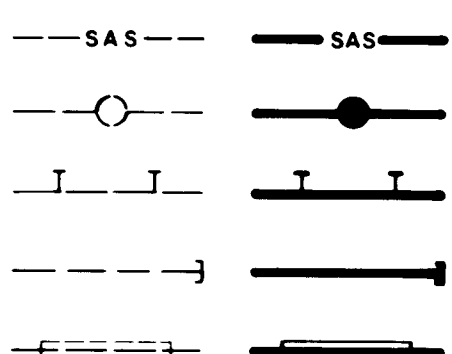
SANITARY SEWER LINE

SANITARY SEWER MANHOLE

SAS SERVICE CONNECTIONS

SAS CAP OR PLUG

ENCASEMENT



**WATER**

WATER LINE

WATER SERVICE CONNECTIONS

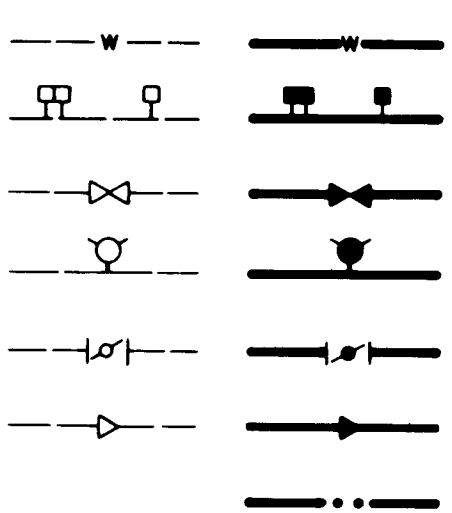
GATE VALVE

FIRE HYDRANT

BUTTERFLY VALVE

REDUCER

WATER PRESSURE ZONE BOUNDARY



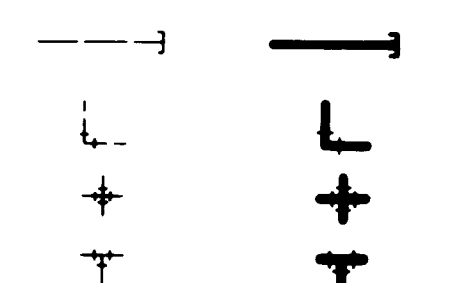
**WATER FITTINGS**

CAPS AND PLUGS

ELBOW

CROSS

TEE



**MISCELLANEOUS**

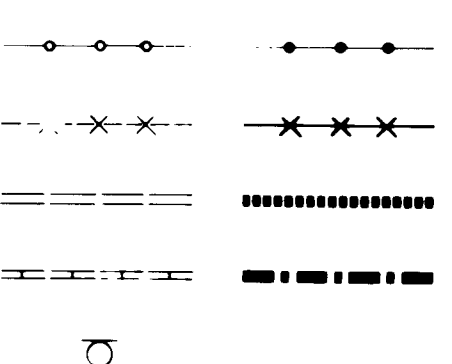
CHAINLINK FENCE

FIELD FENCE

COMMON YARD WALL

RETAINING WALL

POWER OR TELEPHONE POLE



CONSTRUCTION PLANS

FOR

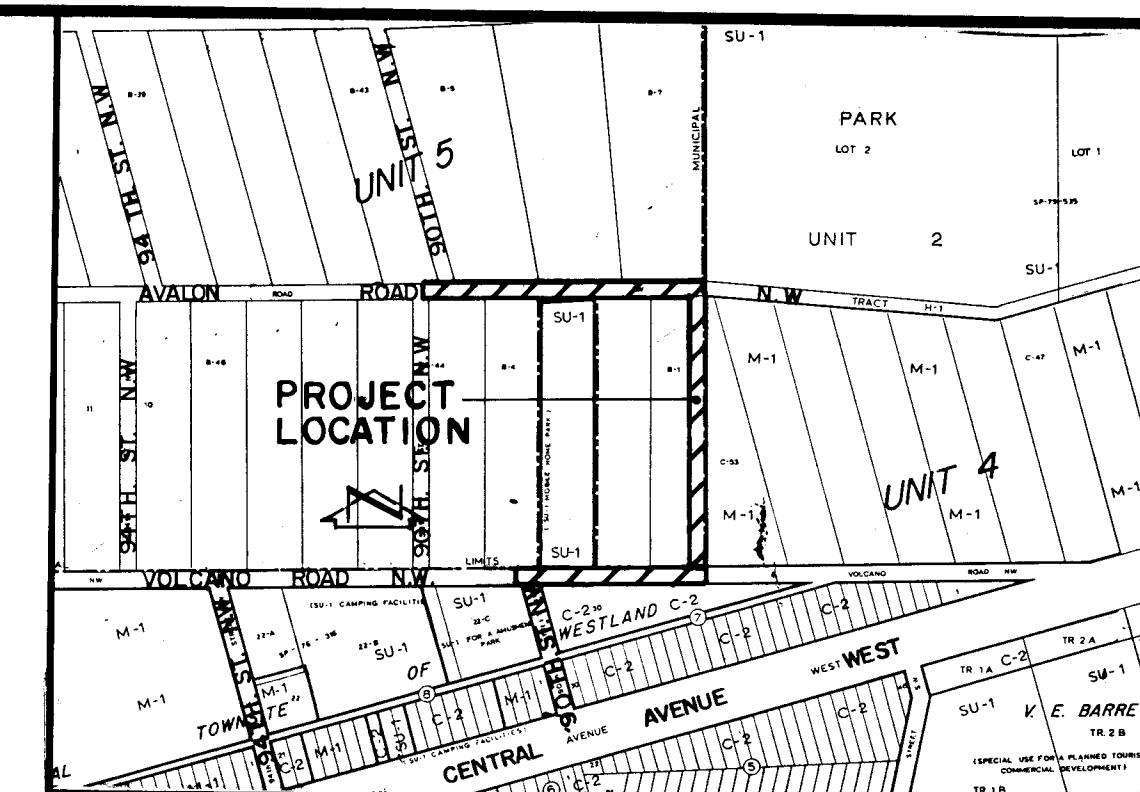
**SUNRISE MASTERPLAN  
WATERLINE**

ALBUQUERQUE, NEW MEXICO  
SEPTEMBER, 1986

**INDEX OF DRAWING**

**DESCRIPTION**

SHEET NO.	TITLE
1.	TITLE, LEGEND, VICINITY MAP, GENERAL NOTES, INDEX OF DRAWINGS
2.	FINAL PLAT
3.	GRADING PLAN (FOR INFORMATION ONLY)
4.	WATERLINE SITE PLAN
5.	VOLCANO RD. N.W. WATERLINE IMPROVEMENT PLAN & PROFILE STA. 13+00 TO STA. 20+16.54
6.	AVALON RD. N.W. WATERLINE IMPROVEMENTS PLAN & PROFILE STA. 13+30 TO STA. 23+00
7.	PUBLIC WATERLINE EASEMENT PLAN & PROFILE STA. 10+00 TO STA. 21+07.10



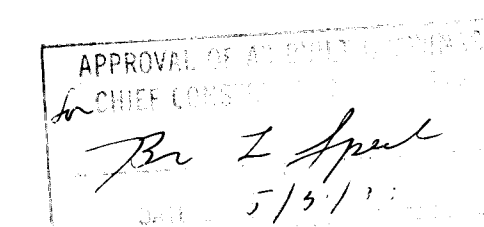
**VICINITY MAP**

SCALE: 1"=800'

**K-9-Z**

**GENERAL NOTES:**

- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATIONS - PUBLIC WORKS CONSTRUCTION - 1985.
- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, FOR LOCATION OF EXISTING UTILITIES.
- IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER HAS UNDERTAKEN NO FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY, AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
- SHOULD A CONFLICT EXIST BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS, THE CONTRACTOR SHALL PROMPTLY NOTIFY THE ENGINEER IN WRITING SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY FOR ALL PARTIES.
- THE CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT PROPERTIES DURING CONSTRUCTION.
- ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- THE CONTRACTOR MUST SUBMIT A CONSTRUCTION SIGNING AND BARRICADING PLAN TO TRAFFIC ENGINEERING TO RECEIVE A BARRICADING PERMIT 48 HOURS PRIOR TO CONSTRUCTION.
- ALL UTILITIES 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 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 PRIOR TO FINAL ACCEPTANCE.



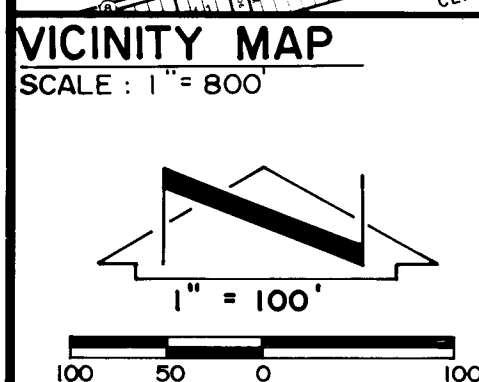
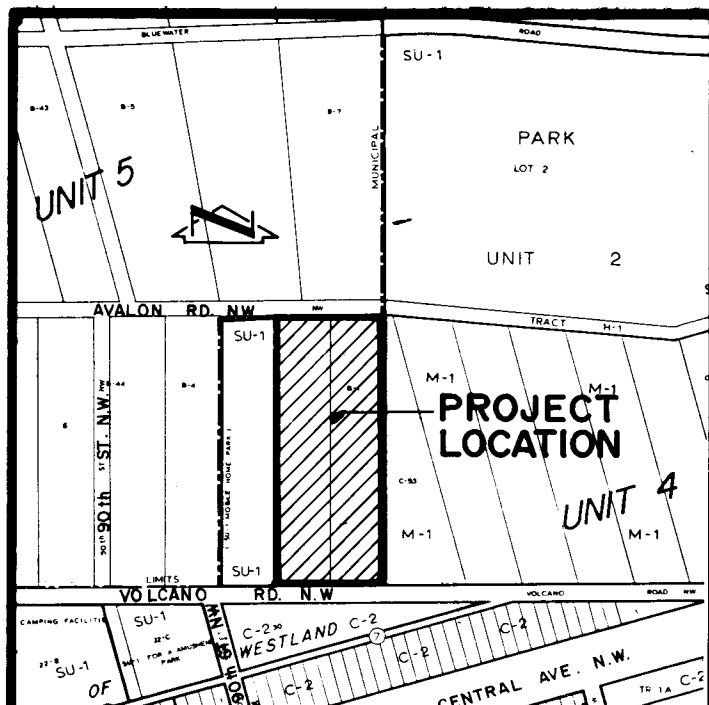
26 30450188

REV	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE

**APPROVAL OF REVISIONS**

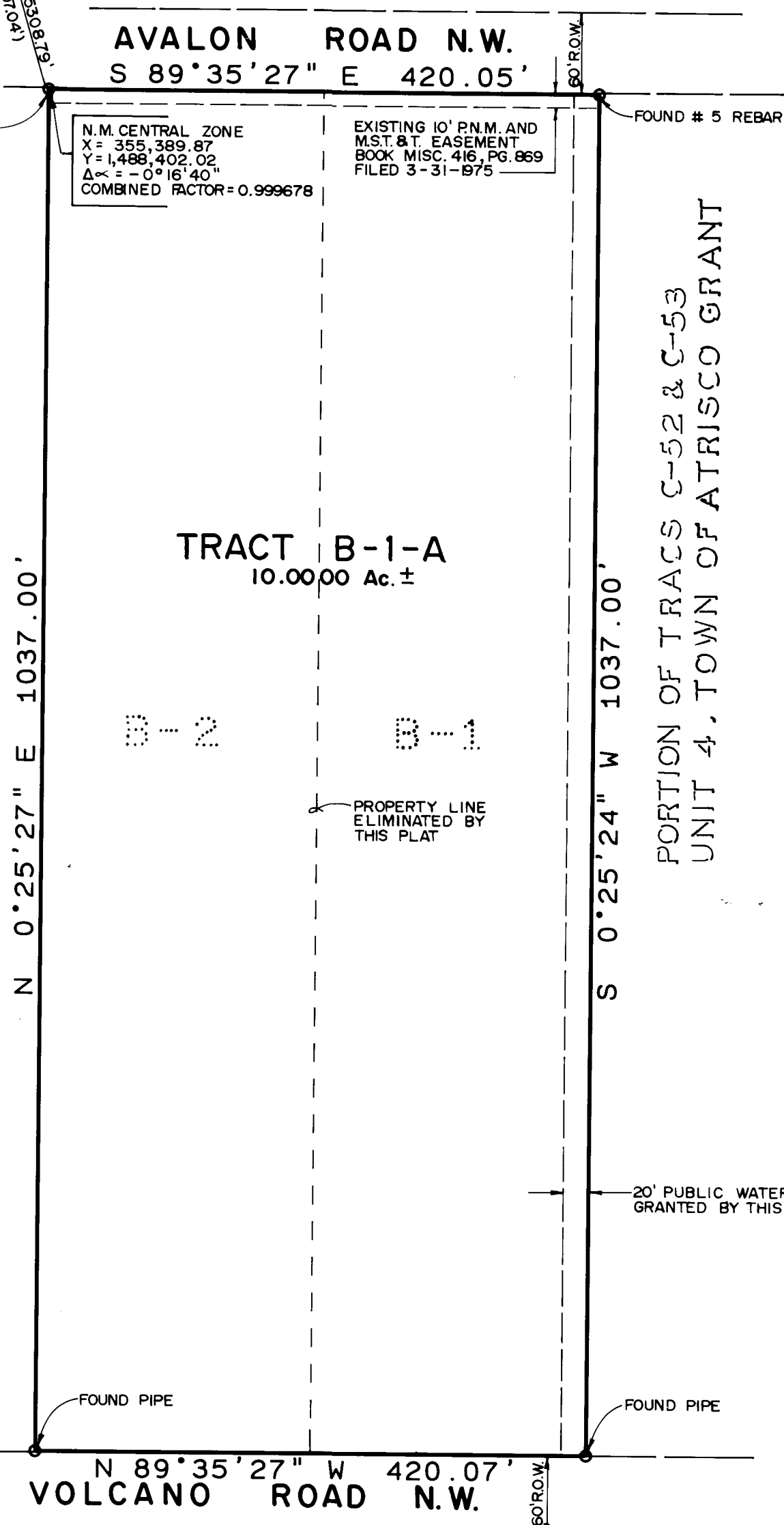
		APPROVED FOR CONSTRUCTION C.E.
3045	SHEET 2 OF 26	

SP # 03-25-1914



- Notes:
1. A field survey was performed on 3-12-1986 (N.M.L.S. No. 6547).
  2. No street mileage was created.
  3. All distances are ground distances.
  4. Site located within Section 21, T10N, R2E, N.M.P.M.
  5. Bearings are grid bearings.
  6. The purpose of this plat is to eliminate the common property line between Tracts B-1 and B-2 to create Tract B-1-A plus grant the 20' waterline easement as shown.

TRACT B-3, TOWN OF ATRISCO GRANT  
UNIT 5, FILED 12-5-1944, D-117



66 30468 PLAT OF  
TRACT B-1-A  
A REPLAT OF  
TRACTS B-1 AND B-2  
UNIT 5, TOWN OF ATRISCO GRANT  
ALBUQUERQUE, NEW MEXICO  
MARCH, 1986

DESCRIPTION

A certain tract of land located within the Corporate limits of the City of Albuquerque, New Mexico, comprising Tracts B-1, and B-2, Unit 5, Town of Atrisco Grant, as shown on the plat filed in the Office of the County Clerk of Bernalillo County, New Mexico on December 5, 1944, Book D, Page 117, and being more particularly described as follows:

Beginning at the northwest corner of the parcel herein described being the northwest corner of said Tract B-2, and also being a point on the south right-of-way line of Avalon Road N.W.; thence S 89°35'27" E a distance of 420.05 feet along said right-of-way line; thence S 00°25'24" W a distance of 1037.00 feet to a point on the north right-of-way line of Volcano Road N.W.; thence N 89°35'27" W a distance of 420.07 feet along said right-of-way line; thence N 00°25'27" E a distance of 1037.00 feet to the point of beginning and containing 10.0000 acres more or less.

DEDICATION and FREE CONSENT  
The undersigned owners of the land shown hereon do hereby consent to the subdivision of said land in the manner shown on this plat and do hereby grant the easements shown hereon including the rights of ingress and egress and the right to trim interfering trees.

E. GARY FICHTNER Date  
ACKNOWLEDGEMENT  
STATE OF NEW MEXICO )  
COUNTY OF BERNALILLO ) SS  
Notary Public



The foregoing instrument was acknowledged before me this 28th day of March, 1986.

Charles G. Cala, Jr.  
Notary Public

DRB 86-215 SP-86-131

APPROVALS:  
Richard P. Mann  
Planning Director, City of Albuquerque, N.M. Date 4-4-86

NA  
Water Utilities, City of Albuquerque, N.M. Date

NA  
City Engineer, City of Albuquerque Date

NA  
A.M.A.F.C.A. Date

NA  
Traffic Engineer, City of Albuquerque, N.M. Date

NA  
Park and Recreation, City of Albuquerque, N.M. Date

Chief City Surveyor, City of Albuquerque, N.M. Date 040266

Property Manager, City of Albuquerque, N.M. Date 4-2-86

CERTIFICATION  
I, Thomas T. Mann, Jr., a registered Land Surveyor under the laws of the State of New Mexico, do hereby certify that this plat was prepared by me or under my supervision; shows all easements noted in a title report prepared by First American Title Ins. Co. on Oct. 18, 1985 (G.F. No. 47020, P.O.C.T. (W)) meets the minimum requirements of monumentation and surveys of the Albuquerque Subdivision Ordinance, and is true and correct to the best of my knowledge and belief.

Thomas T. Mann, Jr. 3792 Date 3-31-86

ACKNOWLEDGEMENT  
STATE OF NEW MEXICO )  
COUNTY OF BERNALILLO ) SS  
Notary Public

The foregoing instrument was acknowledged before me on this 31st day of March, 1986.

Charles G. Cala, Jr.  
Notary Public

OFFICIAL SEAL  
CHARLES G. CALA, JR.  
NOTARY PUBLIC, STATE OF NEW MEXICO  
My Commission Expires 5-6-87

ACKNOWLEDGEMENT  
STATE OF NEW MEXICO )  
COUNTY OF BERNALILLO ) SS  
Notary Public

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COUNTY OF BERNALILLO ) SS  
Notary Public

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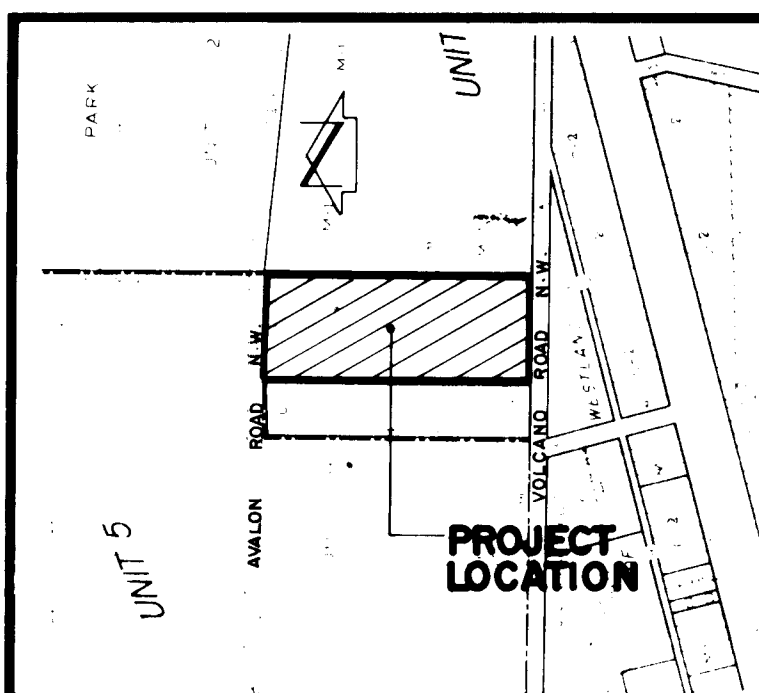
Charles G. Cala, Jr.  
Notary Public



811 DALLAS N.E. • ALBUQUERQUE • NEW MEXICO • 87110  
ENGINEERS  
JOB NO. 51072

C30-19



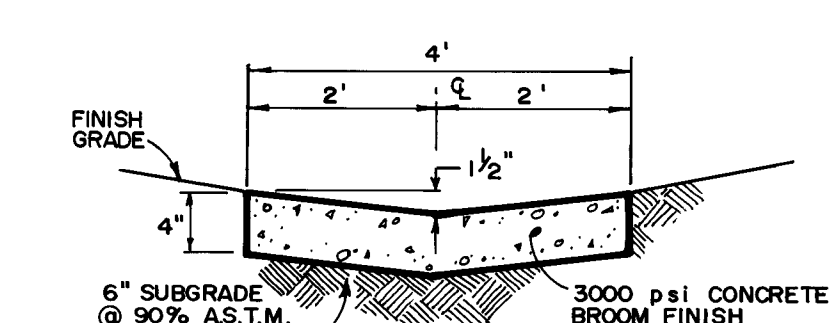


VICINITY MAP  
SCALE 1" = 400'

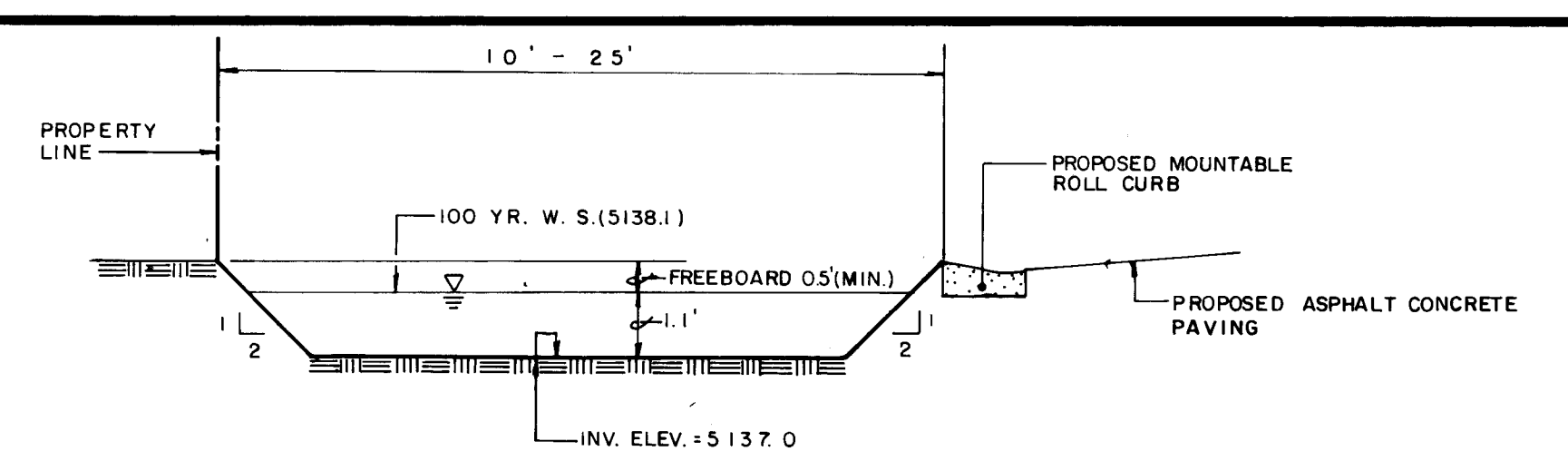
PROJECT BENCHMARK:  
AN ASS. BENCHMARK (2-K9) THE STATION IS ANY  
ON THE N. 1/4 SECTION 10, T. 10 N., R. 10 E.,  
S. 10 E. THE INTERSECTION OF WEST CENTRAL AVE.  
ELEVATION = 5144.90 FEET (M.S.L.D.)  
TOP OF REBAR @ S.W. PROPERTY CORNER,  
AS SHOWN BELOW.  
ELEVATION = 5137.30 FEET (M.S.L.D.)  
LEGAL DESCRIPTION:  
LOT 13-1A, UNIT 5, TOWN OF ATRISCO GRANT  
NOTE: BEARINGS SHOWN HEREON ARE BASED ON N.M.  
STATE PLANE COORDINATE SYSTEM.

LEGEND

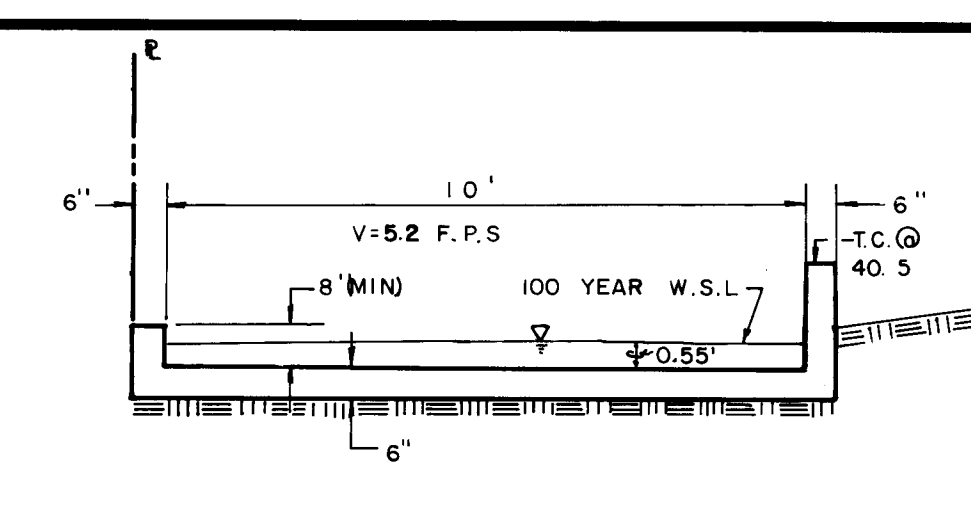
- 5156 EXIST. CONTOUR
- 56 PROPOSED CONTOUR
- EXIST. SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- PROPERTY LINE
- SWALE
- BASIN BOUNDARY LINE
- WATERBLOCK



SECTION D-D  
HORIZONTAL SCALE: 1" = 2'  
VERTICAL SCALE: 1" = 1'



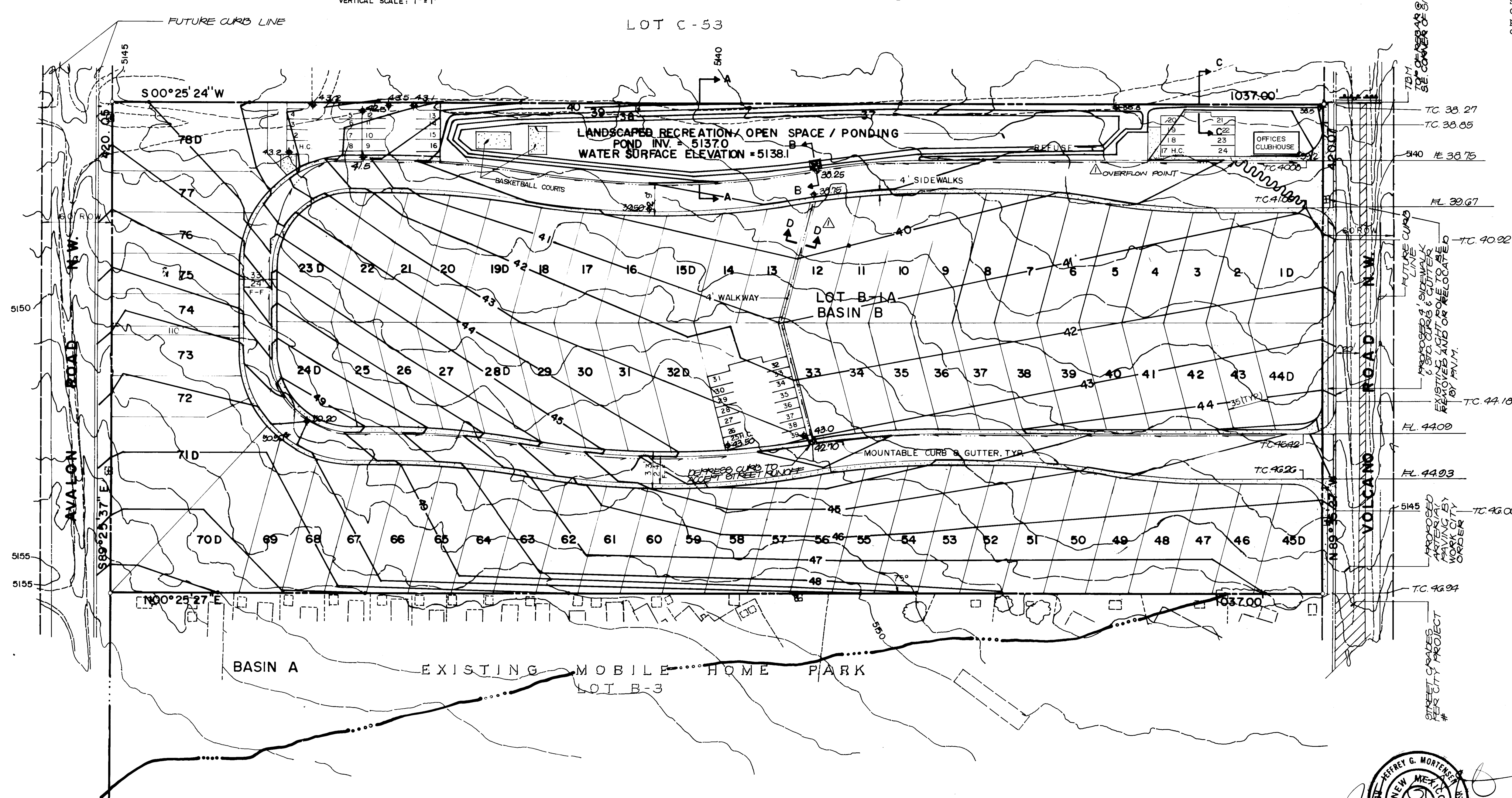
SECTION A-A  
HORIZONTAL SCALE: 1" = 6'  
VERTICAL SCALE: 1" = 3'



SECTION C-C  
FUTURE OUTFALL CHANNEL  
SCALE: 1" = 3'

NOTE:  
WHEN THE FUTURE IMPROVEMENTS DOWNSTREAM OF THE SITE ARE  
CONSTRUCTED, FREE DISCHARGE TO VOLCANO ROAD NW NEEDS TO  
BE ANALYZED. AT THIS TIME, WE ARE UNABLE TO DETERMINE  
THE AMOUNT OF RUNOFF THAT CAN BE DISCHARGED TO THE  
STREET.

EMERGENCY SPILLWAY:  
AS A RESULT OF THE SITE DEVELOPMENT PLAN REVIEW BY THE  
EPC, A SOLID WALL WILL BE BUILT ALONG THE NORTH, EAST,  
AND SOUTH PROPERTY LINES, EXCEPT WHERE DRIVEWAYS ARE  
INDICATED. BECAUSE OF THIS, THE EASTERLY DRIVEWAY WILL  
SERVE AS AN EMERGENCY SPILLWAY SHOULD PONDED RUNOFF  
REACH 5140, OR GREATER. THE OVERFLOW POINT IS SHOWN  
BELOW.



DRAINAGE PLAN  
The following items concerning the Sunrise Drainage Plan are  
contained hereon:

1. Vicinity Map
2. Grading Plan
3. Calculations

Proposed improvements as shown by the Vicinity Map, are located at  
Volcano Road N.W. approximately 250' east of 90th Street N.W. The  
site is more particularly described as Tract B-1A, Unit 5, Town of  
Atrisco Grant. The surrounding sites are predominantly  
undeveloped.

A review of Plate K-9 of the Albuquerque Master Drainage Study  
indicates that whereas the subject site is not within any  
designated Flood Hazard Zone, it is directly upstream of one.  
There is presently no storm drainage improvements on either Avalon  
Road or Volcano Road with both streets draining presently from  
west to east and eventually to Central Avenue N.W.

The Grading Plan shows 1) existing and proposed grades indicated  
by spot elevations and contours at 1'0" intervals, 2) interface  
and continuity of proposed and existing elevations, 3) limit and  
character of proposed improvements. The site presently drains  
southeasterly. Due to considerations as mentioned above, it is  
proposed that the site be graded to retain 100% of both offsite  
and on-site runoff via the use of a retention pond. Said pond is  
designed, as shown in the Grading Plan, to facilitate future  
outfall onto Volcano Road when downstream facilities become  
available. This can be accomplished by the construction of a  
future spillway in conjunction with sidewalk culverts at the  
southeast corner of the subject site. Preliminary street grades  
for both Avalon Road and Volcano Road are included in this  
submittal.

The Calculations which appear below analyze both the existing and  
developed conditions for the 100-year, 6-hour rainfall event. The  
SCS Method has been used for this analysis in accordance with the  
City of Albuquerque Development Process Manual, Volume II. The  
proposed grading concept is consistent with the predesign  
conference recap which is also included in this submittal.

CALCULATIONS

OFFSITE FLOWS (BASIN A)  
Ground Cover Information  
From SCS Bernillo County Soil Survey,  
Plate: 30  
Hydrologic Soil Group: B  
Developed Pervious CN = 69 (DPM Plate 22.2 c-2)  
Time of Concentration/Time to Peak  
 $T_c = 0.0078 (10.77/50.385)$  (Kirpich Equation)  
 $T_p = T_c = 10$  min.  
Point Rainfall  
 $P_g = 2.2$  in. (DPM Plate 22.2 D-1)  
Actual = 108,900 sf = 2.5 Ac  
 $A_{imp} = 8,260$  sf;  $A_{impervious} = 8$  Ac  
Composite CN = 73 (DPM Plate 22.2 c-3)  
DRO = 72 in (DPM Plate 22.2 c-4)  
 $Q_p = 45.4$  A/Tp = 11.35 cfs/in runoff  
 $Q_{100} = Q_{peak} - Q_p$  (DRO) = 5.1 cfs  
 $V_{100} = 3630$  (DRO) A = 4,084 cf

ON-SITE FLOWS (BASIN B)  
Ground Cover Information  
From SCS Bernillo County Soil Survey,  
Plate: 30  
Hydrologic Soil Group: B  
Existing Pervious CN = 70 (DPM Plate 22.2 c-2)  
Developed Pervious CN = 69 (DPM Plate 22.2 c-2)  
Time of Concentration/Time to Peak  
 $T_c = 0.0078 (10.77/50.385)$  (Kirpich Equation)  
 $T_p = T_c = 10$  min.  
Point Rainfall  
 $P_g = 2.2$  in. (DPM Plate 22.2 D-1)  
Existing Condition  
Actual = 435,612 sf = 10.0 Ac  
 $A_{imp} = 0$  sf;  $A_{impervious} = 0$  Ac  
Composite CN = 76 (DPM Plate 22.2 c-3)  
DRO = 0.38 in (DPM Plate 22.2 c-4)  
 $Q_p = 45.4$  A/Tp = 45.4 cfs/in runoff  
 $Q_{100} = Q_{peak} - Q_p$  (DRO) = 17.3 cfs  
 $V_{100} = 3630$  (DRO) A = 11,880 cf

Developed Condition  
Actual = 435,612 sf = 10.0 Ac  
 $A_{imp} = 110,250$  sf;  $A_{impervious} = 2.5$  Ac  
Composite CN = 76 (DPM Plate 22.2 c-3)  
DRO = 0.52 in (DPM Plate 22.2 c-4)  
 $Q_p = 45.4$  A/Tp = 45.4 cfs/in runoff  
 $Q_{100} = Q_{peak} - Q_p$  (DRO) = 23.6 cfs  
 $V_{100} = 3630$  (DRO) A = 18,880 cf

Comparison  
 $\Delta Q_{100} = (23.6 - 17.3) = 6.3$  CFS (increase)  
 $\Delta V_{100} = (18,880 - 11,880) = 7,000$  cf (increase)

WATER LEVEL CALCULATION FOR RETENTION POND  
100-Year Retention Volume:  
 $V_{100}$  (Offsite) +  $V_{100}$  (Onsite) = 4,100 + 18,880 = 22,980 cf  
Use 23,000 cf  
Available Pond Surface Area =  $8.75 \times 50^2 = 21,875$  sf  
To calculate pond water depths for a 100-year storm, use an equivalent  
square pond with a width of 21,875 sf = 147.9 ft and 211 sideslopes  
with a trapezoidal cross section.  
Using  $d$  = depth of water in retention pond in ft. for 100-year  
storm  
Freeboard = 0.5 ft.  
Top width of water surface = 147.9 - (0.5)(2)(2) = 145.9 ft.  
Bottom width = (145.9 - 4 d) ft.  
Equating volumes and solve for  $d$  =  
 $145.9 + (145.9 - 4d)(d) (145.9) = 23,000$   
 $291.8d^2 - 21,286.8d + 23,000 = 0$   
 $d = 1.1'$

FUTURE CONC. OUTFALL CHANNEL ANALYSIS:  
 $b = 10$ ;  $S = .005$ ;  $n = .013$ ;  $Q_{100} = 28.7$  cfs  
Rearranging Manning's Equation:  
 $AR^{2/3} = \frac{Q}{1.486 S^{1/2}}$   
 $= \frac{28.7}{1.486 (.005)^{1/2}}$   
 $= 3.27$   
Since both  $A$  &  $R$  are functions of depth of flow  $d$ , solve by trial and  
error =

d	A	P	R <sup>2/3</sup>	AR <sup>2/3</sup>
0.5	5.0	11.0	0.581	2.905
0.6	6.0	11.2	0.660	3.960
0.55	5.5	11.1	0.626	3.44

$d = 0.55$ ;  $Q_{100} = 28.7$  cfs  
 $V_{100} = 11,880$  cf



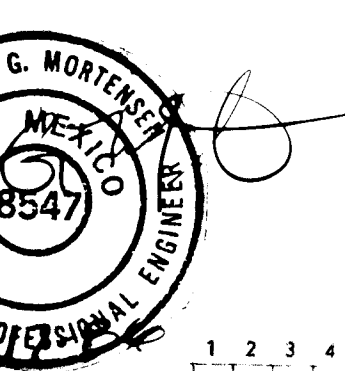
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1	11-86	JGM	ADDRESS REVIEW COMMENTS

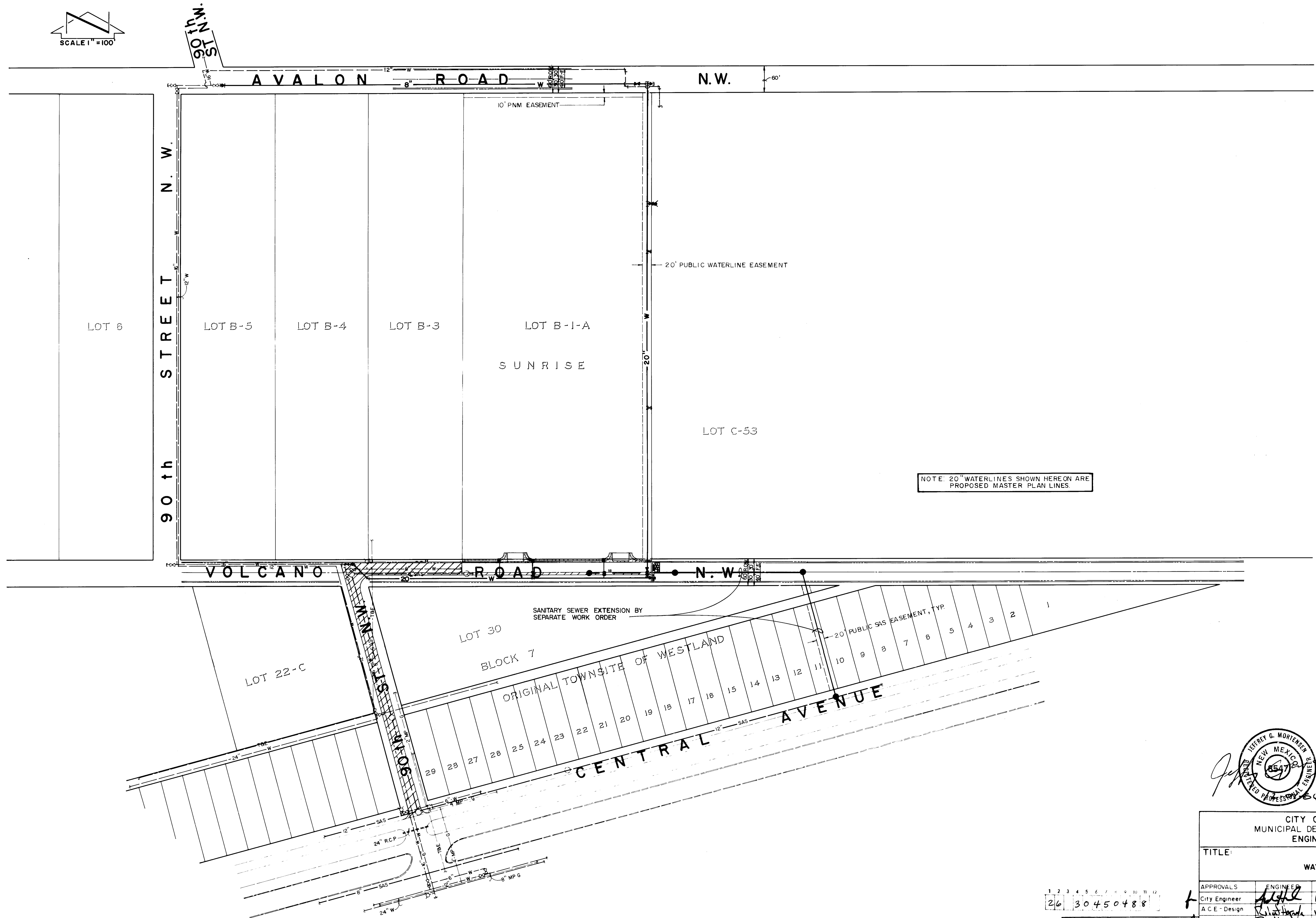
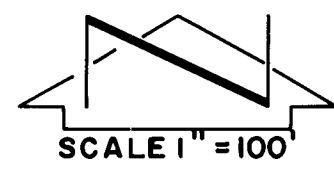
DESIGNED BY: H.P.  
DRAWN BY: J.M.C.  
APPROVED: J.G.M.

JOB NO.  
51072  
DATE  
9-85

FOR INFORMATION ONLY

GRADING & DRAINAGE PLAN  
SUNRISE





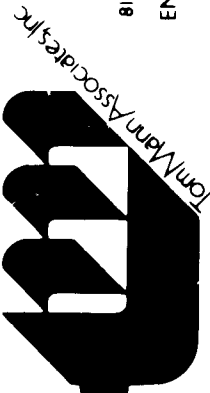
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APPROVED FOR  
CONSTRUCTION

JOB NO. 51072 CITY ENGINEER DATE

CITY OF ALBUQUERQUE MUNICIPAL DEVELOPMENT DEPARTMENT ENGINEERING DIVISION					
TITLE: SUNRISE WATERLINE SITE PLAN					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	<i>[Signature]</i>	1/10/87	Liquid Waste	<i>[Signature]</i>	12/12/86
A.C.E. - Design	<i>[Signature]</i>	12/12/86	Traffic	NADWH	12/14/86
A.C.E. - Hydrology	<i>[Signature]</i>	12/12/86	Water	<i>[Signature]</i>	12/12/86
DRAWING NO. 3045			SHEET 5 OF 26		

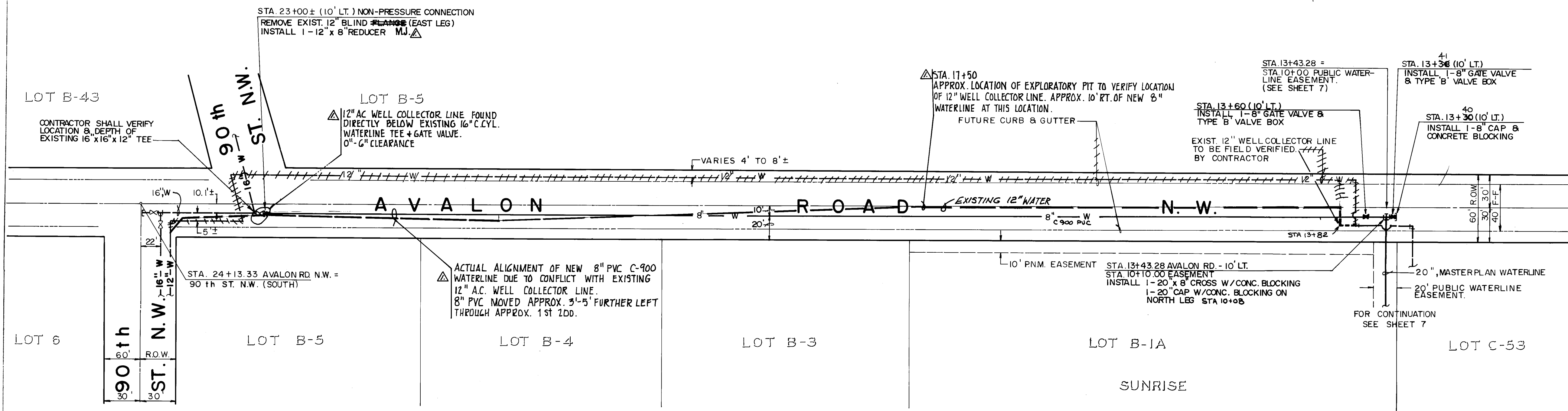
REFERENCES		SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION	
MAP NO.	EST. NO.	NO.	BY	DATE	ACS BENCHMARK (2-K9) THE STATION IS AN "X" CUT ON THE NORTH BONNET BOLT OF FIRE HYDRANT LOCATED @ THE INTERSECTION OF WEST CENTRAL AVENUE & 90th STREET N.W. ELEVATION = 5144.90 FEET (M.S.L.D)	CONTRACTOR	INTERVIEW LTD.
						WORK	DATE
						STAKED BY	E.B. JENSEN
						FIELD ACCEPTANCE BY	DATE
						DATE	DATE
						CORRECTED BY	L.G.
						DRAWINGS	DATE 3-88
						RECORDED BY	DATE
						NO.	DATE



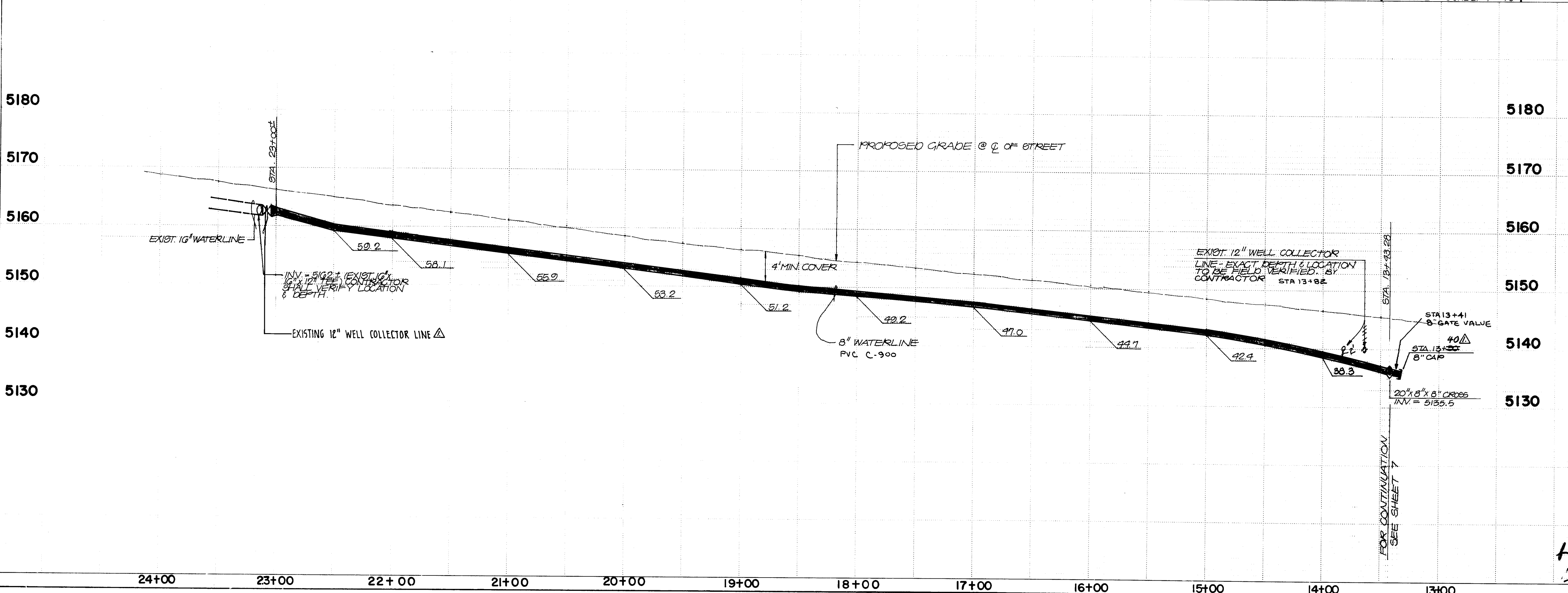




NOTE: 20" MASTERPLAN LINE SHALL NOT BE CONNECTED IN ANY WAY TO EXISTING 12" WELL COLLECTOR LINE.



AVALON ROAD N.W.



WATERLINE NOTES:

- ALL STATIONING IS BASED ON STREET CENTERLINE UNLESS INDICATED OTHERWISE.
- THE CONTRACTOR SHALL FURNISH ELECTRONIC MARKER DISKS (EMD) ON ALL SEWER AND WATER SERVICE STUBS, CAPS AND PLUGS.
- WATER MAIN SHALL BE PVC C-900 PIPE OR AS APPROVED BY THE CITY OF ALBUQUERQUE WATER RESOURCES DIVISION. ~~SMALLER OR LARGER LINES SHALL BE CAST-IRON PIPE~~
- WATER LINE SHALL HAVE A MINIMUM COVER OF 4'0" (TOP OF CURB TO TOP OF PIPE).
- ALL PIPE SHALL BE FURNISHED WITH CLASS 10' BEDDING UNLESS OTHERWISE NOTED. ALL TRENCH BACKFILL SHALL BE COMPACTED TO A MINIMUM OF 90% OF OPTIMUM, AS PER ASTM D-1557.
- WHERE SEWER AND WATER LINES CROSS, IF VERTICAL CLEARANCE DOES NOT EXCEED 1'6", THE SEWER LINE MUST BE PRESSURE PIPE, OR SHALL BE CONCRETE ENCASED 10' EACH SIDE OF WATER LINE.
- IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER HAS UNDERTAKEN NO FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.

NOTE: COMPLETE ACTUAL LOCATION OF 12" WELL COLLECTOR LINE CAN ONLY BE APPROXIMATED AND BASED ON ACTUAL VISUAL VERIFICATIONS MADE AT AS-BUILT STATIONING SHOWN ON THESE RECORD DRAWINGS.

ENGINEER'S SEAL: J. MORRIS, NEW MEXICO, 10541, REGISTERED PROFESSIONAL ENGINEER

REVISIONS:

NO.	DATE	REMARKS
1	4/25/88	Revised from as-built information

DESIGNED BY R.R. DATE 6/88  
DRAWN BY J.M.C. DATE 6/88  
CHECKED BY J.G.M. DATE 6/88

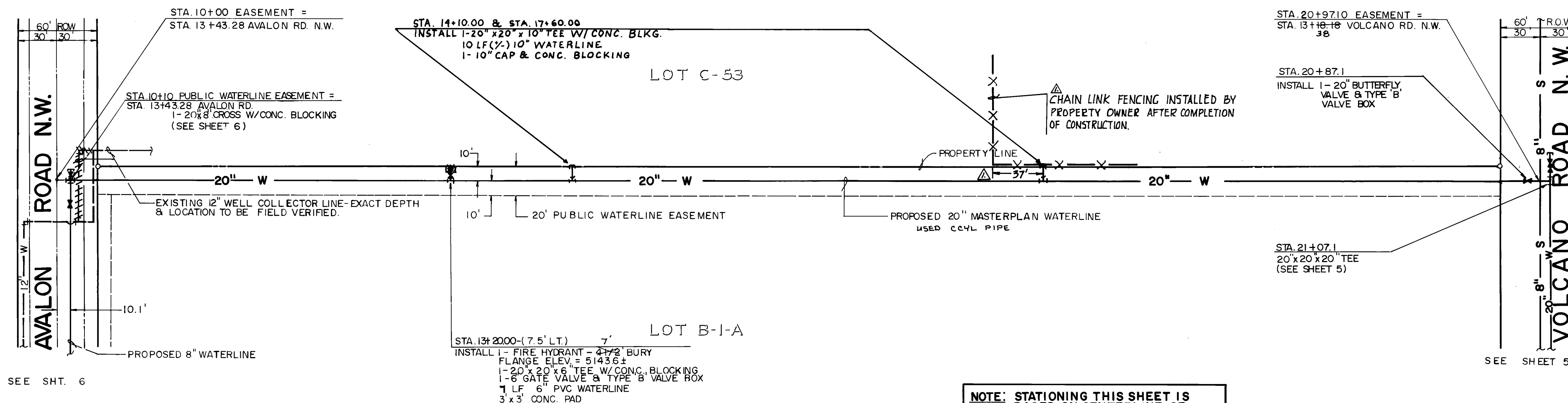
CITY OF ALBUQUERQUE  
MUNICIPAL DEVELOPMENT DEPARTMENT  
ENGINEERING DIVISION

TITLE: AVALON RD. N.W.  
WATERLINE IMPROVEMENTS PLAN & PROFILE  
STA. 13+30 TO STA. 23+00

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	J. Morris	12/12/86	Liquid Waste	J. Morris	12/12/86
A.C.E. - Design	J. Morris	12/12/86	Traffic	N.A.D.W.H.	12/12/86
A.C.E. - Hydrology	J. Morris	12/12/86	Water	J. Morris	12/12/86

DRAWING NO. 3045 MAP NO. K-9 SHEET 7 OF 26





NOTE: 20" MASTERPLAN LINE SHALL NOT BE  
CONNECTED IN ANY WAY TO EXISTING  
12" WELL COLLECTOR LINE.

WATERLINE NOTES:
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1. ALL STATIONING IS BASED ON STREET CENTERLINE UNLESS INDICATED OTHERWISE.
2. THE CONTRACTOR SHALL FURNISH ELECTRONIC MARKER DISKS (EMD) ON ALL SEWER AND WATER SERVICE STUBS, CAPS AND PLUGS.
3. WATER MAIN SHALL BE PVC C-900 PIPE OR AS APPROVED BY THE CITY OF ALBUQUERQUE WATER RESOURCES DIVISION. ~~ALL PROPOSED 24" DIAMETER OR LARGER LINES SHALL BE DUCTILE IRON PIPE~~
4. WATER LINE SHALL HAVE A MINIMUM COVER OF 4'0" (TOP OF CURB TO TOP OF PIPE).
5. ALL PIPE SHALL BE FURNISHED WITH CLASS 'C' BEDDING UNLESS OTHERWISE NOTED. ALL TRENCH BACKFILL SHALL BE COMPACTED TO A MINIMUM OF 90% OF OPTIMUM, AS PER ASTM D-1557.
6. WHERE SEWER AND WATER LINES CROSS, IF VERTICAL CLEARANCE DOES NOT EXCEED 1'6", THE SEWER LINE MUST BE PRESSURE PIPE, OR SHALL BE CONCRETE CASED 10' EACH SIDE OF WATER LINE.
7. IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER HAS UNDERTAKEN NO FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY, AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.

SURVEY INFORMATION		BENCH MARKS	AS BUILT INFORMATION	
NO.	FIELD NOTES		CONTRACTOR	INTERVIEW
	DATE	ACS BENCHMARK (2 KG) THE STATION IS AN "X"	WORK MADE BY: E. B. JENSEN	DATE 7-87
	BY	CUT ON THE NORTH BONNET BOLT OF FIRE HYDRANT	ACCEPTANCE BY:	DATE
		LOCATED @ THE INTERSECTION OF WEST CENTRAL	FIELD	
		AVENUE & 90th STREET N.W.	VERIFICATION BY:	DATE
		ELEVATION = 544.90 ft. (M.S.L.D.)	CORRECTED BY: L. G.	DATE 3-88
			MICRO-FILM INFORMATION	
			RECORDED BY:	DATE
			NO	

[illegible]

1	2	3	4	5	6	7	8	9	10	11	12
26			30	45	07	88					



811 DALLAS, N.E. • ALBUQUERQUE •  
NEW MEXICO • 87110  
ENGINEERS

CITY OF ALBUQUERQUE  
MUNICIPAL DEVELOPMENT DEPARTMENT  
ENGINEERING DIVISION

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TITLE: SUNRISE  
PUBLIC WATERLINE EASEMENT PLAN & PROFILE  
STA. 10+00 TO STA. 21+07.10

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	<i>[Signature]</i>	1/8/07	Liquid Waste	<i>[Signature]</i>	12/12/06
A C E - Design	<i>[Signature]</i>	1/24/07	Traffic	N.A. DWH	12/12/06
A C E - Hydrology	<i>[Signature]</i>	"	Water	<i>[Signature]</i>	12/12/06

DRAWING NO.	3045	MAP NO.	K-9	SHEET	8	OF	26
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