



MAY 2005

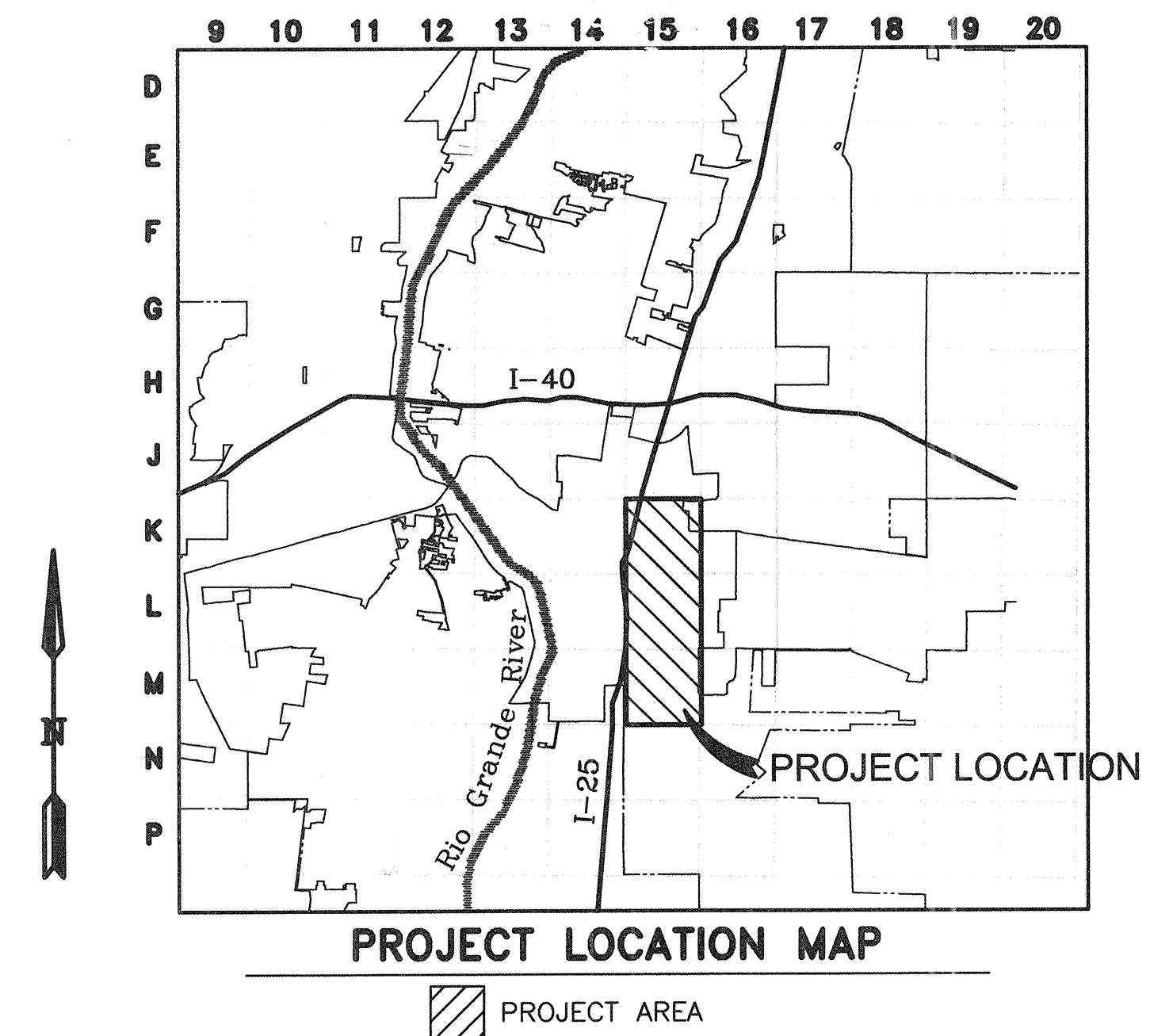
CITY PROJECT NO. 733991

## INDEX OF SHEETS

SHEET NO.	SHEET TITLE	SHEET NO.	SHEET TITLE
1	TITLE SHEET, PROJECT LOCATION MAP	10	UNIVERSITY BOULEVARD PLAN & PROFILE STA 90+94 TO 102+00
2	LOCATION MAP	11	UNIVERSITY BOULEVARD PLAN & PROFILE STA 102+00 TO 109+00
3	LEGEND AND GENERAL NOTES	12	UNIVERSITY BOULEVARD PLAN & PROFILE STA 109+00 TO 113+50
4	BUENA VISTA DRIVE PLAN & PROFILE STA 13+74 TO 21+00	13	MISCELLANEOUS AND PIPING DETAILS
5	BUENA VISTA DRIVE PLAN & PROFILE STA 21+00 TO 32+00	14	RESTRAINED JOINT DETAILS AND WATER METER LOCATION DIAGRAM
6	BUENA VISTA DRIVE PLAN & PROFILE STA 32+00 TO 43+00	15	WATER VALVE SHUT-OFF PLAN
7	BUENA VISTA DRIVE PLAN & PROFILE STA 43+00 TO 54+00		
8	BUENA VISTA DRIVE PLAN & PROFILE STA 54+00 TO 65+00		
9	BUENA VISTA DRIVE PLAN & PROFILE STA 65+00 TO 70+34		

The subject property is located near a former landfill. Due to the subject property being near a former landfill, certain precautionary measures may need to be taken to ensure the health and safety of the public. Recommendations made by a professional engineer with expertise in landfills and landfill gas issues (as required by the most current version of the Interim Guidelines for Development within City Designated Landfill Buffer Zones) shall be consulted prior to development of the site.

X Janet Lopez INTERA INC. FOR AEND 05-20-05  
Albuquerque Environmental Health Department Approval Date

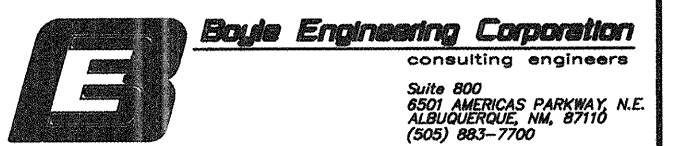


### UTILITY COMPANY CONTACTS

BUSINESS	NAME	PHONE
PNM-ELECTRIC	MARK BOUCHARD	(505)241-3402
PNM-GAS CO. OF NM	JEFF ROMANOWSKI	(505)241-7703
AT&T	DAVID CROWEL	(505)842-2911
MCI WORLDCOM	ANDY DARNELL	(505)346-4470
COMCAST	RITA ERICKSON	(505)761-6235
TIME WARNER TELECOM	ROYAL HARRISON	(505)938-7339
XSPEDIUS	STEVE BENJAMIN	(505)998-2220
McLEOD USA	RICK MUELLER	(505)244-3161
QWEST/US WEST	DAVID MULLER	(505)245-8706
CITY OF ALBUQUERQUE	BILL BALCH	(505)768-2729
UNIVERSAL ACCESS	BRYAN PRICE	(312)660-6476
QWEST LONG DISTANCE	LARRY KELLY	(505)246-0501
LEVEL 3 COMMUNICATIONS	ROGER WEATHERS	(720)888-5688

1. THE UNDERSIGNED, A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE INDICATED RECORD DRAWINGS ARE BASED UPON INFORMATION PROVIDED BY THE CONTRACTOR. THE CONTRACTOR HAS PROVIDED RED-LINED CONSTRUCTION DRAWING MARKINGS TO THE ORIGINAL DESIGN DRAWINGS. THE TRANSFER OF INFORMATION HEREIN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. HOWEVER, HAVE NOT VERIFIED THE ACCURACY AND/OR COMPLETENESS OF THE INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR AND SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH ARE INCORPORATED AS A RESULT OF ERRONEOUS INFORMATION PROVIDED BY OTHERS. ALL INFORMATION INCLUDING VERTICAL AND HORIZONTAL DIMENSIONS SHALL BE VERIFIED PRIOR TO USE ON UTILITY PROJECTS.

APPROVAL OF RECORD DRAWINGS  
CHIEF CONSTRUCTION ENGINEER  
Victoria A. Day P.E.  
DATE 8/13/2006

[illegible]



DATE: X:\MAY 191\CAV\PROJECT\55000\3 SHEET3.dwg USER: clients  
FILE: May 02, 2005 2:03pm PAGES: 00000333

## GENERAL NOTES

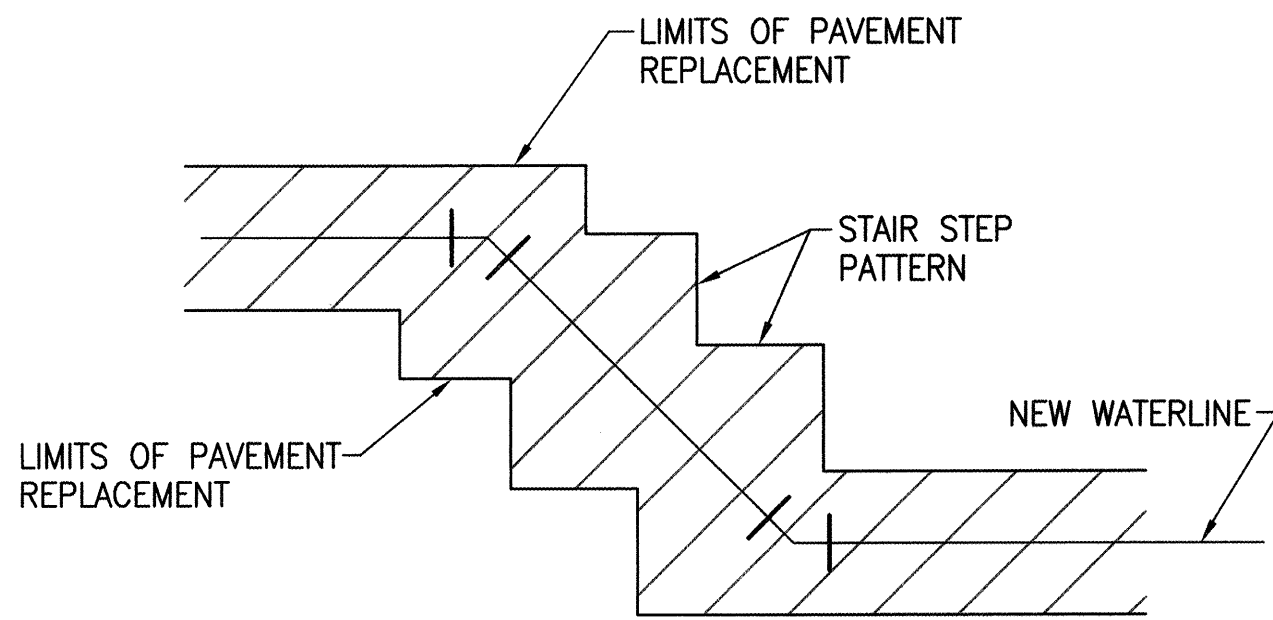
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT N.M. ONE-CALL SYSTEM, INC., 260-1990, FOR LOCATION OF EXISTING UTILITIES. CONTRACTOR SHALL ALSO CALL TRAFFIC ENGINEERING AT 857-8000 FOR LOCATION OF TRAFFIC INTERCONNECT WIRING AND OTHER TRAFFIC SIGNAL EQUIPMENT.
- ALL WORK DETAILED 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 FOR PUBLIC WORKS CONSTRUCTION, 1986 (AS AMENDED THROUGH UPDATE #7.) REFERENCED TO HEREIN AS THE "STANDARD SPECIFICATIONS".
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR TIMING AND COORDINATION OF WATER SHUTOFF. AT LEAST SEVEN (7) WORKING DAYS PRIOR TO CONSTRUCTION, CONTRACTOR SHALL CONTACT THE WATER SYSTEMS DIVISION, 857-8200, TO INITIATE IMPLEMENTATION OF THE NON-PRESSURIZED CONNECTION PLAN.
- FIVE (5) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO CONSTRUCTION COORDINATION DIVISION A DETAILED CONSTRUCTION SCHEDULE. TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN A BARRICADING PERMIT FROM THE CONSTRUCTION COORDINATION DIVISION. CONTRACTOR SHALL NOTIFY BARRICADE ENGINEER (924-3400) PRIOR TO OCCUPYING AN INTERSECTION.
- THE LOCATION OF EXISTING UNDERGROUND UTILITIES HAS BEEN DETERMINED BY INFORMATION PROVIDED BY OTHERS, AND SHALL BE CONSIDERED APPROXIMATE ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION AND SIZE OF ALL EXISTING UTILITY LINES PRIOR TO CONSTRUCTION AND SHALL BE RESPONSIBLE FOR ANY AND ALL DAMAGES RESULTING FROM FAILURE TO LOCATE ANY AND ALL UTILITIES.
- THE CONTRACTOR SHALL SUPPORT AND MAINTAIN OPERATION OF ALL UTILITIES EXPOSED DURING TRENCHING AND OTHER CONSTRUCTION OPERATIONS. ALL CONSTRUCTION ACTIVITIES INVOLVING GAS, POWER, WATER, FIBER OPTIC, TRAFFIC SIGNAL EQUIPMENT, AND/OR OTHER UTILITY LINES SHALL BE COORDINATED WITH THE OWNER OF THE UTILITY PRIOR TO ANY DISTURBANCE. NO UTILITY SERVICE SHALL BE DISRUPTED WITHOUT FIRST NOTIFYING ALL AFFECTED PARTIES 48 HOURS IN ADVANCE.
- THE CONTRACTOR SHALL NOTIFY WATER UTILITY DIVISION OF PUBLIC WORKS (PH. 857-8200) AND THE CITY OF ALBUQUERQUE FIRE DEPARTMENT AT LEAST FIVE (5) WORKING DAYS IN ADVANCE OF ANY DAY THAT FIRE HYDRANTS WILL BE TAKEN OUT OF AND RETURNED TO SERVICE. REFER TO SECTION 18 (GENERAL CONDITIONS) OF THE SPECIFICATIONS.
- THE CONTRACTOR SHALL FIELD VERIFY ALL WATERLINE CONNECTIONS TO EXISTING FACILITIES SUFFICIENTLY IN ADVANCE OF CONSTRUCTION TO ALLOW OBTAINING CORRECT ADAPTERS AND OTHER FITTINGS.
- THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR ANY DAMAGE TO EXISTING VALVE BOXES, MANHOLES, SEWER SERVICES, PAVEMENT MARKINGS, CURB & GUTTER, DRIVE PADS, WHEEL CHAIR RAMPS, AND SIDEWALKS DURING CONSTRUCTION, APART FROM THESE SECTIONS INDICATED FOR REMOVAL ON THE PLANS AND SHALL REPAIR OR REPLACE PER C.O.A. STANDARDS AT CONTRACTOR'S EXPENSE.
- QUANTITIES SHOWN FOR THE VARIOUS BID ITEMS ARE FOR CONTRACTOR INFORMATION ONLY. PAYMENT SHALL BE BASED ON ACTUAL QUANTITIES AS CONSTRUCTED.
- THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND DISPOSAL OF ALL DEMOLITION DEBRIS IN AN ENVIRONMENTALLY ACCEPTABLE MANNER. ALL SALVAGED MATERIALS SHALL BE HANDLED IN ACCORDANCE WITH SECTION 801.15 OF THE STANDARD SPECIFICATIONS.
- TEMPORARY WATER SERVICE IS TO BE PROVIDED FOR ANY RESIDENCE, SCHOOL OR BUSINESS WHICH WILL BE OUT OF SERVICE MORE THAN FOUR HOURS.
- ALL WATER VALVE BOXES AND SEWER MANHOLES WITHIN THE NEW PAVEMENT ARE TO BE ADJUSTED TO FINISH GRADE PER COA STANDARD DETAILS.
- WHERE WATERLINES ARE TO BE REPLACED, PAVEMENT SHALL BE REMOVED AND REPLACED A MINIMUM OF 8 FEET WIDE WITH A MAXIMUM PAY WIDTH OF 9 FEET WIDE UNLESS OTHERWISE NOTED ON THE CONSTRUCTION DRAWINGS OR APPROVED BY THE ENGINEER.
- STREET CENTERLINE GRADES SHALL BE RESTORED BY THE CONTRACTOR TO THE EXISTING CENTERLINE GRADES UNLESS OTHERWISE DIRECTED BY THE ENGINEER. SMOOTH TRANSITIONS SHALL BE MADE BETWEEN EXISTING PAVEMENT WHICH REMAINS IN PLACE AND PAVEMENT WHICH IS BEING REPLACED.
- ALL STREET STRIPING AND MARKING ALTERED OR DESTROYED SHALL BE REPLACED WITH PLASTIC REFLECTORIZED PAVEMENT MARKINGS BY THE CONTRACTOR TO THE SAME LOCATION AS EXISTING OR AS INDICATED ON THE CONSTRUCTION DRAWINGS.
- THE CONTRACTOR SHALL NOT STORE AND/OR PARK EQUIPMENT IN FRONT OF PRIVATE RESIDENCES OVER NIGHT.
- THE CONTRACTOR SHALL MAINTAIN ALL TRENCHES IN A SAFE CONDITION PROTECTING THE WORKERS AND THE GENERAL PUBLIC. TRENCH PROTECTION SHALL BE IN ACCORDANCE WITH O.S.H.A. 29CFR 1926.650 SUBPART P. EXCAVATIONS SHALL BE SLOPED, BRACED OR SHORED AS REQUIRED BY O.S.H.A. REGULATIONS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY, AND FOR KNOWLEDGE AND COMPLIANCE WITH APPLICABLE O.S.H.A. STANDARDS. NO ADDITIONAL COMPENSATION WILL BE MADE THEREFORE.
- ALL OPEN EXCAVATIONS SHALL BE BACKFILLED OR ADEQUATELY FENCED AT THE END OF EACH WORK DAY TO PREVENT SMALL CHILDREN AND/OR VEHICLES FROM ENTERING THE EXCAVATIONS. ALL OPEN EXCAVATIONS SHALL BE BACKFILLED OVER WEEKENDS AND WHEN THE CONTRACTOR IS NOT WORKING THE FOLLOWING DAY.

## (GENERAL NOTES CONTINUED)

- THE CONSTRUCTION DRAWINGS SHOW THE APPROXIMATE ELEVATION OF THE EXISTING PAVEMENT AT THE CENTERLINE OF THE STREET. THE CONTRACTOR SHALL INSTALL THE NEW WATER LINE WITH A MINIMUM OF THREE FEET OF COVER OVER THE WATER LINE REGARDLESS OF ITS ALIGNMENT IN THE STREET
- LOCATIONS OF PIPES AND OTHER UTILITIES ARE ESTIMATED. CONTRACTOR TO ADJUST ELEVATION OF NEW WATER LINE DURING CONSTRUCTION TO MISS THESE UTILITIES. CONTRACTOR TO MARK THEIR EXACT LOCATION ON THE AS-BUILT DRAWINGS AS THEY ARE. ENCOUNTERED.
- PAVEMENT REPLACEMENT**  
RESIDENTIAL STREET - FLEXIBLE PAVEMENT  
FOR PAVEMENT CUTS > 8 FEET WIDE AND > 100 FEET LONG, PAVEMENT SHALL BE REPLACED AS PER CITY STANDARD DRAWING NO. 2405A TO MATCH THE THICKNESS OF THE REMOVED PAVING SECTION. THE TOP OR FINISH COURSE SHALL BE 2" THICK TYPE "C" GRADATION. THE ADDITIONAL THICKNESS OF ASPHALT CONCRETE SHALL BE TYPE "C" GRADATION.  
FOR PAVEMENT CUTS < 8 FEET WIDE, THE PAVEMENT SHALL BE REPLACED AS PER CITY STANDARD DRAWING NO. 2465 TO MATCH EXISTING PAVEMENT THICKNESS PLUS 2 INCHES.  
ARTERIAL/COLLECTOR STREET - FLEXIBLE PAVEMENT  
ARTERIAL STREETS COAL AVENUE & AVENIDA CESAR CHAVEZ PAVEMENT SHALL BE REPLACED AS PER CITY STANDARD DRAWING NO. 2465 TO MATCH EXISTING PAVEMENT THICKNESS PLUS 2 INCHES. THE POTHOLED PAVEMENT DEPTH ON AVENIDA CESAR CHAVEZ IS +/- 7 INCHES.  
THE REMAINING STREETS WITHIN THE PROJECT AREA, NOT DESIGNATED AS EITHER ARTERIAL OR COLLECTOR, ARE DESIGNATED AS RESIDENTIAL STREETS.  
THE ALLEYS WITHIN THE PROJECT AREA, WHETHER PAVED OR NOT PAVED, ARE DESIGNATED AS RESIDENTIAL ALLEYS.  
QUANTITIES SHOWN ON THE PLANS ARE APPROXIMATE BASED ON PAVEMENT THICKNESS ASSUMPTIONS.
- CONTRACTOR SHALL NOTIFY THE CITY OF ALBUQUERQUE GEODETIC SURVEY NOT LESS THAN THREE (3) WORKING DAYS PRIOR TO STARTING WORK THAT WILL IMPACT ANY EXISTING ACS GEODETIC SURVEY MONUMENTS SHALL BE DONE BY THE CITY OF ALBUQUERQUE GEODETIC SURVEY. ANY ACS MONUMENTS DAMAGED OR DESTROYED DUE TO THE FAILURE OF CONTRACTOR TO NOTIFY AS STATED ABOVE SHALL BE REPLACED BY THE CITY OF ALBUQUERQUE GEODETIC SURVEY AT CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL NOTIFY ENGINEER NO LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE ENGINEER MAY TAKE NECESSARY MEASURES TO ENSURE THE PRESERVATION OF ALL OTHER PERMANENT 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. ONLY THE ENGINEER SHALL DO REPLACEMENT 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 CONTRACTOR EXPENSE, ADJUST THE MONUMENT COVER TO THE NEW GRADE UNLESS OTHERWISE SPECIFIED.
- CONTRACTOR SHALL CONSTRUCT PROJECT SOUTH ON BUENA VISTA DRIVE FROM COAL AVENUE SOUTH TO GIBSON BOULEVARD, THEN ON UNIVERSITY BLVD FROM GIBSON BOULEVARD TO RANDOLPH ROAD.
- CONTRACTOR SHALL NOT CLOSE MORE THAN TWO BLOCKS OF BUENA VISTA DRIVE AT ANY ONE TIME DURING CONSTRUCTION.
- CONTRACTOR SHALL LIMIT CONSTRUCTION ON BUENA VISTA DRIVE ON HOME GAME DAYS AT UNM ATHLETIC FACILITIES OR AT HOME ISOTOPIES BASEBALL GAMES SUCH THAT BUENA VISTA REMAINS ACCESSIBLE AS AN INGRESS/EGRESS ROAD FOR THOSE SPORTING EVENTS.
- CONTRACTOR SHALL LIMIT COAL AVENUE CLOSURE TO ONE LANE AND PERFORM INVESTIGATION, DEMOLITION AND INSTALLATION ACTIVITIES ON WEEKENDS ONLY. PROVIDE AND MAINTAIN PAVEMENT PATCH UNTIL INSTALLATION IS COMPLETE AND ACCEPTED BY THE CITY.
- CONTRACTOR SHALL COORDINATE WORK ON AVENIDA CESAR CHAVEZ WITH SPORTING EVENTS THE SAME AS REQUIRED FOR BUENA VISTA DRIVE.
- CONTRACTOR SHALL COORDINATE WORK AT GIBSON BOULEVARD (BUENA VISTA DRIVE AND UNIVERSITY BOULEVARD) WITH THE GIBSON BOULEVARD RECONSTRUCTION CONTRACTOR.
- CONTRACTOR SHALL NOT MAKE TIES TO EXISTING WELL COLLECTOR UNLESS APPROVED IN ADVANCE WITH WATER UTILITY DIVISION. CONTACT VICTORIA DERY @ 857-8258 TO SCHEDULE TIES.
- ALL EXCAVATION, TRENCHING AND SHORING ACTIVITIES MUST BE CARRIED OUT IN ACCORDANCE WITH OSHA 29 CFR 1926.650 SUBPART P.
- UTILIZE FLOWABLE FILL WHERE NOTED ON PLANS, OR WHEREVER BACKFILL MATERIAL CAN NOT BE PLACED AND COMPACTED BETWEEN THE NEW PIPE LINE AND EXISTING UTILITIES, OR IF THE SEPARATION BETWEEN THE NEW PIPE LINE AND EXISTING UTILITY IS LESS THAN 6 INCHES, OR IF REQUIRED BY THE DRAWINGS. AT UTILITY CROSSINGS WITH LESS THAN 6 INCH CLEARANCE, FLOWABLE FILL SHALL BE PLACED 5 FEET EACH SIDE. THIS COST IS INCIDENTAL TO BACKFILL COSTS.

## LEGEND

PROPOSED	EXISTING	DESCRIPTION
NA	--- 8" SAS ---	SANITARY SEWER LINE W/SIZE
NA	--- 8" SD ---	STORM SEWER LINE W/SIZE
6" WL	--- 6" WL ---	WATER LINE W/SIZE
NA	--- ---	MANHOLE
	--- ---	WATER LINE / GATE VALVE
	--- ---	WATER LINE / BUTTERFLY VALVE
	---	FIRE HYDRANT
NA	---	DROP INLET
	---	REDUCER
	NA	PIPE COUPLING
		TEE
		CROSS
		BEND
	NA	CAP OR PLUG
NA		POLE
NA	---	SIGN
NA		POLE W/ LIGHT
NA		LIGHT POLE
NA	--- UGT ---	UNDERGROUND TELEPHONE LINE
NA	--- 2" G ---	UNDERGROUND GAS LINE
NA	--- CATV UG ---	UNDERGROUND CATV LINE
NA	--- UGE ---	UNDERGROUND ELECTRIC
NA	--- OHE ---	OVERHEAD ELECTRIC
NA	-----	RIGHT OF WAY LINE
NA	-----	GRAVEL/GRADED/UNPAVED ROAD
NA	-----	PAVED ROAD
	=====	CURB AND GUTTER AND SIDEWALK
NA		BUILDING
	=====	CONCRETE SIDEWALK OR DRIVEWAY
NA	--- x --- x ---	WIRE FENCE
	--- o --- o ---	CHAINLINK FENCE
NA	---	BLOCK WALL
NA	3'-6" S/W	3'-6" SIDEWALK
		ZONE MAP BOUNDARY
	(WM)	WATER METER
		WHEEL CHAIR RAMPS
TP=5149.8		TOP OF PIPE W/ELEVATION
WC		WELL COLLECTOR
SVY PI STA		SURVEY POINT OF INFLECTION STATION
POB SVY STA		POINT OF BEGINNING SURVEY STATION
POE SVY STA		POINT OF ENDING SURVEY STATION
	NA	COMBINATION AIR/VAC AND RELEASE VALVE



- ALL PAVEMENT REPLACEMENT CUTS FOR WATERLINES ON DIAGONALS MUST BE PARALLEL OR PERPENDICULAR TO THE NORMAL FLOW OF TRAFFIC.
- USE STAIR STEP PATTERN IN ORDER TO KEEP THE MAXIMUM REPLACEMENT WIDTH TO 9 FEET.

## TYPICAL DIAGONAL CUT PAVEMENT REPLACEMENT DETAIL

YALE WELL COLLECTOR REALIGNMENT - PRIMARY CONTROL			
NAD 27 NGVD29			
PROJECT GROUND TO GRID = 0.99967484			
C.O.A. BENCHMARK	GROUND NORTHING	GROUND EASTING	ELEVATION, (FT.)
SDC_14-15	1,482,395.260	384,452.920	5036.3
SDC_13-4	1,477,563.190	384,890.540	5040.7
1-25-30	1,477,752.770	384,040.910	5038.51
G-9A	1,477,193.800	387,390.920	5143.07
7-L15	1,479,968.770	388,947.850	5161.477
5-M14	1,473,746.303	381,668.933	4937.592
5-K16A	1,485,437.255	390,376.915	5171.38
4-K15	1,485,997.187	384,770.822	5045.075
1-M16	1,477,175.738	388,970.037	5189.847
15-L14	1,480,530.900	381,909.980	4964.823
14-L14	1,479,270.560	382,025.860	4958.507

HORIZONTAL ALIGNMENT SURVEY DATA		
STATION	NORTHING	EASTING
10+00.00	1,483,227.353	388,379.3242
10+41.56	1,483,185.872	388,376.8058
10+41.56	1,483,185.872	388,376.8058
16+62.04	1,482,565.415	388,371.4438
16+62.04	1,482,565.415	388,371.4438
17+65.82	1,482,462.009	388,365.4062
17+65.82	1,482,462.009	388,365.4062
22+65.60	1,481,962.054	388,360.7749
22+65.60	1,481,962.054	388,360.7749
24+10.24	1,481,818.849	388,340.4148
24+10.24	1,481,818.849	388,340.4148
55+36.78	1,478,692.398	388,316.6876
55+36.78	1,478,692.398	388,316.6876
56+67.26	1,478,561.924	388,317.109
56+67.26	1,478,561.924	388,317.109
70+34.44	1,477,194.805	388,303.5235
70+34.44	1,477,194.805	388,303.5235
84+11.95	1,477,201.476	386,926.0358
84+11.95	1,477,201.476	386,926.0358
87+12.63	1,477,209.125	386,625.4546
87+12.63	1,477,209.125	386,625.4546
89+99.47	1,477,231.244	386,339.4672
89+99.47	1,477,231.244	386,339.4672
90+93.63	1,477,137.649	386,329.1832
90+93.63	1,477,137.649	386,329.1832
94+75.35	1,476,755.928	386,329.098
94+75.35	1,476,755.928	386,329.098
95+67.76	1,476,663.531	386,330.5739
95+67.76	1,476,663.531	386,330.5739
99+34.18	1,476,297.112	386,328.3079
99+34.18	1,476,297.112	386,328.3079
105+52.00	1,475,679.289	386,328.1182
105+52.00	1,475,679.289	386,328.1182
113+50.00	1,474,881.294	386,329.438

I, THE UNDERSIGNED, A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE INDICATED RECORD DRAWINGS ARE BASED UPON INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR IN THE FORM OF RED-LINED CONSTRUCTION DRAWING MARKUPS TO THE ORIGINAL DESIGN DRAWINGS. THE TRANSFER OF INFORMATION HEREIN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. HOWEVER, I HAVE NOT VERIFIED THE ACCURACY AND/OR COMPLETENESS OF THE INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR AND SHALL NOT BE RESPONSIBLE FOR ERRORS OR OMISSIONS THAT MAY BE INCORPORATED AS A RESULT OF ERRONEOUS INFORMATION PROVIDED BY OTHERS. ALL INFORMATION INCLUDING VERTICAL AND HORIZONTAL DIMENSIONS SHOULD BE FIELD VERIFIED PRIOR TO USE ON FUTURE PROJECTS.

*Chang-Hyung Kim*

**BOYLE ENGINEERING CORPORATION**  
consulting engineers  
6501 Americas Parkway N.E. Suite 800  
Albuquerque, NM 87110 (505) 883-7700



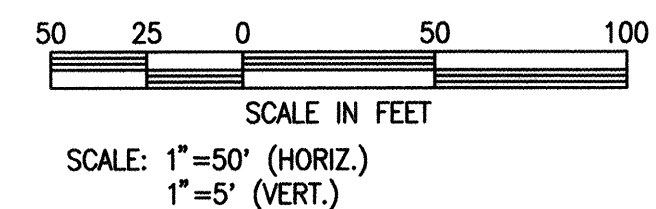
**CITY OF ALBUQUERQUE**  
WATER UTILITY DEPARTMENT

**TITLE: YALE WELL COLLECTOR REALIGNMENT**

## LEGEND AND GENERAL NOTES

Design Review Committee APPROVED MAY 2 2005 DESIGN REVIEW COMMITTEE	City Engineer Approval APPROVED MAY 2 4 2005 CITY ENGINEER	Mo./Day/Yr. Mo./Day/Yr.
City Project No. <b>733991</b>	Zone Map No. <b>N/A</b>	Sheet <b>3</b> Of <b>15</b>





7. REPLACE ALL RESIDENTIAL GALVANIZED STEEL AND POLYETHYLENE SERVICE LINES FROM DISTRIBUTION LINE. ANY OTHER TYPE OF SERVICE LINE, VERIFY REPLACEMENT WITH ENGINEER. METER YOKE/COPPERSETTER REPLACEMENT TO BE FIELD VERIFIED. METER BOX REPLACEMENT AND RELOCATION SHALL ONLY OCCUR WITH SERVICE LINE REPLACEMENT AND SHALL BE PER C.O.A. STD. DWG. 2362 PER THE FOLLOWING SCHEDULE:

I, THE UNDERSIGNED, A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE INDICATED RECORD DRAWINGS ARE BASED UPON INFORMATION PROVIDED BY THE CONTRACTOR TO THE CONTRACT ADMINISTERING THE RED-LINED CONSTRUCTION DRAWING MARKUPS TO THE ORIGINAL DESIGN DRAWINGS. THE TRANSFER OF INFORMATION HEREIN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. HOWEVER, I DO NOT GUARANTEE THE ACCURACY AND/OR COMPLETENESS OF THE INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR AND SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS THAT ARE INCORPORATED AS A RESULT OF ERRONEOUS INFORMATION PROVIDED BY OTHERS. ALL INFORMATION INCLUDING VERTICAL AND HORIZONTAL DIMENSIONS AND ELEVATIONS HAS BEEN VERIFIED PRIOR TO USE ON FUTURE PROJECTS.



City Engineer Approval

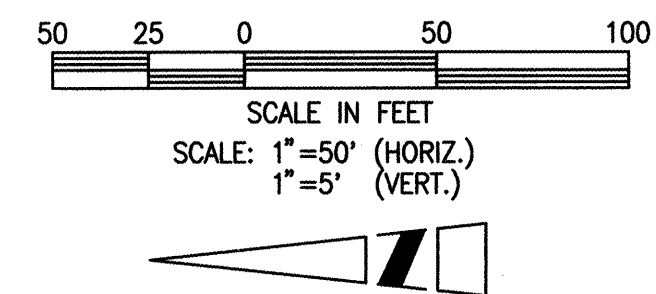
APPROVED

MAY 24 2005

CITY ENGINEER

AL-A01-161-02

Map No.	Sheet	Of
1-15	5	15



1. PROFILE CENTERLINE IS CENTERLINE OF SURVEY, NOT CENTERLINE OF STREET OR WELL COLLECTOR.
2. RESTRAINED JOINT LENGTHS ARE FOR PVC. IF CONCRETE CYLINDER PIPE OR DUCTILE IRON PIPE IS USED, THRUST RESTRAINT SHALL BE PER SPECIFICATION SECTION 801.13 OR SPECIFICATION SECTION 801.12 RESPECTIVELY.
3. ENCASE EXISTING 8" SAS PER C.O.A. STD. DWG. 2140 OR REPLACE EXISTING SAS WITH PRESSURE RATED PVC SEWER PIPE.
4. FOR SURVEY HORIZONTAL ALIGNMENT DATA SEE SHEET 3.
5. PROFILE STATIONING IS CENTERLINE OF SURVEY NOT CENTERLINE OF WELL COLLECTOR.
6. DEFLECTIONS SHOWN ARE FOR WELL COLLECTOR NOT SURVEY DEFLECTIONS.
7. USE TRENCH BOX TO MINIMIZE TRENCH WIDTH AND PROTECT ADJACENT UTILITIES.
8. GRADE SHOWN IS @ CENTERLINE OF SURVEY
9. REPLACE ALL RESIDENTIAL GALVANIZED STEEL AND POLYETHYLENE SERVICE LINES FROM DISTRIBUTION LINE. ANY OTHER TYPE OF SERVICE LINE, VERIFY REPLACEMENT WITH ENGINEER. METER YOKE/COPPERSETTER REPLACEMENT TO BE FIELD VERIFIED. METER BOX REPLACEMENT AND RELOCATION SHALL ONLY OCCUR WITH SERVICE LINE REPLACEMENT AND SHALL BE PER C.O.A. STD. DWG. 2362 PER THE FOLLOWING SCHEDULE:

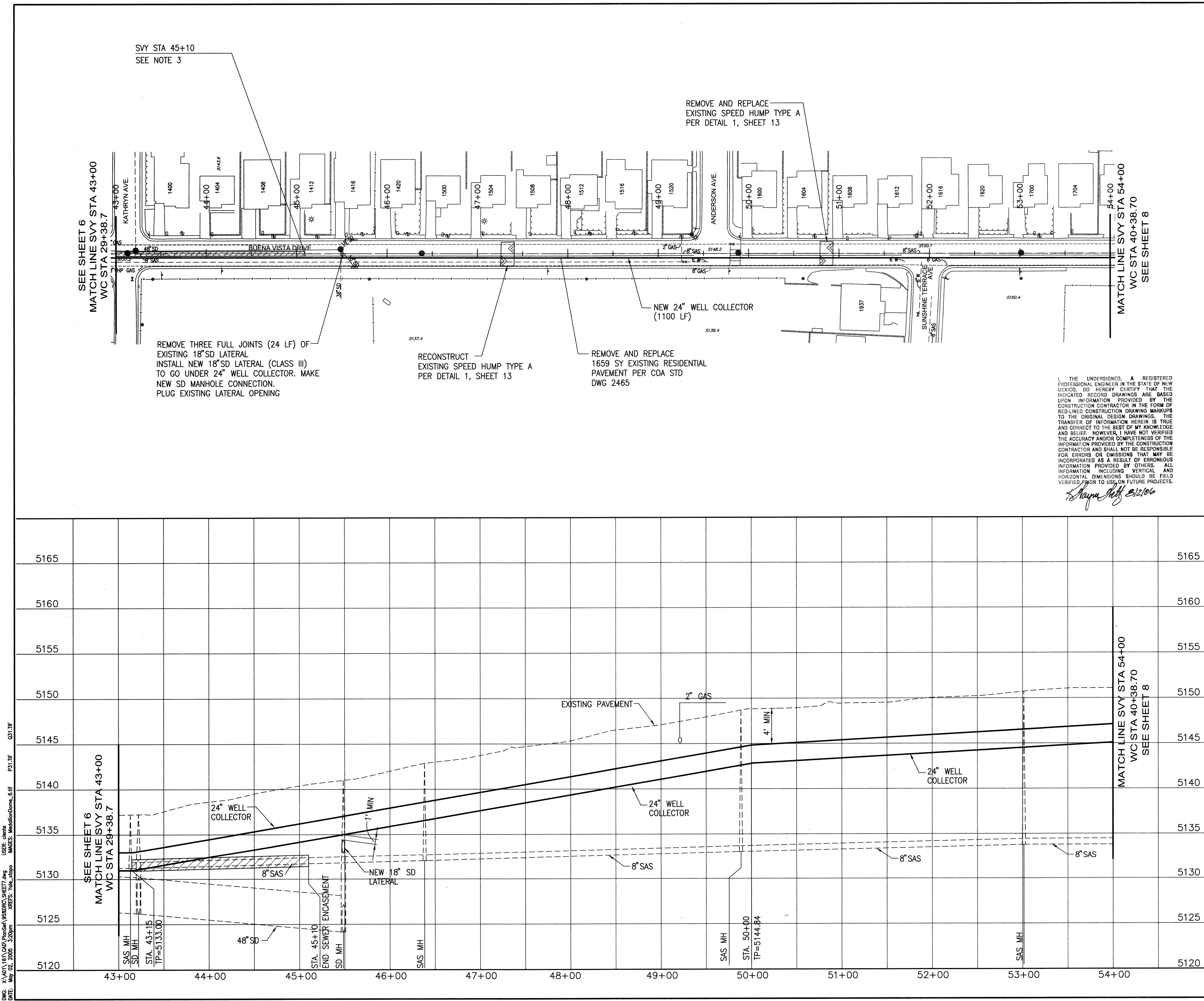
**B. SOYLE ENGINEERING CORPORATION**  
consulting engineers

6501 Americas Parkway N.E. Suite 800  
Albuquerque, NM 87110 (505) 883-7700

TITLE: **YALE COLLECTOR REALIGNMENT  
BUENA VISTA DRIVE PLAN & PROFILE  
STA. 32+00 TO 43+00**

City Engineer Approval  
APPROVED  
MAY 24 2005  
CITY ENGINEER

AL-A01-161-02



NOTES:

1. PROFILE CENTERLINE IS CENTERLINE OF SURVEY, NOT CENTERLINE OF STREET OR WELL COLLECTOR.
2. RESTRAINED JOINT LENGTHS ARE FOR PVC. IF CONCRETE CYLINDER PIPE OR DUCTILE IRON PIPE IS USED, THRUST RESTRAINT SHALL BE PER SPECIFICATION SECTION 801.13 OR SPECIFICATION SECTION 801.12 RESPECTIVELY.
3. ENCASE EXISTING 8" SAS PER C.O.A. STD. DWG. 2140 OR REPLACE EXISTING SAS WITH PRESSURE RATED PVC SEWER PIPE.
4. FOR SURVEY HORIZONTAL ALIGNMENT DATA SEE SHEET 3.
5. PROFILE STATIONING IS CENTERLINE OF SURVEY NOT CENTERLINE OF WELL COLLECTOR.
6. DEFLECTIONS SHOWN ARE FOR WELL COLLECTOR NOT SURVEY DEFLECTIONS.
7. USE TRENCH BOX TO MINIMIZE TRENCH WIDTH AND PROTECT ADJACENT UTILITIES.
8. GRADE SHOWN IS @ CENTERLINE OF SURVEY
9. REPLACE ALL RESIDENTIAL GALVANIZED STEEL AND POLYETHYLENE SERVICE LINES FROM DISTRIBUTION LINE. ANY OTHER TYPE OF SERVICE LINE, VERIFY REPLACEMENT WITH ENGINEER. METER YOKE/COPPERSETTER REPLACEMENT TO BE FIELD VERIFIED. METER BOX REPLACEMENT AND RELOCATION SHALL ONLY OCCUR WITH SERVICE LINE REPLACEMENT AND SHALL BE PER C.O.A. STD. DWG. 2362 PER THE FOLLOWING SCHEDULE:

HOUSE NO.	LOCATION	METER SIZE	REPLACE BOX	RELOCATE BOX
1400	F5	3/4"	VERIFY	VERIFY
1404	F4	3/4"	X	X
1408	F7	3/4"	X	
1412	F4	3/4"	X	
1416	F6	3/4"	X	X
1420	F4	3/4"	X	X
1500	F4	3/4"	X	X
1504	F5	3/4"	X	X
1508	F4	3/4"	X	X
1512	F7	3/4"	X	X
1516	F5	3/4"	X	X
1520	F7	3/4"	X	
1937*	R3	3/4"		
1600	F4	3/4"	X	X
1604	F4	3/4"		
1608	F6	3/4"	X	X
1612	F4	3/4"	X	X
1616	F4	3/4"	X	X
1620	F6	3/4"	X	X
1700	F4	3/4"	X	X
1704	F6	3/4"	X	X

\*1937 SUNSHINE TERRACE AVE.

**SOYLE ENGINEERING CORPORATION**  
consulting engineers  
6501 Americas Parkway N.E. Suite 800  
Albuquerque, NM 87110  
(505) 883-7700

**CITY OF ALBUQUERQUE**  
WATER UTILITY DEPARTMENT

TITLE: **YALE WELL COLLECTOR REALIGNMENT  
BUENA VISTA DRIVE PLAN & PROFILE  
STA. 43+00 TO 54+00**

Design Review Committee  
**APPROVE**  
MAY 24 2005  
CITY ENGINEER

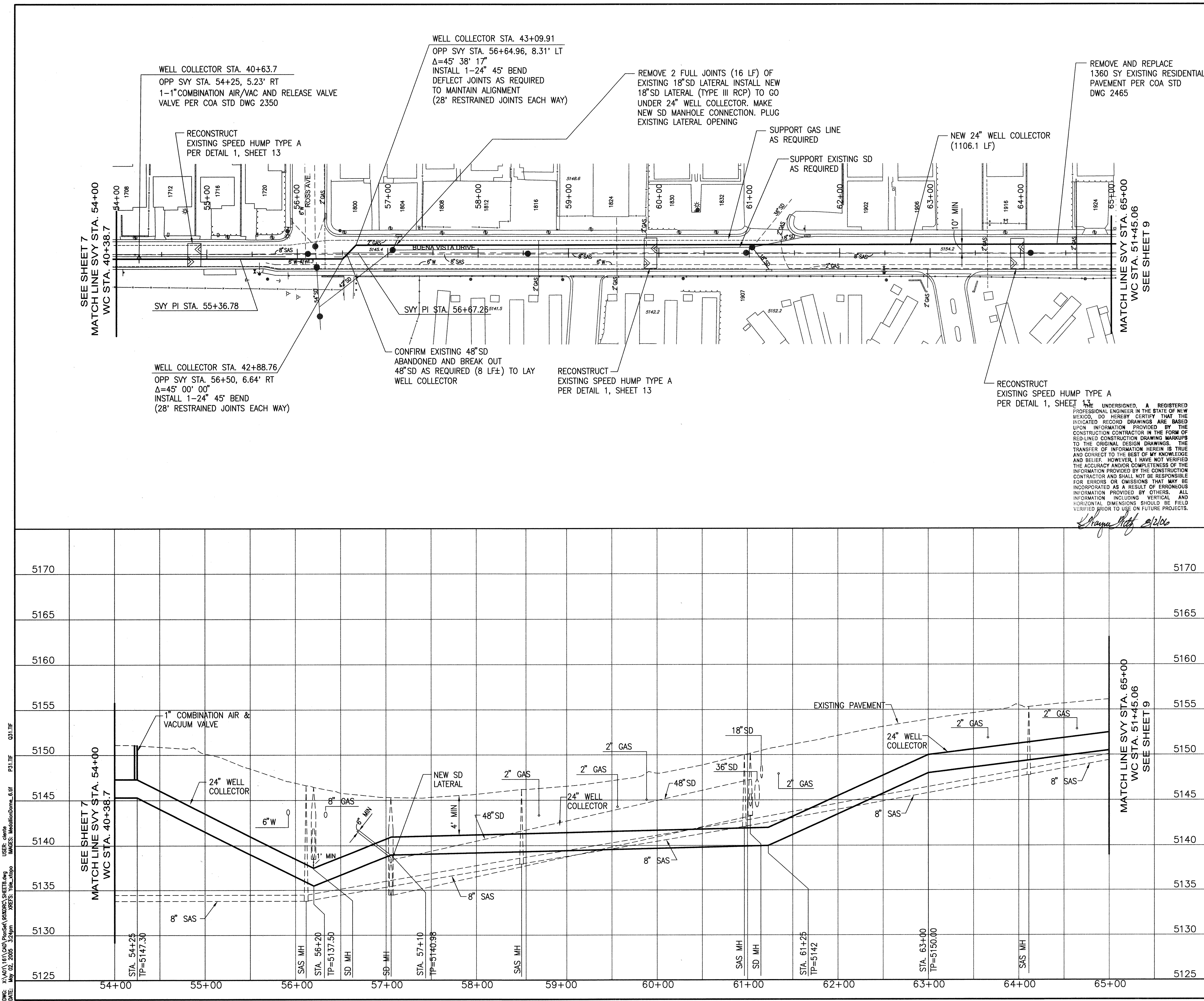
City Engineer Approval  
**APPROVE**  
MAY 24 2005  
CITY ENGINEER

City Project No. **733991**

Zone Map No. **L-15**

Sheet **7** of **15**

DWG: AL-A01-161-02 Project: 733991 SHEET 7 of 15  
DATE: May 24, 2005 3:25pm  
USER: cml  
PROJECT: Water Utility



NOTES:

1. PROFILE CENTERLINE IS CENTERLINE OF SURVEY, NOT CENTERLINE OF STREET OR WELL COLLECTOR.
2. RESTRAINED JOINT LENGTHS ARE FOR PVC. IF CONCRETE CYLINDER PIPE OR DUCTILE IRON PIPE IS USED, THRUST RESTRAINT SHALL BE PER SPECIFICATION SECTION 801.13 OR SPECIFICATION SECTION 801.12 RESPECTIVELY.
3. FOR SURVEY HORIZONTAL ALIGNMENT DATA SEE SHEET 3.
4. PROFILE STATIONING IS CENTERLINE OF SURVEY NOT CENTERLINE OF WELL COLLECTOR.
5. DEFLECTIONS SHOWN ARE FOR WELL COLLECTOR NOT SURVEY DEFLECTIONS.
6. USE TRENCH BOX TO MINIMIZE TRENCH WIDTH AND PROTECT ADJACENT UTILITIES.
7. GRADE SHOWN IS @ CENTERLINE OF SURVEY
8. REPLACE ALL RESIDENTIAL GALVANIZED STEEL AND POLYETHYLENE SERVICE LINES FROM DISTRIBUTION LINE. ANY OTHER TYPE OF SERVICE LINE, VERIFY REPLACEMENT WITH ENGINEER. METER YOKE/COPPERSETTER REPLACEMENT TO BE FIELD VERIFIED. METER BOX REPLACEMENT AND RELOCATION SHALL ONLY OCCUR WITH SERVICE LINE REPLACEMENT AND SHALL BE PER C.O.A. STD. DWG. 2362 PER THE FOLLOWING SCHEDULE:

HOUSE NO.	LOCATION	METER SIZE	REPLACE BOX	RELOCATE BOX
1708	F6	3/4"	X	
1712	F6	3/4"	X	
1716	F7	3/4"	X	
1717	VERIFY	VERIFY	VERIFY	VERIFY
1720	F7	3/4"	X	
1721	F5	2"	VERIFY	VERIFY
1800	F4	3/4"	X	
1804	F3	3/4"	X	X
1808	F4	1-1/4"		
1812	F3	1"	X	
1816	F8	3/4"		
1830	F5	1"	X	
1832	F5	1"	VERIFY	
1902	F9	1"	X	
1906	F1	3/4"	X	
1907	F6	2"		
1916	F5	3/4"	X	
1924	F5	3/4"		

AS-BUILT INFORMATION

CONTRACTOR NIM UNDERGROUND

INSPECTOR'S FIELD VERIFICATION BY TEGRA LAND SURVEY

FIELD CORRECTED BY COA- BULL MCCALL

RECORDED BY BCC

M/CRO-F ILM INFORMATION

RECORDED BY

DATE

ENGINEERS SEAL

DATE

NO.

REMARKS

DESIGN

DESIGNED BY PJC

DRAWN BY WBH

CHECKED BY KWH

DATE 1/04

DATE 1/04

DATE 1/04

SOYLE ENGINEERING CORPORATION

consulting engineers

6501 Americas Parkway N.E. Suite 800

Albuquerque, NM 87110

(505) 883-7700

CITY OF ALBUQUERQUE

WATER UTILITY DEPARTMENT

TITLE: YALE WELL COLLECTOR REALIGNMENT

BUENA VISTA DRIVE PLAN & PROFILE

STA. 54+00 TO 65+00

Design Review Committee

City Engineer Approval

MAY 24 2005

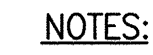
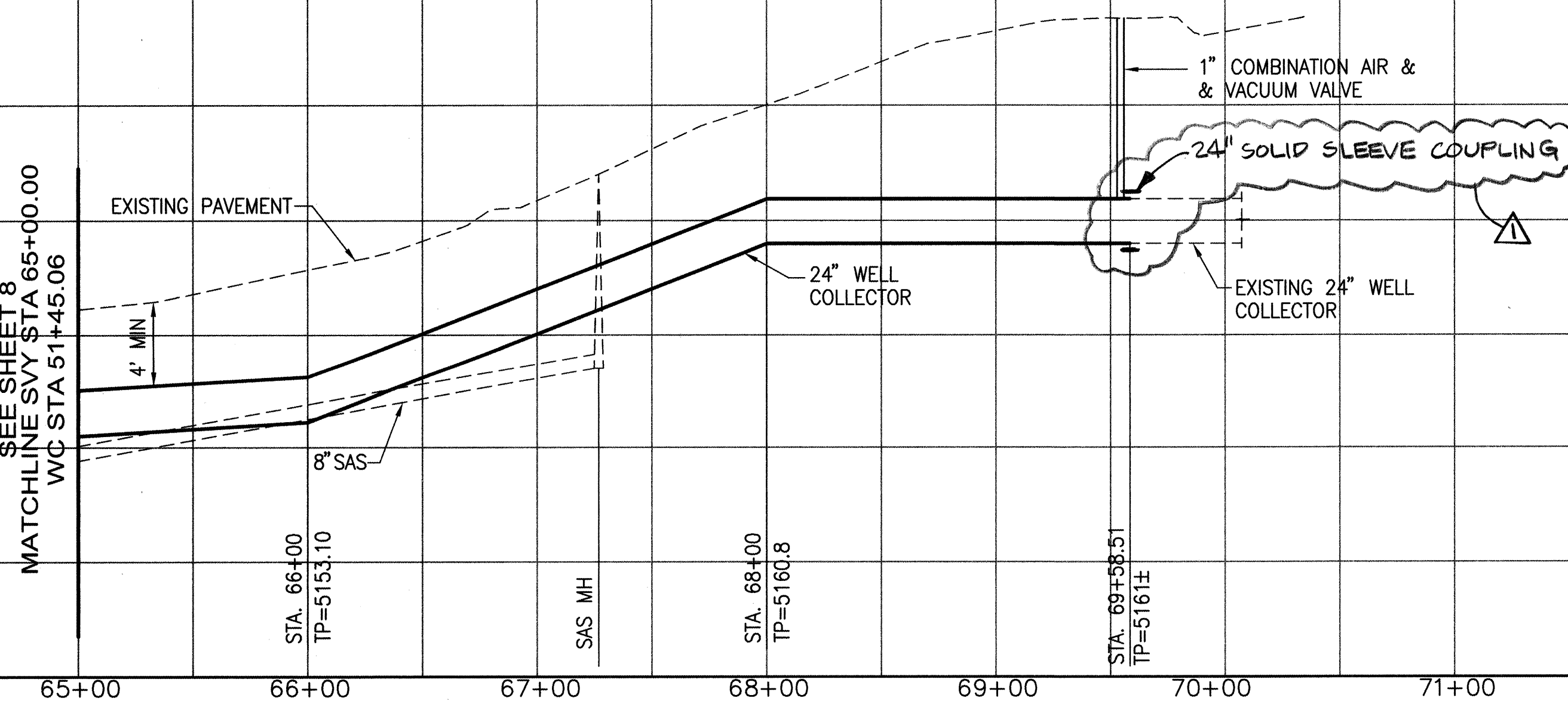
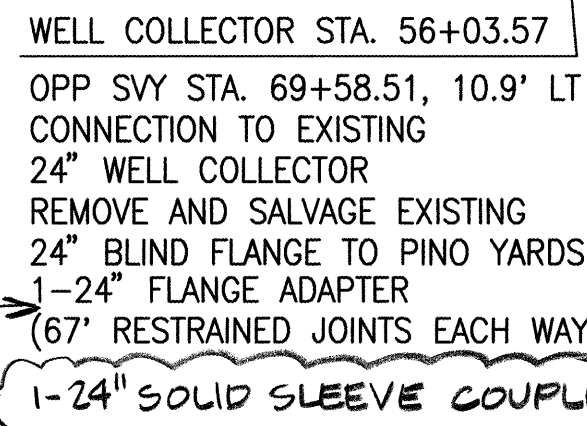
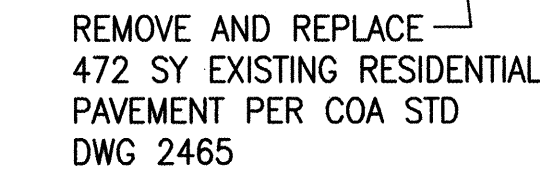
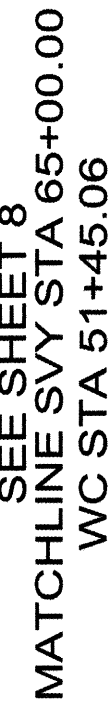
CITY ENGINEER

City Project No. 733991

Zone Map No. L-15

Sheet 8 of 15

DWG: AL-A01-161-02 Project: 733991, SHEET 8 OF 15  
DATE: May 22, 2005 3:25pm  
USER: csh  
P31.TIF Q31.TIF



1. PROFILE CENTERLINE IS CENTERLINE OF SURVEY, NOT CENTERLINE OF STREET OR WELL COLLECTOR.
2. RESTRAINED JOINT LENGTHS ARE FOR PVC. IF CONCRETE CYLINDER PIPE OR DUCTILE IRON PIPE IS USED, THRUST RESTRAINT SHALL BE PER SPECIFICATION SECTION 801.13 OR SPECIFICATION SECTION 801.12 RESPECTIVELY.
3. FOR SURVEY HORIZONTAL ALIGNMENT DATA SEE SHEET 3.
4. PROFILE STATIONING IS CENTERLINE OF SURVEY NOT CENTERLINE OF WELL COLLECTOR.
5. DEFLECTIONS SHOWN ARE FOR WELL COLLECTOR NOT SURVEY DEFLECTIONS.
6. USE TRENCH BOX TO MINIMIZE TRENCH WIDTH AND PROTECT ADJACENT UTILITIES.
7. GRADE SHOWN IS @ CENTERLINE OF SURVEY

HOUSE NO.	LOCATION	METER SIZE	REPLACE BOX	RELOCATE BOX
1928	F5	1"		
1932	F5	1"		

I, THE UNDERSIGNED, A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE INDICATED RECORD DRAWINGS ARE BASED UPON INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR IN THE FORM OF RED-LINED CONSTRUCTION DRAWING MARKUPS TO THE ORIGINAL DESIGN DRAWINGS. THE TRANSFER OF INFORMATION HEREIN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. HOWEVER, I HAVE NOT VERIFIED THE ACCURACY AND/OR COMPLETENESS OF THE INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR. I AM NOT RESPONSIBLE FOR ERRORS OR OMISSIONS THAT MAY BE INCORPORATED AS A RESULT OF ERRONEOUS INFORMATION PROVIDED BY OTHERS. ALL INFORMATION INCLUDING BUT NOT LIMITED TO, DIMENSIONS, SHOULD BE FIELD VERIFIED PRIOR TO USE ON OTHER PROJECTS.

Kayna Koff 8/2/06

**B** **BOYLE ENGINEERING CORPORATION**  
consulting engineers  
6501 Americas Parkway N.E. Suite 800  
Albuquerque, NM 87110 (505) 883-7700



TITLE: **YALE COLLECTOR REALIGNMENT  
BUENA VISTA DRIVE PLAN & PROFILE  
STA. 65+00 TO 70+34**

Design Review Committee

City Engineer Approval  
APPROVED  
MAY 24 2005  
CITY ENGINEER

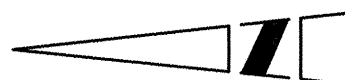
	City Project No.
--	------------------

Zone Map No.

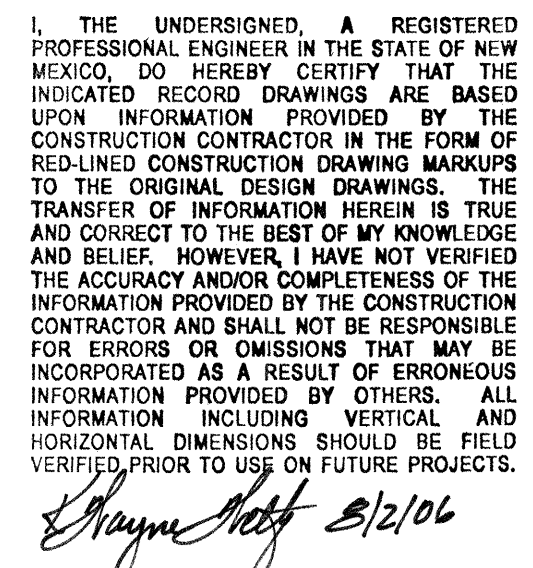
733991

5 | 9 | 15

AL-A01-161-02

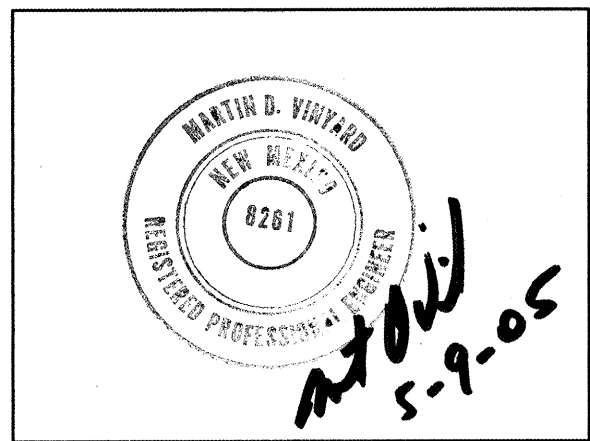


1. PROFILE CENTERLINE IS CENTERLINE OF SURVEY NOT CENTERLINE OF STREET OR WELL COLLECTOR.
2. RESTRAINED JOINT LENGTHS ARE FOR PVC. IF CONCRETE CYLINDER PIPE OR DUCTILE IRON PIPE IS USED, THRUST RESTRAINT SHALL BE PER SPECIFICATION SECTION 801.13 OR SPECIFICATION SECTION 801.12 RESPECTIVELY.
3. ENCASE EXISTING 8" SAS PER C.O.A. STD. DWG. 2140 OR REPLACE EXISTING SAS WITH PRESSURE RATED PVC SEWER PIPE.
4. FOR SURVEY HORIZONTAL ALIGNMENT DATA SEE SHEET 3.
5. PROFILE STATIONING IS CENTERLINE OF SURVEY NOT CENTERLINE OF WELL COLLECTOR.
6. DEFLECTIONS SHOWN ARE FOR WELL COLLECTOR NOT SURVEY DEFLECTIONS.
7. USE TRENCH BOX TO MINIMIZE TRENCH WIDTH AND PROTECT ADJACENT UTILITIES.
8. GRADE SHOWN IS @ CENTERLINE OF SURVEY

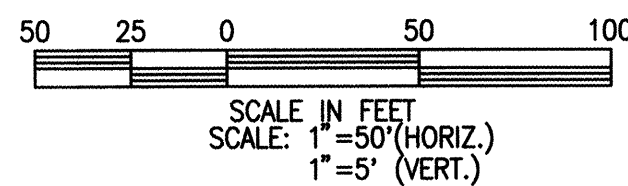
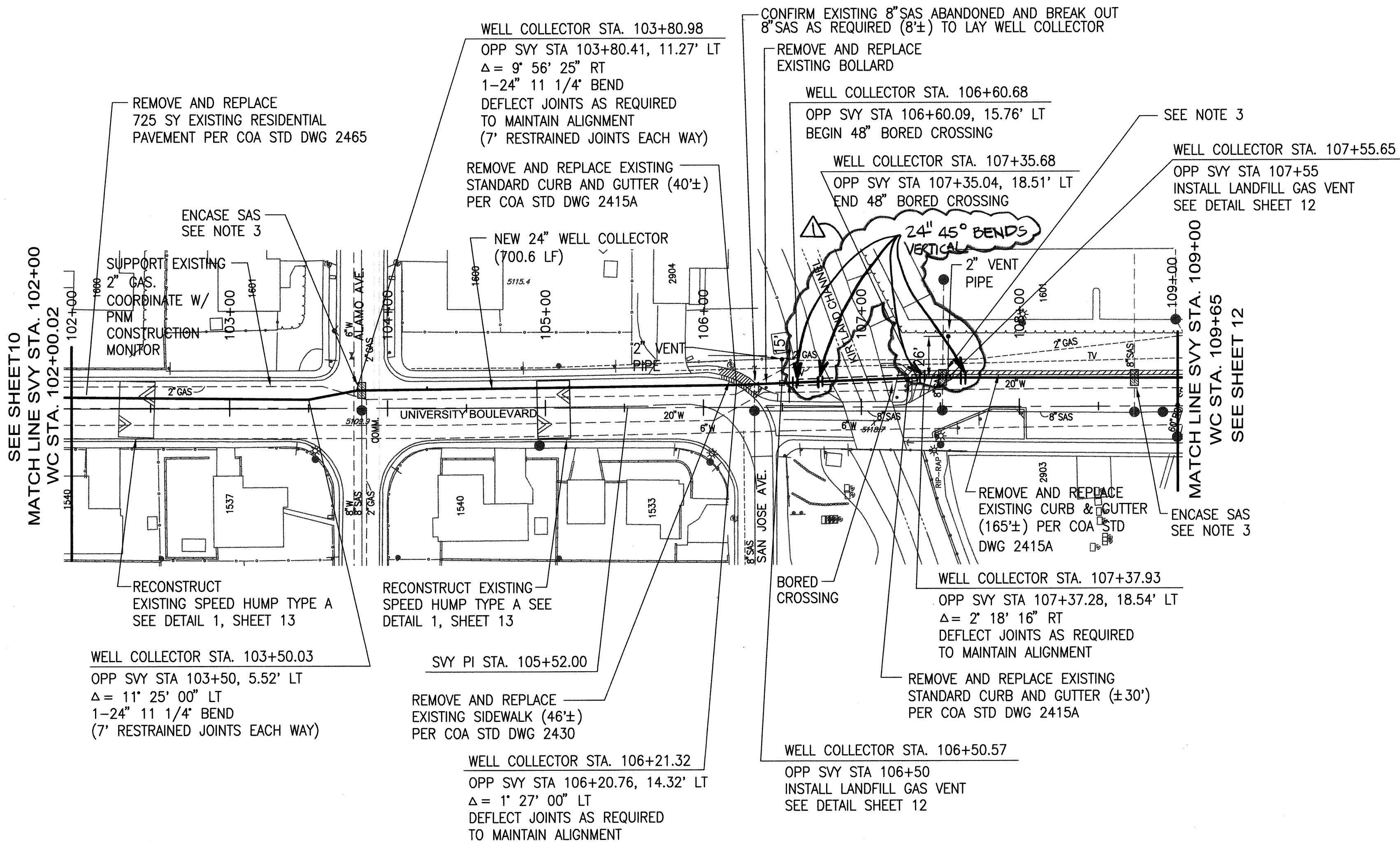


5 Sheet 10 of 15

AL-A01-161-0



The subject property is located near a former landfill. Due to the subject property being near a former landfill, certain precautionary measures may need to be taken to ensure the health and safety of the public. Recommendations made by a professional engineer with expertise in landfills and landfill gas issues (as required by the most current version of the Interim Guidelines for Development within City Designated Landfill Buffer Zones) shall be consulted prior to development of the site.

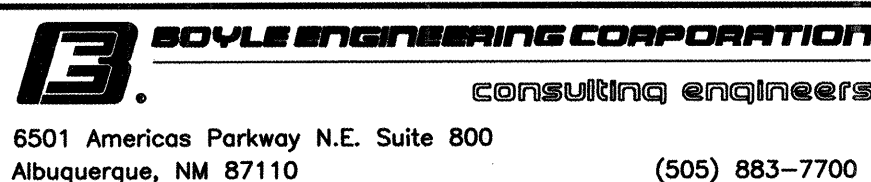
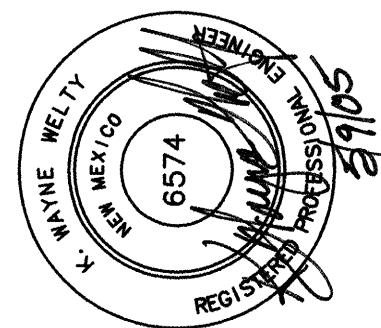


NOTES:

1. PROFILE CENTERLINE IS CENTERLINE OF SURVEY, NOT CENTERLINE OF STREET OR WELL COLLECTOR.
2. RESTRAINED JOINT LENGTHS ARE FOR PVC. IF CONCRETE CYLINDER PIPE OR DUCTILE IRON PIPE IS USED, THRUST RESTRAINT SHALL BE PER SPECIFICATION SECTION 801.13 OR SPECIFICATION SECTION 801.12 RESPECTIVELY.
3. ENCASE EXISTING 8" SAS PER C.O.A. STD. DWG. 2140 OR REPLACE EXISTING SAS WITH PRESSURE RATED PVC SEWER PIPE.
4. FOR SURVEY HORIZONTAL ALIGNMENT DATA SEE SHEET 3.
5. PROFILE STATIONING IS CENTERLINE OF SURVEY NOT CENTERLINE OF WELL COLLECTOR.
6. DEFLECTIONS SHOWN ARE FOR WELL COLLECTOR NOT SURVEY DEFLECTIONS.
7. USE TRENCH BOX TO MINIMIZE TRENCH WIDTH AND PROTECT ADJACENT UTILITIES.
8. GRADE SHOWN IS @ CENTERLINE OF SURVEY

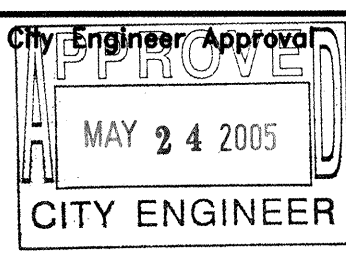
I, THE UNDERSIGNED, A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE INDICATED RECORD DRAWINGS ARE BASED UPON INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR IN THE FORM OF RED-LINED CONSTRUCTION DRAWING MARKUPS TO THE ORIGINAL DESIGN DRAWINGS. THE TRANSFER OF INFORMATION HEREIN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. HOWEVER, I HAVE NOT VERIFIED THE ACCURACY AND/OR COMPLETENESS OF THE INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR AND SHALL NOT BE RESPONSIBLE FOR ERRORS OR OMISSIONS THAT MAY BE INCORPORATED AS A RESULT OF ERRONEOUS INFORMATION PROVIDED BY OTHERS. ALL INFORMATION INCLUDING VERTICAL AND HORIZONTAL DIMENSIONS SHOULD BE FIELD VERIFIED PRIOR TO USE ON FUTURE PROJECTS.

*Chayne Kelly* 5/2/06

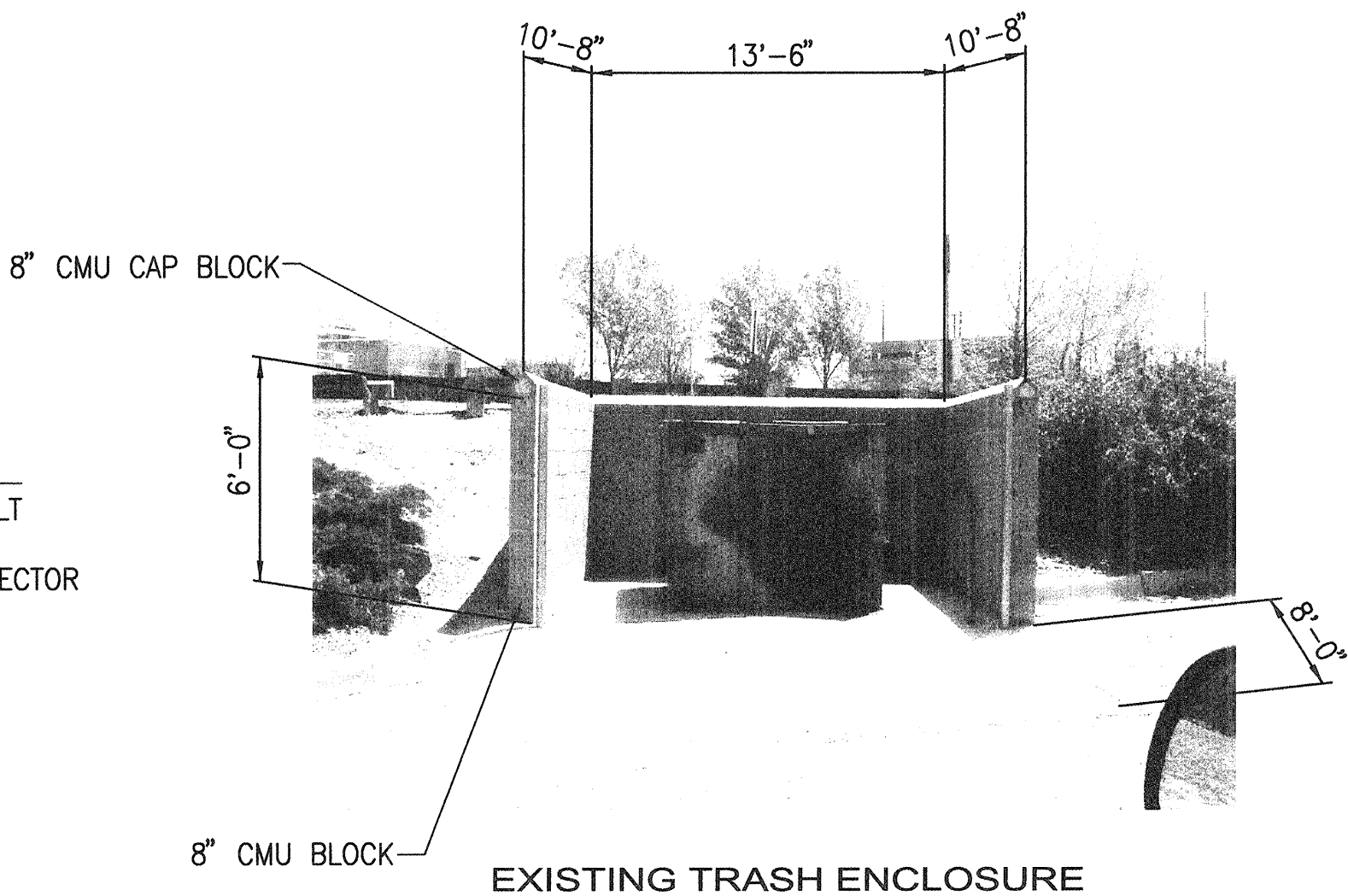


CITY OF ALBUQUERQUE  
WATER UTILITY DEPARTMENT

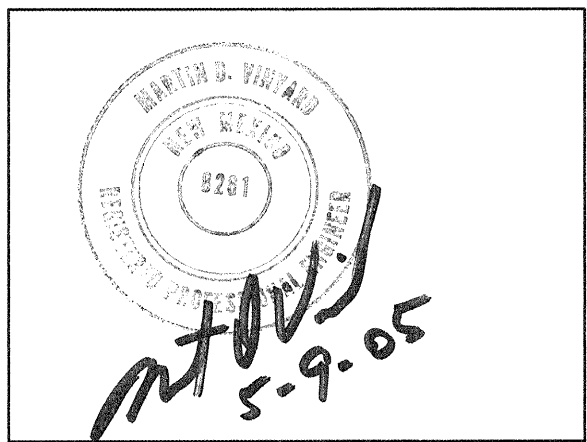
TITLE:  
**YALE COLLECTOR REALIGNMENT  
BUENA VISTA DRIVE PLAN & PROFILE  
STA. 102+00 TO 109+00**



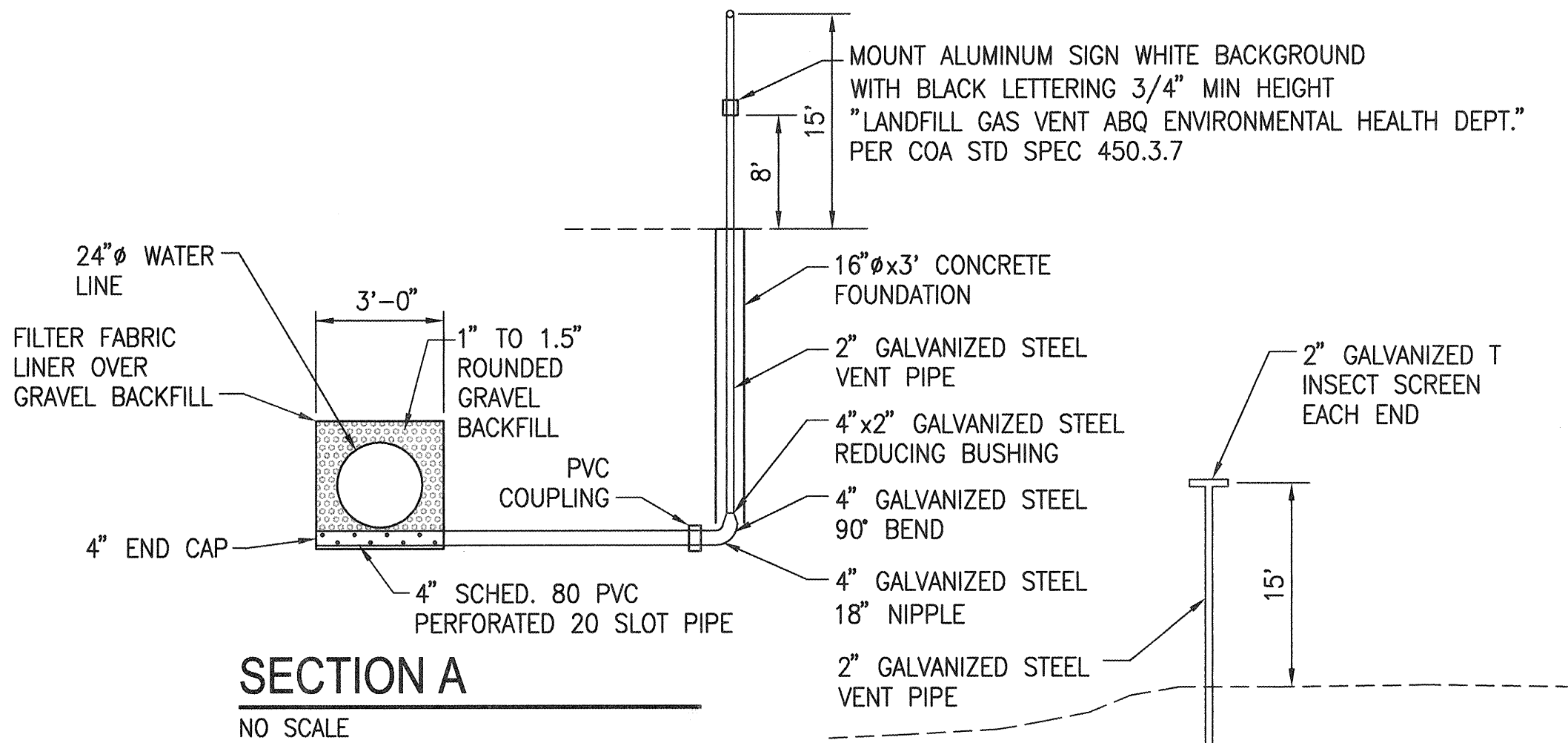
City Project No. **733991** Zone Map No. **M-15** Sheet **11** of **15**



### EXISTING TRASH ENCLOSURE

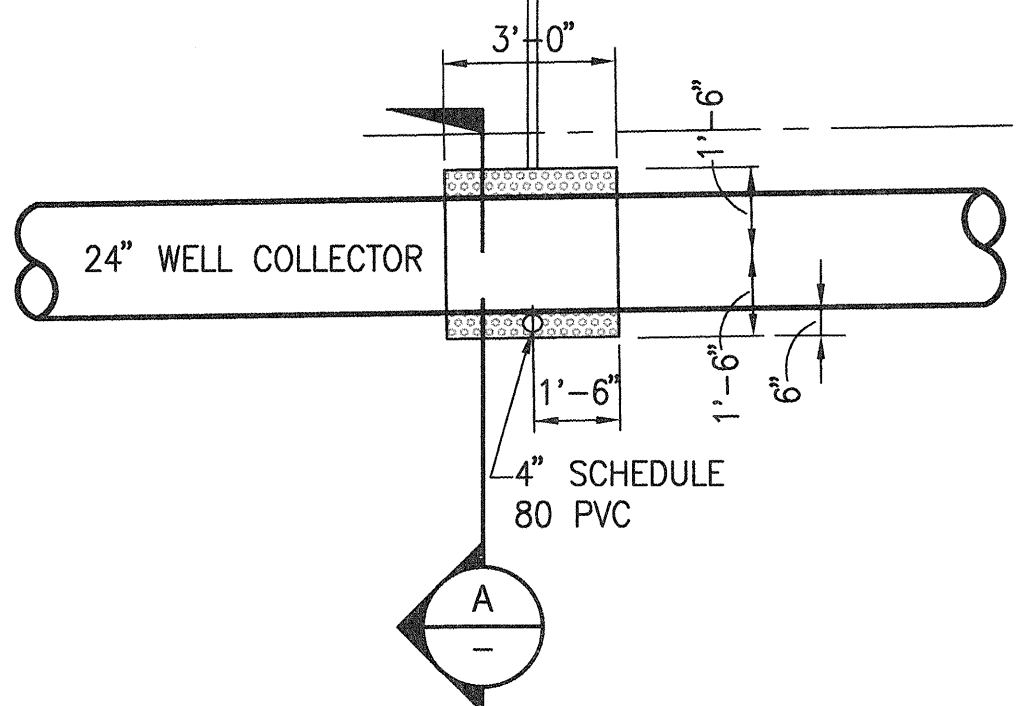


The subject property is located near a former landfill. Due to the subject property being near a former landfill, certain precautionary measures may need to be taken to ensure the health and safety of the public. Recommendations made by a professional engineer with expertise in landfills and landfill gas issues (as required by the most current version of the Interim Guidelines for Development within City Designated Landfill Buffer Zones) shall be consulted prior to development of the site.



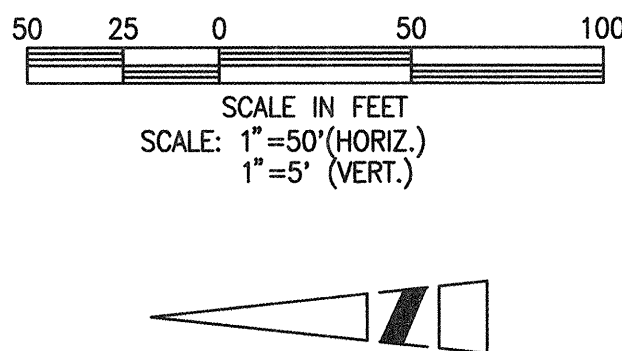
## SECTION A

NO SCALE



## LANDFILL GAS VENT DETAIL

NO SCALE

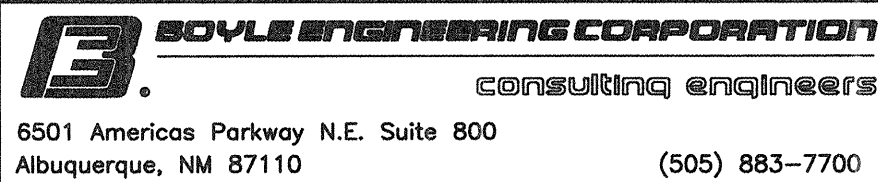


NOTES:

1. PROFILE CENTERLINE IS CENTERLINE OF SURVEY, NOT CENTERLINE OF STREET OR WELL COLLECTOR.
2. RESTRAINED JOINT LENGTHS ARE FOR PVC. IF CONCRETE CYLINDER PIPE OR DUCTILE IRON PIPE IS USED, THRUST RESTRAINT SHALL BE PER SPECIFICATION SECTION 801.13 OR SPECIFICATION SECTION 801.12 RESPECTIVELY.
3. ENCASE EXISTING 8" SAS PER C.O.A. STD. DWG. 2140 OR REPLACE EXISTING SAS WITH PRESSURE RATED PVC SEWER PIPE.
4. FOR SURVEY HORIZONTAL ALIGNMENT DATA SEE SHEET 3.
5. PROFILE STATIONING IS CENTERLINE OF SURVEY NOT CENTERLINE OF WELL COLLECTOR.
6. DEFLECTIONS SHOWN ARE FOR WELL COLLECTOR NOT SURVEY DEFLECTIONS.
7. USE TRENCH BOX TO MINIMIZE TRENCH WIDTH AND PROTECT ADJACENT UTILITIES.
8. GRADE SHOWN IS @ CENTERLINE OF SURVEY

I, THE UNDERSIGNED, A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE INDICATED RECORD DRAWINGS ARE BASED UPON THE INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR IN THE FORM OF RED-LINED CONSTRUCTION DRAWING MARKUPS TO THE ORIGINAL DESIGN DRAWINGS. THE INFORMATION PROVIDED BY THE CONTRACTOR IS BELIEVED TO BE TRUE, ACCURATE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. HOWEVER, I HAVE NOT VERIFIED THE ACCURACY AND/OR COMPLETENESS OF THE INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR. THEREFORE, I WILL NOT BE RESPONSIBLE FOR ERRORS OR OMISSIONS THAT MAY BE INCORPORATED AS A RESULT OF ERRONEOUS INFORMATION PROVIDED BY OTHERS. ALL VERTICAL DIMENSIONS SHOWN ON THESE HORIZONTAL DIMENSIONS SHOULD BE FIELD VERIFIED PRIOR TO USE ON FUTURE PROJECTS.

Hayne Kelly 8/2/06



CITY OF ALBUQUERQUE  
WATER UTILITY DEPARTMENT

**TITLE:**

**YALE COLLECTOR REALIGNMENT  
BUENA VISTA DRIVE PLAN & PROFILE  
STA. 102+00 TO 109+00**

Design Review Committee

City Engineer Approval \_\_\_\_\_

## PROVE

MAY 24 1985

MAY 24 2005

City Project No

Variable	Mean	SD	Min	Max
Age	34.5	10.2	21	55
Gender	Male	Female		
Marital status	Married	Single		
Education	High school	College		
Occupation	Manager	Worker		
Income	Low	High		
Health status	Good	Poor		
Stress level	Low	High		
Life satisfaction	High	Low		
Resilience	High	Low		
Optimism	High	Low		
Self-efficacy	High	Low		
Emotional stability	High	Low		
Neuroticism	High	Low		
Extraversion	High	Low		
Conscientiousness	High	Low		
Agreeableness	High	Low		
Openness	High	Low		
Depression	High	Low		
Anxiety	High	Low		
Stress coping	High	Low		
Life satisfaction	High	Low		
Resilience	High	Low		
Optimism	High	Low		
Self-efficacy	High	Low		
Emotional stability	High	Low		
Neuroticism	High	Low		
Extraversion	High	Low		
Conscientiousness	High	Low		
Agreeableness	High	Low		
Openness	High	Low		
Depression	High	Low		
Anxiety	High	Low		
Stress coping	High	Low		

Map No.

ap No.

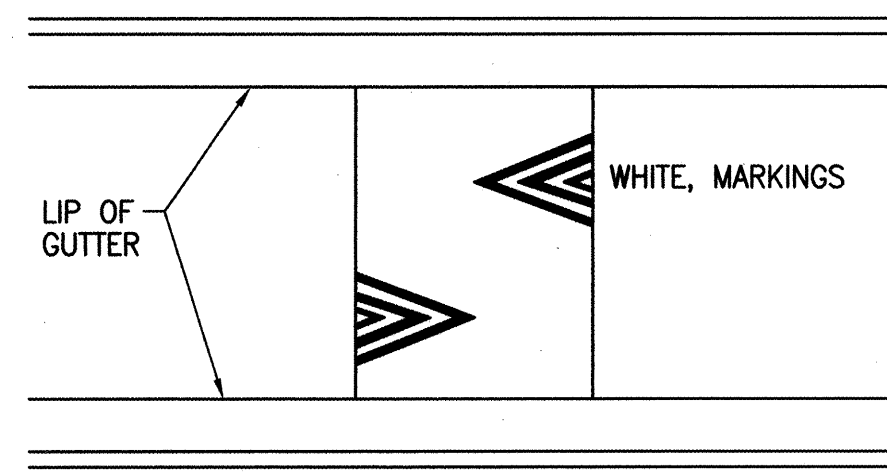
Shee

t

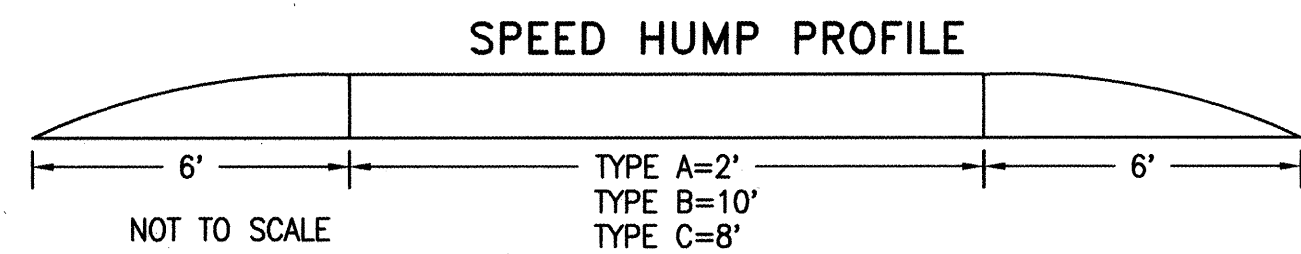
0

Of

AL-A01-161-02

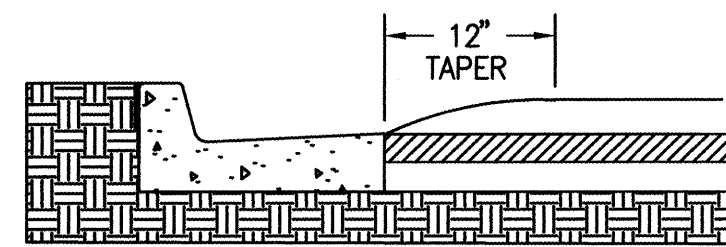


MARKING PLAN  
NOT TO SCALE



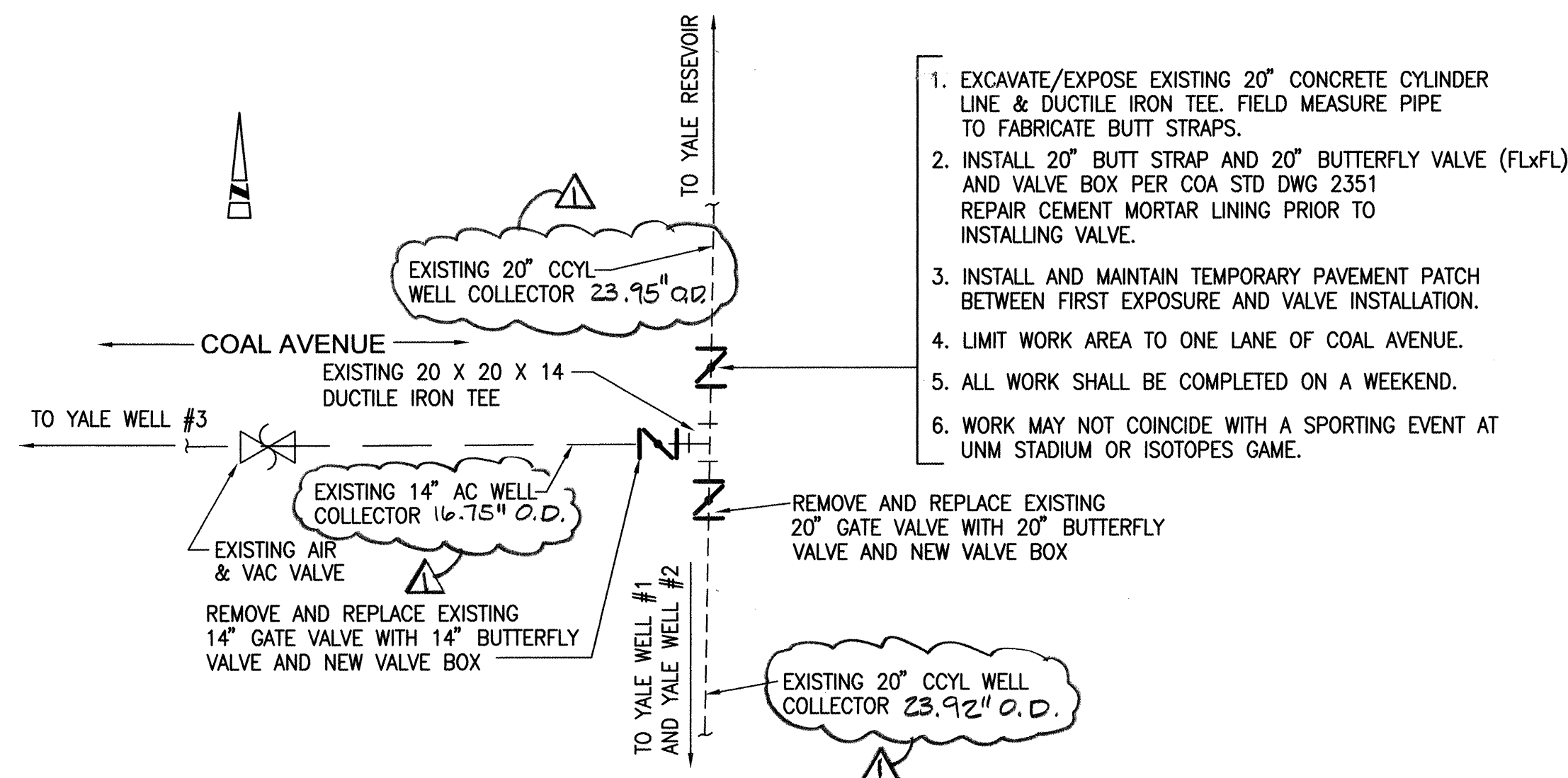
APPROACH DETAIL

NOT TO SCALE

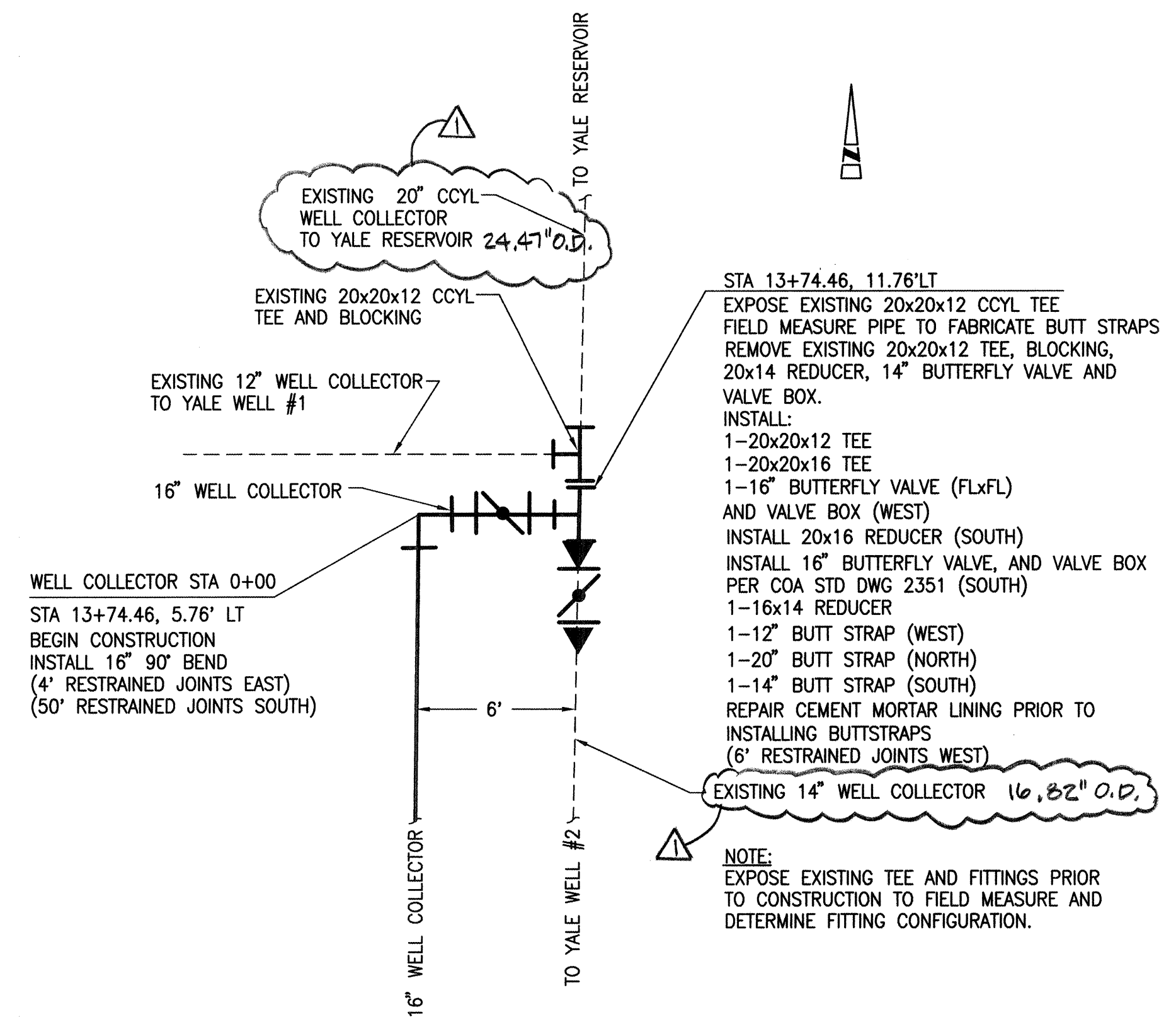


CURB DETAIL  
NOT TO SCALE

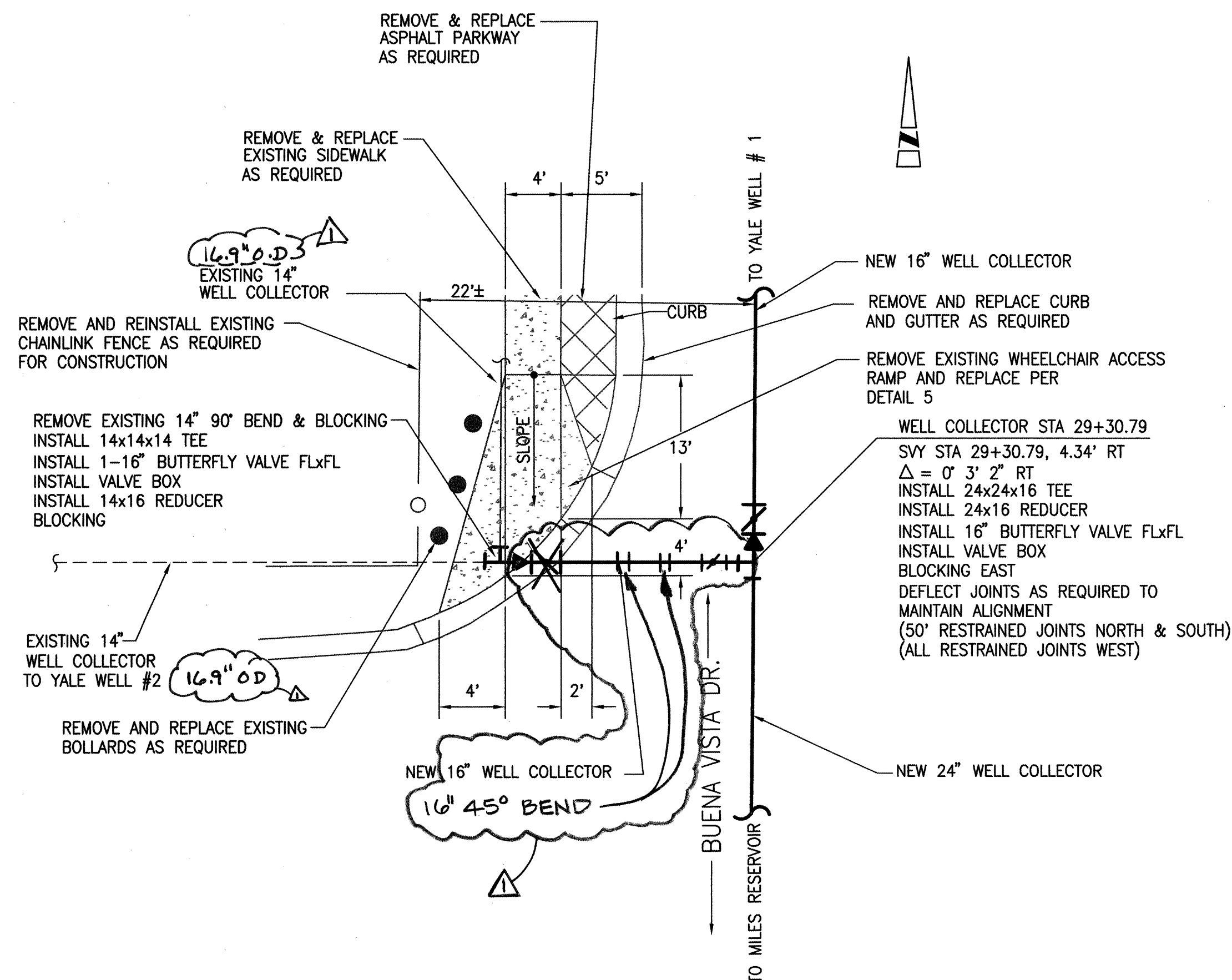
1 SPEED HUMP DETAIL  
N.T.S.



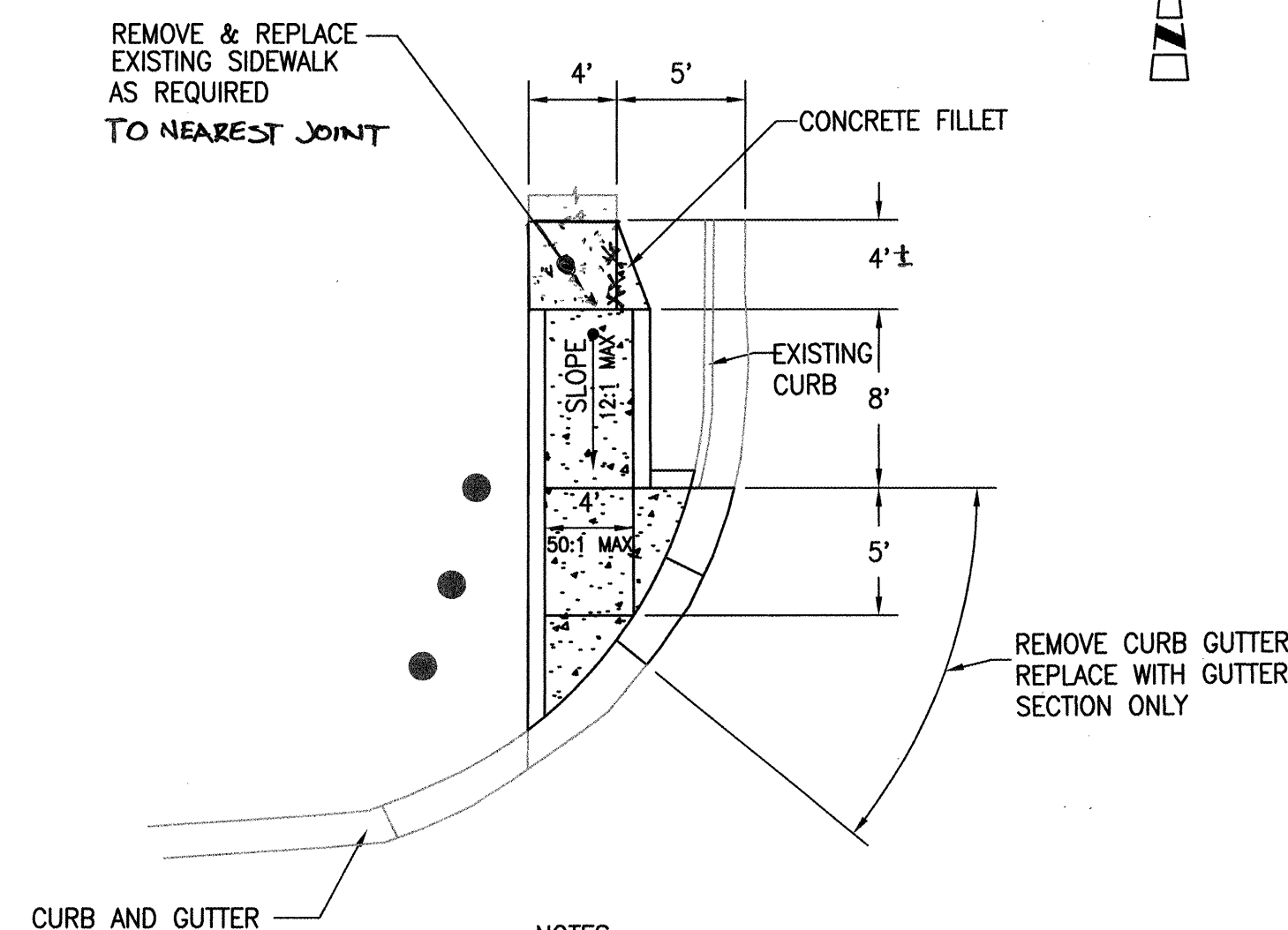
2 COAL VALVE DETAIL  
N.T.S.



3 YALE WELL # 1 DETAIL  
N.T.S.  
WELL COLLECTOR STA. 0+00



4 YALE WELL # 2 DETAIL  
N.T.S.  
WELL COLLECTOR STA. 29+30.79



5 WHEELCHAIR RAMP REPLACEMENT  
N.T.S.  
WELL COLLECTOR STA. 29+30.79

I, THE UNDERSIGNED, A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE INDICATED RECORD DRAWINGS ARE BASED UPON INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR IN THE FORM OF RED-LINED CONSTRUCTION DRAWING MARKUPS TO THE ORIGINAL DESIGN DRAWINGS. THE TRANSFER OF INFORMATION HEREIN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. HOWEVER, I HAVE NOT VERIFIED THE ACCURACY AND/OR COMPLETENESS OF THE INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR AND SHALL NOT BE RESPONSIBLE FOR ERRORS OR OMISSIONS THAT MAY BE INCORPORATED AS A RESULT OF ERRONEOUS INFORMATION PROVIDED BY OTHERS. ALL INFORMATION INCLUDING VERTICAL AND HORIZONTAL DIMENSIONS SHOULD BE FIELD VERIFIED PRIOR TO USE ON FUTURE PROJECTS.

*Signature* 5/2/06

**BOYLE ENGINEERING CORPORATION**  
consulting engineers  
6501 Americas Parkway N.E. Suite 800  
Albuquerque, NM 87110 (505) 883-7700

**CITY OF ALBUQUERQUE**  
WATER UTILITY DEPARTMENT

TITLE: **YALE COLLECTOR REALIGNMENT**  
**MISCELLANEOUS AND PIPING DETAILS**

Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
APPROVED	MAY 24 2005		
DESIGN REVIEW COMMITTEE	CITY ENGINEER		

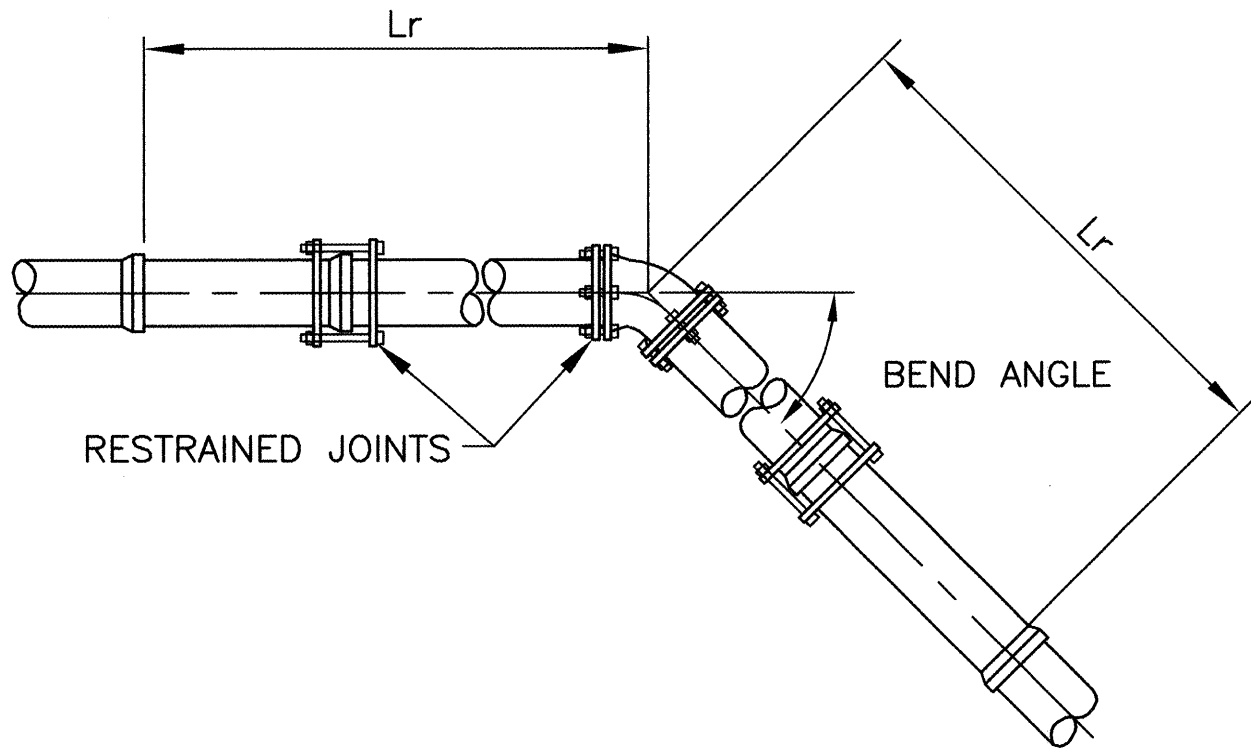
City Project No.	Zone Map No.	Sheet	Of
733991	N/A	13	15

RESTRAINED JOINTS FOR PVC WATER LINES

1. HORIZONTAL BEND

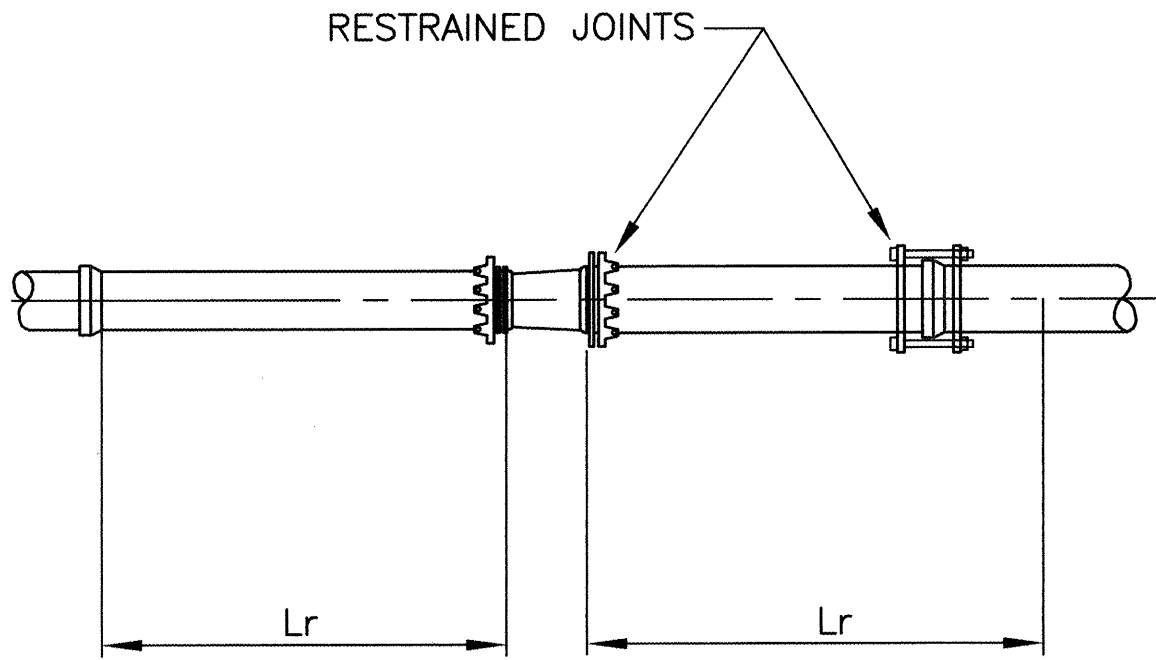
BEND ANGLE	PIPE SIZE				
	8"	10"	12"	16"	24"
90°	26'	31'	36'	49'	67'
45°	11'	13'	15'	21'	28'
22 1/2°	5'	6'	7'	10'	14'
11 1/4°	3'	3'	4'	5'	7'

Lr = LENGTH OF PIPE TO BE RESTRAINED



4. REDUCER

SMALL END	Lr			
	12"	16"	20"	24"
8"	81'			
10"	36'			
12"		66'	117'	160'
14"		35'	93'	141'
16"			66'	118'

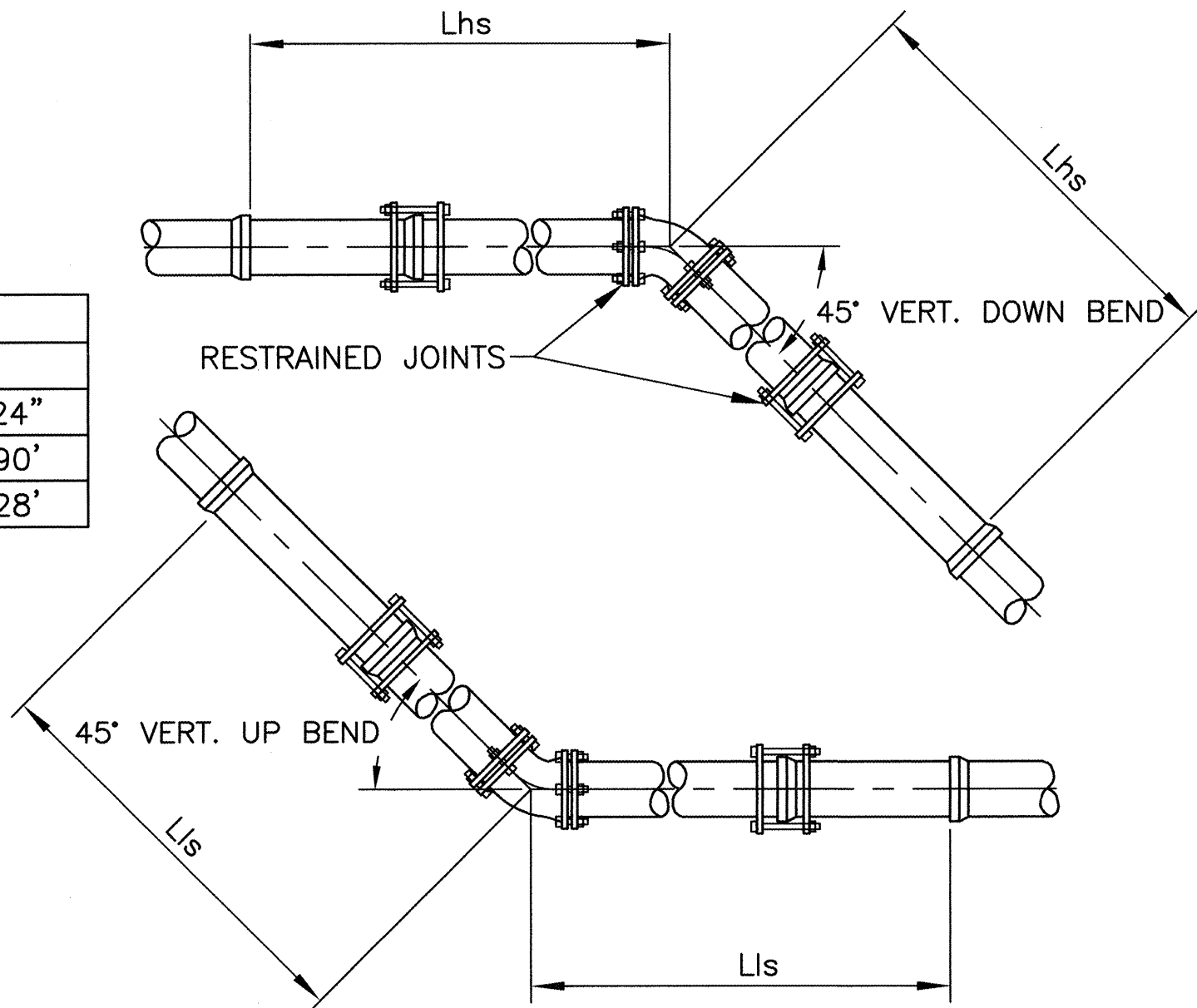


2. VERTICAL OFFSET (45°)

	PIPE SIZE				
	8"	10"	12"	16"	24"
Lhs	30'	36'	42'	64'	90'
Lls	8'	10'	12'	21'	28'

Lhs = LENGTH OF PIPE TO BE RESTRAINED ON VERTICAL DOWN BENDS

Lls = LENGTH OF PIPE TO BE RESTRAINED ON VERTICAL UP BENDS

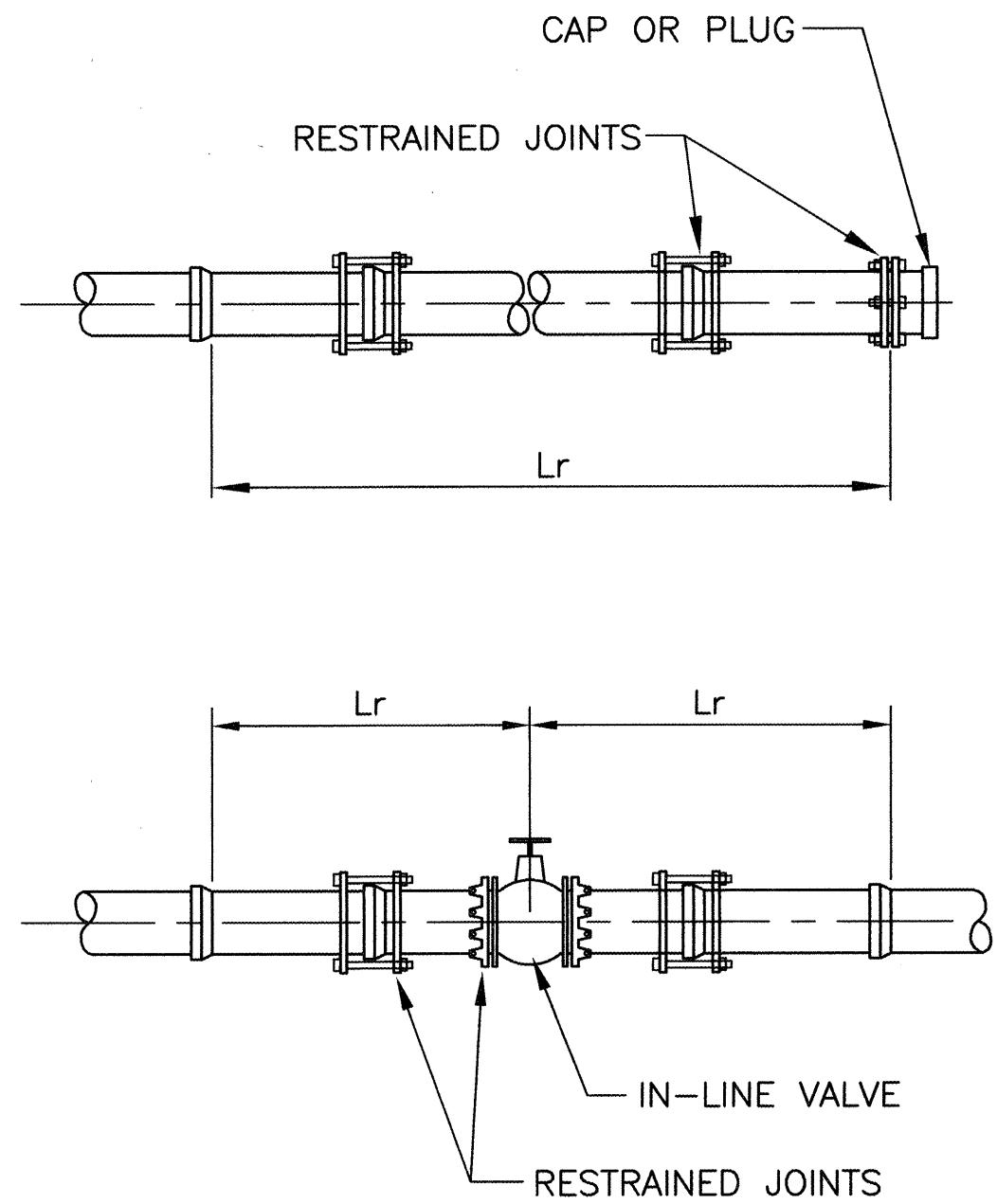


5. IN-LINE VALVES & DEAD ENDS

Lr	PIPE SIZE				
	10"	12"	14"	16"	24"
Lr	86'	102'	138'	154'	218'

NOTE: VALVES SHALL BE RESTRAINED ON BOTH SIDES.

Lr = LENGTH OF PIPE TO BE RESTRAINED



WATER METER LOCATION DIAGRAM

FIRST DIGIT: TELLS YOU THE GENERAL LOCATION OF THE METER AS YOU FACE THE HOUSE FROM THE STREET.

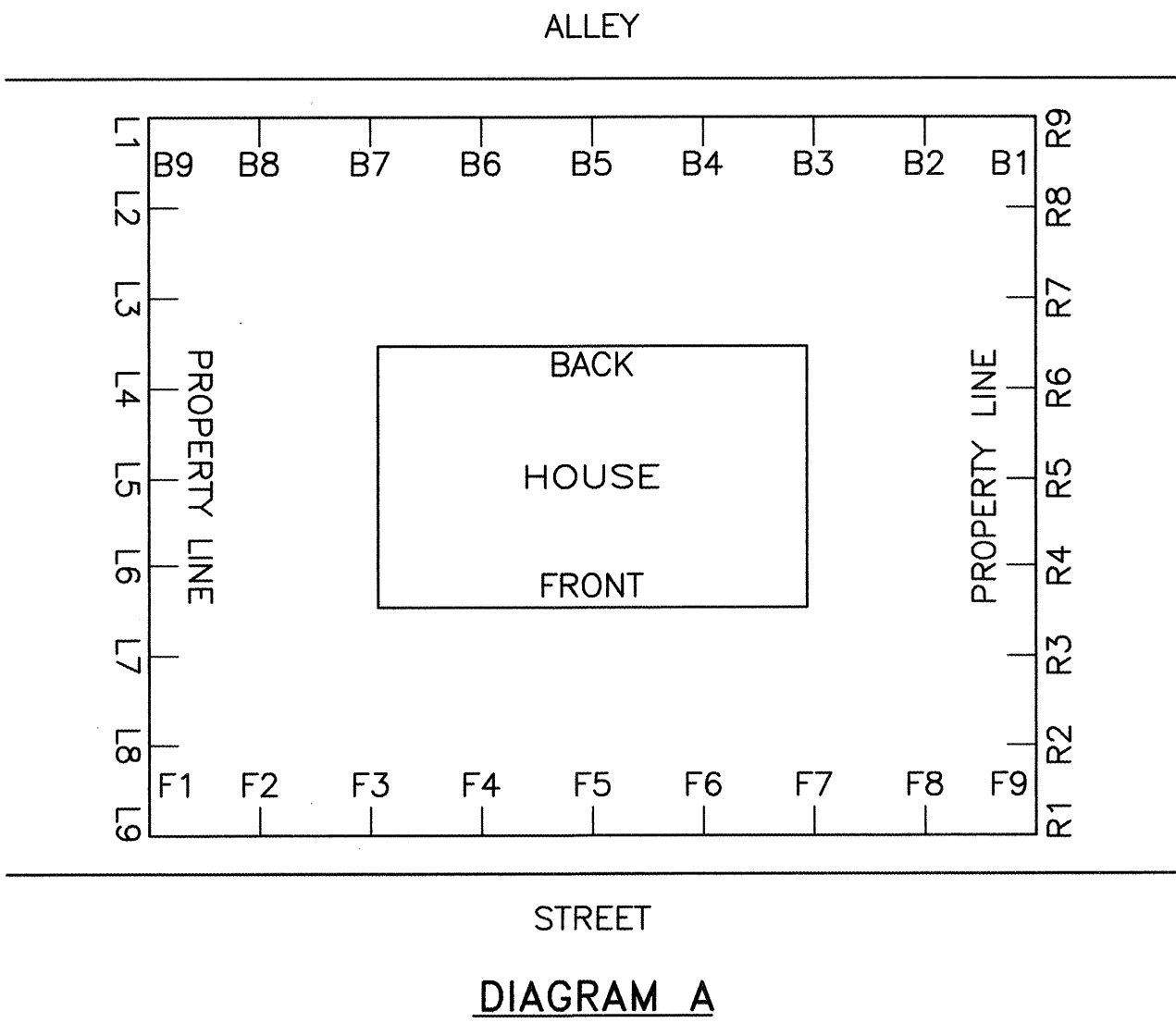
F (FRONT), B (BACK OR ALLEY),  
L (LEFT SIDE OF PROPERTY),  
R (RIGHT SIDE OF PROPERTY)

SECOND DIGIT: TELLS YOU THE SPECIFIC LOCATION OF THE METER.

CODE 1 THRU 9, REFER TO DIAGRAM A  
D REFERS TO A SHARED METER BOX

THIRD DIGIT: TELLS YOU WHICH METER YOU ARE LOOKING FOR IF THERE IS MORE THAN ONE:

E - EAST W - WEST N - NORTH  
S - SOUTH M - MIDDLE METER



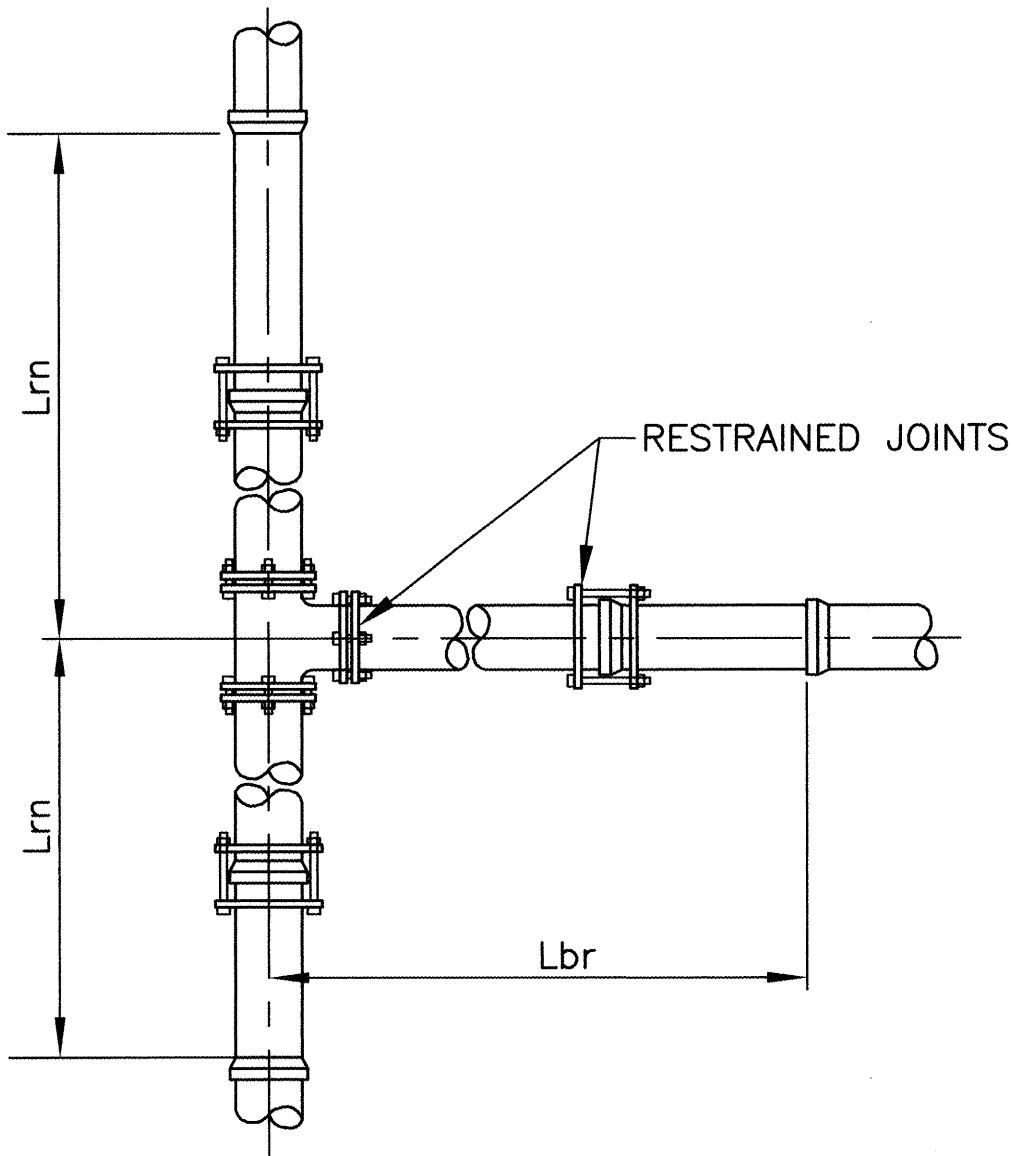
3. TEE

BRANCH SIZE	Lbr (Lrn=0.5') / Lbr (Lrn=10')				
	8"	10"	12"	16"	24"
10"		84'/33'	83'/21'		
12"			99'/47'	145'/60'	212'/157'
14"				143'/42'	210'/146'
16"				140'/24'	209'/133'
24"					204'/82'

NOTE: IF Lrn > 20', THEN ALL TEE SIZES NEED TO BE RESTRAINED AT THE FITTING ONLY (FO).

Lrn = SHORTEST LENGTH OF PIPE RESTRAINED ON EITHER SIDE OF THE TEE

Lbr = LENGTH OF PIPE TO BE RESTRAINED ON THE BRANCH



NOTES:

- ALL JOINTS AND FITTINGS WITHIN THE SPECIFIED RESTRAINED LENGTH, MUST BE RESTRAINED.
- ALL LENGTHS ARE IN FEET.
- ALL RESTRAINED JOINT LENGTHS ARE BASED ON THE CONDITIONS NOTED UNDER "BASIS OF DESIGN". ANY CHANGES TO THESE CONDITIONS MUST BE NOTED AND LENGTHS RECALCULATED AND SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.
- THE CONTRACTOR SHALL NOTE THE LOCATION, TYPE AND EXTENT OF ALL RESTRAINED JOINTS INSTALLED ON THIS PROJECT AS PART OF THE RECORD DRAWINGS.
- THE CONTRACTOR SHALL SUBMIT THRUST RESTRAINT DESIGN FOR PIPE THAT IS NOT THE SIZE OR MATERIAL TYPE SHOWN IN THESE DETAILS.

I, THE UNDERSIGNED, A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE INDICATED RESTRAINED JOINTS ARE BASED UPON INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR IN THE FORM OF RED-LINED CONSTRUCTION DRAWINGS. THE TRANSFER OF INFORMATION HEREIN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. HOWEVER, I HAVE NOT VERIFIED THE ACCURACY AND/OR COMPLETENESS OF THE INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR AND SHALL NOT BE RESPONSIBLE FOR ERRORS OR OMISSIONS THAT MAY BE INCORPORATED AS A RESULT OF ERRONEOUS INFORMATION PROVIDED BY OTHERS. ALL INFORMATION, INCLUDING VERTICAL AND HORIZONTAL DIMENSIONS SHOULD BE FIELD VERIFIED PRIOR TO USE ON FUTURE PROJECTS.

BASIS OF DESIGN

- PIPE MATERIAL = PVC
- TEST PRESSURE = 150 PSI
- SOIL TYPE = "SM" (ASTM STANDARD D24870)
- TRENCH TYPE & BEDDING = TYPE 4, (ANSI/AWWA C150/A21.50)
- PIPE COVER = 3' MINIMUM
- FACTOR OF SAFETY = 1.5

**BOYLE ENGINEERING CORPORATION**  
consulting engineers  
6501 Americas Parkway N.E. Suite 800  
Albuquerque, NM 87110 (505) 883-7700



**CITY OF ALBUQUERQUE**  
WATER UTILITY DEPARTMENT

TITLE: **YALE COLLECTOR REALIGNMENT  
RESTRAINED JOINT DETAILS  
WATER METER LOCATION DIAGRAM**

Design Review Committee  
APPROVED  
REVIEW COMMITTEE

City Engineer Approval  
APPROVED  
MAY 24 2005  
CITY ENGINEER

City Project No.

733991

Zone Map No.

N/A

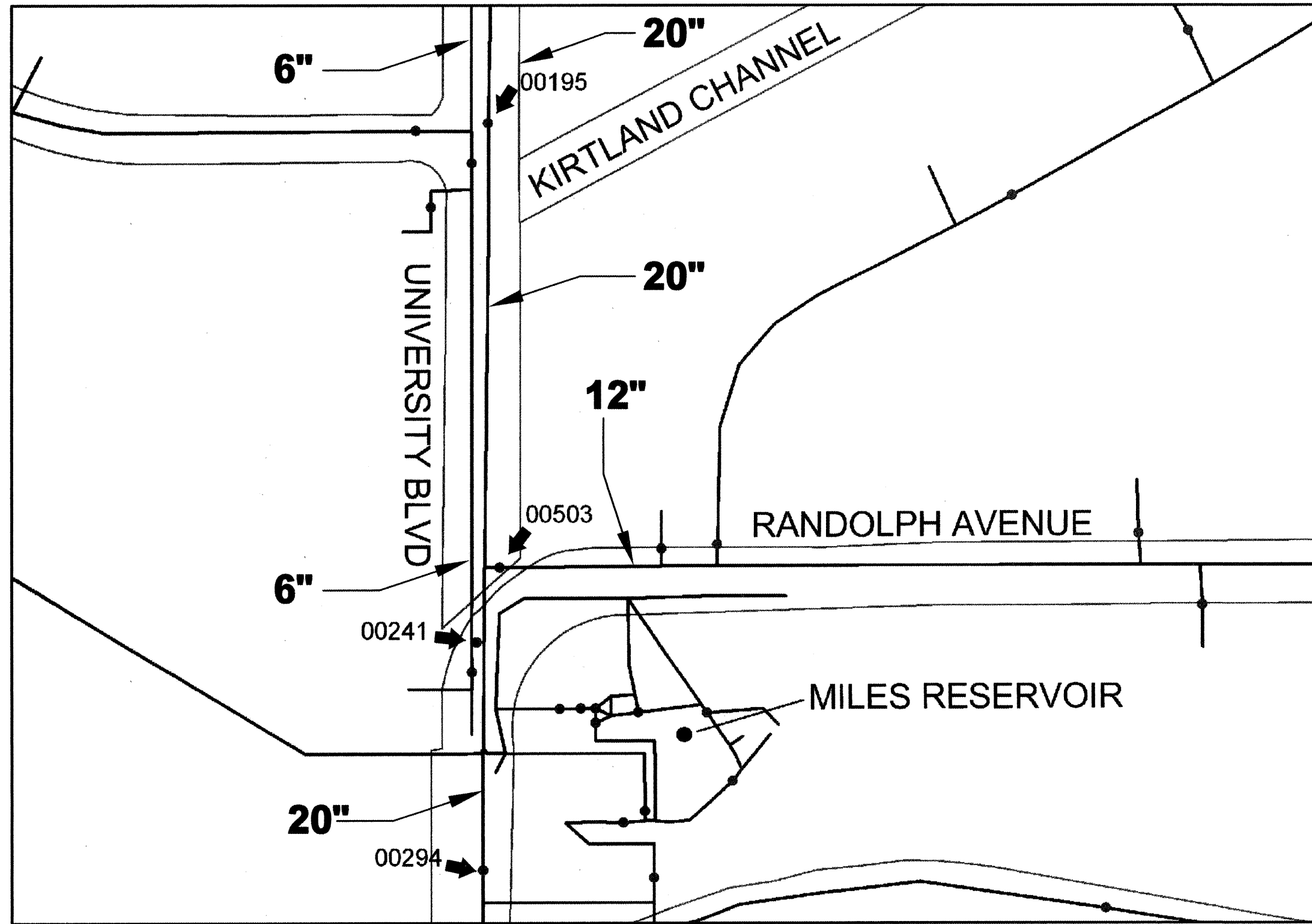
Sheet

Of

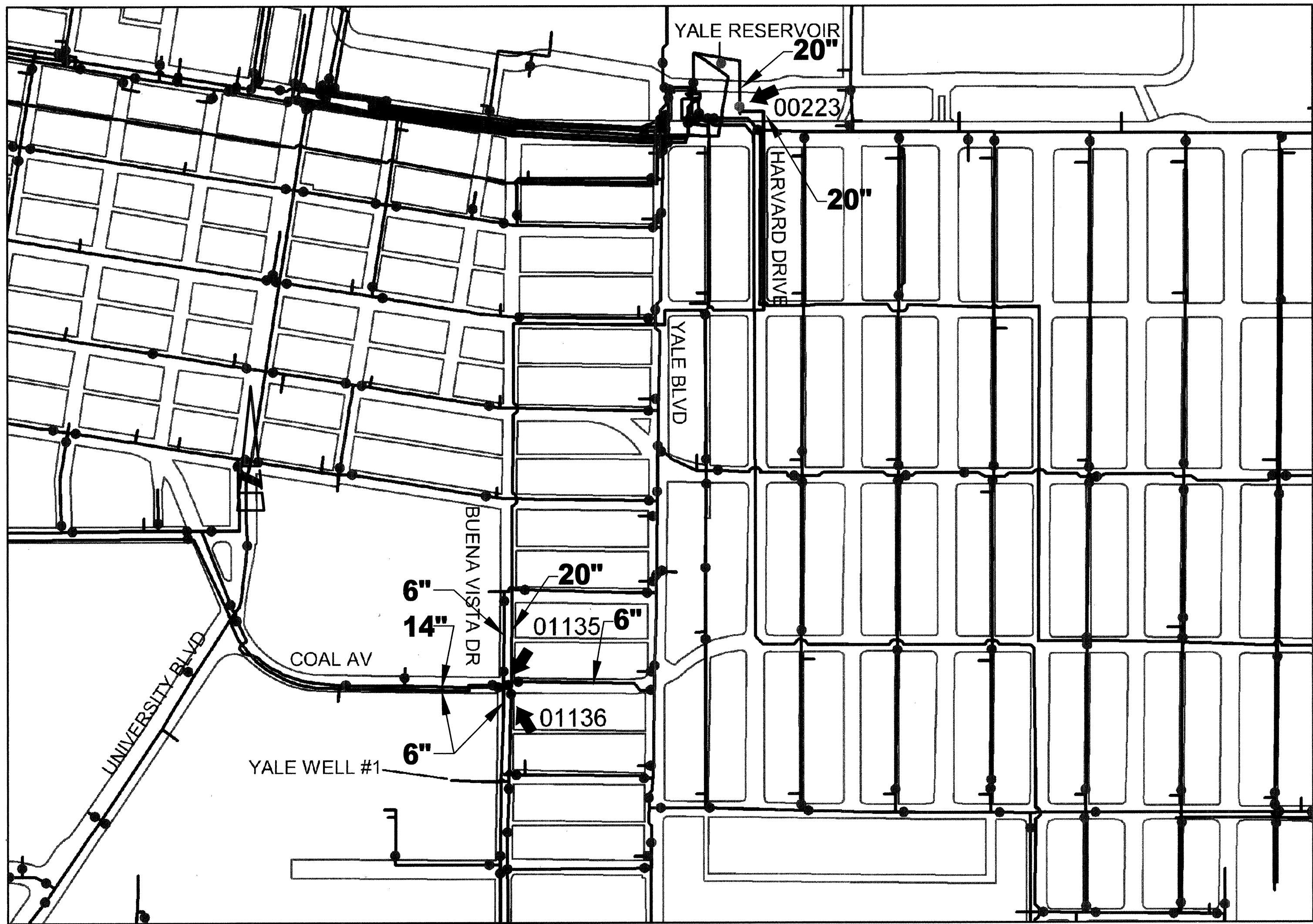
14

15

DWG: X:\A01\161\001\Drawings\000001\000001.dwg USER: dclark DATE: May 02, 2005 4:23pm PLOT: May 02, 2005 4:23pm



UNIVERSITY BLVD. AND RANDOLPH AVENUE  
SEE SHEET 12  
ZONE ATLAS M-15



COAL AVENUE AND BUENA VISTA DRIVE  
SEE SHEETS 4 AND 13  
ZONE ATLAS K-15 AND K-16

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TIMING AND COORDINATION OF WATER SHUTOFF. AT LEAST (7) WORKING DAYS PRIOR TO CONSTRUCTION, CONTRACTOR SHALL CONTACT THE WATER SYSTEMS DIVISION, 857-8200, TO INITIATE IMPLEMENTATION OF THE NON-PRESSURIZED CONNECTION PLAN.

I, THE UNDERSIGNED, A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT THE INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR IN THE FORM OF RED-LINED CONSTRUCTION DRAWINGS TO THE ORIGINAL DESIGN DRAWINGS, THE TRANSFER OF INFORMATION HEREIN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. HOWEVER, I HAVE NOT VERIFIED THE ACCURACY AND/OR COMPLETENESS OF THE INFORMATION PROVIDED BY THE CONSTRUCTION CONTRACTOR AND SHALL NOT BE RESPONSIBLE FOR ERRORS OR OMISSIONS THAT MAY BE INCORPORATED AS A RESULT OF ERRONEOUS INFORMATION PROVIDED BY OTHERS. ALL INFORMATION, INCLUDING VERTICAL AND HORIZONTAL DIMENSIONS SHOULD BE FIELD CHECKED PRIOR TO USE ON FUTURE PROJECTS.

*Shirley A. B/2/04*

#### LEGEND

- ↑ WATER VALVE TO BE SHUT OFF DURING INSTALLATION/CONNECTION OF NEW WATER LINE.

**BOYLE ENGINEERING CORPORATION**  
consulting engineers  
6501 Americas Parkway N.E. Suite 800  
Albuquerque, NM 87110  
(505) 883-7700



**CITY OF ALBUQUERQUE**  
WATER UTILITY DEPARTMENT

TITLE: **YALE COLLECTOR REALIGNMENT  
WATER VALVE SHUT-OFF PLAN**

Design Review Committee  
APPROVED  
MAY 24 2005  
CITY ENGINEER

City Engineer Approval  
APPROVED  
MAY 24 2005  
CITY ENGINEER

Lost Design Update

City Project No. **733991** Zone Map No. **M-15** Sheet **15** of **15**

AL-A01-161-02