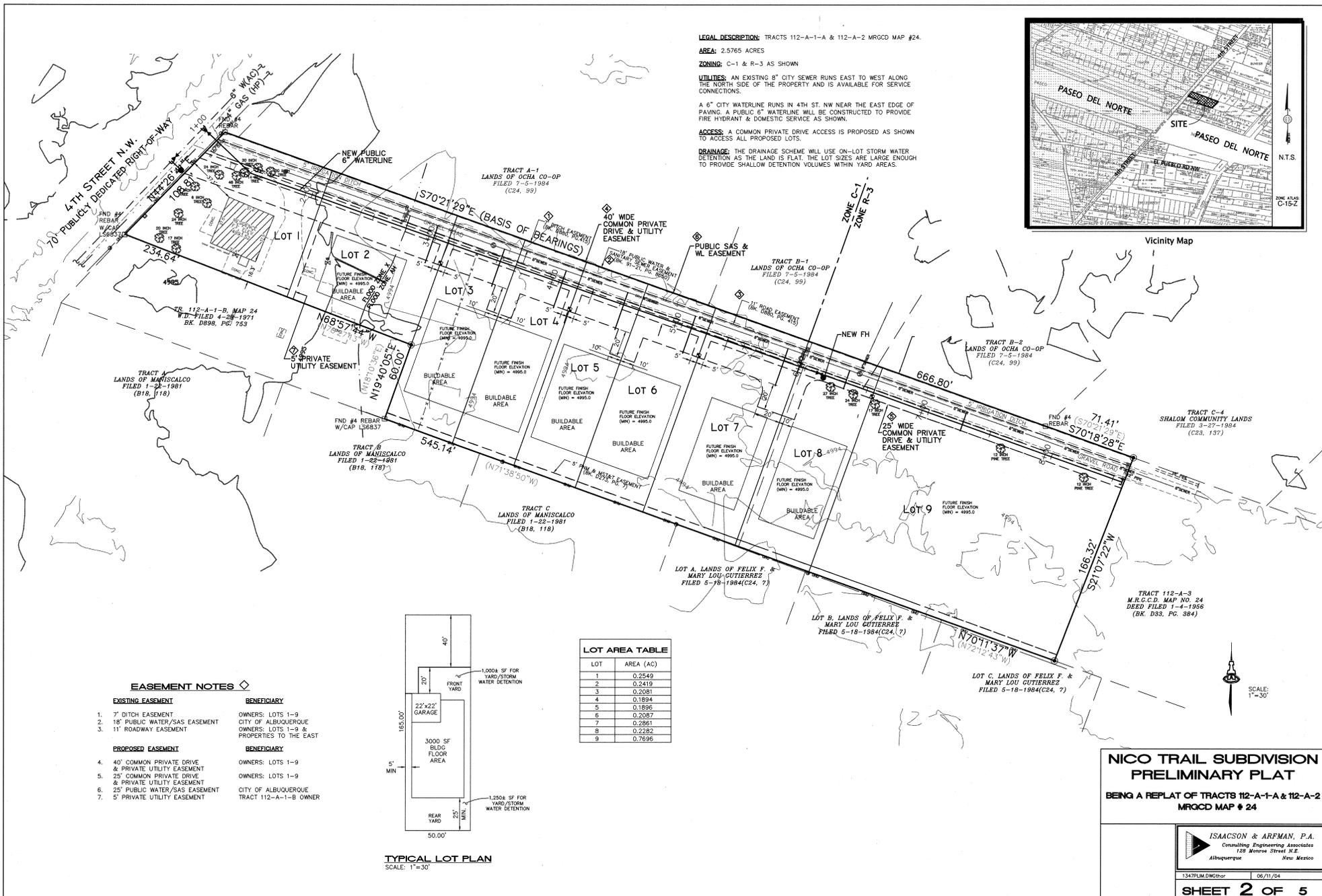
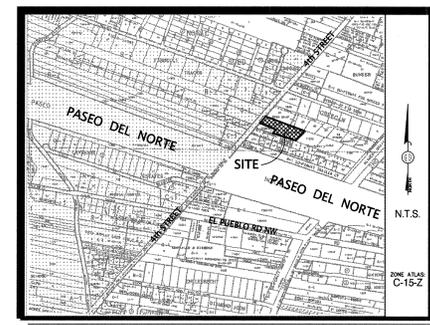




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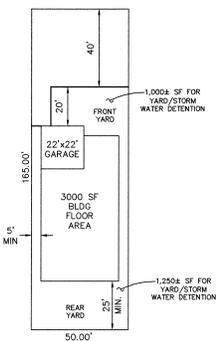


**LEGAL DESCRIPTION:** TRACTS 112-A-1-A & 112-A-2 MRGCD MAP # 24.  
**AREA:** 2.5765 ACRES  
**ZONING:** C-1 & R-3 AS SHOWN  
**UTILITIES:** AN EXISTING 8" CITY SEWER RUNS EAST TO WEST ALONG THE NORTH SIDE OF THE PROPERTY AND IS AVAILABLE FOR SERVICE CONNECTIONS.  
 A 6" CITY WATERLINE RUNS IN 4TH ST. NW NEAR THE EAST EDGE OF PAVING. A PUBLIC 6" WATERLINE WILL BE CONSTRUCTED TO PROVIDE FIRE HYDRANT & DOMESTIC SERVICE AS SHOWN.  
**ACCESS:** A COMMON PRIVATE DRIVE ACCESS IS PROPOSED AS SHOWN TO ACCESS ALL PROPOSED LOTS.  
**DRAINAGE:** THE DRAINAGE SCHEME WILL USE ON-LOT STORM WATER DETENTION AS THE LAND IS FLAT. THE LOT SIZES ARE LARGE ENOUGH TO PROVIDE SHALLOW DETENTION VOLUMES WITHIN YARD AREAS.



**EASEMENT NOTES**

- |  |   |
|--|---|
| <b>EXISTING EASEMENT</b>                               | <b>BENEFICIARY</b>                        |
| 1. 7' DITCH EASEMENT                                   | OWNERS: LOTS 1-9                          |
| 2. 18" PUBLIC WATER/SAS EASEMENT                       | CITY OF ALBUQUERQUE                       |
| 3. 11" ROADWAY EASEMENT                                | OWNERS: LOTS 1-9 & PROPERTIES TO THE EAST |
| <b>PROPOSED EASEMENT</b>                               | <b>BENEFICIARY</b>                        |
| 4. 40' COMMON PRIVATE DRIVE & PRIVATE UTILITY EASEMENT | OWNERS: LOTS 1-9                          |
| 5. 25' COMMON PRIVATE DRIVE & PRIVATE UTILITY EASEMENT | OWNERS: LOTS 1-9                          |
| 6. 25' PUBLIC WATER/SAS EASEMENT                       | CITY OF ALBUQUERQUE                       |
| 7. 5' PRIVATE UTILITY EASEMENT                         | TRACT 112-A-1-B OWNER                     |



**LOT AREA TABLE**

LOT	AREA (AC)
1	0.2549
2	0.2419
3	0.2081
4	0.1894
5	0.1896
6	0.2087
7	0.2861
8	0.2282
9	0.7696

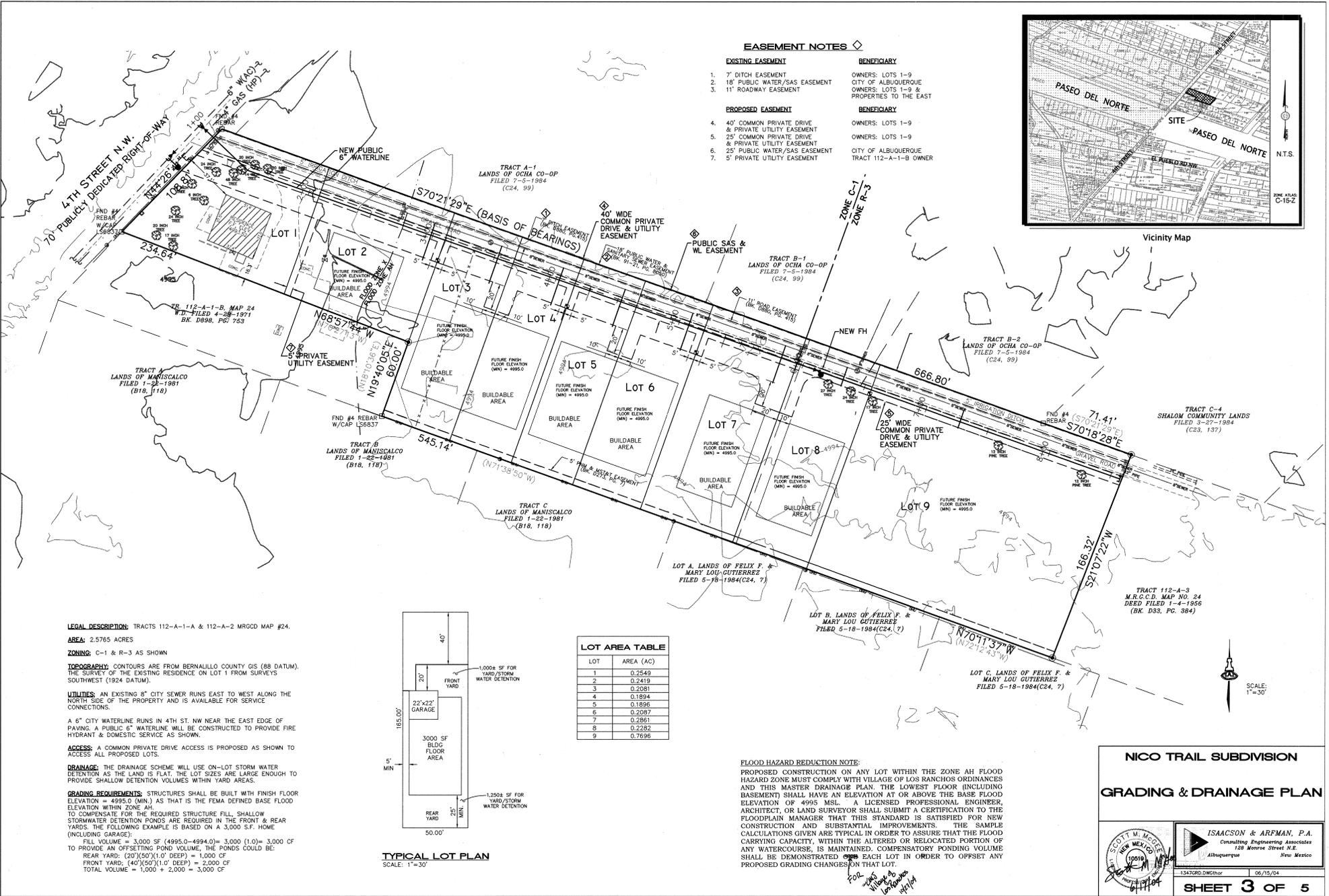
**NICO TRAIL SUBDIVISION  
PRELIMINARY PLAT**  
 BEING A REPLAT OF TRACTS 112-A-1-A & 112-A-2  
 MRGCD MAP # 24

**ISAACSON & ARFMAN, P.A.**  
 Consulting Engineering Associates  
 120 Monroe Street N.E.  
 Albuquerque, New Mexico

1347PLM.DWG:hor 06/11/04  
**SHEET 2 OF 5**

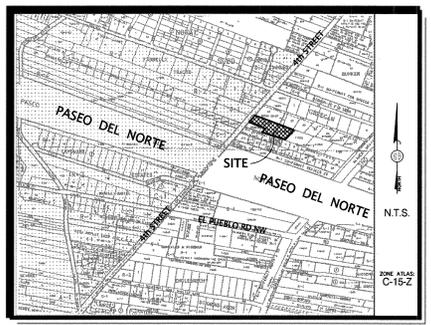
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MESARHEPHO

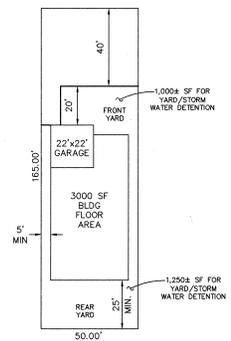


**EASEMENT NOTES**

- |  |   |
|--|---|
| <b>EXISTING EASEMENT</b>                               | <b>BENEFICIARY</b>                        |
| 1. 7' DITCH EASEMENT                                   | OWNERS: LOTS 1-9                          |
| 2. 18' PUBLIC WATER/SAS EASEMENT                       | CITY OF ALBUQUERQUE                       |
| 3. 11' ROADWAY EASEMENT                                | OWNERS: LOTS 1-9 & PROPERTIES TO THE EAST |
| <b>PROPOSED EASEMENT</b>                               | <b>BENEFICIARY</b>                        |
| 4. 40' COMMON PRIVATE DRIVE & PRIVATE UTILITY EASEMENT | OWNERS: LOTS 1-9                          |
| 5. 25' COMMON PRIVATE DRIVE & PRIVATE UTILITY EASEMENT | OWNERS: LOTS 1-9                          |
| 6. 25' PUBLIC WATER/SAS EASEMENT                       | CITY OF ALBUQUERQUE                       |
| 7. 5' PRIVATE UTILITY EASEMENT                         | TRACT 112-A-1-B OWNER                     |



**LEGAL DESCRIPTION:** TRACTS 112-A-1-A & 112-A-2 MROCD MAP #24.  
**AREA:** 2.5765 ACRES  
**ZONING:** C-1 & R-3 AS SHOWN  
**TOPOGRAPHY:** CONTOURS ARE FROM BERNALILLO COUNTY GIS (88 DATUM). THE SURVEY OF THE EXISTING RESIDENCE ON LOT 1 FROM SURVEYS SOUTHWEST (1924 DATUM).  
**UTILITIES:** AN EXISTING 8" CITY SEWER RUNS EAST TO WEST ALONG THE NORTH SIDE OF THE PROPERTY AND IS AVAILABLE FOR SERVICE CONNECTIONS.  
 A 6" CITY WATERLINE RUNS IN 4TH ST. NW NEAR THE EAST EDGE OF PAVING. A PUBLIC 5" WATERLINE WILL BE CONSTRUCTED TO PROVIDE FIRE HYDRANT & DOMESTIC SERVICES AS SHOWN.  
**ACCESS:** A COMMON PRIVATE DRIVE ACCESS IS PROPOSED AS SHOWN TO ACCESS ALL PROPOSED LOTS.  
**DRAINAGE:** THE DRAINAGE SCHEME WILL USE ON-LOT STORM WATER DETENTION AS THE LAND IS FLAT. THE LOT SIZES ARE LARGE ENOUGH TO PROVIDE SHALLOW DETENTION VOLUMES WITHIN YARD AREAS.  
**GRADING REQUIREMENTS:** STRUCTURES SHALL BE BUILT WITH FINISH FLOOR ELEVATION = 4995.0 (MIN.) AS THAT IS THE FEMA DEFINED BASE FLOOD ELEVATION WITHIN ZONE AH.  
 TO COMPENSATE FOR THE REQUIRED STRUCTURE FILL, SHALLOW STORMWATER DETENTION PONDS ARE REQUIRED IN THE FRONT & REAR YARDS. THE FOLLOWING EXAMPLE IS BASED ON A 3,000 S.F. HOME (INCLUDING GARAGE).  
 FILL VOLUME = 3,000 SF (4995.0-4994.0) = 3,000 (1.0) = 3,000 CF TO PROVIDE AN OFFSETTING POND VOLUME. THE PONDS COULD BE:  
 REAR YARD: (50'x50'x1.0' DEEP) = 1,000 CF  
 FRONT YARD: (40'x50'x1.0' DEEP) = 2,000 CF  
 TOTAL VOLUME = 1,000 + 2,000 = 3,000 CF



TYPICAL LOT PLAN  
SCALE: 1"=30'

LOT	AREA (AC)
1	0.2549
2	0.2419
3	0.2081
4	0.1894
5	0.1896
6	0.2087
7	0.2861
8	0.2282
9	0.7696

**FLOOD HAZARD REDUCTION NOTE:**  
 PROPOSED CONSTRUCTION ON ANY LOT WITHIN THE ZONE AH FLOOD HAZARD ZONE MUST COMPLY WITH VILLAGE OF LOS RANCHOS ORDINANCES AND THIS MASTER DRAINAGE PLAN. THE LOWEST FLOOR (INCLUDING BASEMENT) SHALL HAVE AN ELEVATION AT OR ABOVE THE BASE FLOOD ELEVATION OR 4995 MSL. A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, OR LAND SURVEYOR SHALL SUBMIT A CERTIFICATION TO THE FLOODPLAIN MANAGER THAT THIS STANDARD IS SATISFIED FOR NEW CONSTRUCTION AND SUBSTANTIAL IMPROVEMENTS. THE SAMPLE CALCULATIONS GIVEN ARE TYPICAL IN ORDER TO ASSURE THAT THE FLOOD CARRYING CAPACITY, WITHIN THE ALTERED OR RELOCATED PORTION OF ANY WATERCOURSE, IS MAINTAINED. COMPENSATORY PONDING VOLUME SHALL BE DEMONSTRATED ON EACH LOT IN ORDER TO OFFSET ANY PROPOSED GRADING CHANGES WITH THAT LOT.

FOR  
WILLS  
W/10/10  
L/10/10  
10/10/10

**NICO TRAIL SUBDIVISION**

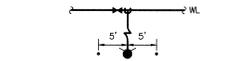
**GRADING & DRAINAGE PLAN**

**ISAACSON & ARFMAN, P.A.**  
 Consulting Engineering Associates  
 120 Monroe Street N.E.  
 Albuquerque, New Mexico

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**SHEET 3 OF 5**

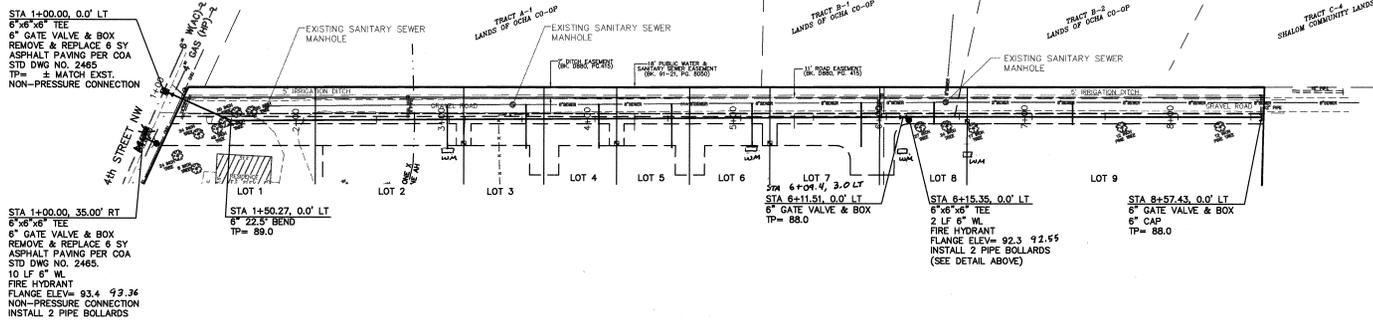
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MESA REPRO



**NOTE:** BOLLARDS TO BE 4" DIA. BY 5' LONG STEEL PIPE (2" BURIED IN CONCRETE) PAINTED SAFETY YELLOW.

**HYDRANT BOLLARD DETAIL**  
NO SCALE



STA 1+00.00, 0.0' LT  
6" x 6" TEE  
6" GATE VALVE & BOX  
REMOVE & REPLACE 6 SY ASPHALT PAVING PER COA STD DWG NO. 2465  
TP= 8 MATON EXST. NON-PRESSURE CONNECTION

STA 1+00.00, 35.00' RT  
6" x 6" TEE  
6" GATE VALVE & BOX  
REMOVE & REPLACE 6 SY ASPHALT PAVING PER COA STD DWG NO. 2465.  
10 LF 6" WL  
FIRE HYDRANT  
FLANGE ELEV= 93.4 92.34  
NON-PRESSURE CONNECTION  
INSTALL 2 PIPE BOLLARDS

STA 1+50.27, 0.0' LT  
6" 22.5" BEND  
TP= 88.0

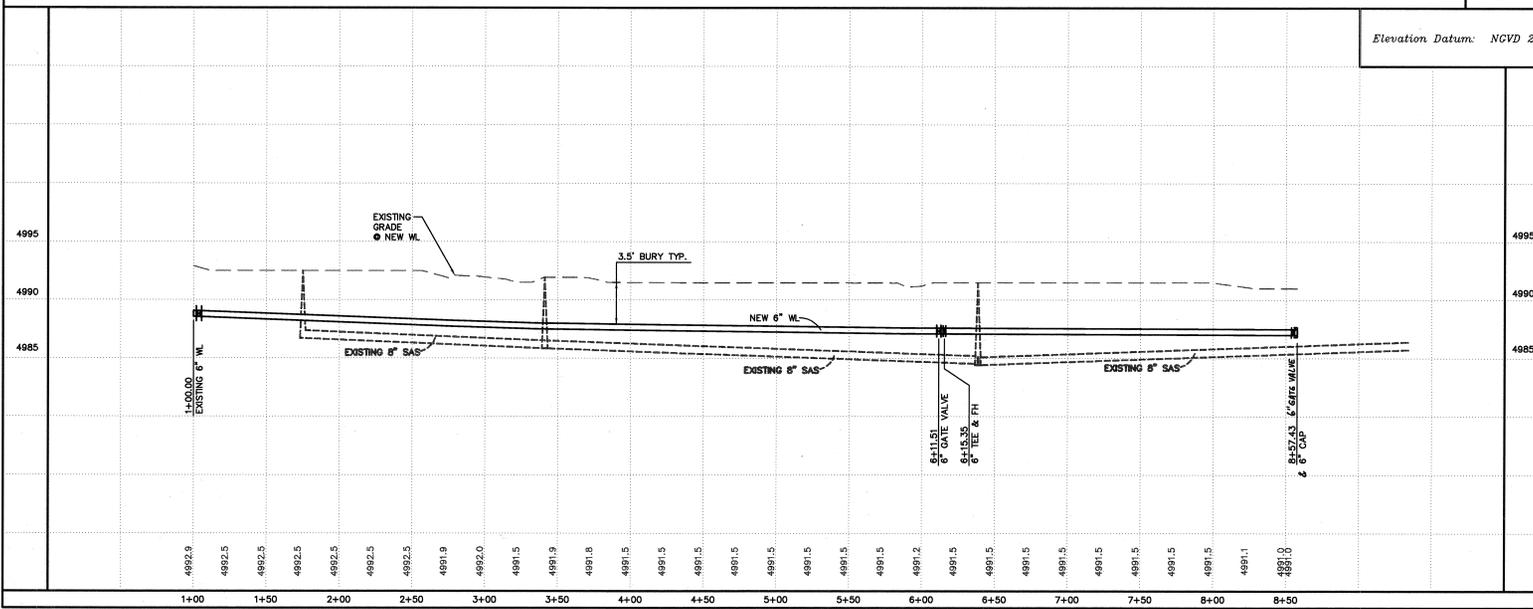
LOT 7  
3/8" 6" x 6" 4' 3.0' LT  
STA 6+11.51, 0.0' LT  
6" GATE VALVE & BOX  
TP= 88.0

STA 6+15.35, 0.0' LT  
6" x 6" TEE  
2 LF 6" WL  
FIRE HYDRANT  
FLANGE ELEV= 92.3 92.55  
INSTALL 2 PIPE BOLLARDS  
(SEE DETAIL ABOVE)

STA 8+57.43, 0.0' LT  
6" GATE VALVE & BOX  
6" CAP  
TP= 88.0

SCALES:  
1"=40' HOR.  
1"=5' VERT.

Elevation Datum: **NCVD 29**



- GENERAL NOTES**
- CONSTRUCT SAS SERVICES WITH ELECTRONIC MARKER DISC PER COA STD DWG #2125.
  - CONSTRUCT ALL SINGLE & DOUBLE WATER SERVICES PER COA STD DWG #2361, #2362, & #2366.
  - ALL WATER SERVICES SHALL HAVE CORPUSCUTTERS THAT INCLUDE A DUAL CHECK VALVE (CITY SPEC. SECTION 802.3.13) AND HEAVYWEIGHT METER BOX COVER & LID PER COA STD DWG #2369.
  - SEE SHEET 5 FOR WATER SHUT-OFF PLAN.
  - SEE SHEET 5 FOR RESTRAINED JOINT LENGTHS FOR WATER LINE FITTINGS.
  - CONSTRUCT 4' BURY FIRE HYDRANT PER COA STD DWG #2340.
  - SEE COA STD DWGS #2326 FOR VALVE BOX, #2328 FOR VALVE RING & COVER DETAIL, AND #2461 FOR VALVE CONCRETE COLLAR.

**WL SERVICE TABLE**

LOT NO.	STA.	TYPE	LENGTH
1	(EXISTING- 4th ST)	---	---
2	3+08.58	DS	19'
3	3+08.58	DS	19'
4	4+12.52	DS	19'
5	4+12.52	DS	19'
6	5+17.52	DS	19'
7	5+17.52	DS	19'
8	6+53.10	DS	4'
9	6+53.10	DS	4'

**SAS SERVICE TABLE**

LOT NO.	STA.	LENGTH	INV @ END
1	(EXISTING)	---	---
2	2+38.65	30'	87.5
3	3+52.65	30'	87.4
4	4+02.65	30'	87.2
5	4+52.65	30'	87.0
6	5+07.65	30'	87.0
7	5+52.65	30'	87.0
8	6+32.65	15'	87.0
9	7+27.59	15'	87.0

(SEE NOTE 1 ABOVE)

- LEGEND**
- GATE VALVE W/ VALVE BOX
  - FIRE HYDRANT
  - SAS MANHOLE
  - WATER LINE W/ FITTING
  - WATER METER SERVICE



8888  
New Mexico  
Professional Engineer  
Scott M. McGeer  
10/10/05

**ISAACSON & ARFMAN, P.A.**  
Consulting Engineering Associates  
128 Monroe Street N.E.  
Albuquerque, New Mexico  
1347UL1.DWGstor 05.14.04

CITY OF ALBUQUERQUE  
PUBLIC WORKS DEPARTMENT  
ENGINEERING GROUP

TITLE:  
**PROPOSED WATERLINE**  
STA 1+00.00 TO STA 8+57.43  
UTILITY PLAN & PROFILE

Design Review Committee: APPROVED  
City Engineer Approval: APPROVED  
City Project No. 741781  
Zone Map No. C-15-Z

AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
DATE	BY	DATE	BY	DATE	BY	NO.	DATE
07/04	AS BUILT	03/04	AS BUILT	03/04	AS BUILT	10519	04/04
DATE	BY	DATE	BY	DATE	BY	REVISIONS	DATE
07/04	AS BUILT	04/04	AS BUILT	04/04	AS BUILT	DESIGN	04/04
DATE	BY	DATE	BY	DATE	BY	DESIGNED BY	DATE
07/04	AS BUILT	04/04	AS BUILT	04/04	AS BUILT	SAHM	04/04
DATE	BY	DATE	BY	DATE	BY	DRAWN BY	DATE
07/04	AS BUILT	04/04	AS BUILT	04/04	AS BUILT	SAHM	04/04
DATE	BY	DATE	BY	DATE	BY	CHECKED BY	DATE
07/04	AS BUILT	04/04	AS BUILT	04/04	AS BUILT	SAHM	04/04

SCANNED BY  
MESA REPRO

**RESTRAINED JOINT LENGTHS, L<sub>r</sub>, FOR TEES, (FT.)**  
ALL JOINTS AT THE TEE MUST BE RESTRAINED.

SIZE	RUN	BRANCH
12x12x12	15	17
12x12x10	10	18
12x12x8	6	19
12x12x6	3	19
12x12x4	1	19
10x10x10	12	18
10x10x8	8	15
10x10x6	4	16
10x10x4	2	4
8x8x8	9	20
8x8x6	5	17
8x8x4	2	15
6x6x6	6	20
6x6x4	2	20

THIS TABLE IS BASED UPON THE FOLLOWING CRITERIA:

DEPTH OF BURY: 3.0 FT. MINIMUM  
 FACTOR OF SAFETY: 1.25  
 MATERIAL: PVC PIPE  
 SOIL TYPE: GM/SM - SILTY GRAVELS AND SILTY SANDS, GRAVEL-SAND-SILT MIXTURES.  
 TEST PRESSURE: 150 PSI  
 TRENCH TYPE 4: PIPE BEDDED IN SAND, GRAVEL OR CRUSHED STONE TO DEPTH OF 1/8 PIPE DIAMETER, 4 INCH MINIMUM, BACKFILL COMPACTED TO TOP OF PIPE.  
 DIFFERENT CRITERIA, E.G., DUCTILE IRON PIPE, GREATER DEPTH OF BURY, ETC., WILL REQUIRE DIFFERENT RESTRAINED LENGTHS. THESE MUST BE CALCULATED BY A QUALIFIED PROFESSIONAL ENGINEER AND APPROVED BY THE PUBLIC WORKS DEPARTMENT.

**RESTRAINED JOINT LENGTHS FOR WATERLINE FITTINGS**

**RESTRAINED JOINT LENGTHS, L<sub>r</sub>, FOR HORIZONTAL BENDS, VALVES, AND DEAD ENDS, (FT.)**

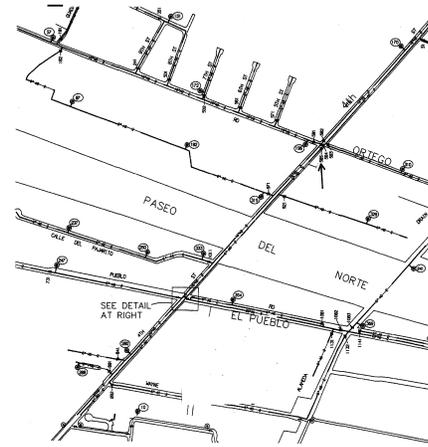
SIZE	HORZ. BENDS				VALVES & DEAD ENDS
	90°	45°	22 1/2°	11 1/4°	
12	30	12	6	3	85
10	26	11	5	3	72
8	22	9	4	2	60
6	17	7	3	2	46
4	12	5	2	2	32

**RESTRAINED JOINT LENGTHS, L<sub>r</sub>, FOR REDUCERS, (FT.)**  
MINIMUM UNRESTRAINED, STRAIGHT-RUN LENGTH: RESTRAIN EITHER LARGE PIPE, OR SMALL PIPE.

SIZE	LARGE SIDE		SMALL SIDE		
	SIZE	SMALL SIDE	SIZE	SMALL SIDE	
12x10	25	30	10x6	44	73
12x8	45	68	10x4	58	141
12x6	62	121	8x6	29	23
12x4	74	213	6x4	43	63
10x8	24	30	6x4	24	35

**NOTES:**

- ALL MECHANICAL JOINTS SHALL BE RESTRAINED AT THE FITTING.
- THE CONTRACTOR SHALL PROVIDE A MINIMUM PIPE LENGTH OF 20 LF FROM ALL MECHANICAL JOINTS. ALL PIPE JOINTS WITHIN 20 LF OF A MECHANICAL JOINT SHALL BE RESTRAINED AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL RESTRAIN ALL PIPE JOINTS IN THE SPECIFIED DISTANCE LISTED IN THE TABLE ON THIS SHEET.
- THE CONTRACTOR SHALL RESTRAIN ALL FIRE HYDRANT JOINTS FROM THE TEE ON THE MAIN TO THE FIRE HYDRANT FLANGE.

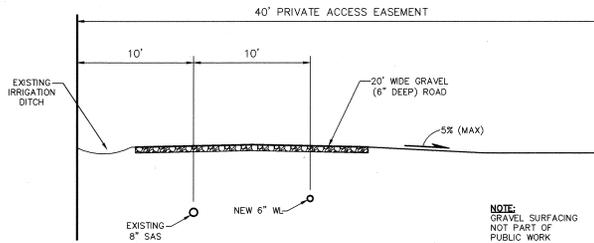


**NOTES:**

- ONLY CITY CREWS MAY OPERATE VALVES.
- CONTRACTOR MUST NOTIFY WATER UTILITIES DIV. (857-8200) AT LEAST 7 WORKING DAYS IN ADVANCE OF CONSTRUCTION.
- CLOSE VALVES No. 585, 1053, 1054, & 1056 TO COMPLETE SHUTOFF.



**WATER SHUTOFF PLAN**



**PRIVATE GRAVEL ROAD SECTION**  
SCALE: 1"=5'

**NOTE:**  
GRAVEL SURFACING NOT PART OF PUBLIC WORK ORDER CONSTRUCTION

AS-BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL		REMARKS		NO. DATE		BY		DATE		DATE	
DATE: 05/14/04 DRAWN BY: SAM CHECKED BY: SAM		4th ST NW OVER PASEO DEL NORTE NW ELEVATION: 5005.861 (1929)		10/04 SURVEY BY: AS BUILT 8/5/04				REMARKS: AS BUILT 11/10/00 to 11/10/05		NO. DATE 10519 04/04		BY DATE 04/04		DATE 04/04		DATE 04/04	
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING GROUP																	
TITLE: NICO TRAIL WATERLINE DETAILS																	
Design Review Committee APPROVE NOV 15 2003				City Engineer Approval APPROVE MAR 31 2005				Last Design Update				No./Rev./In.		No./Rev./In.			
City Project No. 741781 Zone Map No. C-15-Z Sheet 5 of 5																	

**ISAACSON & ARFMAN, P.A.**  
 Consulting Engineering Associates  
 128 Monroe Street N.E.  
 Albuquerque, New Mexico  
 134707L.DW@cor 09.14.04

**SEAL OF THE CITY OF ALBUQUERQUE**  
 8888  
 Scott M. McGehee  
 AS BUILT 11/10/00 to 11/10/05