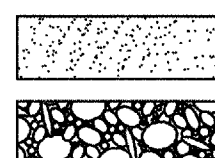


LEGEND

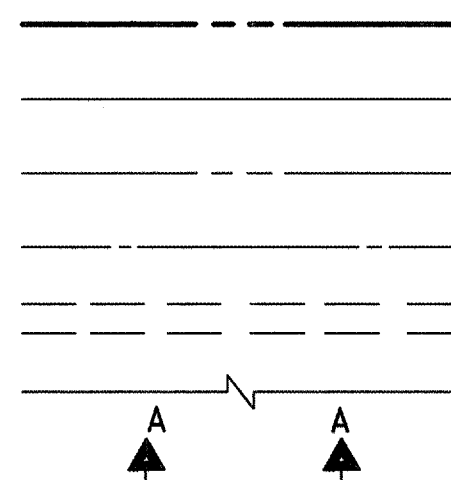
MATERIALS

CONCRETE
RIP-RAP



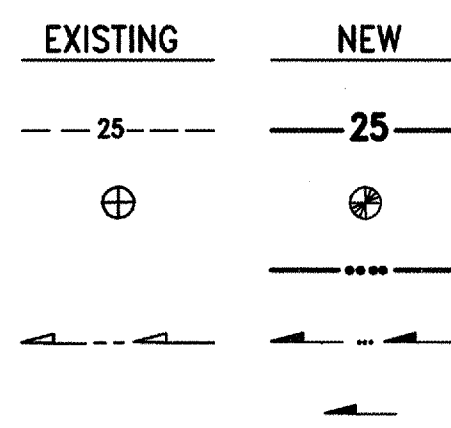
LINES

SUBDIVISION BOUNDARY
PROPERTY LINE (PLAN)
PROPERTY LINE (SECTION)
CENTERLINE
EASEMENT LINE
MATCH LINE
SECTION CUT LINE



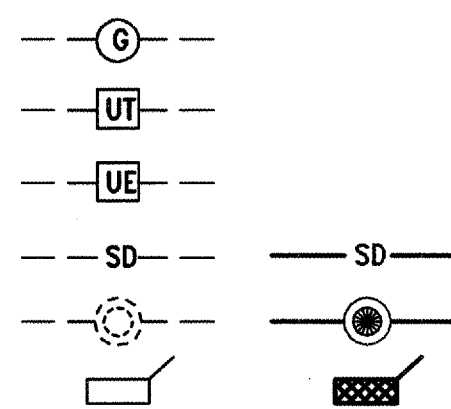
EARTHWORK

CONTOUR LINE
SPOT ELEVATION
PROJECT / PHASE BOUNDARY
FLOWLINE
DIRECTION OF FLOW



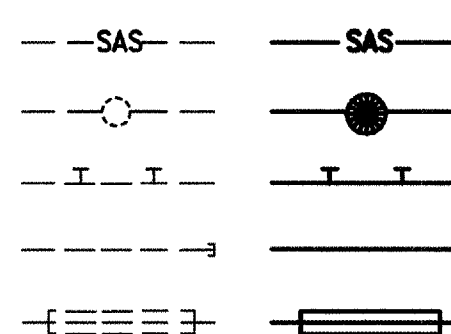
MISCELLANEOUS UTILITIES

GAS LINE
UNDERGROUND TELEPHONE
UNDERGROUND ELECTRICAL
STORM DRAIN
STORM DRAIN MANHOLE
STORM DRAIN INLET



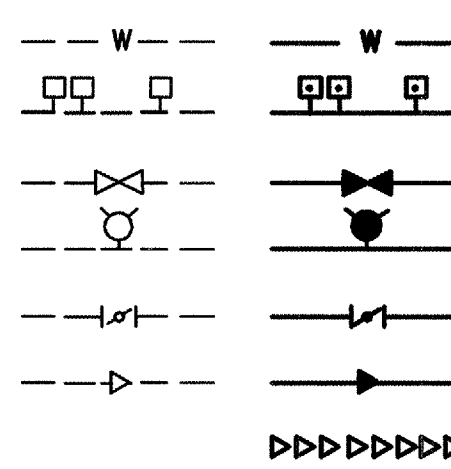
SANITARY SEWER

SANITARY SEWER LINE
SANITARY SEWER MANHOLE
SAS SERVICE CONNECTIONS
SAS CAP OR PLUG
ENCASEMENT



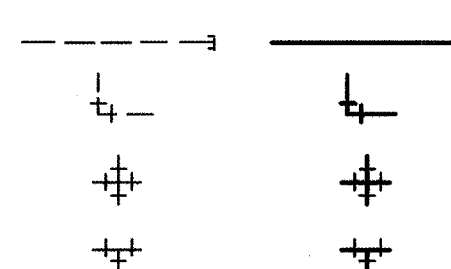
WATER

WATER LINE
WATER SERVICE CONNECTIONS
GATE VALVE
FIRE HYDRANT
BUTTERFLY VALVE
REDUCER
WATER PRESSURE ZONE BOUNDARY



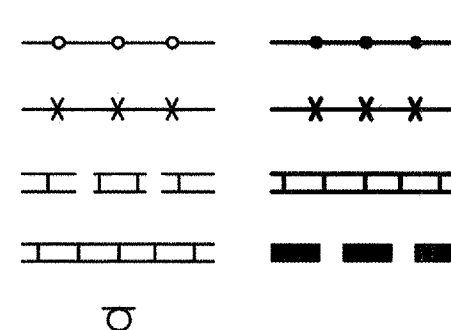
WATER FITTINGS

CAPS AND PLUGS
ELBOW
CROSS
TEE



MISCELLANEOUS

CHAINLINK FENCE
FIELD FENCE
COMMON YARD WALL
RETAINING WALL
POWER OR TELEPHONE POLE

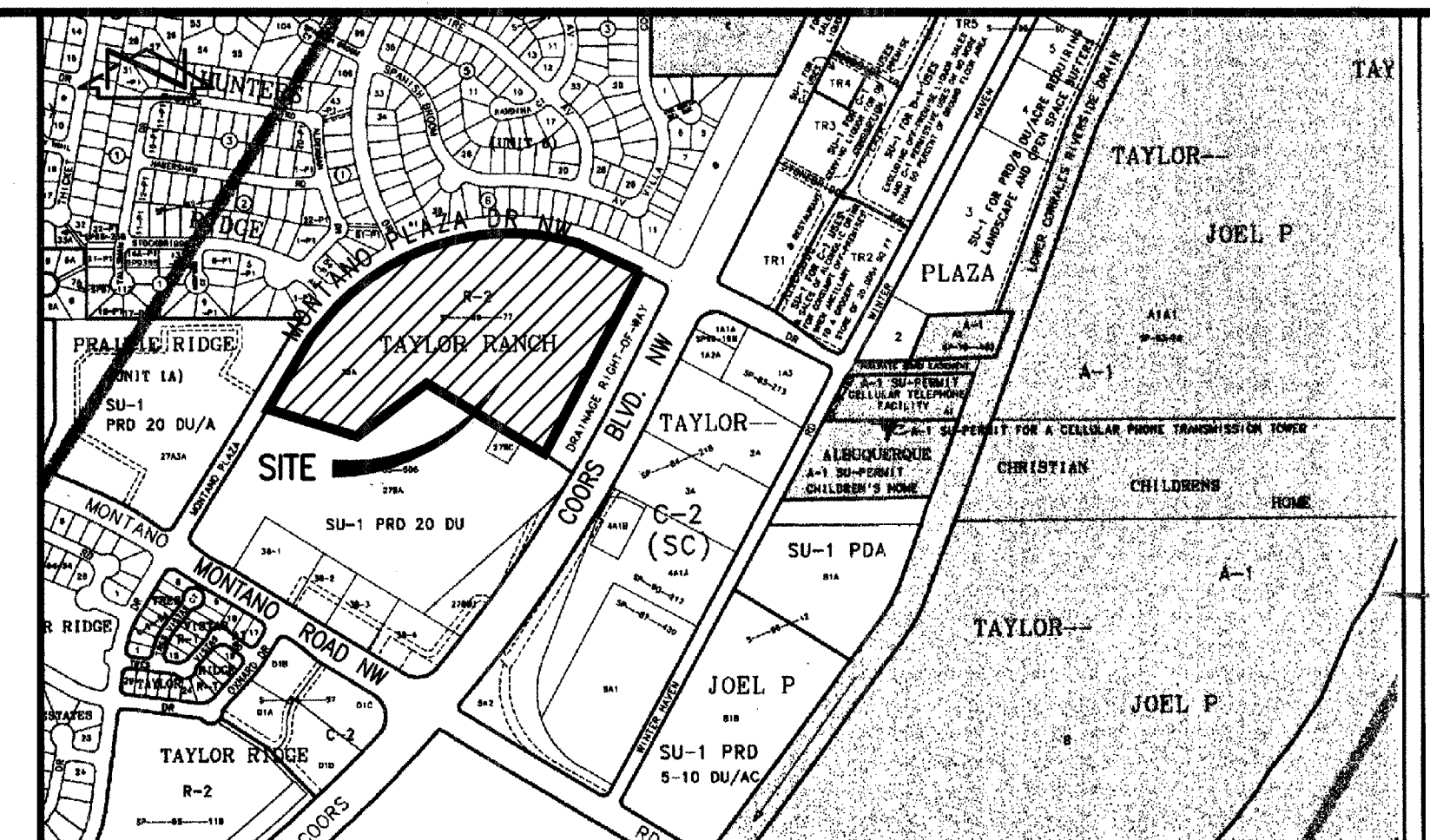


CONSTRUCTION PLANS for LAS MANANITAS APARTMENTS WATER AND SANITARY SEWER SERVICES

ALBUQUERQUE, NEW MEXICO
SEPTEMBER, 2003

INDEX OF DRAWINGS

SHEET	DESCRIPTION
1	COVER SHEET, VICINITY MAP, GENERAL NOTES, LEGEND AND INDEX OF DRAWINGS
2	PLAT OF RECORD
3	SITE PLAN
4	SANITARY SEWER SERVICE PLAN AND PROFILE
5	WATER SERVICE DETAILS, WATER VALVE SHUTOFF PLAN
6	SIGNING AND CONSTRUCTION TRAFFIC CONTROL STANDARDS
7	TYPICAL TRAFFIC CONTROL & SIGNING EXAMPLES (REF. M.U.T.C.D.)



VICINITY MAP
SCALE: 1" = 750'

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 STANDARD SPECIFICATIONS-PUBLIC WORKS CONSTRUCTION-1986 - UPDATE NO. 7.
- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM, 260-1990, (ALBUQUERQUE AREA) 1-800-321-ALERT (2537) (STATEWIDE) 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 CONDUCTED ONLY PRELIMINARY INVESTIGATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES. THIS INVESTIGATION IS NOT CONCLUSIVE, AND MAY NOT BE COMPLETE, THEREFORE, 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 SAFETY AND HEALTH.
- 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 DURING CONSTRUCTION BY THE PROJECT ENGINEER.
- SIDEWALKS AND WHEELCHAIR RAMPS WITHIN THE CURB RETURNS SHALL BE CONSTRUCTED WHEREVER A NEW CURB RETURN IS CONSTRUCTED.
- IF CURB IS DEEPENED 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.
- CONTRACTOR SHALL COORDINATE WITH THE WATER SYSTEM DIVISION FOR THE EXECUTION OF THE VALVE SHUT OFF PLAN, NOT LESS THAN SEVEN (7) WORKING DAYS IN ADVANCE OF ANY WORK THAT MAY AFFECT THE EXISTING PUBLIC WATER UTILITIES. ONLY WATER SYSTEM DIVISION PERSONNEL SHALL OPERATE EXISTING VALVES. REFER TO SECTION 18 OF THE SPECIFICATIONS. THE WATER SYSTEM DIVISION PHONE NUMBER IS 857-8200.
- CONTRACTOR SHALL NOTIFY THE CITY SURVEYOR NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE CITY SURVEYOR MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE CITY SURVEYOR AND SHALL NOTIFY THE CITY SURVEYOR AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. REPLACEMENT SHALL BE DONE ONLY BY THE CITY SURVEYOR. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATION OF THE PAVEMENT OF 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 THE SPECIFICATIONS.
- FIVE (5) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION THE CONTRACTOR SHALL SUBMIT TO THE CONSTRUCTION CO-ORDINATION DIVISION A DETAILED CONSTRUCTION SCHEDULE. TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL OBTAIN A BARRICADE PERMIT FROM THE CONSTRUCTION CO-ORDINATION DIVISION. CONTRACTOR SHALL NOTIFY BARRICADE ENGINEER (924-3400) PRIOR TO OCCUPYING AN INTERSECTION. CONTRACTOR MUST REFER TO SECTION 19 OF THE STANDARD SPECIFICATION FOR TRAFFIC CONTROL.
- ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED WITH PLASTIC REFLECTORIZED STRIPING BY CONTRACTOR TO EXISTING LOCATION OR AS INDICATED BY THIS PLAN SET.
- CAUTION: THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR. ALL EXCAVATION, TRENCHING AND SHORING ACTIVITIES MUST BE CARRIED-OUT IN ACCORDANCE WITH OSHA 29 CFR 1926, SUBPART P-EXCAVATIONS.
- ANY WORK OCCURRING WITHIN AN ARTERIAL ROADWAY REQUIRES TWENTY-FOUR HOUR CONSTRUCTION.
- CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORK SITE. CONTRACTOR SHALL PROMPTLY REMOVE ANY AND ALL GRAFFITI FROM EQUIPMENT, WHETHER PERMANENT OR TEMPORARY.
- WHEN APPLICABLE, CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" FROM THE CITY AND/OR FILE A NOTICE OF INTENT (N.O.I.) WITH THE EPA PRIOR TO BEGINNING CONSTRUCTION.

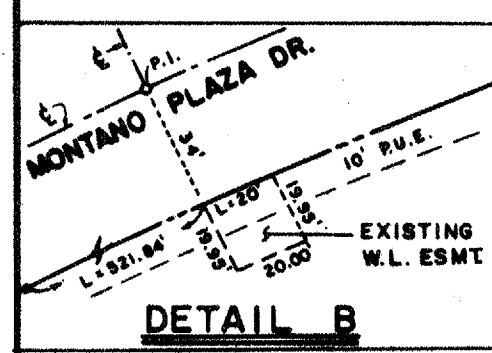


JEFF MORTENSEN & ASSOCIATES, INC.
8810-B MIDWAY PARK BLVD. N.E.
ALBUQUERQUE, N.M. 87109
ENGINEERS & SURVEYORS (505) 545-4250
FAX: 505 545-4254 E-mail: jma@swep.com

2001.057.9

REV.	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE
ENGINEERS STAMP & SIGNATURE		APPROVALS		ENGINEER		DATE	
DRC Chairman		9/18/2003		9/18/2003		9/18/2003	
Transportation		9/18/2003		9/18/2003		9/18/2003	
Water/Wastewater		9/18/2003		9/18/2003		9/18/2003	
Hydrology		9/18/2003		9/18/2003		9/18/2003	
C.I.P.		9/18/2003		9/18/2003		9/18/2003	
Const. Mngmt.		9/18/2003		9/18/2003		9/18/2003	
Const. Coord.		9/18/2003		9/18/2003		9/18/2003	
City Project No.		717781		SHEET		OF	
				1		7	

C38-161 TALOS NO. 01-20-1688



U.S.C. & G.S. BRASS CAP "HUGHES"
N.M. STATE PLANE COORDINATES
CENTRAL ZONE; X = 371,688.59'
Y = 1,514,316.32'
 $\Delta \alpha = -0^{\circ}14'50''$; ELEV = 5049.93' (3rd Order)
GROUND-TO-GRID FACTOR = 0.99967726
N 240°34'07"E 287.3' (4')

THE ABOVE DESCRIBED ENCLOSURE CONTAINS 19.6874 ACRES, MORE OR LESS.

ACKNOWLEDGEMENT
STATE OF NEW MEXICO
COUNTY OF BERNALILLO

BY: Mary S. [Signature]
NOTARY PUBLIC
MY COMMISSION EXPIRES 12-9

A. CARLETON, JR., N.M.R.I.S. #7270

STATE OF NEW MEXICO
COUNTY OF SANDOVAL

11- DAY OF JANUARY, 1965 BY L.R. CARLETON, JR.
110024

MY COMMISSION EXPIRES: 3-25-89

State of New Mexico }
County of Bernalillo } SS
This instrument was filed for record on
10-51 MAR 1 6 1980 C38
At _____ a clerk of said County do hereby certify that the foregoing is a true and correct copy of the original as the same appears from the records of said County. TC

County Clerk & Recorder

Deputy Clerk

NOTES

1. BEARING BASE FOR THIS PLAT IS THE PLAT FOR TAYLOR RANCH (FILED 5/3/84, C25-180). ROTATE ALL BEARINGS CLOCKWISE 00°01'24" TO OBTAIN STATE PLANE GRID BEARINGS. ALL DISTANCES ARE GROUND.

2. ALL DIMENSIONS PUBLISHED ALONG CURVED LINES ARE ARC DISTANCES.

3. BENCHMARK FOR THIS PLAT IS THE A.C.S. CAP "M448-N74" ELEV. = 5006.41.

4. PUBLIC UTILITY EASEMENTS (P.U.E.) SHOWN ON THIS PLAT ARE TEN (10) FEET WIDE AND ARE GRANTED FOR THE COMMON AND JOINT USE OF:

- A. THE PUBLIC SERVICE COMPANY OF NEW MEXICO FOR THE INSTALLATION, MAINTENANCE, AND SERVICE OF OVERHEAD AND UNDERGROUND ELECTRICAL LINES, TRANSFORMERS, AND OTHER EQUIPMENT AND RELATED FACILITIES REASONABLY NECESSARY TO PROVIDE ELECTRICAL SERVICE.
- B. THE GAS COMPANY OF NEW MEXICO FOR INSTALLATION, MAINTENANCE, AND SERVICE OF NATURAL GAS LINES, VALVES AND OTHER EQUIPMENT AND FACILITIES REASONABLY NECESSARY TO PROVIDE NATURAL GAS.
- C. MOUNTAIN BELL FOR THE INSTALLATION, MAINTENANCE AND SERVICE OF ALL BURRED AND AERIAL LINES, CABLES AND OTHER RELATED EQUIPMENT AND FACILITIES REASONABLY NECESSARY TO PROVIDE COMMUNICATION SERVICES, INCLUDING BUT NOT LIMITED TO ABOVE GROUND PEDESTALS AND CLOSURES.
- D. JONES INTERCABLE FOR THE INSTALLATION, MAINTENANCE, AND SERVICE OF SUCH LINES, CABLE, AND OTHER RELATED EQUIPMENT AND FACILITIES REASONABLY NECESSARY TO PROVIDE CABLE TV SERVICE.

INCLUDED IS THE RIGHT OF INGRESS AND EGRESS FOR THE CONSTRUCTION AND MAINTENANCE AND THE RIGHT TO TRIM, INTERFERING TREES AND SHRUBS. ALSO INCLUDED IS THE RIGHT TO INSTALL AND MAINTAIN SERVICE LINES.

5. DRAINAGE R.O.W. IS A PUBLIC STORMWATER DETENTION FACILITY AND WITH THE APPROVAL AND RECORD OF THIS PLAT IS HEREBY DEEDDED TO THE CITY OF ALBUQUERQUE IN FEE SIMPLE.

PAGE 3 OF 4

SHEET 1 OF 1

DATE:	NOV., 1988
SCALE:	1" = 200'
DESIGNED:	C. S. C.
DRAWN:	W. J. W.
JOB NO.:	73-19-720

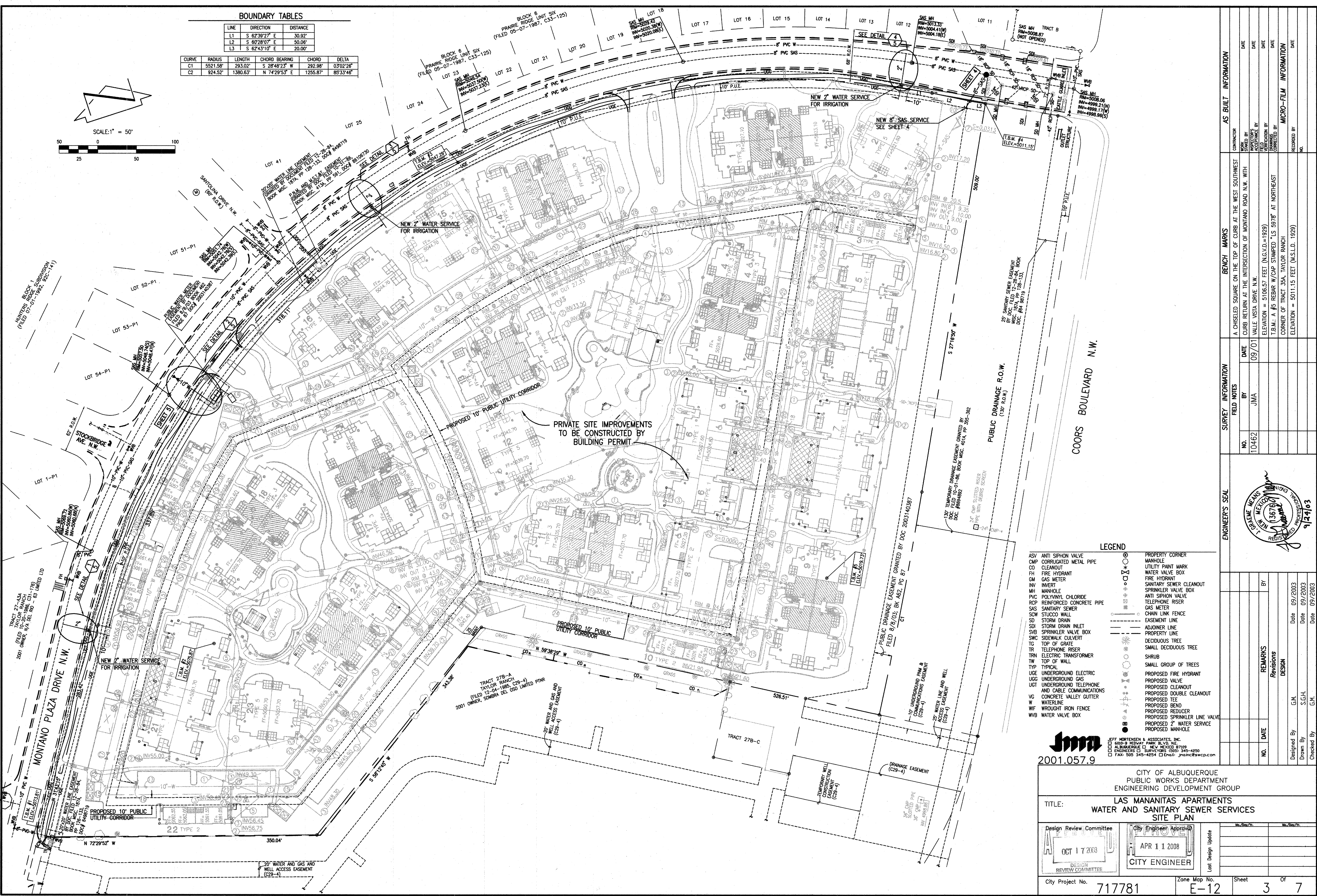
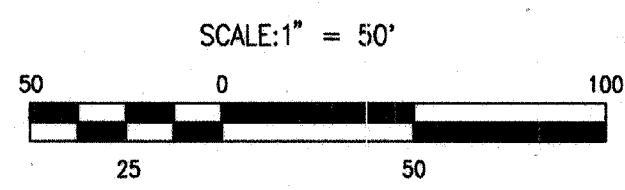
C38-161

Plot Path: E:\MANANITAS\2003\ Plot Date: 09-24-2003
File Name: 1057952.DWG Plot Time: 1:34 pm

BOUNDARY TABLES

CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD	DELTA
C1	5521.58'	293.02'	S 28°48'23" W	292.98'	03°02'26"
C2	924.52'	1380.63'	N 74°29'53" E	1255.87'	85°33'46"

LINE	DIRECTION	DISTANCE
L1	S 62°39'27" E	30.92'
L2	S 60°28'07" E	50.06'
L3	S 62°43'10" E	20.00'



LEGEND

ASV	ANTI SIPHON VALVE	PROPERTY CORNER
CMP	CORRUGATED METAL PIPE	MANHOLE
CO	CLEANOUT	UTILITY PAINT MARK
FM	FIRE HYDRANT	WATER VALVE BOX
GM	GAS METER	FIRE HYDRANT
INV	INVERT	SANITARY SEWER CLEANOUT
MH	MANHOLE	SPRINKLER VALVE BOX
PVC	POLYVINYL CHLORIDE	ANTI SIPHON VALVE
RCP	REINFORCED CONCRETE PIPE	TELEPHONE RISER
SAS	SANITARY SEWER	GAS METER
SCW	STUCCO WALL	CHAIN LINK FENCE
SD	STORM DRAIN	EASEMENT LINE
SDI	STORM DRAIN INLET	ADJOINER LINE
SVB	SPRINKLER VALVE BOX	PROPERTY LINE
SWC	SIDEWALK CULVERT	DECIDUOUS TREE
TG	TOP OF GRADE	SMALL DECIDUOUS TREE
TR	TELEPHONE RISER	SHRUB
TRN	ELECTRIC TRANSFORMER	SMALL GROUP OF TREES
TW	TOP OF WALL	PROPOSED FIRE HYDRANT
TYP	TYPICAL	PROPOSED VALVE
UGE	UNDERGROUND ELECTRIC	PROPOSED CLEANOUT
UGG	UNDERGROUND GAS	PROPOSED DOUBLE CLEANOUT
UGT	UNDERGROUND TELEPHONE	PROPOSED TEE
W	WATERLINE	PROPOSED REDUCER
WIF	WROUGHT IRON FENCE	PROPOSED SPRINKLER LINE VALVE
WVB	WATER VALVE BOX	PROPOSED 2" WATER SERVICE
		PROPOSED MANHOLE

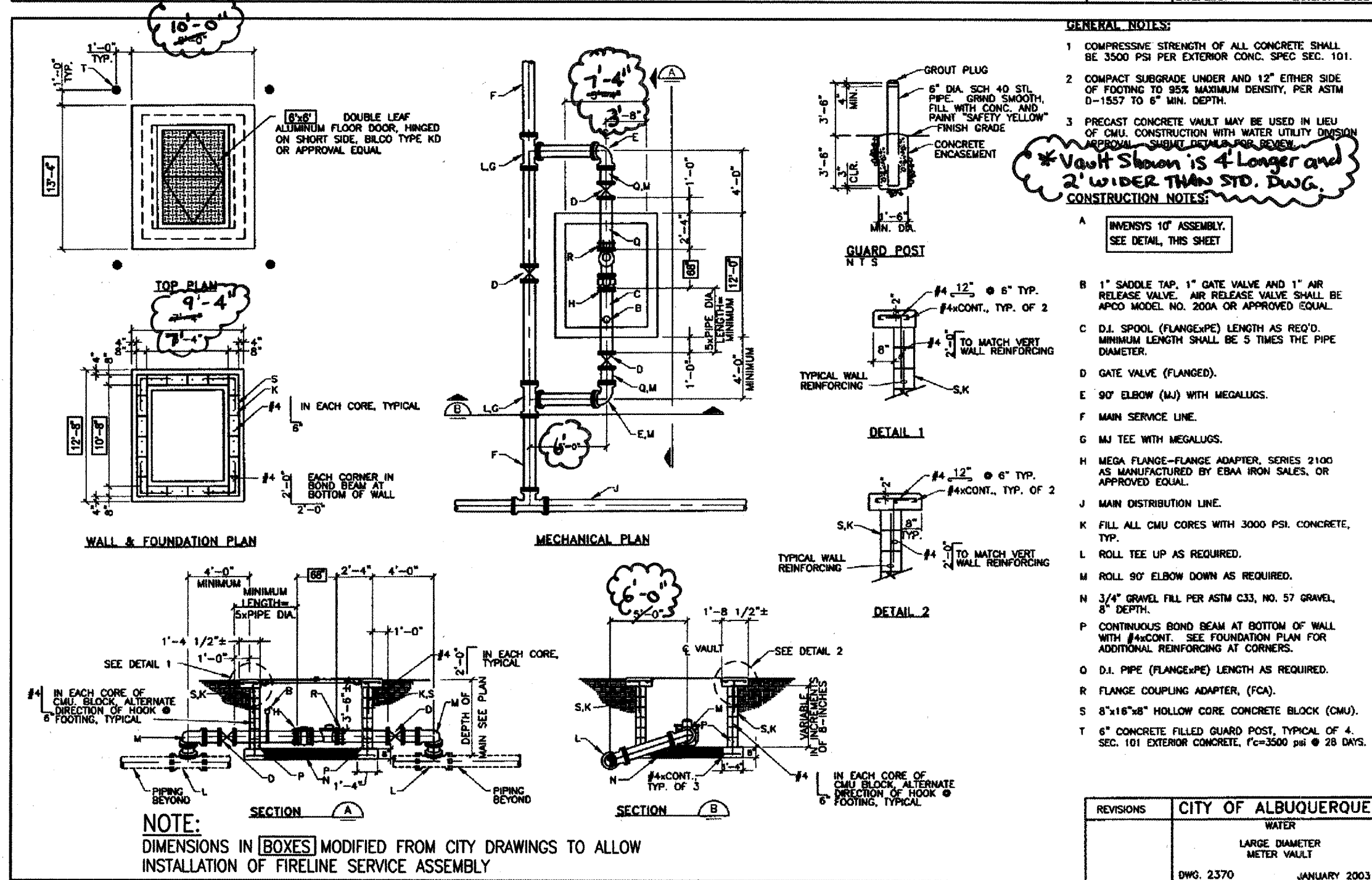
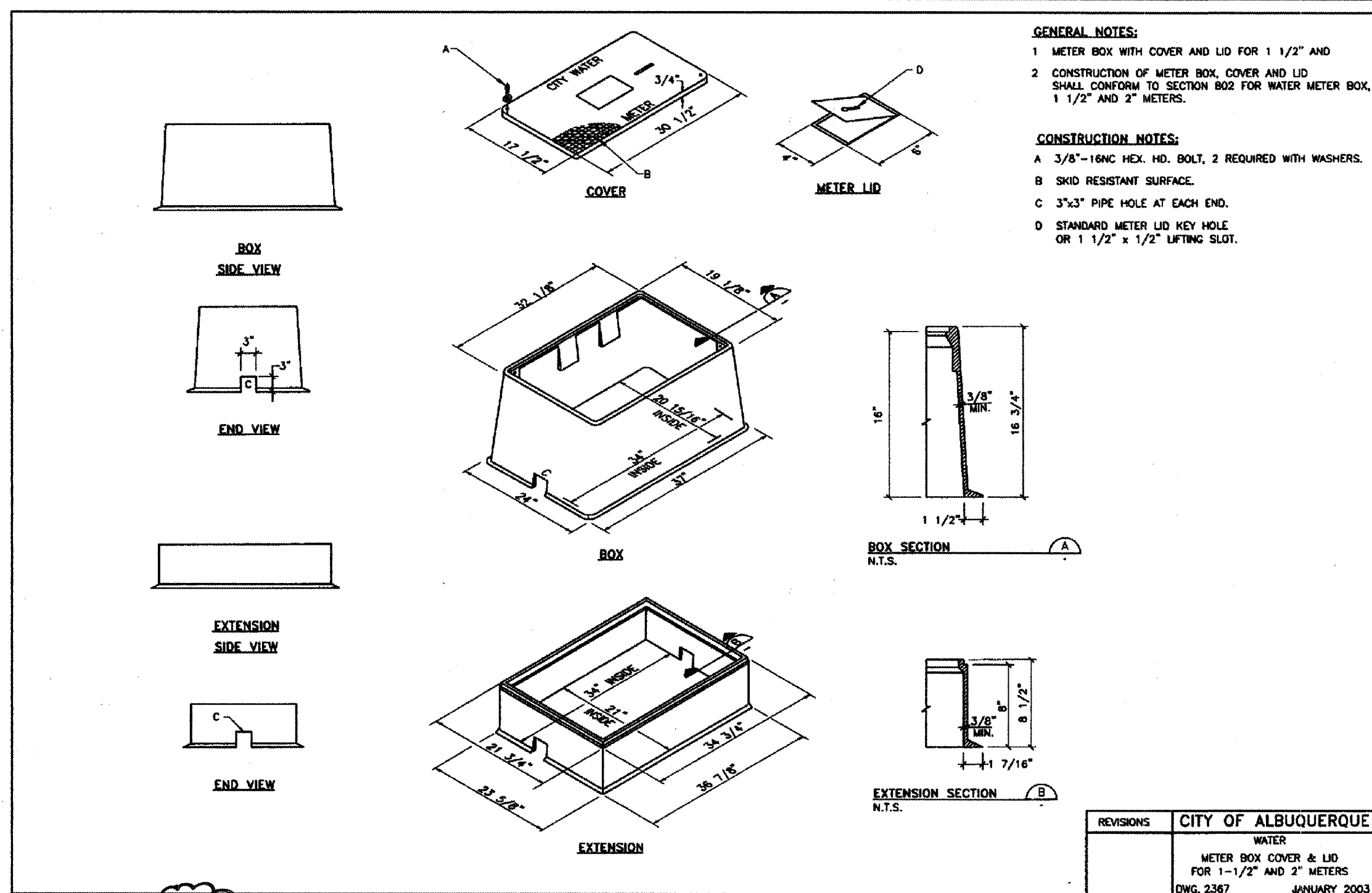
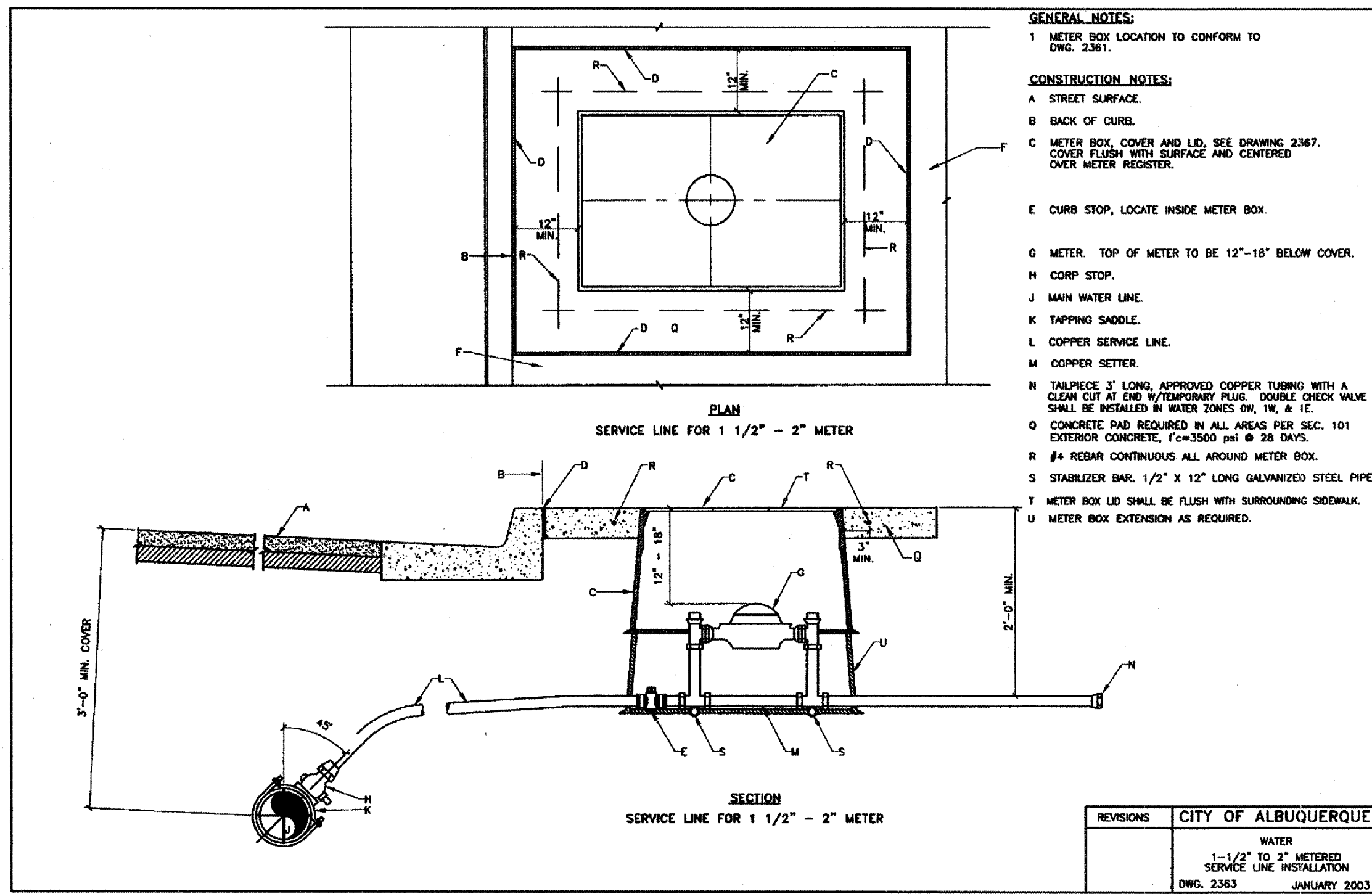


CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DEVELOPMENT GROUP

TITLE: LAS MANANITAS APARTMENTS
WATER AND SANITARY SEWER SERVICES
SITE PLAN

Design Review Committee	City Engineer Approval	NO. DATE	REMARKS
OCT 17 2003	APR 11 2008		Revisions
			DESIGN
City Project No. 717781	Zone Map No. E-12	Sheet 3 of 7	

Designed By: G.M. Date: 09/2003
Drawn By: S.G.H. Date: 09/2003
Checked By: G.M. Date: 09/2003



LIST OF MATERIALS - 10"

No.	Name	Quantity	Material
1	InvenSys 10" Turbo Meter	1	Bronze
2	Compact Strainer	1	Ductile Iron
3	InvenSys Detector Check Valve	1	Cast Iron
4	InvenSys 2" Turbo Meter	1	Bronze
5	Check Valve	1	Bronze
6	Ball Valve - Locking	2	Bronze
7	Upstream Bolts Supplied as Standard Equipment	8	Type 316 Stainless Steel
8	10" Smith-Blair Special 913 Flanged Coupling Adapter (Optional-Not Shown)	2	Fabricated Steel

DIMENSIONS - 10"

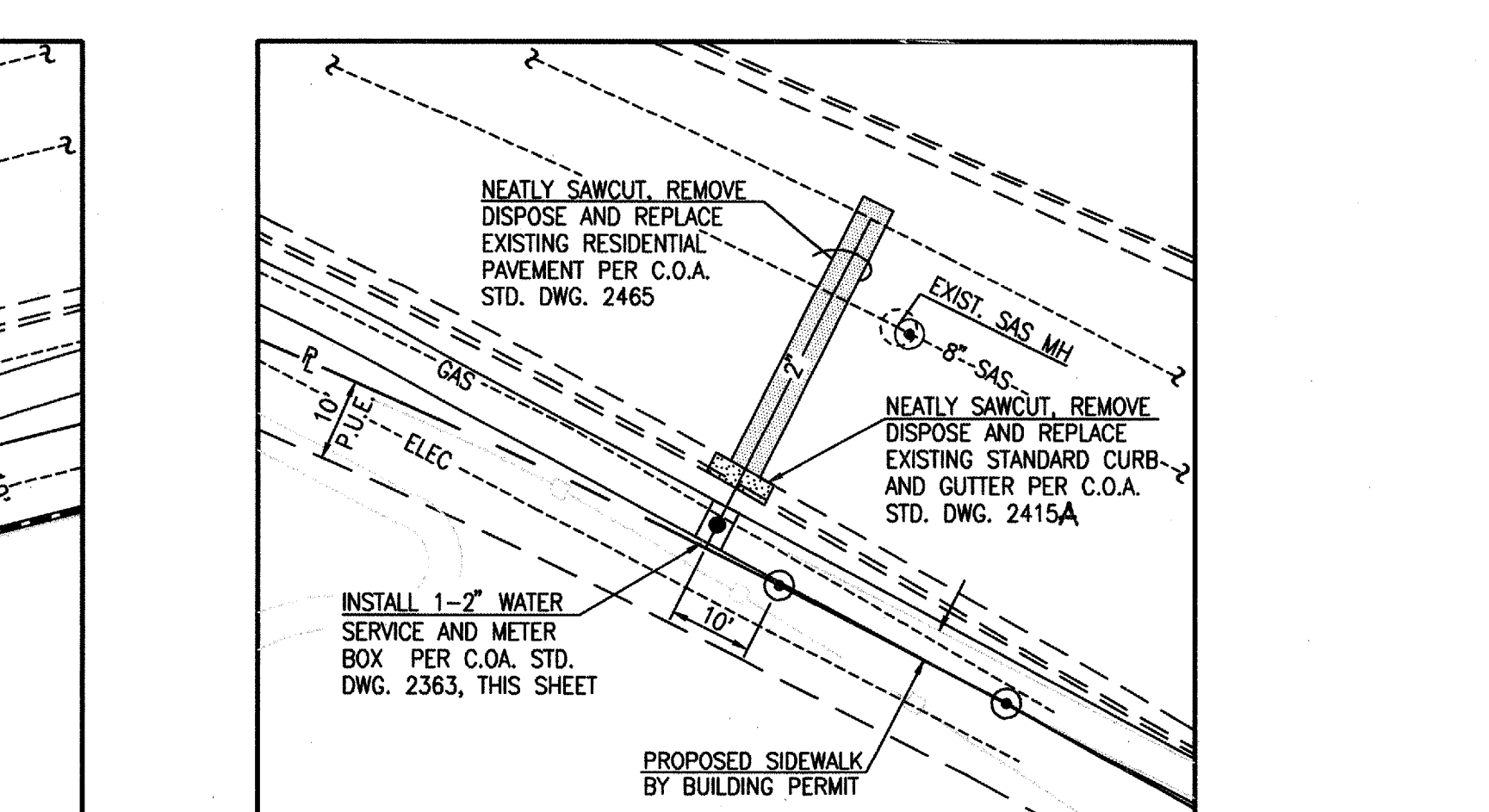
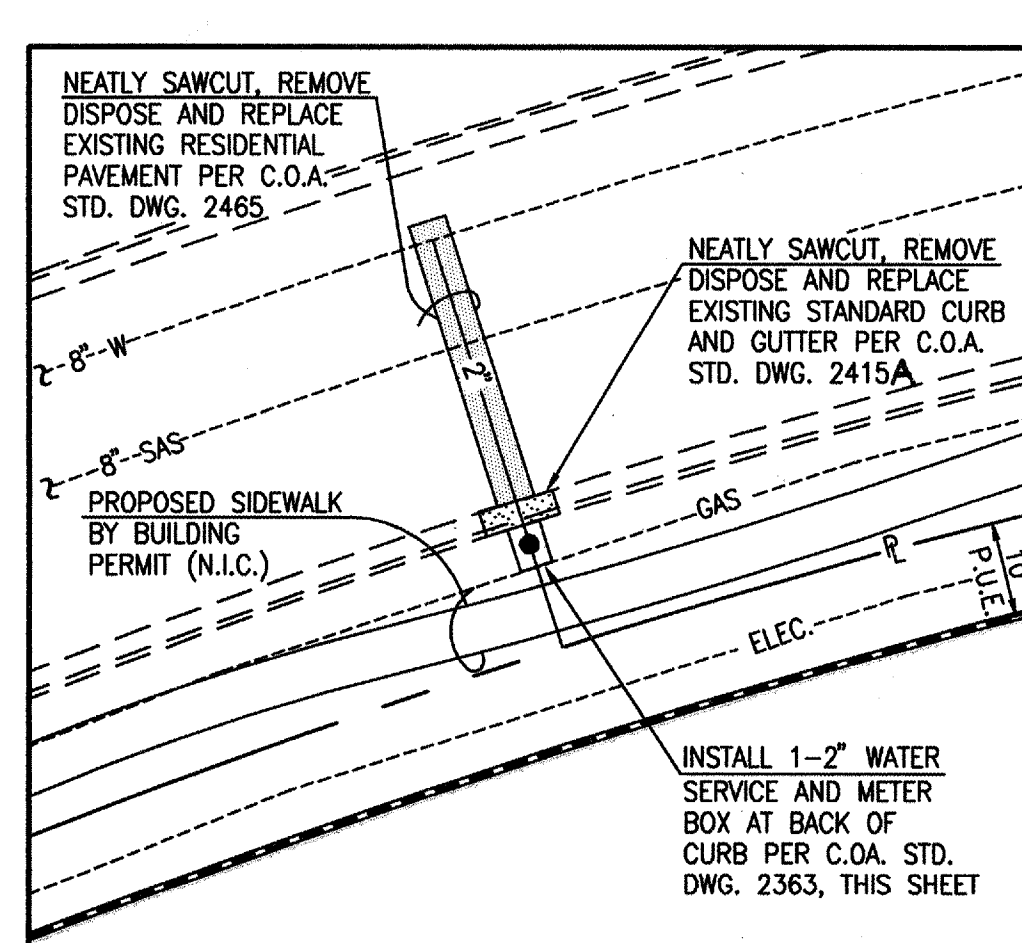
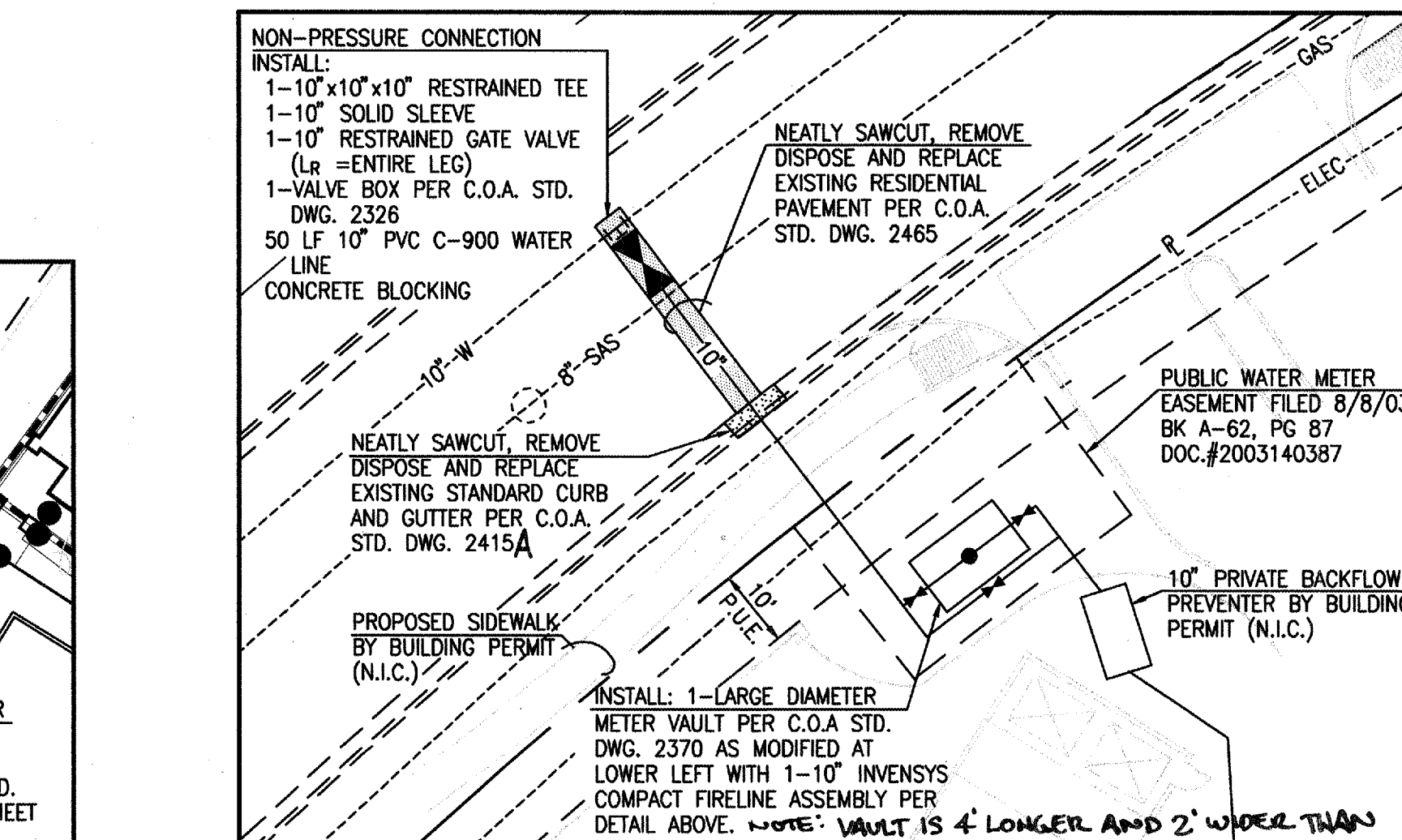
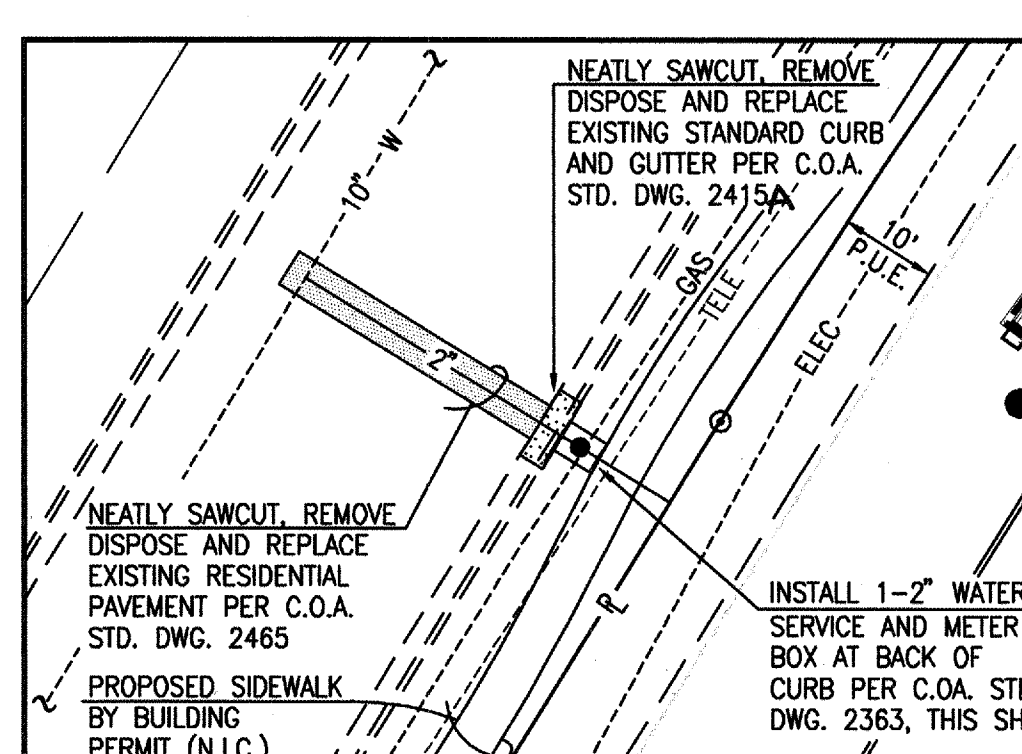
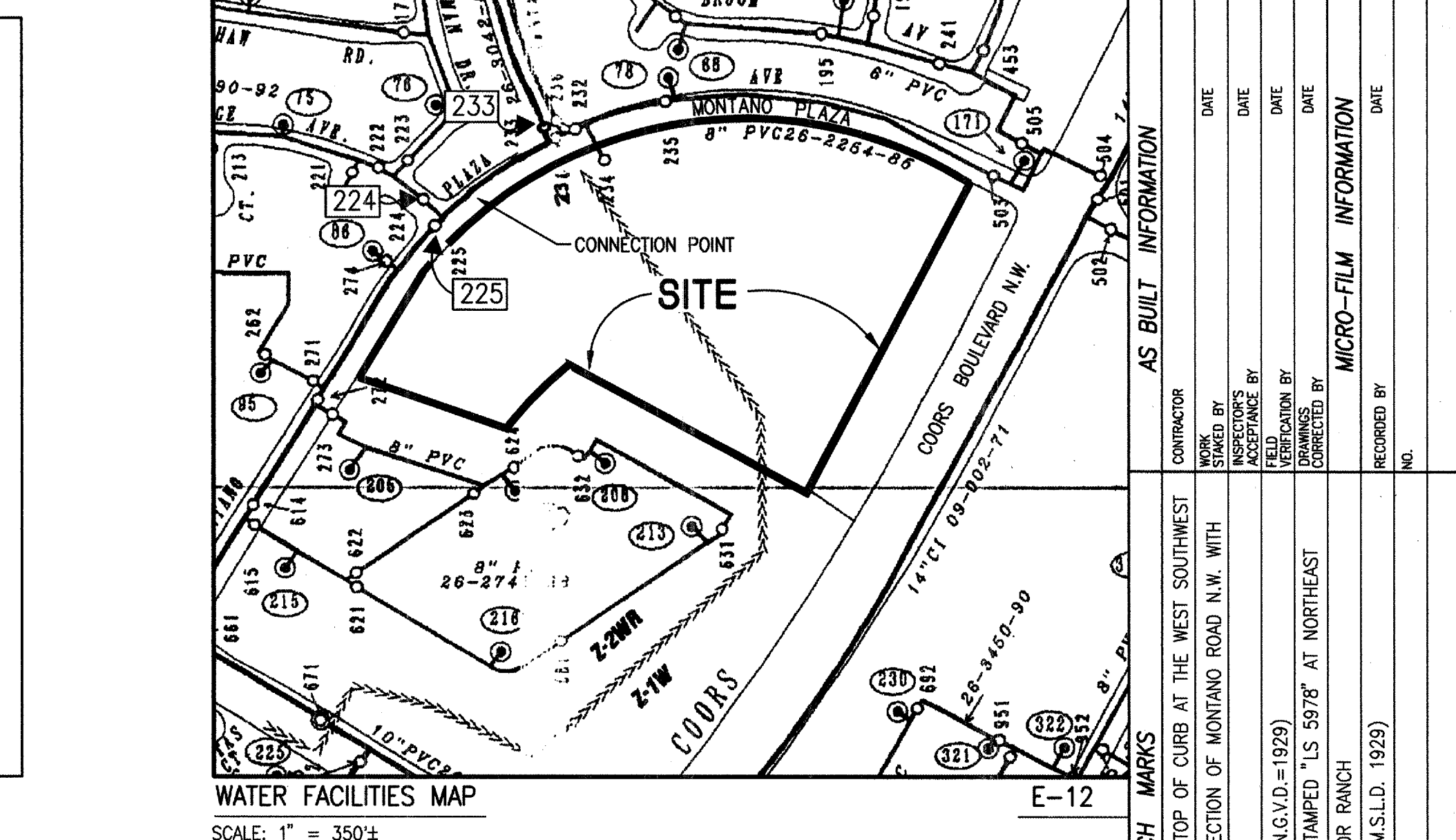
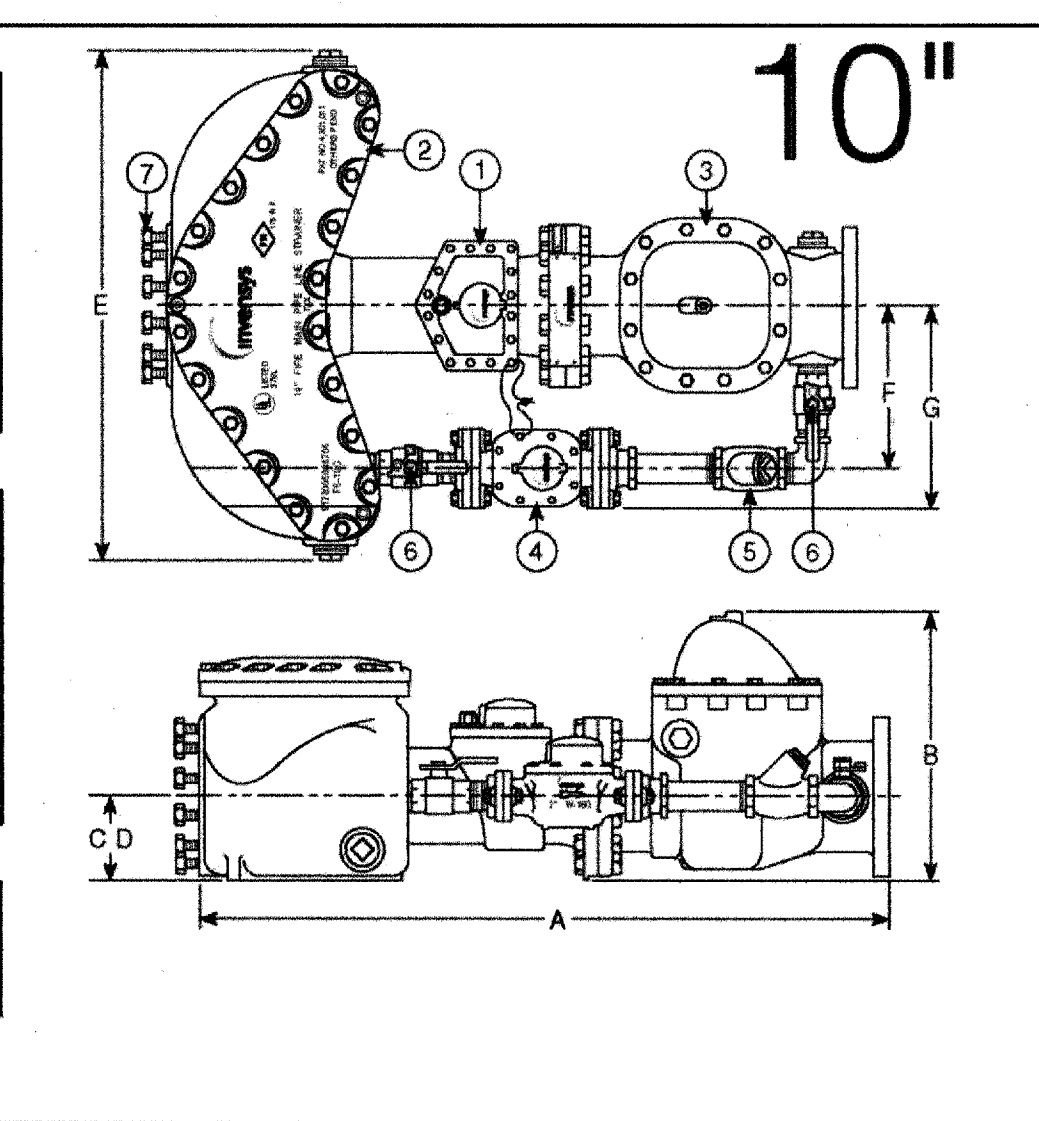
Item	Dimensions
A	Laying Length: 68.00"
B	Overall Height: 28.13"
C	Center Line to Meter Base: 8.50"
D	Center Line to Strainer Base: 8.50"
E	Overall Width: 50.00"
F	Center Line to Center Line: 16.16"
G	Center Line to By-Pass Extreme: 18.74"
H	Flanged Coupling Adapter Length: 5.56"
I	By-Pass Size (nom.): 2.00"
J	Weight (Lbs): 1840

FLOW RANGES AND ACCURACY LIMITS - 10"

Flow Range	Accuracy
Continuous Flows: 4 to 3500 GPM	±1.5% of Actual Throughput-95% at Low Flow
Intermittent Flows: 7000 GPM	
Low Flows: 3 GPM	

① Bronze gate valve optional
 ② Pipeline O.D. required
 ③ Except at crossover

INVENSYS 10" COMPACT FIRELINE SERVICE ASSEMBLY, FM-721
 BY INVENSYS METERING SYSTEMS
 P.O. BOX 487
 450 N. GALLATIN AVENUE
 UNIONTOWN, PA. 15401
 1-800-METER-IT (1-800-638-3748)



WATER VALVE SHUTOFF PLAN NOTES:

- AT A MINIMUM, THE FOLLOWING VALVES SHALL BE CLOSED TO FACILITATE THE PROPOSED CONNECTION:
 • VALVES 224, 225 AND 233
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO WATER SYSTEMS (857-8250) A DETAILED CONSTRUCTION SCHEDULE OF WORK ANTICIPATED TO REQUIRE WATER VALVE SHUTOFFS. THE CONTRACTOR SHALL MAINTAIN WEEKLY CONTACT WITH WATER SYSTEMS AS REQUIRED TO UPDATE AND/OR VERIFY THE SCHEDULE.
- WATER SYSTEMS PERSONNEL SHALL PERFORM ALL SHUTOFFS. THE CONTRACTOR SHALL NOT OPERATE ANY VALVES THAT MAY AFFECT SYSTEM OPERATION.
- WATER SYSTEMS WILL NOT BE RESPONSIBLE FOR ANY PROJECT DELAYS ATTRIBUTABLE TO THE SCHEDULING OF WATER VALVE SHUTOFFS.
- THE CONTRACTOR SHALL REQUEST A WATER SHUTOFF IN WRITING, A MINIMUM OF SEVEN (7) WORKING DAYS IN ADVANCE PER STANDARD CITY OF ALBUQUERQUE PROCEDURES.
- WITHIN FIVE (5) DAYS AFTER RECEIPT OF CONTRACTOR'S SHUTOFF REQUEST, TRIAL SHUTOFFS WILL BE CONDUCTED. CITY TO FURNISH LABOR AND APPURTENANCES NECESSARY TO VERIFY COMPLETENESS OF SHUTOFFS.
- THE CONTRACTOR SHALL HAVE ALL FITTINGS, MATERIALS AND EQUIPMENT ON SITE PRIOR TO VALVE SHUTOFF. ALL EXCAVATION SHALL BE COMPLETE EXCEPT AS NECESSARY TO MAINTAIN SAFE SYSTEM OPERATION WHILE UNDER PRESSURE.
- THE CONTRACTOR SHALL PROVIDE ALL RESTRAINTS AND THRUST BLOCKS NECESSARY TO EFFECT ALL NECESSARY SHUTOFFS AND CONNECTIONS.
- EXISTING WATER VALVE AND WATER LINE INFORMATION OBTAINED FROM CITY OF ALBUQUERQUE FACILITIES MAP E-12

REVISIONS

NO.	DATE	BY	REMARKS
1	09/01	JMA	DESIGN

ENGINEER'S SEAL

JEFF MORTENSEN & ASSOCIATES, INC.
 6010-B MIDWAY PARK BLVD. N.E.
 ALBUQUERQUE, NM 87109
 ENGINEERS & SURVEYORS (CROSS) 345-4250
 FAX: 345-4254 E-MAIL: jma@jma-inc.com

DESIGNED BY: G.M. DATE: 09/03
 DRAWN BY: S.G.H. DATE: 09/03
 CHECKED BY: G.M. DATE: 09/03

