

MICHAEL'S ESTATES

BERNALILLO COUNTY, NEW MEXICO

IMPROVEMENTS FOR GRADING, PAVING AND UTILITIES

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TC.1	TRAFFIC CONTROL PLAN (COORS BLVD.)

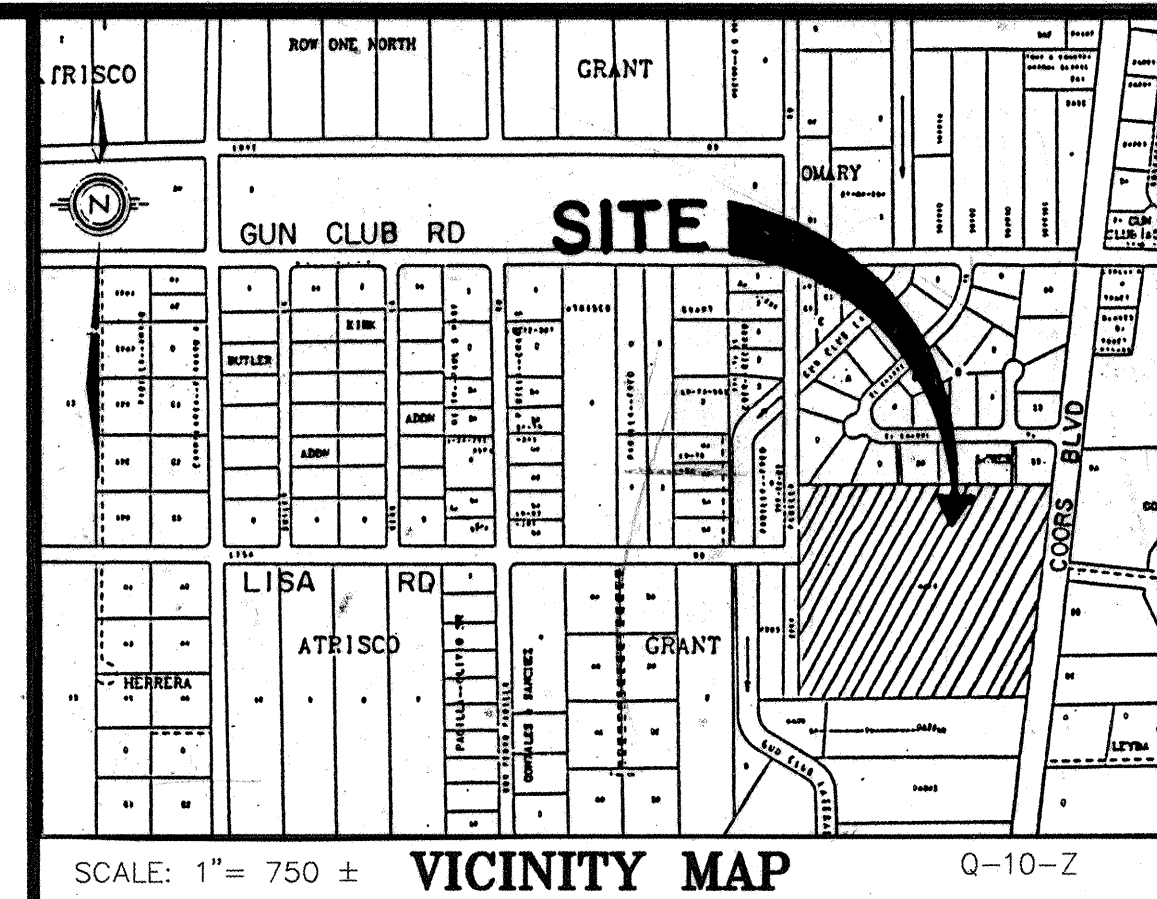
GENERAL NOTES:

- ALL UTILITY IMPROVEMENTS DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FROM HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1987 EDITION AS AMENDED WITH UPDATE NO. 6. PAVING AND RELATED ITEMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH BERNALILLO COUNTY STANDARD DRAWINGS.
- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, (260-1990) FOR LOCATION OF EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS AND EXISTING PAVEMENT. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR SURVEYOR SO THAT THE CONFLICT CAN BE RESOLVED WITH MINIMUM AMOUNT OF DELAY.
- THE CONTRACTOR SHALL FURNISH EMD'S ON ALL WATER AND SEWER SERVICE STUBS, CAPS AND PLUGS.
- CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE ENGINEER MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE ENGINEER AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. REPLACEMENT SHALL BE DONE ONLY BY THE CITY SURVEY SECTION. WHEN A CHANGE IS MADE IN ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED, CONTRACTOR SHALL, AT HIS OWN EXPENSE, ADJUST THE MONUMENT COVER TO THE NEW GRADE UNLESS OTHERWISE SPECIFIED. REFER TO SECTION 4.4 OF GENERAL CONDITIONS OF THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
- RESTRAINED JOINTS ARE REQUIRED AT ALL WATER LINE BENDS, TEES, CAPS AND GATE VALVES.
- THE PUBLIC WATER LINE MUST BE A MINIMUM OF 18" ABOVE THE SEWER LINE AT ALL CROSSINGS.
- THE CONTRACTOR SHALL CONTACT WATER SYSTEMS DIVISION (857-8250) (3) WORKING DAYS PRIOR TO NEEDING SHUT-OFF OR TURN-ON OF VALVES. ONLY CITY WATER SYSTEMS PERSONNEL ARE AUTHORIZED TO OPERATE VALVE.
- ALL INDIVIDUAL SEWER SERVICES REQUIRE ENVIRONMENTAL ONE GRINDER PUMPS, OR APPROVED EQUIVALENT, WHICH ARE NOT A PART OF THIS CONTRACT.
- PIPE FOR WATER LINES SHALL BE POLYVINYL CHLORIDE (PVC) PIPE C-900 DR25 FOR 8" OR SMALLER LINES AND C-905 PVC FOR THE 16" WATER MAIN. PIPE FOR SERVICE LATERALS SHALL BE COPPER.
- SEWER MAINS SHALL BE SDR 21 PVC PIPE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING AND MAINTAINING IN SERVICE ALL EXISTING UTILITIES. CONTRACTOR IS TO EXERCISE DUE CARE TO AVOID DISTURBING ANY EXISTING UNDERGROUND UTILITIES.
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- ALL TRAFFIC CONTROL DEVICES SHALL COMPLY WITH THE CURRENT EDITION OF THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES. ALL TRAFFIC CONTROL DEVICES REQUIRED FOR UTILITIES CONSTRUCTION OR OTHER REASONS SHALL BE FURNISHED BY THE CONTRACTOR AND SHALL BE INCIDENTAL TO OTHER ITEMS OF WORK AND NO SEPARATE PAYMENT WILL BE MADE.
- ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED BY CONTRACTOR TO LOCATED BY EXISTING OR AS INDICATED BY THIS PLAN SET. ALL NEW STRIPING SHALL BE REFLECTIONIZED PLASTIC AS PER CITY STANDARDS.
- ANY WORK AFFECTING AN ARTERIAL ROADWAY REQUIRES TWENTY-FOUR HOUR CONSTRUCTION.
- THE CONTRACTOR SHALL CONFINE HIS WORK TO WITHIN THE CONSTRUCTION LIMITS AND/OR RIGHT-OF-WAY TO PRESERVE EXISTING VEGETATION AND PRIVATE PROPERTY. OVERNIGHT PARKING OF CONTRACTOR'S EQUIPMENT SHALL NOT OBSTRUCT TRAFFIC. THE CONTRACTOR SHALL PROVIDE ACCESS TO PROPERTIES AT ALL TIMES.
- ALL HANDICAP RAMPS WILL MEET WITH ADA STANDARDS. HANDICAP ACCESS TO INDIVIDUAL UNITS SHALL BE ADDRESSED BY THE HOME BUILDER.
- PERMANENT SIGNAGE AND STRIPING SHALL BE PROVIDED BY BERNALILLO COUNTY AT SUCH LOCATIONS AS IT DEEMS NECESSARY.
- CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORK SITE. CONTRACTOR SHALL PROMPTLY REMOVE ANY AND ALL GRAFFITI FROM EQUIPMENT, WHETHER PERMANENT OR TEMPORARY.
- FOLLOW PROJECT SPECS. FOR GRINDER PUMPS AND SAS LATERALS AS FOUND IN SANITARY SEWER SPECIFICATIONS FOR MICHAEL'S ESTATES.**

WARNING - EXISTING UTILITY LINE LOCATIONS ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. THE LOCATION OF ANY SUCH EXISTING LINES IS BASED UPON INFORMATION PROVIDED BY THE UTILITY COMPANY, THE OWNER, OR BY OTHERS, AND THE INFORMATION MAY BE INCOMPLETE OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES.

THE ENGINEER HAS UNDERTAKEN LIMITED FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UNDERGROUND UTILITY LINES. MAKES NO REPRESENTATION PERTAINING THERETO AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFORE. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY 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. THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES IN PLANNING AND CONDUCTING EXCAVATION, WHETHER BY CALLING OR NOTIFYING THE UTILITIES, COMPLYING WITH (BLUE STAKES) PROCEDURES, OR OTHERWISE.

SCANNED BY
MESA REPRO

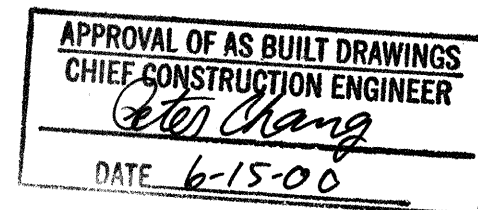


MRGCD GENERAL CONSTRUCTION NOTES:

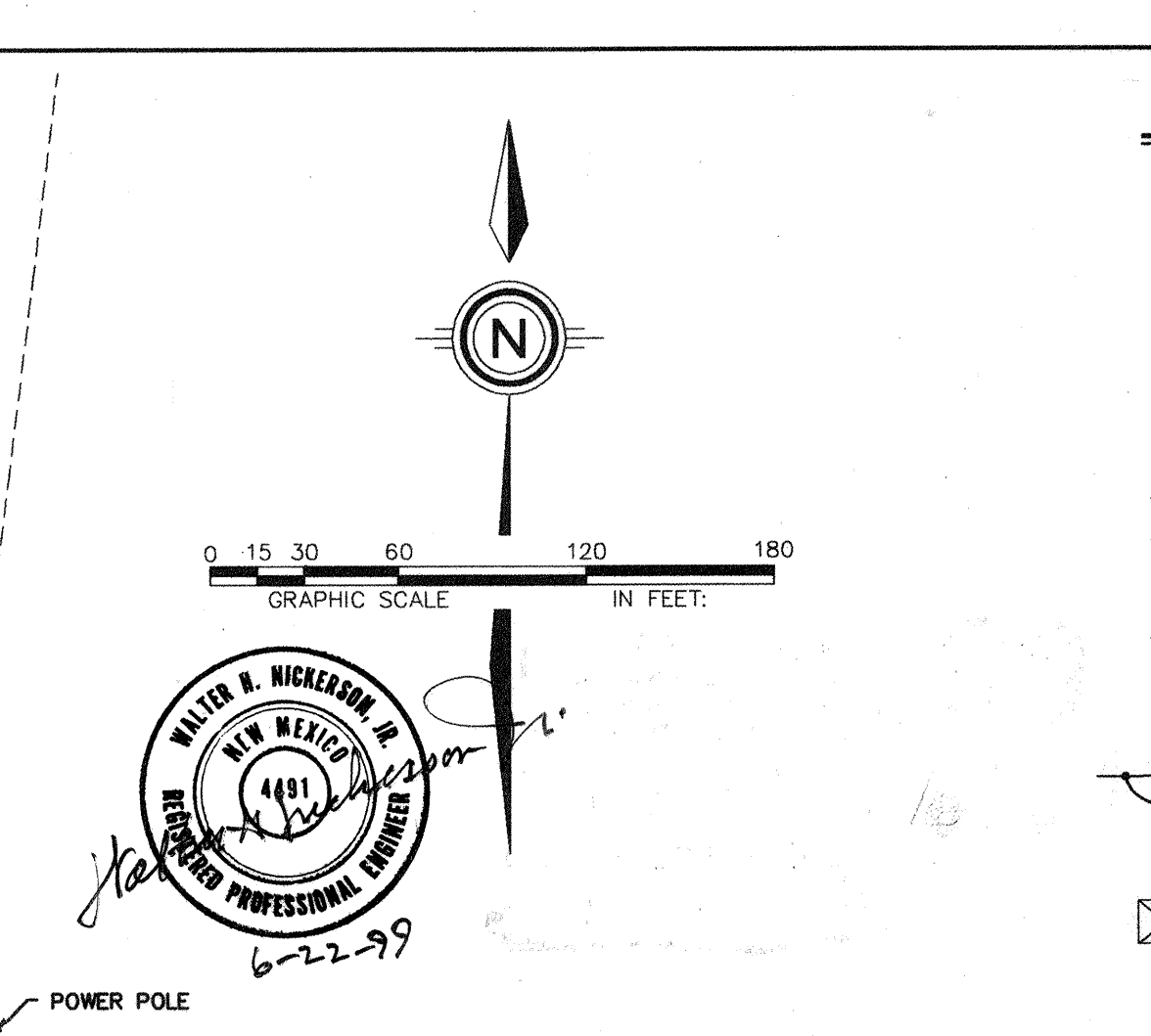
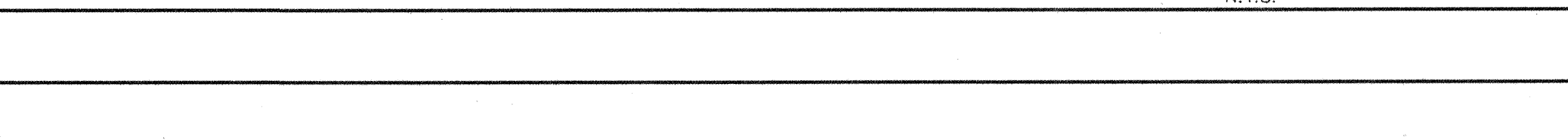
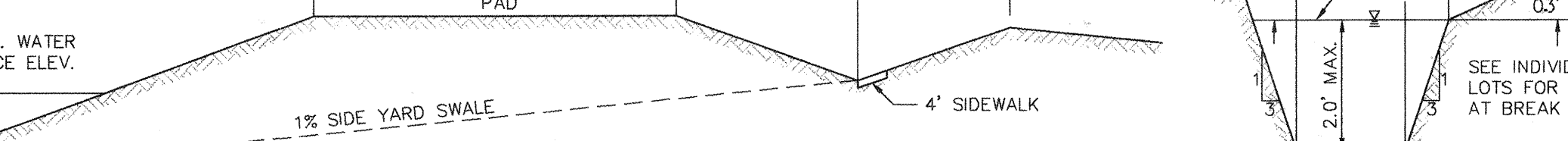
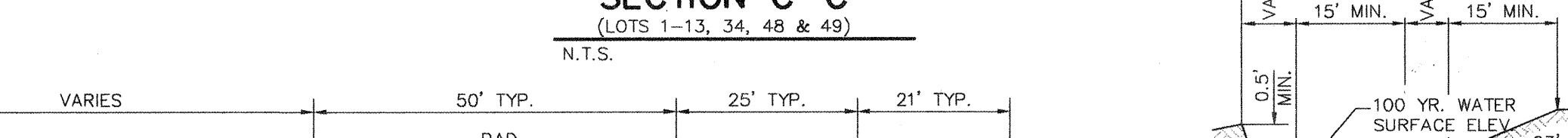
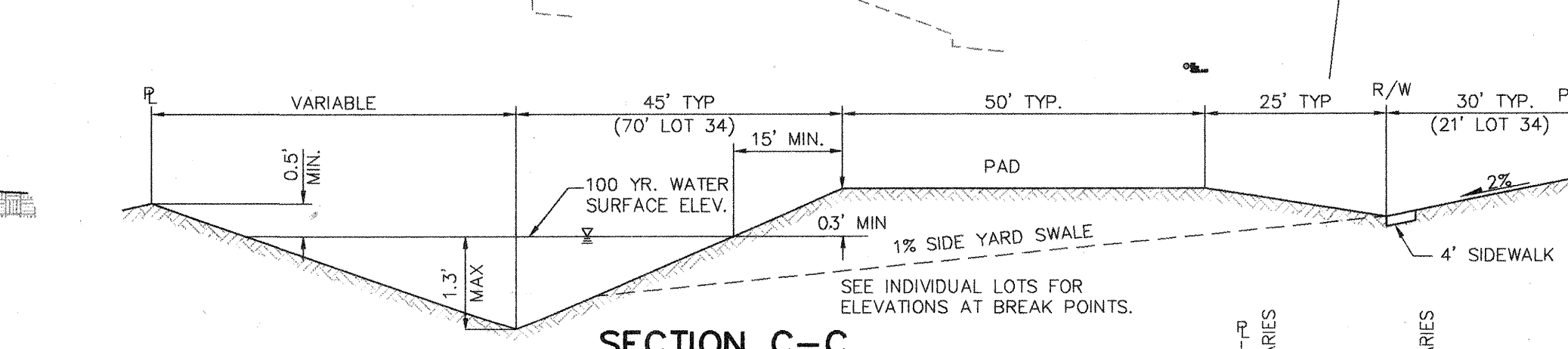
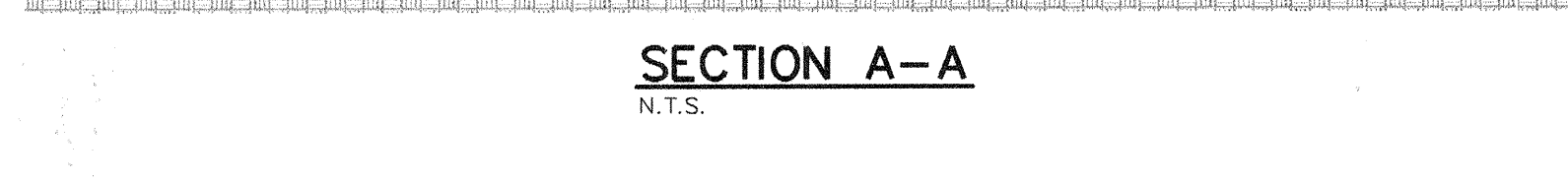
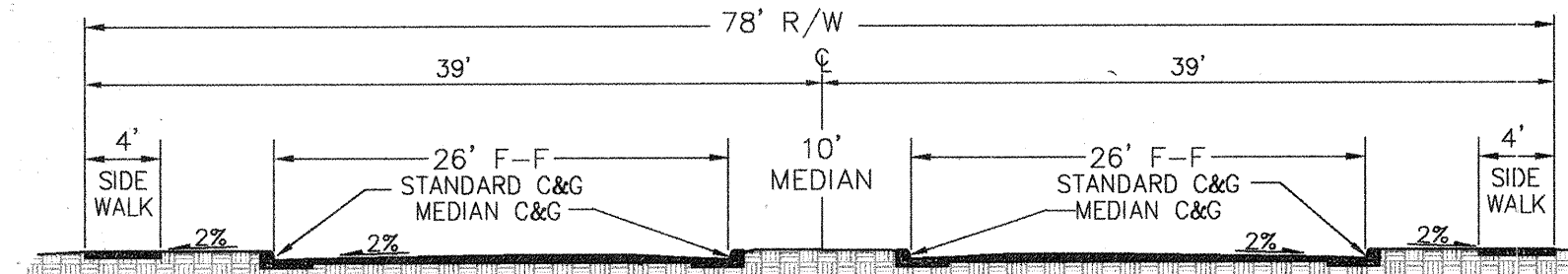
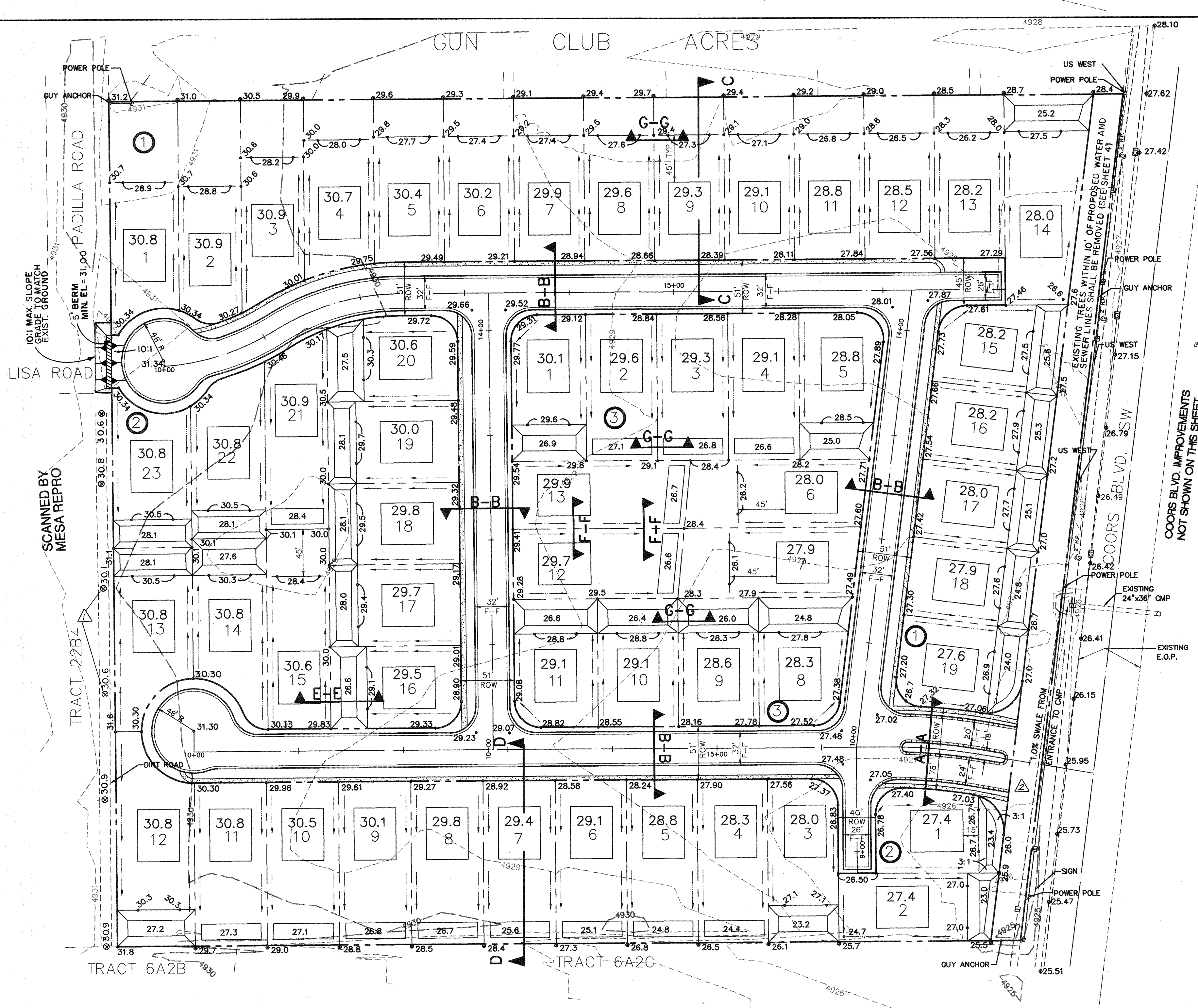
- ANY WORK TO BE PERFORMED WITHIN THE MIDDLE RIO GRANDE CONSERVANCY DISTRICT (M.R.G.C.D.) RIGHT-OF-WAY SHALL BE CLOSELY COORDINATED WITH THE M.R.G.C.D. ENGINEERING DEPARTMENT AND APPROPRIATE FIELD OFFICE. PHONE: (505) 247-0234.
- NO WORK IS TO BE DONE ON FACILITIES OR STRUCTURES BELONGING TO, OR OPERATED BY, THE M.R.G.C.D. BETWEEN MARCH 1 AND OCTOBER 31 INCLUSIVE. HOWEVER, WORK MAY BE PERMITTED BY THE M.R.G.C.D. IF IT CAN BE SHOWN THAT THE WORK WILL NOT INTERFERE WITH OPERATIONS OF THE M.R.G.C.D. FACILITY. ALL WORK TO BE DONE WITHIN THE M.R.G.C.D. FACILITIES MUST BE APPROVED BY THE M.R.G.C.D. ENGINEER PRIOR TO COMMENCING WORK.
- THE CONTRACTOR SHALL NOT STORE EQUIPMENT, NEW MATERIALS OR DEBRIS WITHIN DISTRICT RIGHT-OF-WAY WHICH MAY INTERFERE WITH OPERATIONS AND MAINTENANCE OF THE M.R.G.C.D. FACILITY.
- THE CONTRACTOR SHALL NOT SERVICE VEHICLES OR EQUIPMENT WITHIN M.R.G.C.D. RIGHT-OF-WAY.
- SEEDING OF DISTRIBUTED AREAS WITHIN M.R.G.C.D. RIGHT-OF-WAYS IS REQUIRED PER THE M.R.G.C.D. SEEDING SPECIFICATIONS.
- THE CONTRACTOR MUST MAINTAIN A MINIMUM COVER OF 3' OVER ALL CULVERT CROSSINGS USED FOR ACCESS TO THE PROJECT SITE.
- THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING AND/OR REPLACEMENT OF DAMAGED STRUCTURE(S) WITHIN M.R.G.C.D. RIGHT-OF-WAYS THAT MAY OCCUR DUE TO THE CONTRACTORS ACTIVITIES.
- ALL DAMAGED CULVERT CROSSINGS MUST BE RESTORED AND/OR REPLACED TO THE SATISFACTION OF THE M.R.G.C.D..
- ALL SALVAGEABLE CULVERTS, IRRIGATION GATES, ETC. MUST BE RETURNED TO THE M.R.G.C.D..
- THE CONTRACTOR IS RESPONSIBLE FOR EXECUTING A "SPECIAL USE LICENSES AGREEMENT" WITH THE M.R.G.C.D. PRIOR TO CONSTRUCTION.

TRAFFIC CONTROL GENERAL NOTES:

- PROJECT IS SUBJECT TO THE REQUIREMENTS OF COUNTY ORDINANCE NO. 96-3. THE CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ALL PERMITS NECESSARY. CONTRACTOR SHALL CALL 848-1500 FOR MORE INFORMATION.
- THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE COUNTY TRAFFIC CONTROL MANAGER AT LEAST 72 HOURS PRIOR TO COMMENCEMENT OF WORK. TRAFFIC CONTROL PLANS SHALL BE PREPARED IN ACCORDANCE WITH NOTED REQUIREMENTS AND BY CERTIFIED PERSONNEL AND MUST BE APPROVED PRIOR TO COMMENCEMENT OF WORK ON THE PROJECT. CALL 848-1504 FOR FURTHER INFORMATION.
- A DAILY TRAFFIC CONTROL LOG SHALL BE MAINTAINED BY THE CONTRACTOR REFLECTING THE TYPES AND LOCATIONS OF ALL TRAFFIC CONTROL DEVICES, SIGNS, BARRICADES, ETC. BEING USED ON THE PROJECT IN COMPLIANCE WITH THE APPROVED TRAFFIC CONTROL PLAN. THIS LOG SHALL BE SUBMITTED TO THE BERNALILLO COUNTY TRAFFIC CONTROL MANAGER UPON COMPLETION OF THE PROJECT CONSTRUCTION OR WHEN SO REQUESTED BY THE PROJECT OR THE BERNALILLO COUNTY TRAFFIC CONTROL MANAGER.
- CONTRACTOR SHALL PROVIDE A WEEKLY CONSTRUCTION ACTIVITY SCHEDULE TO BERNALILLO COUNTY PUBLIC WORKS DIVISION ATTN: TRAFFIC ENGINEERING MANAGER.
- THE CONTRACTOR SHALL FILE WEEKLY WRITTEN REPORT TO THE TRAFFIC CONTROL MANAGER DESCRIBING THE TRAFFIC CONTROL PLAN THAT WILL BE IN EFFECT FOR THE FOLLOWING WEEK.
- SUBJECT TO THE APPROVED TRAFFIC CONTROL PLAN, AT LEAST ONE LANE SHALL BE OPEN TO TRAFFIC AT ALL TIMES. CONTRACTOR SHALL PROVIDE PROPER SIGNAGE AND FLAGMAN AND SHALL MAINTAIN THE TRAFFIC LANE IN SUCH A MANNER AS TO ASSURE PROPER SAFETY TO THE TRAVELING PUBLIC ON ALL AFFECTED ROADS. THE CONTRACTOR SHALL PROVIDE ACCESS TO ALL PRIVATE AND PUBLIC PROPERTY AT ALL TIMES, EXCEPT WHEN GRADING, EXCAVATION AND BACKFILL OPERATIONS ARE BEING CONDUCTED IMMEDIATELY IN FRONT OF THE PROPERTY, IN WHICH CASE ACCESS WILL NOT BE DENIED FOR MORE THAN 4 HOURS WITHOUT APPROVAL BY THE COUNTY.
- TRAFFIC LANES PROVIDED DURING CONSTRUCTION SHALL BE MAINTAINED, IN SUCH A CONDITION UNDER ALL WEATHER CONDITIONS, SO AS TO PERMIT THE REASONABLE PASSAGE OF PASSENGER VEHICLES, AND SHALL BE KEPT GRADED AND SMOOTH, AND WATERED SEVERAL TIMES DAILY TO CONTROL DUST.



DESIGN SUBMITTAL	6/23/99				
DESIGN SUBMITTAL	6/22/99				
DESIGN SUBMITTAL	3/30/99				
REV. SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT
ENGINEER'S SEAL	APPROVALS	ENGINEER	DATE	APPROVED FOR CONSTRUCTION	
	DRC CHAIRMAN	11/23/99			
	TRANSPORTATION	11/23/99			
	WATER/WASTEWATER	11/23/99			
	HYDROLOGY	11/23/99			
	PARKS				
	CONSTR. MGMT.				
	CONSTR. COORD.	N/A - IN County			
	AMATEC				
	PROJECT NO.	5799.81			
4- RESTRAINED LENGTHS	SUBMITTAL	6/23/99			
ADDED FOR & MAIN	CONSTRUCTION PLAN SUBMITTAL	6/22/99			
ADDED WATERLINE	DESIGN SUBMITTAL	3/30/99			
REV. SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT
ENGINEER'S SEAL	DATE	DEC. 1997			
	SCALE:	AS SHOWN			
	DESIGNED BY	FROM			
	DRAWN	GWR/DLW			
	JOB NO.	352-04-PR			
	LAND PLANNING	ENGINEERING			
	P.O. Box 1328	Corrales, N.M. 87048			
	PROJECT NO.	SC5-99007			
	NO.	SC5-97-12			
		CON-97-41			
	RACK #	29			
	PAGE #	11			
	BOX #				
	SLOT #				



EXISTING CONDITIONS:

This seventeen (17) acre site is located west of Coors Boulevard, SW and south of Gun Club Road. It has a very flat terrain with a gentle slope to the east. The site contains localized depressions in the order of one half to one foot (1/2' to 1') which appear as swales on the top map. However, there are no flow paths identifiable from a site inspection. Due to grading around the perimeter of the site, this area is raised above its adjoining tracts of land, preventing any offsite drainage from entering the site. Tract 22 B 4, a projection of Padilla Road to the south, has had minor grading in the past which prevents flow from this tract from entering Michael's Estates. The runoff from this property either ponds onsite, ponds within the Padilla Road right-of-way or is diverted to the south. Final grading of the west boundary of Michael's Estates will not alter the drainage from this property. Michael's Estates is located within Zone X (outside of 500 year flood plain) on the Flood Insurance Rate Map (FIRM) number 35001C0339 D, effective September 20, 1996. The runoff is collected by the Coors Boulevard roadside ditch along the east boundary and discharges to the east through a culvert under Coors Boulevard.

PROPOSED CONDITIONS:

Due to inadequate drainage facilities below Coors Boulevard, the site is designed for on-lot retention. The streets have very flat longitudinal slopes and a 2% cross slope to the property line. This enables the street to drain to the lot front. Rear yard ponds have been designed to retain the 100-year, 10-day runoff volume. See Michael's Estates Retention Volume Table for the minimum storage capacity of each lot. Each pond shall be maintained by the respective lot owner. A narrow strip of land along the east edge of the property is being dedicated as additional right-of-way for Coors Boulevard. This strip and the entrance to Michael's Estates will continue to discharge to the Coors Boulevard culvert. The contributing area will be reduced from 17 acres to 0.73 acres. The 0.73 acres is divided into the same land treatment types as the rest of the site (A = 0%, B = C = 32% = 0.23 acres, and D = 36% = 0.26 acres). Due to the decrease in contributing area, the discharge to the culvert will be decreased from 0.62 ac-ft to 0.11 ac-ft (from 21.9 cfs to 2.3 cfs). Final grading of the west boundary line shall leave the development a minimum of one foot (1') above the adjacent property to the west. This will ensure that off-site flow can not enter the site. Therefore, this site will be self contained, maintain existing conditions on the adjoining tracts of land, and decrease the flow to the culvert in Coors Boulevard.

HYDROLOGIC CALCULATIONS:

Area = 17 acres Rainfall zone = 1 $P_{30} = 2.20"$ $P_{100yr} = 6.7"$

Land Treatment (Ex) A=100% B=0% C=0% D=0%

Land Treatment (Prop) A=0% B=32% C=32% D=36%

Area 0.4c 5.44ac 5.44ac 6.12ac

Excess Precipitation 0.44 0.67 0.99 1.97

Factor

Excess Precipitation (E) = $(0.44 \times 17) / 17 = 0.44"$ (existing)

$V_{30} = V_{100yr} = E \times A = 0.44 (17) / 12 = 0.62$ ac-ft (existing)

Excess Precipitation (E) = $(0.67 \times 5.44 + 0.99 \times 5.44 + 1.79 \times 6.12) / 17 = 1.24"$ (proposed)

$V_{30} = E \times A = 1.24 (17) / 12 = 1.76$ ac-ft (proposed)

$V_{100yr} = 1.76 + 6.12 (3.67 - 2.20) / 12 = 2.50$ ac-ft (proposed)

$Q_{100} (exist) = 1.29 (17) = 21.93$ cfs.

$Q_{100} (proposed) = 2.03 (0.23) + 2.87 (0.23) + 4.37 (0.26) = 2.26$ cfs.

MICHAEL'S ESTATES RETENTION VOLUME

LOT/BLK	CONTRIBUTING AREA (ACRES)	VOLUME (AC-FT)	VOLUME (CU-FT)
1	0.35	0.051	2,242
2	0.30	0.044	1,927
3	0.30	0.044	1,927
4	0.30	0.044	1,927
5	0.29	0.042	1,845
6	0.29	0.042	1,845
7	0.29	0.042	1,845
8	0.29	0.042	1,845
9	0.29	0.042	1,845
10	0.29	0.042	1,845
11	0.29	0.042	1,845
12	0.29	0.042	1,845
13	0.29	0.042	1,845
14	0.29	0.042	1,845
15	0.30	0.044	1,927
16	0.28	0.038	1,640
17	0.28	0.038	1,640
18	0.28	0.038	1,640
19	0.33	0.049	2,131
20	0.28	0.041	1,804
21	0.23	0.034	1,476
22	0.33	0.049	2,131
23	0.28	0.041	1,804
24	0.29	0.043	1,886
25	0.29	0.043	1,886
26	0.29	0.043	1,886
27	0.29	0.043	1,886
28	0.29	0.043	1,886
29	0.29	0.043	1,886
30	0.29	0.043	1,886
31	0.30	0.044	1,927
32	0.33	0.049	2,131
33	0.29	0.043	1,886
34	0.28	0.038	1,640
35	0.28	0.038	1,640
36	0.28	0.038	1,640
37	0.28	0.038	1,640
38	0.28	0.038	1,640
39	0.28	0.038	1,640
40	0.28	0.038	1,640
41	0.28	0.038	1,640
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44	0.28	0.038	1,640
45	0.28	0.038	1,640
46	0.28	0.038	1,640
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237	0.28	0.038	1,640
238	0.28	0.038	1,640

LEGEND			LEGEND		
DESCRIPTION	PROPOSED	EXISTING	DESCRIPTION	PROPOSED	EXISTING
SANITARY SEWER LINE			BUTTERFLY VALVE		N/A
ENCASEMENT			GAS LINES	N/A	
SANITARY SEWER MH			OVERHEAD ELEC. LINE	N/A	
SAS SERVICE CONN.			OVERHEAD TELE. LINE	N/A	
SAS FLUSHOUT		N/A	CABLE TELEVISION	N/A	
SAS REDUCER		N/A	POWER OR TELE. POLE	N/A	
WATER LINE			PROPOSED CURB		● FL=74.11
GATE VALVE			FLOWLINE ELEVATION		
FIRE HYDRANTS			EXISTING SPOT ELEV. (GRND & TC)	N/A	⊙ 73.6
WATER SERVICE/METER			SIDEWALK		
TEES			ESTATE CURB		
CROSSES			MOUNTABLE MEDIAN CURB		
BENDS			STANDARD C & G		
CAPS & PLUGS			CROWN TRANSITION		

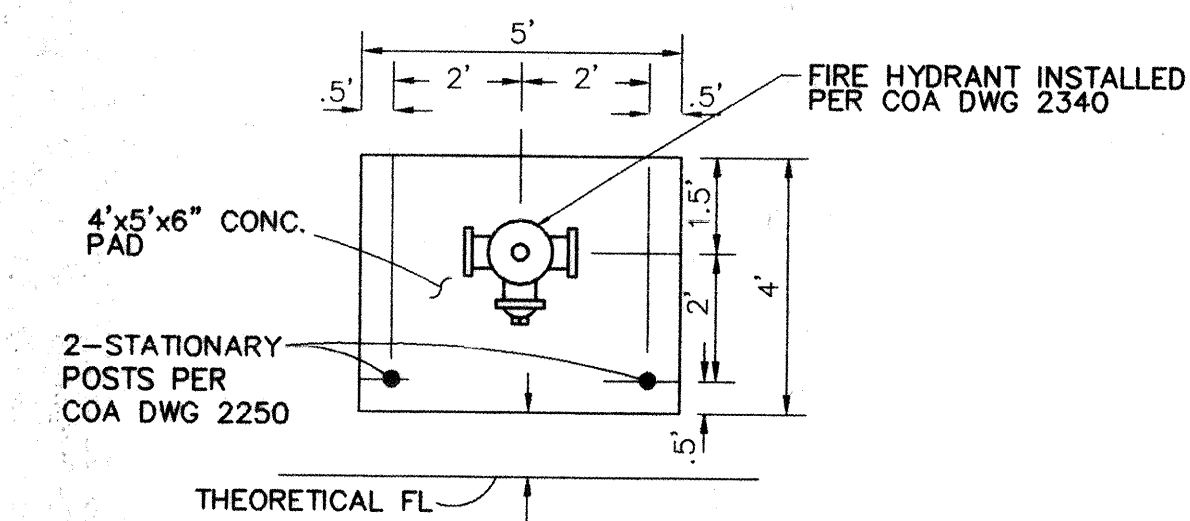
NOTE: SEE SHEET 8 FOR SANITARY SEWER DETAILS

UTILITY NOTES

1. RESTRAINED JOINTS, SUCH AS MEGA-LUG EQUIVALENT BRANDS ACCEPTABLE TO THE ENGINEER, SHALL BE USED ON ALL TEES, BENDS, CROSSES AND REDUCERS IN LIEU OF CONCRETE THRUST BLOCKING. CAPS AND VALVES SHALL BE INSTALLED WITH CONCRETE THRUST BLOCKING AS WELL AS RESTRAINED JOINTS. RESTRAINED JOINTS SHALL BE CONSIDERED INCIDENTAL TO THIS CONTRACT AND NO ADDITIONAL COMPENSATION, MEASUREMENT, OR PAYMENT WILL BE MADE THEREFORE.
2. ALL FIRE HYDRANTS & FITTINGS ETC. SHALL BE BUILT IN ACCORDANCE WITH COA STD. DWG'S 2301 THRU 2380 INCLUSIVE.
3. WATER METERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH COA STD. DWG. 2362. NOTE: GROUND SLOPES AT 2% FROM EDGE OF ESTATE CURB TO PROPERTY LINE. THIS SLOPE IS REVERSED FROM STANDARD CONSTRUCTION.
4. ALL SAS SERVICES SHALL BE CONSTRUCTED AT THE CENTER OF EACH LOT FRONTAGE UNLESS SHOWN OTHERWISE ON THIS SHEET.

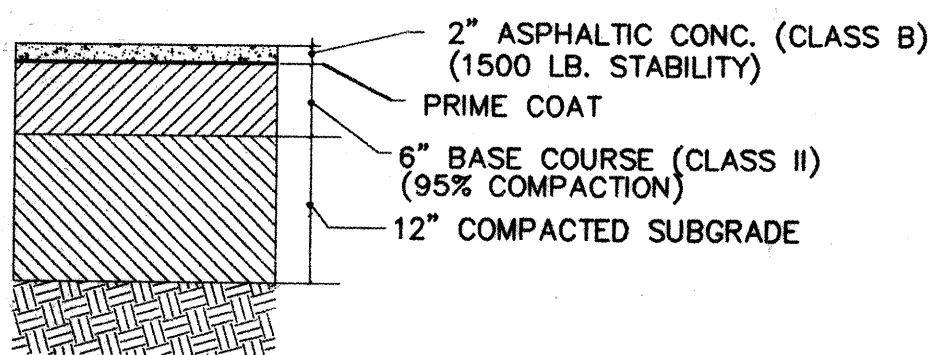
WATER SHUT-OFF PLAN

1. VALVES NO. 1 AND 2 SHALL BE SHUT-OFF SO NON-PRESSURE CONNECTIONS CAN BE MADE.
2. CONTRACTOR SHALL CONTACT WATER SYSTEMS DIVISION (857-8200) FIVE (5) WORKING DAYS PRIOR TO VALVE SHUT-OFF ONLY WATER SYSTEMS PERSONNEL ARE AUTHORIZED TO OPERATE VALVES.



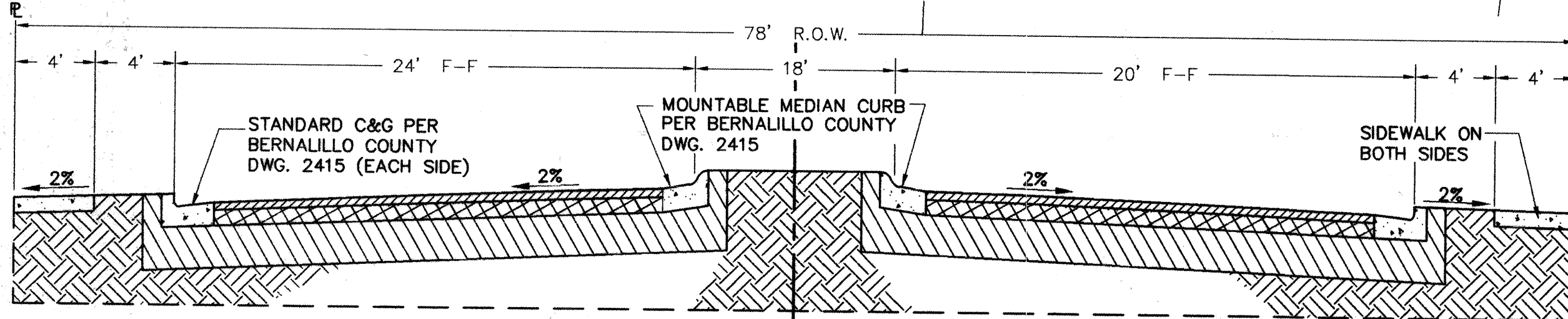
FIRE HYDRANT AND BOLLARD DETAIL

NOT TO SCALE



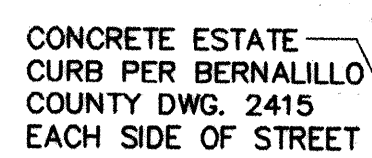
ASPHALT CONCRETE PAVEMENT SECTION

N.T.S.



TYPICAL ENTRANCE DETAIL

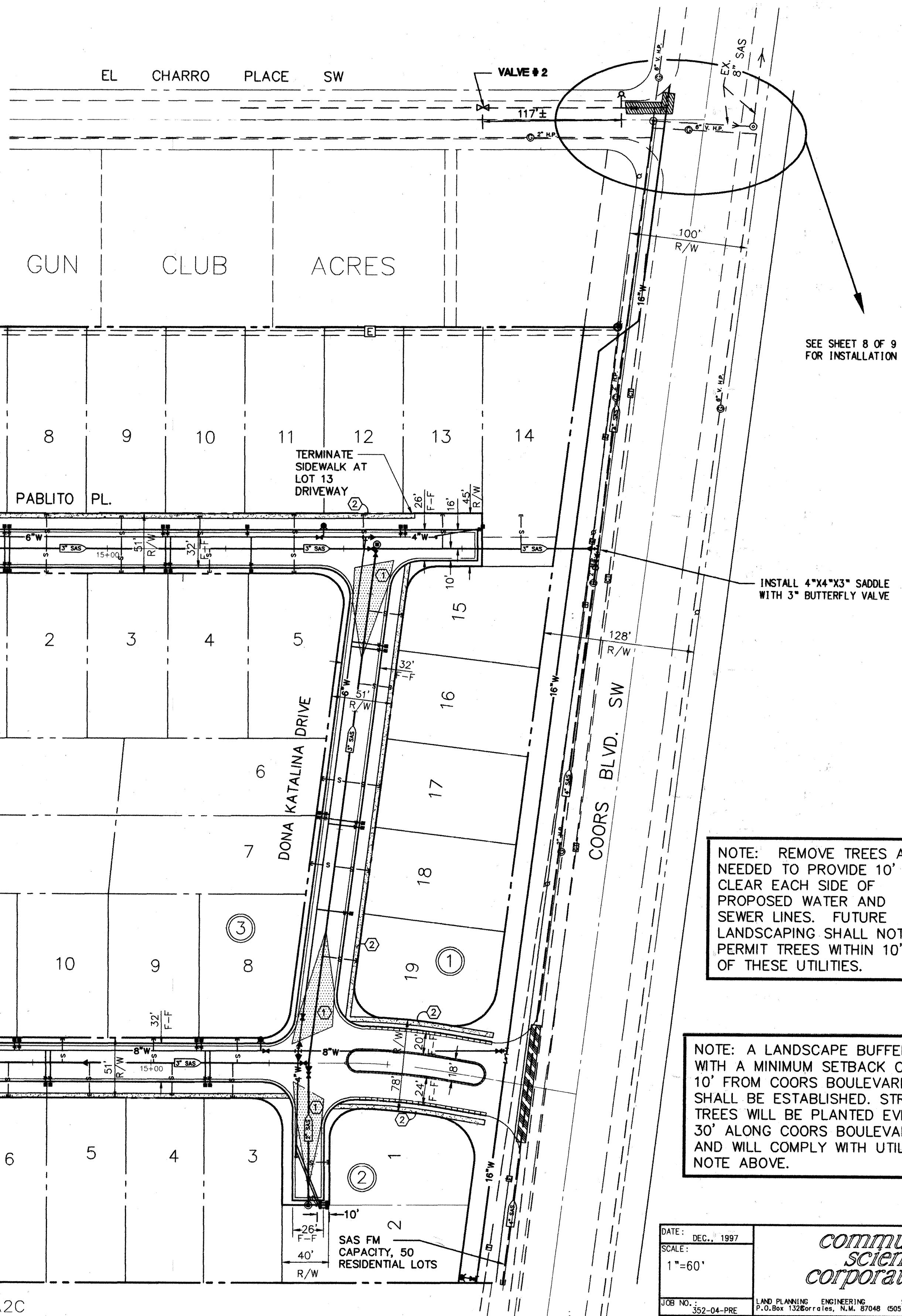
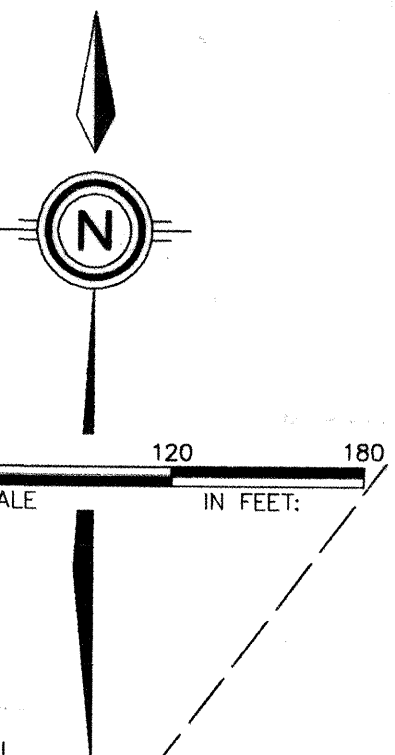
N.I.S.



TYPICAL ROAD DETAIL
PER BERNALILLO COUNTY DWG. 2406
N.T.S.

RESTRAINING LENGTHS	
FITTING	LR
8" X 8" TEE	RUN 9', BRANCH 20'
8" X 6" TEE	RUN 7', BRANCH 5'
6" X 6" TEE	RUN 6', BRANCH 20'
16" X 8" TEE	RUN 4', BRANCH 13'
8" - 11 1/4" BEND	2'
8" - 22 1/2" BEND	4'
16" - 45" BEND (2)	10'
8" X 8" CROSS	RUN 9', BRANCH 20'
16" BUTTERFLY VALVE/CAP	119"
8" GATE VALVE/CAP	60"
6" GATE VALVE/CAP	46"
4" CAP	32"
8" X 6" REDUCER	LARGE SIDE 25'
8" X 4" REDUCER	LARGE SIDE 43'
6" X 4" REDUCER	LARGE SIDE 24'

LR = LENGTH TO BE RESTRAINED EACH SIDE OF THE FITTING. FOR TEES, ALL THREE LEGS SHALL BE RESTRAINED FOR A DISTANCE OF "LR". FOR REDUCERS, "LR" IS GIVEN FOR THE LARGER DIAMETER SIDE OF THE FITTING AND NO RESTRAINING IS REQUIRED ON THE SMALL SIDE OF THE FITTING. GATE VALVES SHALL BE MECHANICALLY RESTRAINED AND INSTALLED WITH CONCRETE BLOCKING PER COA STD DWG 2332 IN ADDITION TO THE MECHANICALLY RESTRAINED LENGTHS. ALL CAPS SHALL BE INSTALLED WITH CONCRETE BLOCKING PER COA STD DWG 2320. RESTRAIN ALL JOINTS ON FIRE HYDRANTS.



NOTE: REMOVE TREES AS
NEEDED TO PROVIDE 10'
CLEAR EACH SIDE OF
PROPOSED WATER AND
SEWER LINES. FUTURE
LANDSCAPING SHALL NOT
PERMIT TREES WITHIN 10'
OF THESE UTILITIES.

NOTE: A LANDSCAPE BUFFER WITH A MINIMUM SETBACK OF 10' FROM COORS BOULEVARD SHALL BE ESTABLISHED. STREET TREES WILL BE PLANTED EVERY 30' ALONG COORS BOULEVARD AND WILL COMPLY WITH UTILITY NOTE ABOVE.

DATE: DEC., 1997	<i>communi sciences corporation</i>
SCALE: 1"=60'	
JOB NO.: 352-04-PRE	

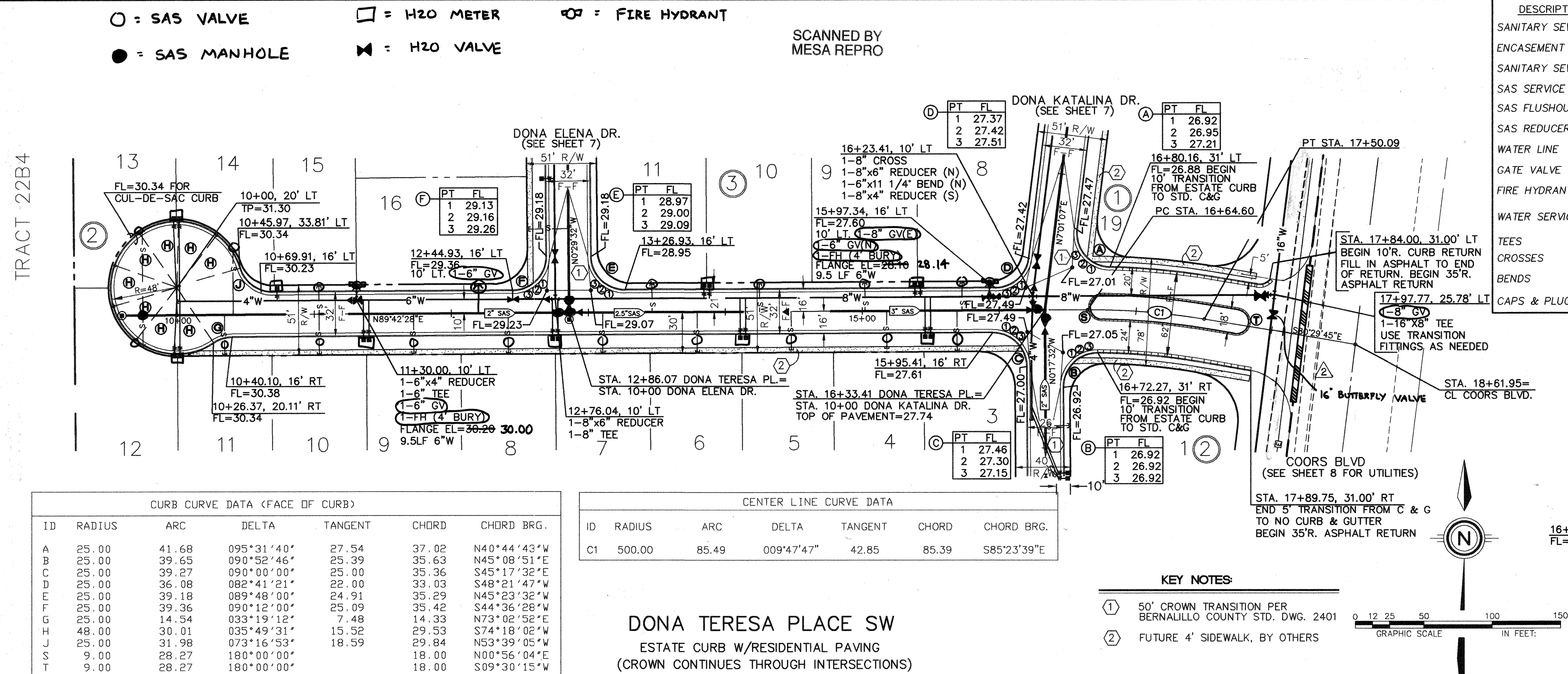
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: MICHAEL'S ESTATES
PAVING AND UTILITY COMPOSITE PLAN

DESIGN REVIEW COMMITTEE		CITY ENGINEER APPROVAL		LAST DESIGN DATE	
APPROVE		APPROVE		MO./DAY/YR.	MO./DAY/YR.
NOV 23 1999		DEC - 1 1999			
DESIGN REVIEW COMMITTEE		CITY ENGINEER			

PROJECT NO.	5799.81	MAP NO.	Q-10	SHEET	4	OF	9
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COMMUNITY SCIENCES CORPORATION



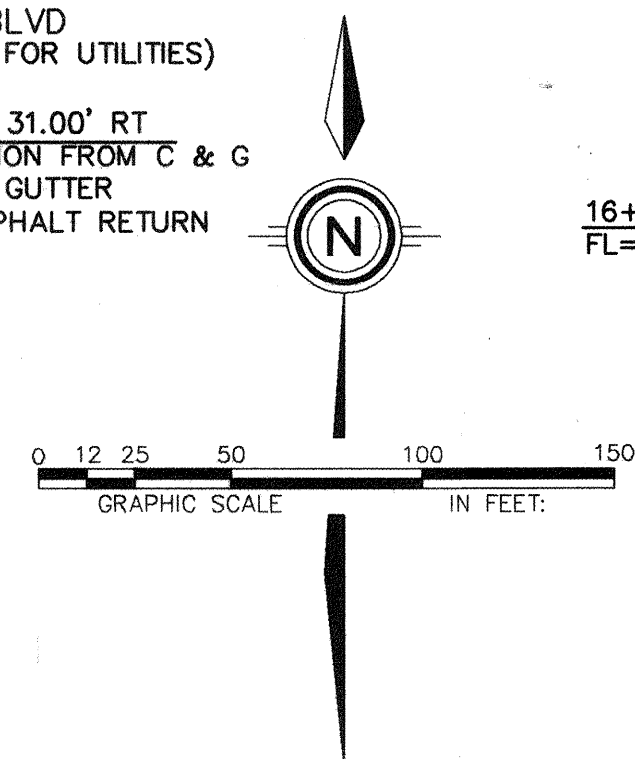
CURB CURVE DATA (FACE OF CURB)						
ID	RADIUS	ARC	DELTA	TANGENT	CHORD	CHORD BRG
A	25.00	41.68	095°31'40"	27.54	37.02	N40°44'43"W
B	25.00	39.65	090°52'46"	25.39	35.63	N45°08'51"E
C	25.00	39.27	090°00'00"	25.00	35.36	S45°17'32"E
D	25.00	36.08	082°41'21"	22.00	33.03	S48°21'47"W
E	25.00	39.18	080°48'00"	24.91	35.29	N45°23'32"W
F	25.00	36.08	090°00'00"	25.00	35.42	S44°56'28"W
G	25.00	14.54	033°19'12"	7.48	14.33	N73°02'52"E
H	48.00	30.01	035°49'31"	15.52	29.53	S74°18'02"W
J	25.00	31.98	073°16'53"	18.59	29.84	N53°39'05"W
S	9.00	28.27	180°00'00"		18.00	N00°56'04"E
T	9.00	28.27	180°00'00"		18.00	S09°30'15"W

CENTER LINE CURVE DATA						
ID	RADIUS	ARC	DELTA	TANGENT	CHORD	CHORD BRG.
C1	500.00	85.49	009°47'47"	42.85	85.39	S85°23'39"E

DONA TERESA PLACE SW
ESTATE CURB W/RESIDENTIAL PAVING
(CROWN CONTINUES THROUGH INTERSECTIONS)

① 50' CROWN TRANSITION PER
BERNALILLO COUNTY STD. DWG. 2401

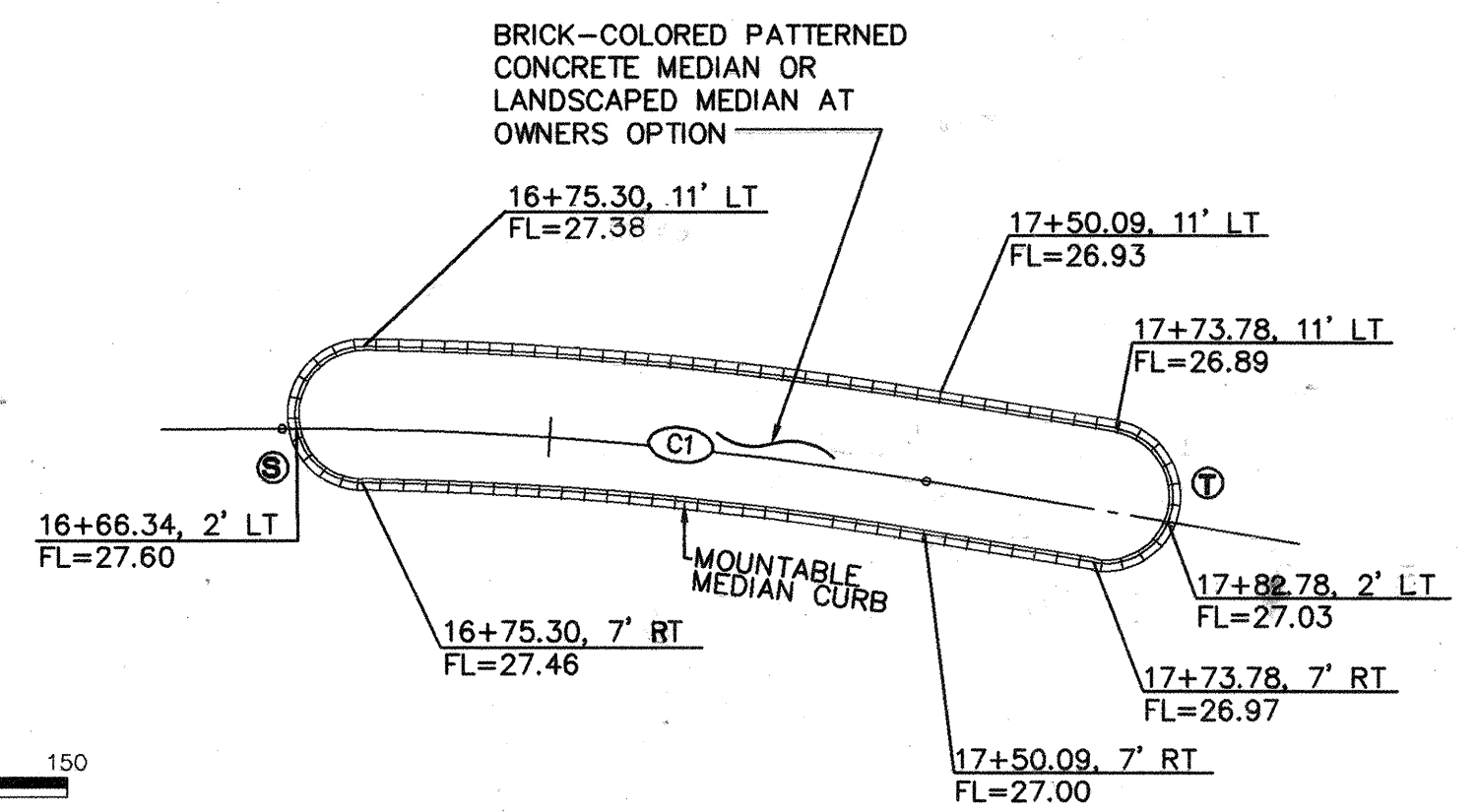
② FUTURE 4' SIDEWALK, BY OTHERS



MEDIAN DETAIL

SCALE: 1"=25'

DESCRIPTION	PROPOSED	EXISTING	DESCRIPTION	PROPOSED	EXISTING
SANITARY SEWER LINE			BUTTERFLY VALVE		N/A
ENCASEMENT			GAS LINES	N/A	
SANITARY SEWER MH			OVERHEAD ELEC. LINE	N/A	
SAS SERVICE CONN.			OVERHEAD TELE.	N/A	
SAS FLUSHOUT		N/A	CABLE TELEVISION	N/A	
SAS REDUCER		N/A	POWER OR TELE. POLE	N/A	
WATER LINE					

[illegible]

DATE: DEC., 1997	<i>community sciences corporation</i>	6/99	RE	DESIGNED BY	B	
SCALE:			NO.	DATE	DRAWN BY	G
HORIZ: 1"= 50'						
VERT: 1"= 10'						
JOB NO.:	LAND PLANNING ENGINEERING SURVEYING P.O. Box 1328 Corrales, N.M. 870485051897-0000			CHECKED BY	K	

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

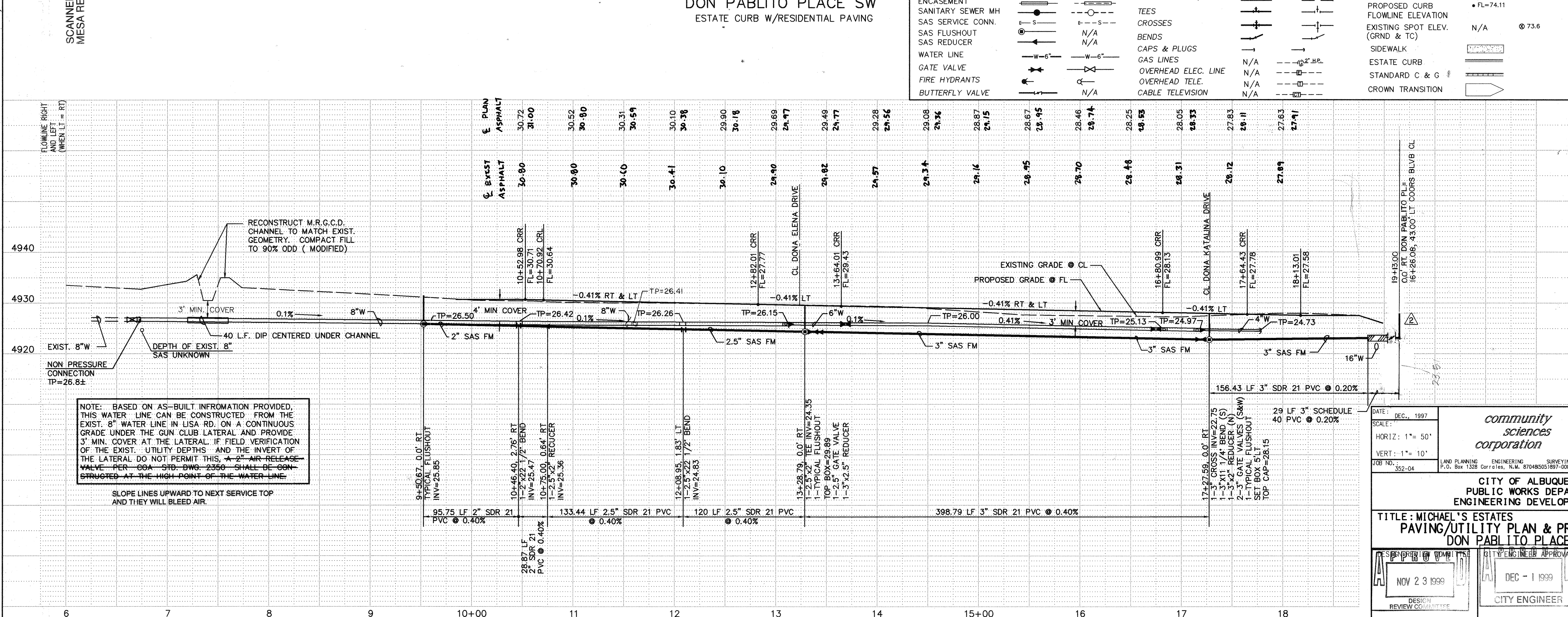
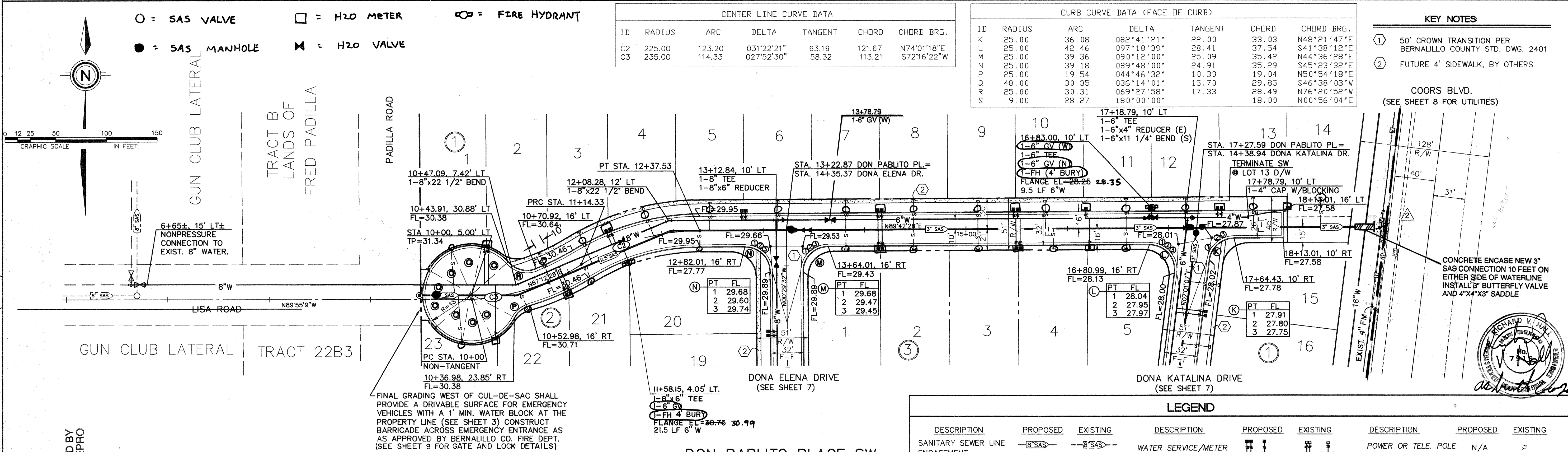
TITLE: MICHAEL'S ESTATES
PAVING/UTILITY PLAN & PROFILE
DONA TERESA PLACE SW

DESIGN REVIEW COMMITTEE		DESIGN REVIEW COMMITTEE																							
APPROVED NOV 23 1999 DESIGN REVIEW COMMITTEE	APPROVED DEC - 1 1999 CITY ENGINEER	LAST DESIGN DATE	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; padding: 5px;">MO./DAY/YR.</th> <th style="width: 50%; padding: 5px;">MO./DAY/YR.</th> </tr> </thead> <tbody> <tr><td style="height: 30px;"></td><td></td></tr> <tr><td style="height: 30px;"></td><td></td></tr> <tr><td style="height: 30px;"></td><td></td></tr> <tr><td style="height: 30px;"></td><td></td></tr> <tr><td style="height: 30px;"></td><td></td></tr> <tr><td style="height: 30px;"></td><td></td></tr> <tr><td style="height: 30px;"></td><td></td></tr> <tr><td style="height: 30px;"></td><td></td></tr> <tr><td style="height: 30px;"></td><td></td></tr> <tr><td style="height: 30px;"></td><td></td></tr> </tbody> </table>	MO./DAY/YR.	MO./DAY/YR.																				
MO./DAY/YR.	MO./DAY/YR.																								

PROJECT NO.	5799.81	MAP NO.	Q-10	SHEET	5	OF	9
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CON-97-41	FILE # 29 BOX #	PAGE # 15 SLOT #
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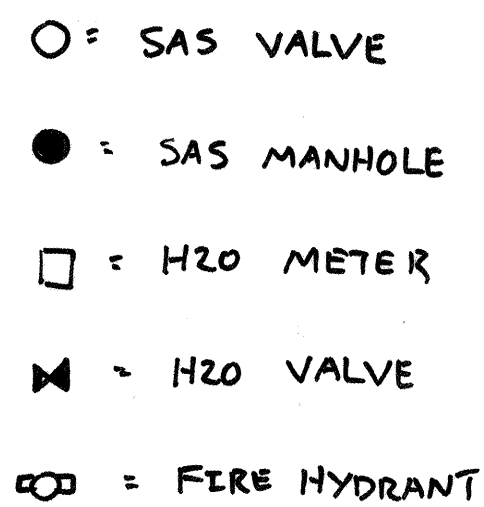
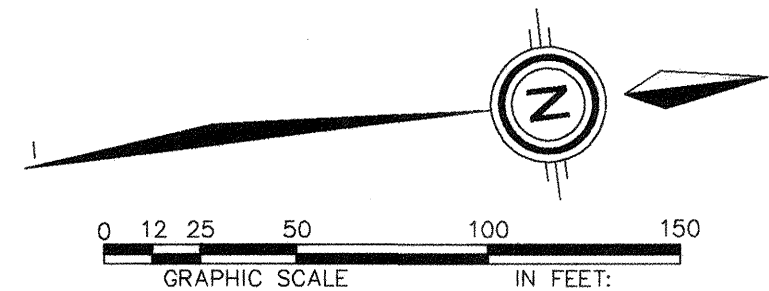
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5204-PRE
5204C3-DWG



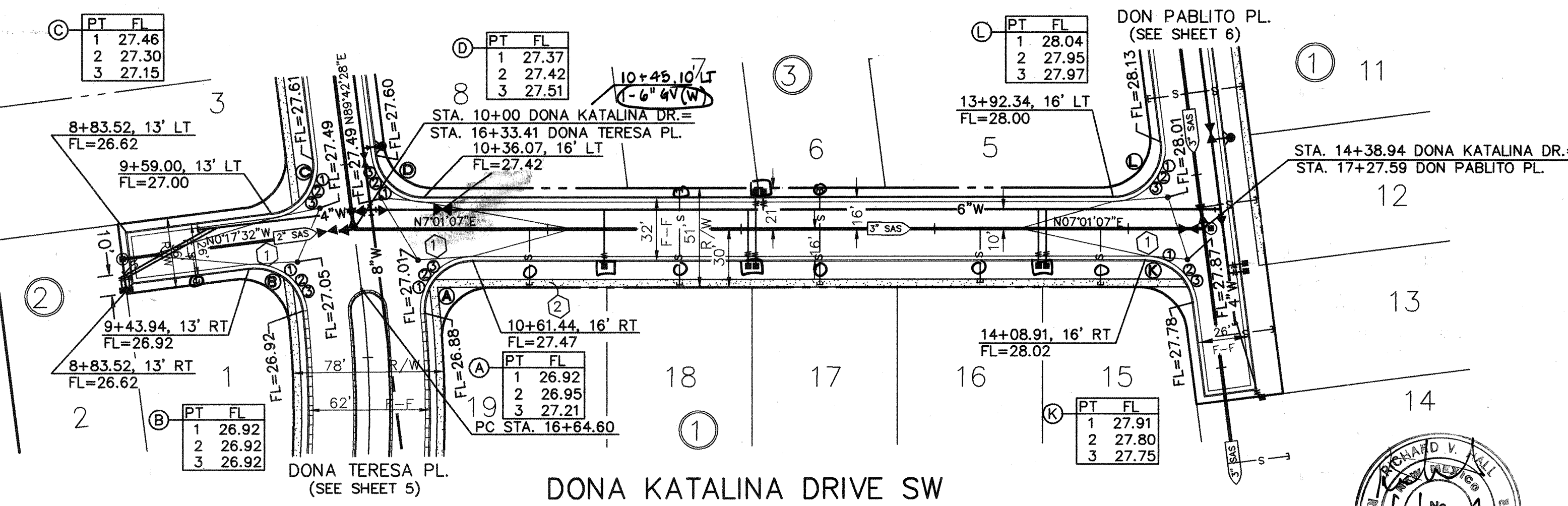
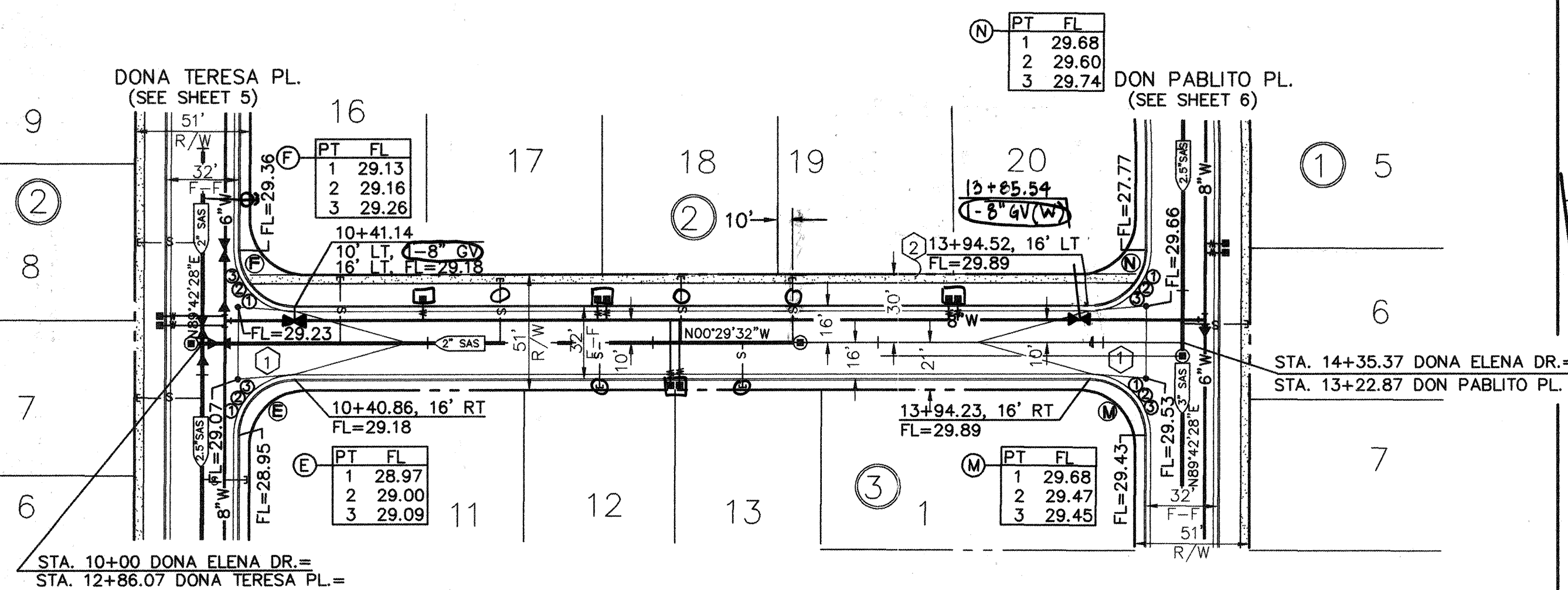
CURB CURVE DATA (FACE OF CURB)						
ID	RADIUS	ARD	DELTA	TANGENT	CHORD	CHORD BRG.
A	25.00	41.68	095°31'40"	27.54	37.02	N40°44'43"W
B	25.00	39.65	090°52'46"	25.39	35.63	N45°08'51"E
C	25.00	35.27	090°00'00"	25.00	35.36	S45°17'32"E
D	25.00	36.08	082°41'21"	22.00	33.03	S48°21'47"W
E	25.00	39.18	089°48'00"	24.91	35.29	N45°23'32"W
F	25.00	39.36	090°12'00"	25.09	35.42	S44°36'28"W
K	25.00	36.08	082°41'21"	22.00	33.03	N48°21'47"E
L	25.00	42.46	097°18'39"	28.41	37.54	S41°38'12"E
M	25.00	39.36	090°12'00"	25.09	35.42	N44°36'28"E
N	25.00	39.18	089°48'00"	24.91	35.29	S45°23'32"E

1 50' CROWN TRANSITION PER
BERNALILLO COUNTY STD. DWG. 2401

2 FUTURE 4' SIDEWALK, BY OTHERS

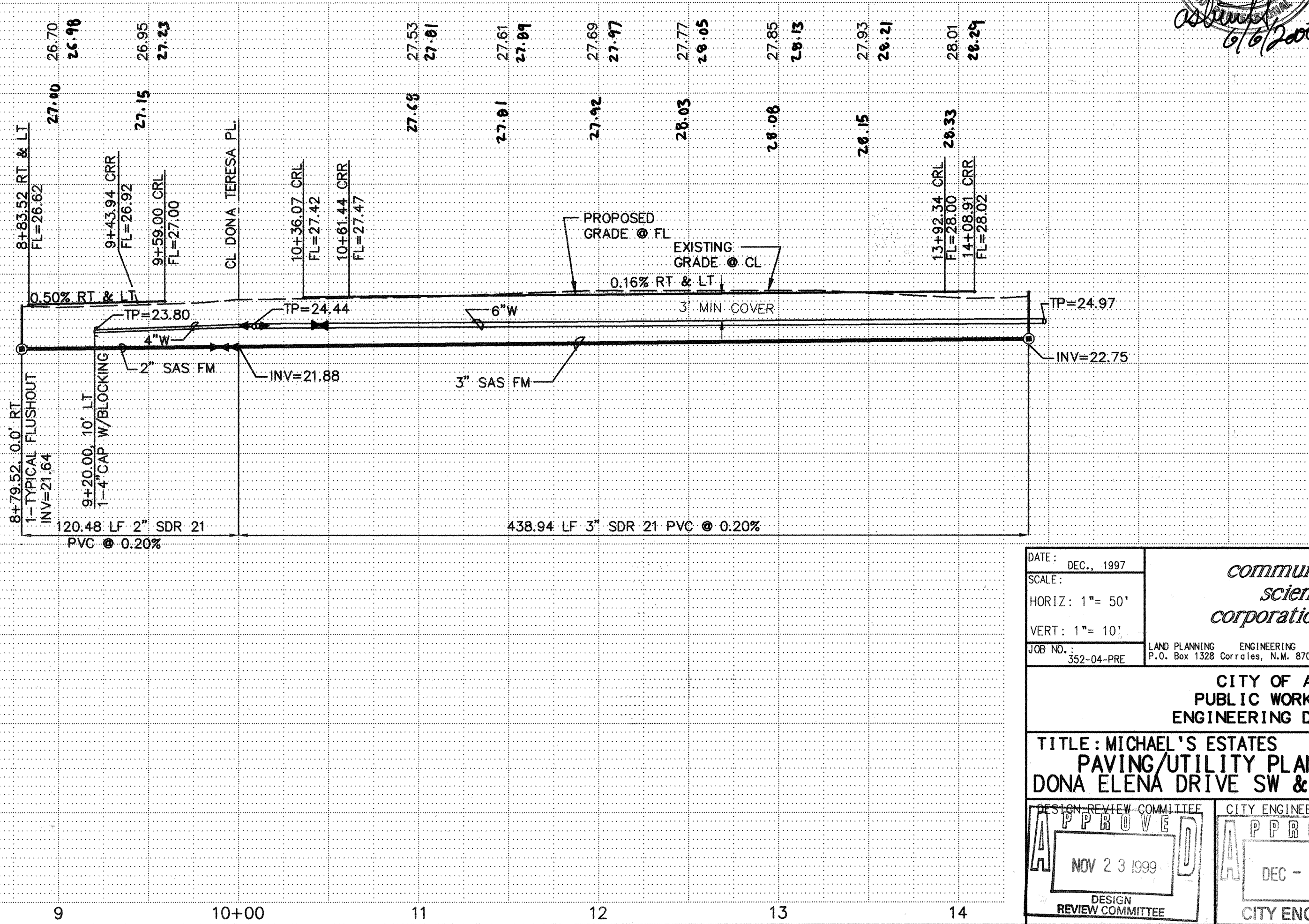
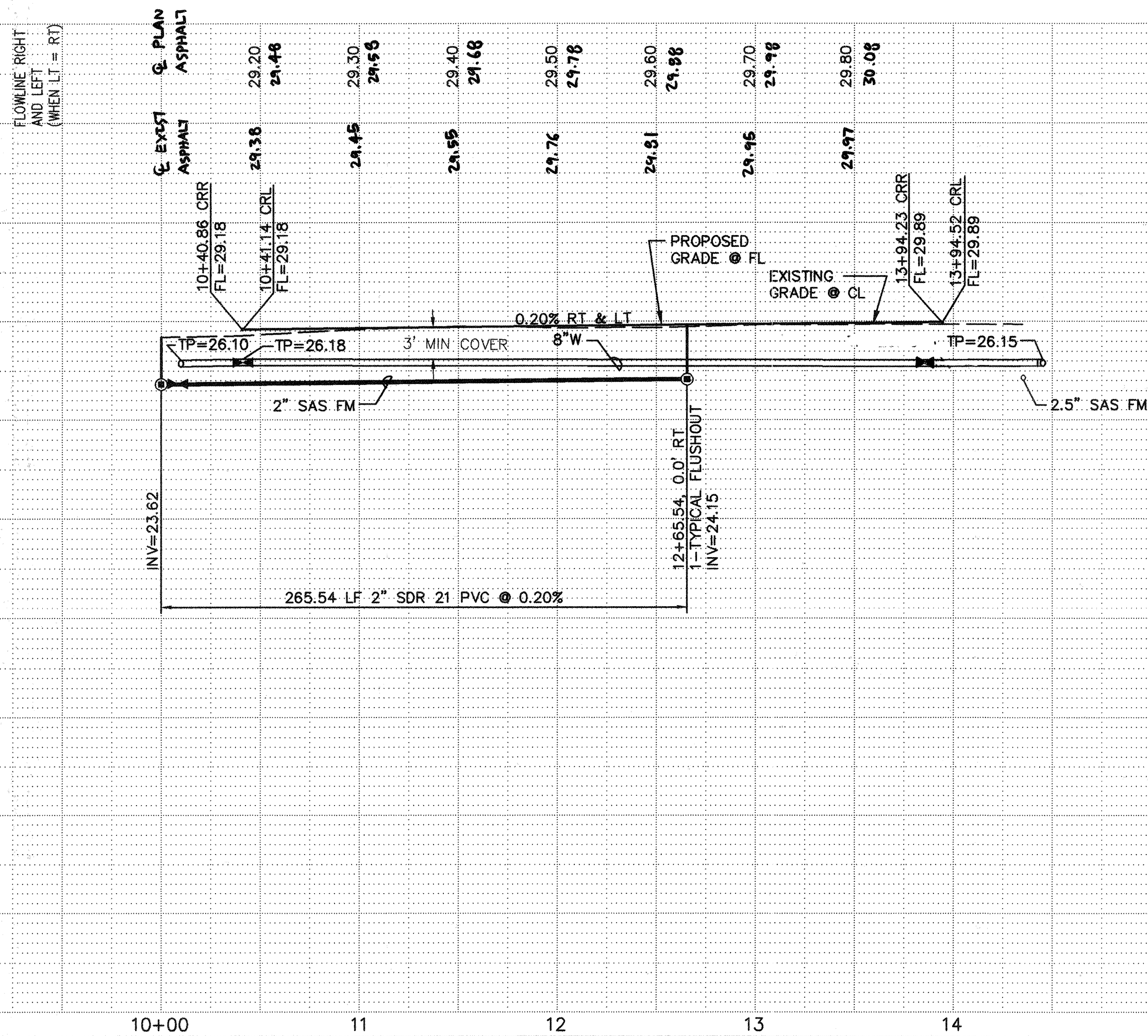


DESCRIPTION	PROPOSED	EXISTING	DESCRIPTION	PROPOSED	EXISTING
SANITARY SEWER LINE			BUTTERFLY VALVE		N/A
ENCASEMENT			GAS LINES	N/A	
SANITARY SEWER MH			OVERHEAD ELEC. LINE	N/A	
SAS SERVICE CONN.			OVERHEAD TELE.	N/A	
SAS FLUSHOUT		N/A	CABLE TELEVISION	N/A	
SAS REDUCER		N/A	POWER OR TELE. POLE	N/A	
WATER LINE			PROPOSED CURB	● FL=74.11	
GATE VALVE			FLOWLINE ELEVATION		
FIRE HYDRANTS			EXISTING SPOT ELEV. (GRND & TC)	N/A	⊗ 73.6
WATER SERVICE/METER			SIDEWALK		
TEES			ESTATE CURB		
CROSSES			STANDARD C & G		
BENDS			CROWN TRANSITION		
CAPS & PLUGS					



DONA ELENA DRIVE SW
ESTATE CURB W/RESIDENTIAL PAVING

DONA KATALINA DRIVE SW
ESTATE CURB W/RESIDENTIAL PAVING



DATE: DEC., 1997	<i>community sciences corporation</i>
SCALE:	
HORIZ: 1"= 50'	
VERT: 1"= 10'	
JOB NO.: 352-04-PRE	LAND PLANNING ENGINEERING SURVEYING P.O. Box 1328 Corrales, N.M. 870485051897-000

*community
sciences
corporation*

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: MICHAEL'S ESTATES
PAVING/UTILITY PLAN & PROFILE
DONA ELENA DRIVE SW & DONA KATALINA DRIVE SW

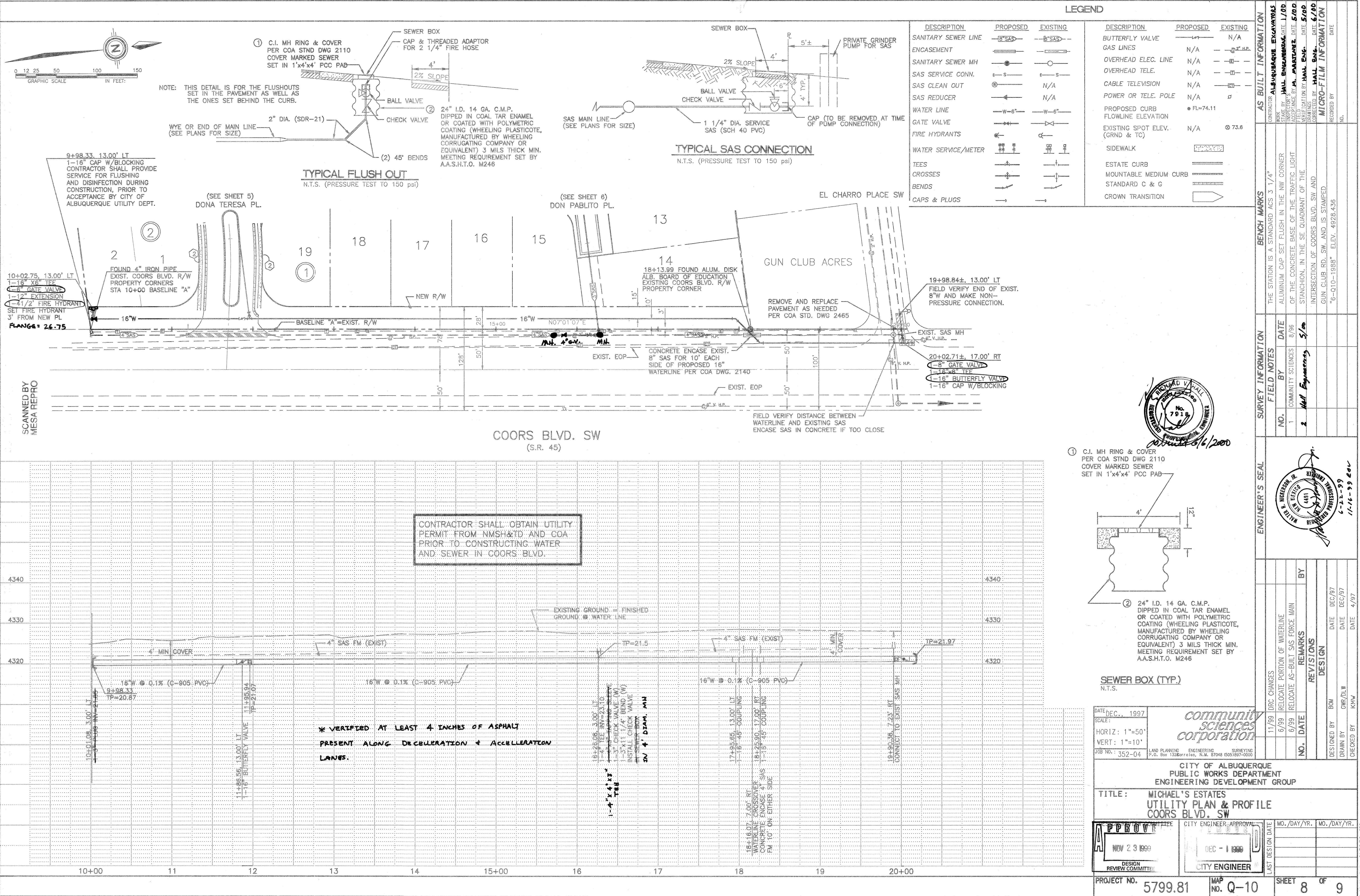
DESIGN REVIEW COMMITTEE APPROVED NOV 23 1999 DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL APPROVED DEC - 1 1999 CITY ENGINEER	LAST DESIGN DATE MO./DAY/YR. _____ _____ _____ _____
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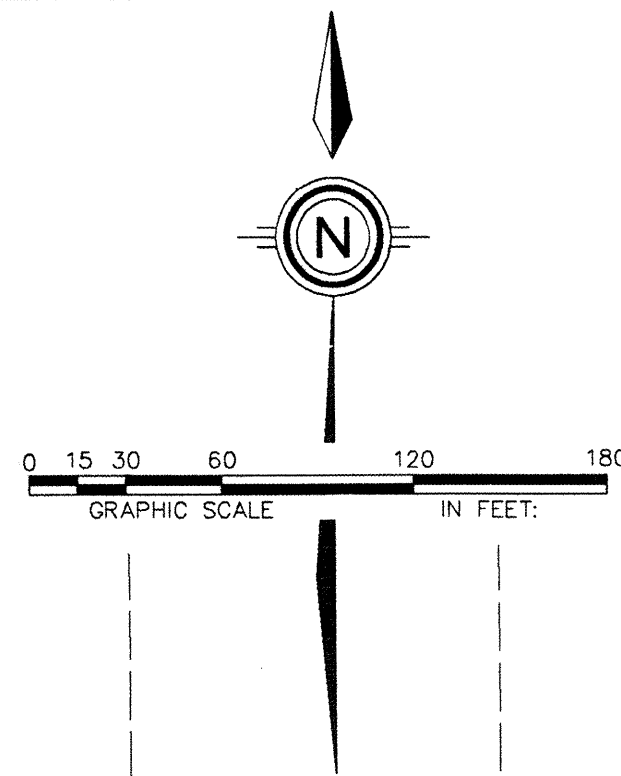
PROJECT NO.	5799.81	MAP NO.	Q-10	SHEET	7	OF	9
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CON-97-41

		RACK # 29 BOX #	PAGE # 13 SLOT #
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RACK # 29	PAGE # 13
BOX #	SLOT #





GUN CLUB LATERAL
TRACT B
LANDS OF
FRED PADILLA

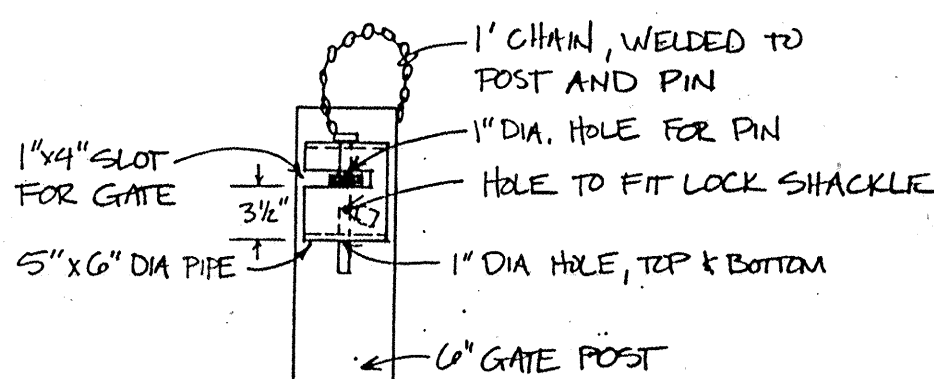
GUN CLUB LATERAL

TRACT 22B3

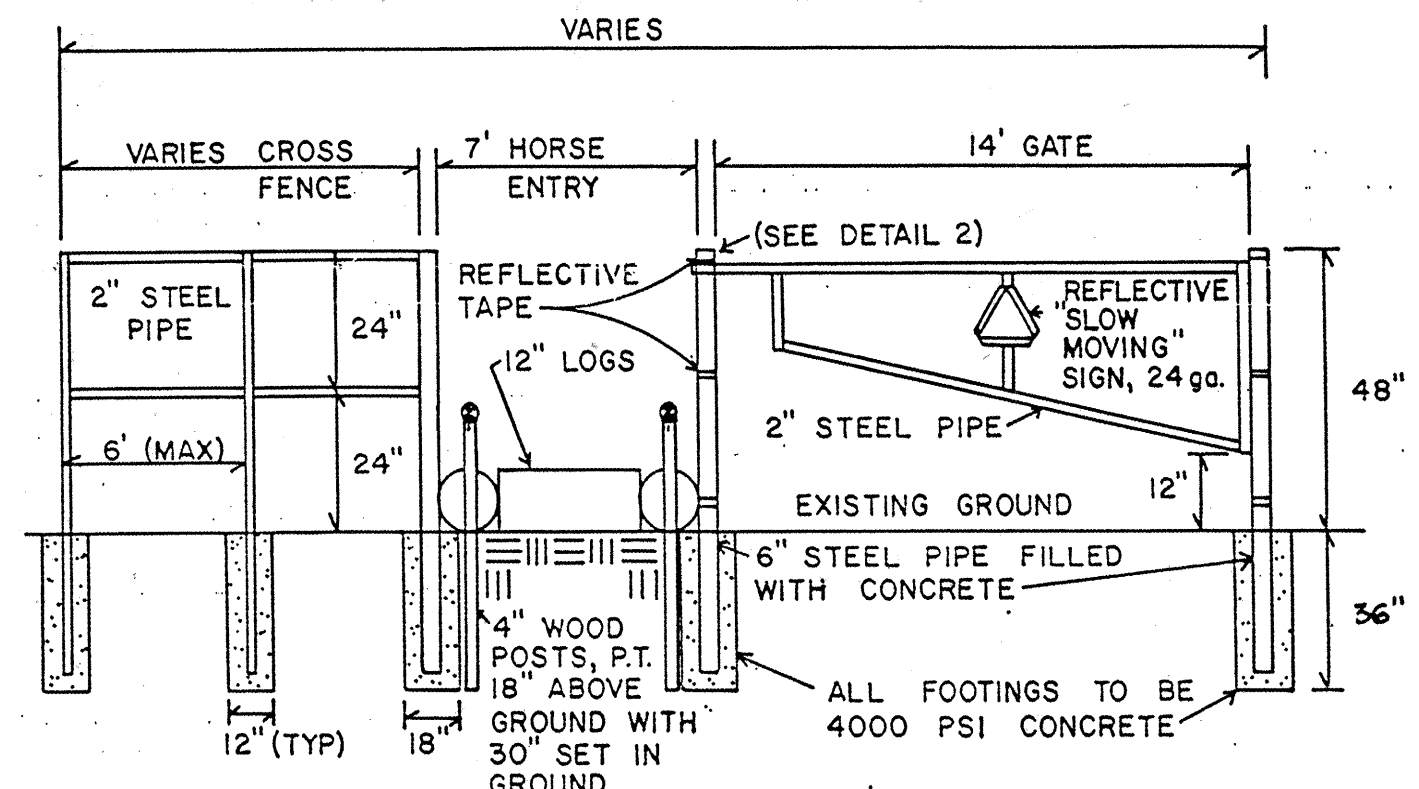
TRACT 22B4

TRACT 6A2B

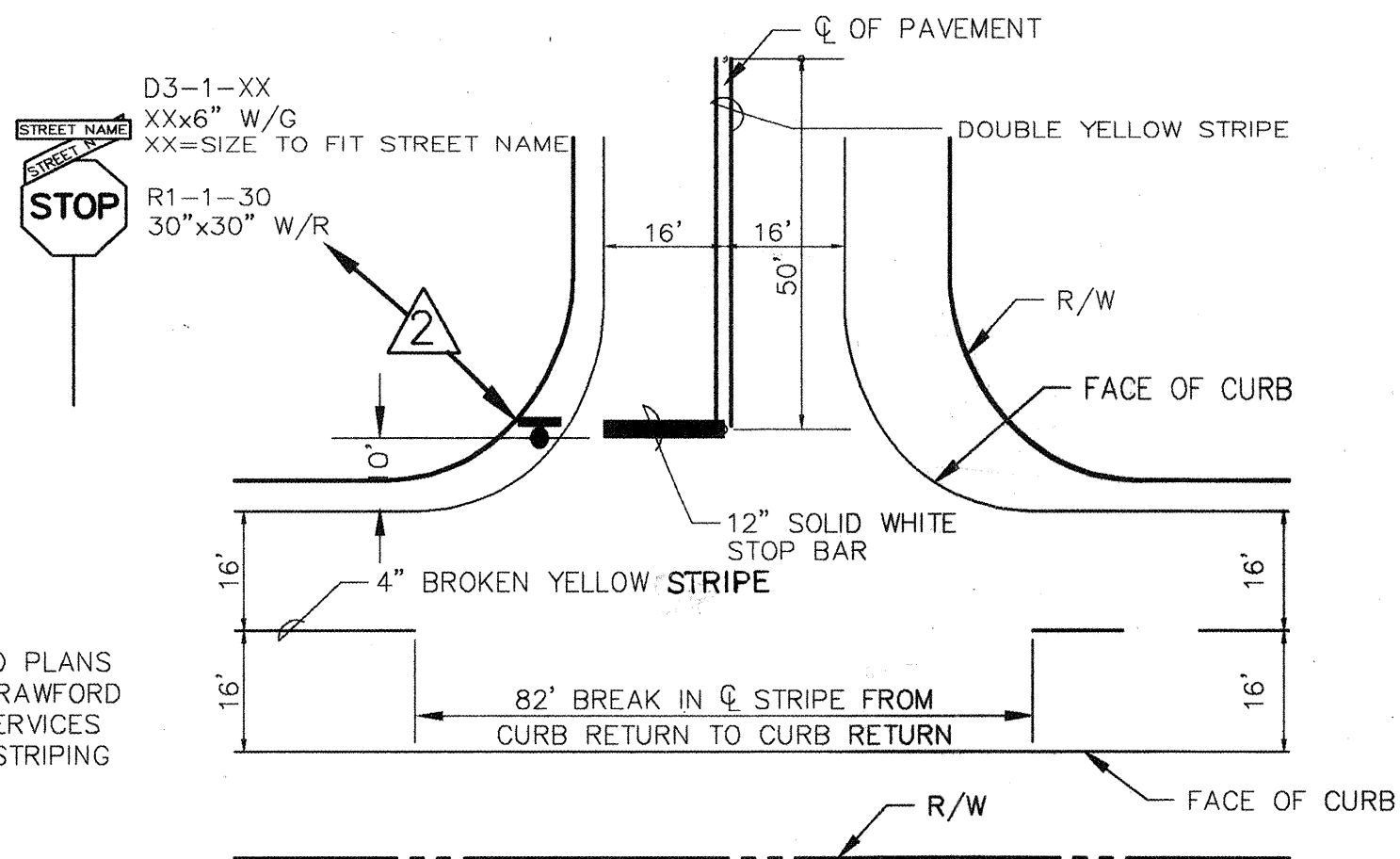
TRACT 6A2C



② MRGCD LOCK DETAIL



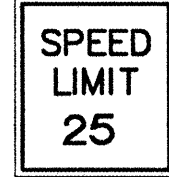
① GATE AND CROSS FENCE DETAIL
NTS



TYPICAL INTERSECTION
STRIPING AND SIGNAGE DETAIL
N.T.S.

PAINT SPECIFICATION: ALL PAINT SHALL BE DOUBLE APPLICATION AND MEET OR EXCEED PAVEMENT MARKING TYPE 'F' DESCRIPTION IN SECTION 634 AND 718.16 OF FP-96 STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAY PROJECTS.

NOTE: FINAL PLACEMENT OF THE SIGNS ARE TO BE INSTALLED AT THE DISCRETION OF THE COUNTY INSPECTOR.



SIGN KEYED NOTES
N.T.S.

DATE: APR., 1997
SCALE: 1"=60'
JOB NO.: 352-04

community
sciences
corporation

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: MICHAEL'S ESTATES
SIGNING AND STRIPING PLAN

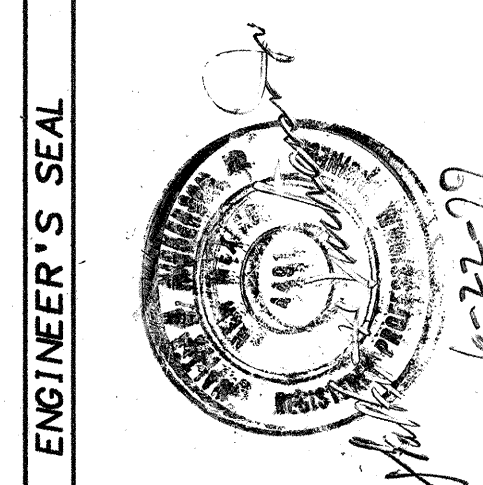
DESIGN REVIEW COMMITTEE
CITY ENGINEER APPROVAL
r/a county

PROJECT NO. 579981
PAGE # 11

MAP NO. Q-10

SHEET 9 OF 9

BOX # CON-97-41



REVISIONS	BY	DATE
DESIGN	BOM	12/97
	DILW	12/97
	KW	12/97

NO.	DATE	REMARKS
1	8/96	COMMUNITY SCIENCES
2	5/97	HAL ENGINEERING

Professional Engineer Seal for the State of Texas, No. 10000, signed by John W. Smith, dated 6-22-99.

ALBUQUERQUE DEPARTMENT OF TRANSPORTATION CONSTRUCTION GROUP		
PLAN		
LAST DESIGN DATE	MO. /DAY /YR.	MO. /DAY /YR.
0	SHEET 9	OF 9

12/16/97 DLW
3/20/98 SP5
3/20/97 DWG