



H/2/DO11

File

FAX TRANSMISSION
DEPARTMENT OF MUNICIPAL DEVELOPMENT
STORM DRAINAGE DESIGN
ALBUQUERQUE, NEW MEXICO

To: Brad Bingham**From: Chuck Thompson****Fax: (505) 924-3864****Fax: 768-2765****Phone: (505) 924-3986****Phone: 768-2654****Pages: 10 including cover****Date: 1/25/2007****Re: Rio Perles and Serna****CC:**

☐ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

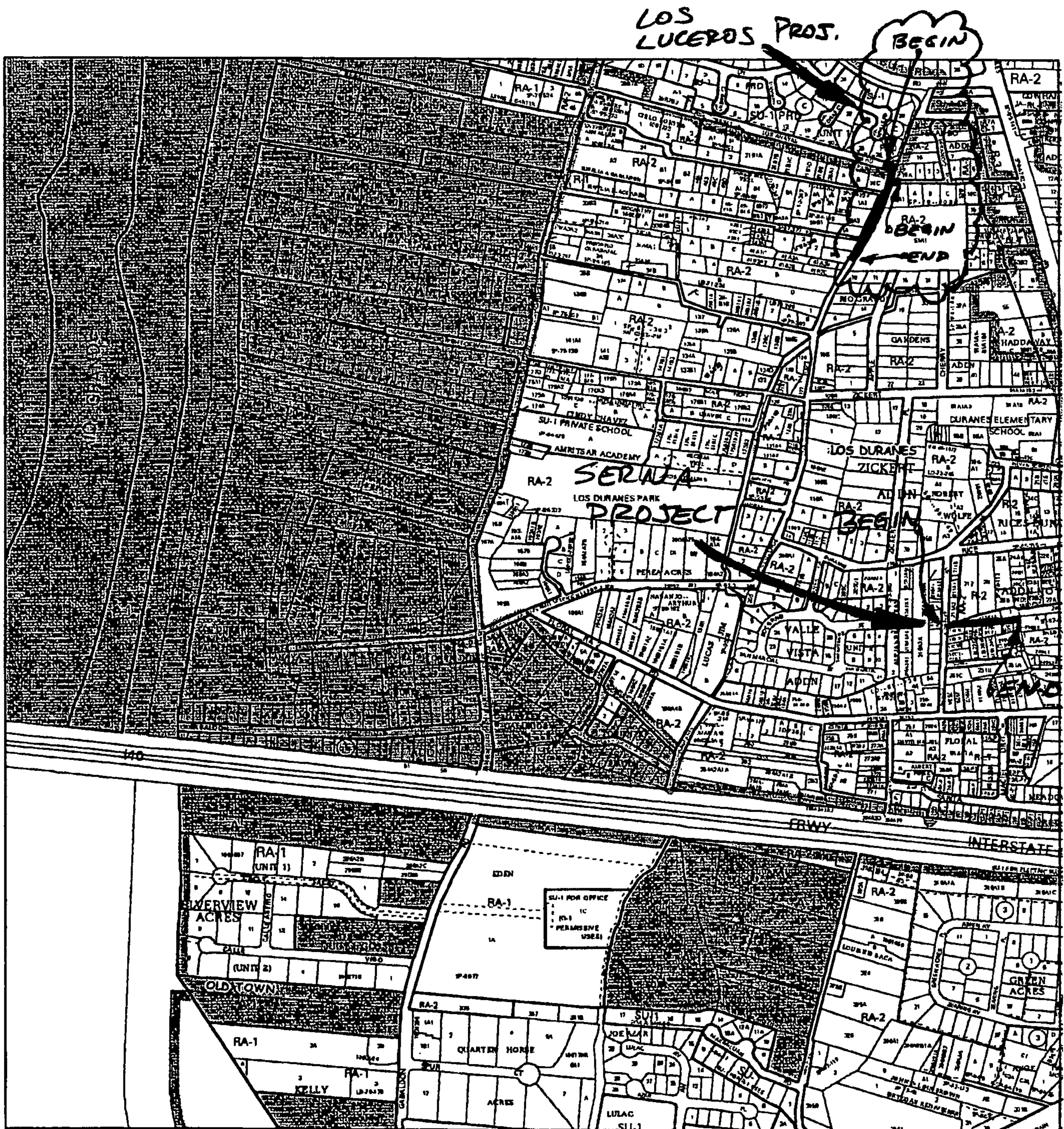
Message:

Enclosed is a portion of the G&D that R. Burton submitted for the Rio Perles subdivision (apparently going through platting now) and plans that show the 18-inch SD that we are building in Serna.

We believe that we can accept the water from the subdivision in our pipe, but we would like for the engineer (Mr. Burton) to confirm. Our proposal could be that a manhole be constructed on our new SD now and that an (18-inch) stub be extended to the location shown on the proposed G&D. We would like for the owner of the subdivision to be financially responsible for his portion of the construction through whatever process is appropriate. TLC is constructing SAS and water improvements now, and will be ready to start on the SD soon, so we are looking to coordinate and resolve the plan quickly. Please take a look and phone when you can.

Thanks, CT

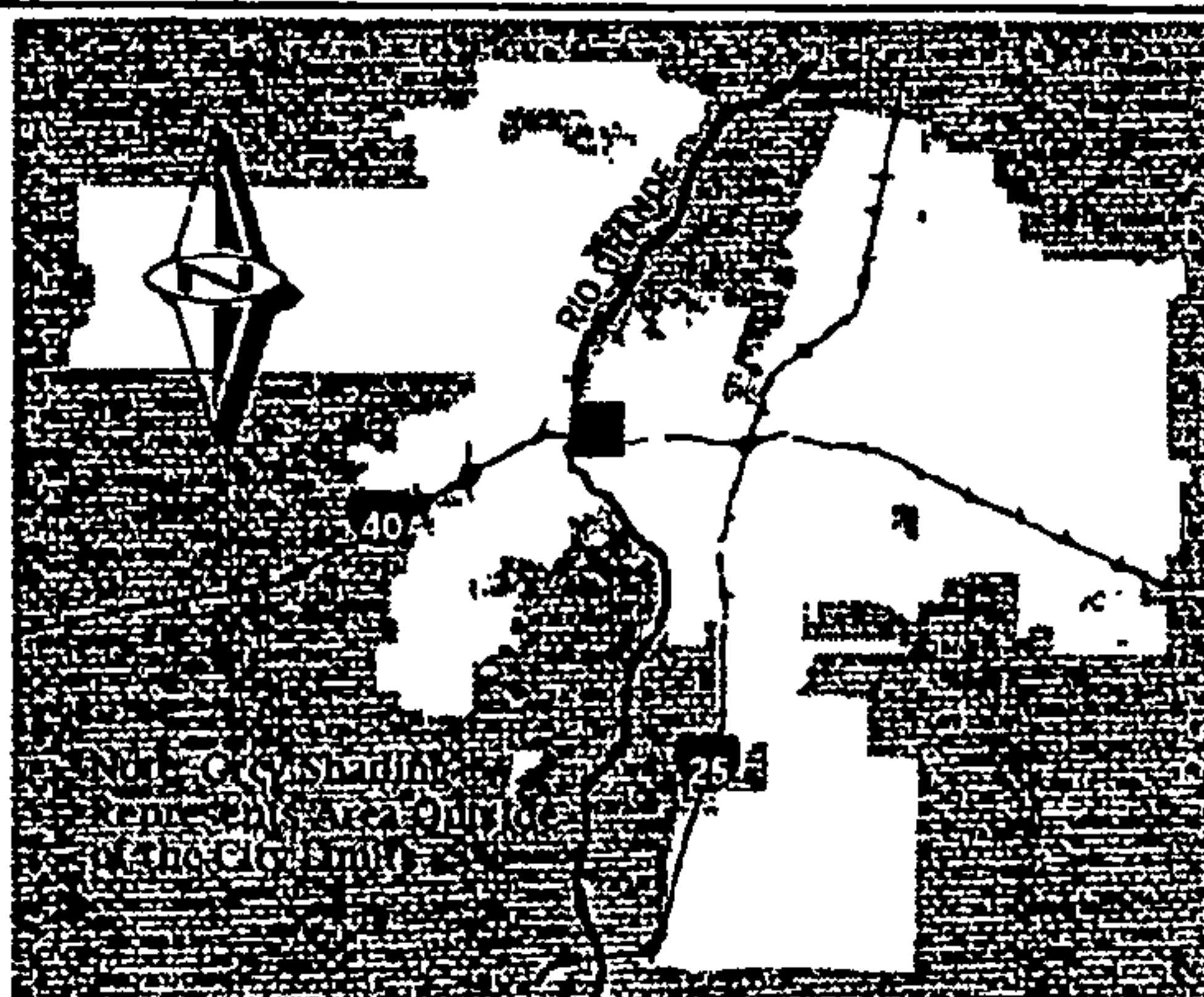
cthompson@cabq.gov



For more current information and more details visit: <http://www.cabq.gov/gis>



Map amended through: Aug 08, 2006



Zone Atlas Page:

H-12-Z

Selected Symbols

- | | |
|----------------------|------------------------|
| SECTOR PLANS | Escarpment |
| Design Overlay Zones | 2 Mile Airport Zone |
| City Historic Zones | Airport Noise Contours |
| H-1 Buffer Zone | Wall Overlay Zone |
| Petroglyph Mon. | |

0 750 1,500 Feet

Jan 25 07 10:45a Richard Burton

(505)839-0610

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Untitled

to Charles Thompson

from Richard Burton

I have attached drainage information and a drawing of the t-turnaround proposed for Mike Gaves town houses. This project is at the city for drainage review.

DRAINAGE INFORMATION

THE PROPERTY IS VACANT LAND EXCEPT FOR THE GARAGE STRUCTURE SHOWN. THE DRAINAGE INLET ON RICE IS A CURB INLET TYPE "C". THE INLET ON AMADO IS A SINGLE "D". AMADO HAS AN INVERTED CROWN SO THE SINGLE "D" INLET IS LOCATED IN THE CENTER OF THE ROAD. RICE ROAD HAS A NORMAL CROWN SECTION AND THE STORM WATER ON RICE IS COLLECTED IN THE CURB INLET. STORM WATER FROM THE SITE DRAINS TO SERNA ROAD AND THEN TO THE DROP INLET IN AMADO.

PEAK RUNOFF - CITY OF ALBUQUERQUE DPM, SECTION 22.2 HYDROLOGY, JANUARY 1993
PRECIPITATION ZONE 2
DESIGN STORM - 100 YEAR

EXISTING CONDITIONS

LAND TREATMENT	DESCRIPTION	SQ. FT.	ACRE
A	VACANT LOT	40208	0.9230
D	ROOF AREA	540	0.0124
TOTALS		40748	0.9354

PEAK DISCHARGE - $(0.9230)(1.56) + (0.0124)(4.70) = 1.44 + 0.058 = 1.498$ CFS

RUNOFF VOLUME - $(0.9230)(0.53) + (0.0124)(2.12) = (0.489 + 0.026)/12 = 0.043$ AC-FT

PROPOSED CONDITIONS

LAND TREATMENT	DESCRIPTION	SQ. FT.	ACRE
B	LANDSCAPE AREAS	10945	0.2512
D	IMPERVIOUS SURFACES	29803	0.6842
TOTALS		40748	0.9354

PEAK DISCHARGE - $(0.2512)(2.28) + (0.6842)(4.70) = 0.5727 + 3.2157 = 3.788$ CFS

RUNOFF VOLUME - $(0.2512)(0.78) + (0.6842)(2.12) = (0.196 + 1.45)/12 = 0.1372$ AC-FT

PEAK DISCHARGE WILL INCREASE BY 2.5 TIMES AND RUNOFF VOLUME WILL INCREASE BY 3.2 TIMES.

THE SITE IS IN FLOOD ZONE X (500 YR).

PROPOSED DRAINAGE

THE CITY HAS CONSTRUCTED A STORM SEWER SYSTEM TO SERVE THIS AREA. OUR PROPOSAL IS TO DRAIN THE STORM WATER TO THE EXISTING DRAINAGE SYSTEM. RIO PERLES COURT WILL SLOPE TO THE SOUTH AT 0.5%. THIS WILL DRAIN ALL OF THE STORM WATER TO THE T-TURNAROUND ON THE SOUTH END OF THE PROJECT. WE WILL CONSTRUCT A WATER BLOCK AT THE NORTH END OF RIO PERLES TO KEEP STORM WATER ON RICE FROM FLOWING DOWN RIO PERLES. RIO PERLES WILL BE A 24' WIDE PRIVATE ROAD WITH A 2% CROWN. WE WILL TRANSITION TO NO CROWN AT RICE ROAD AND AT THE T-TURNAROUND. THE T-TURNAROUND WILL BE SLOPED TO DRAIN TO THE WEST AND WE WILL CONSTRUCT A SINGLE "C" DROP INLET IN THE WEST CURB OF THE T-TURNAROUND. THE TYPICAL CURB AND GUTTER WILL BE A 2' WIDE SECTION WITH A 6" CURB. THE WEST SIDE OF THE T-TURNAROUND WILL BE THE CITY STANDARD CURB AND GUTTER, 2'-7.5" WIDE, WITH AN 8" CURB TO ACCOMMODATE THE SINGLE "C" INLET. WE WILL INSTALL A NEW MANHOLE IN SERNA ROAD AND CONNECT THE 12" PVC STORM DRAIN FROM THE DROP INLET THROUGH THE NEW MANHOLE AND TO THE EXISTING STORM DRAIN ON AMADO. THE PIPE WILL BE LOCATED APROXIMATELY ALONG THE NORTH RIGHT-OF-WAY ON SERNA TO AVOID A CONFLICT WITH THE SANITARY SEWER IN SERNA.

PIPE SIZE

PEAK DISCHARGE - 3.788 CFS

12 " PIPE 0.7% SLOPE 18" PIPE .08%

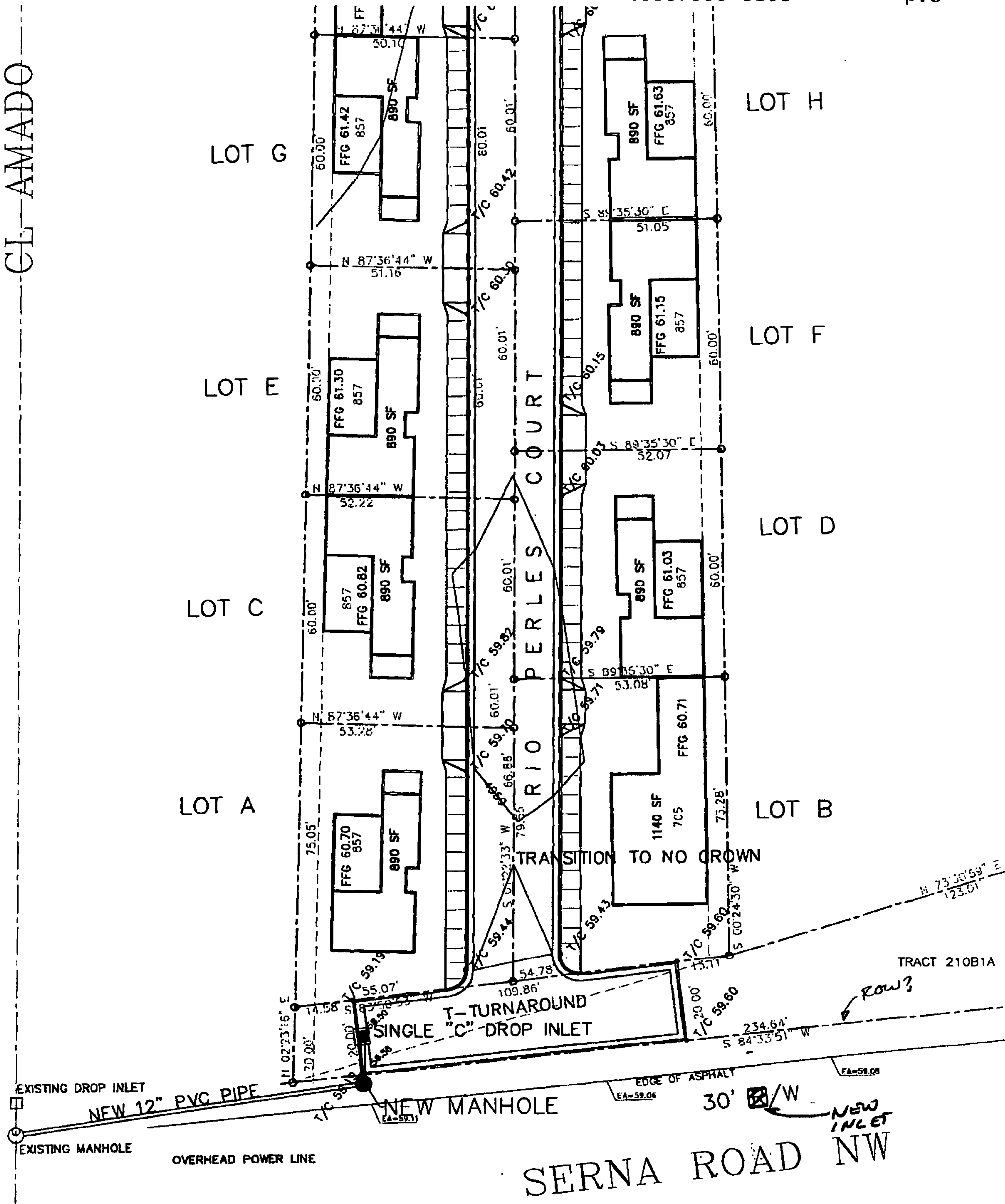
Jan 25 07 10:46a

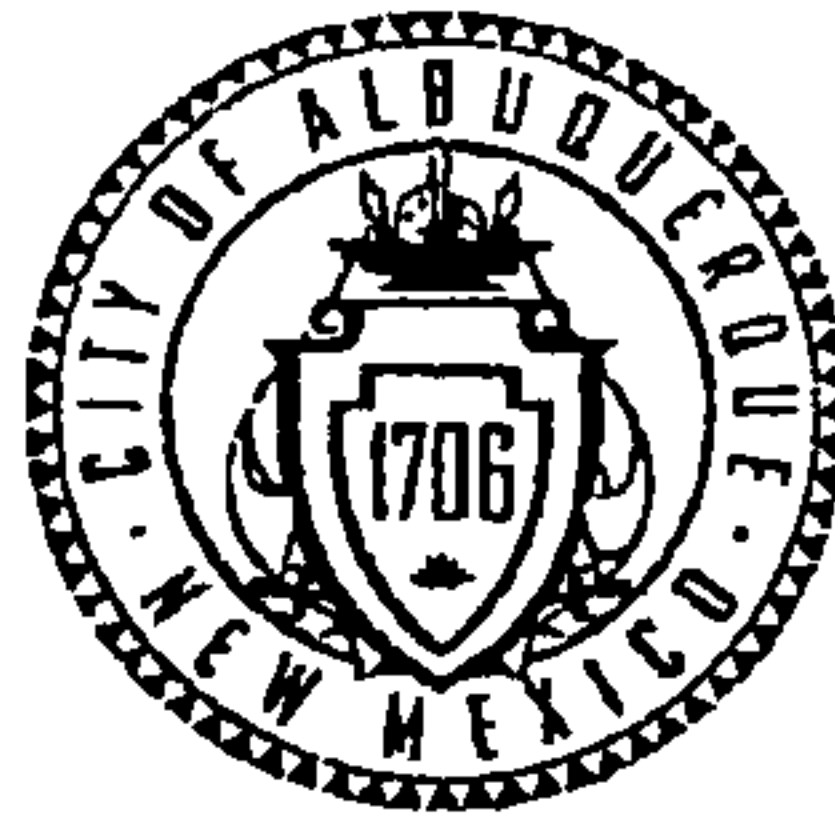
Richard Burton

(505) 839-0610

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CL AMADO





FAX TRANSMISSION
DEPARTMENT OF MUNICIPAL DEVELOPMENT
STORM DRAINAGE DESIGN
ALBUQUERQUE, NEW MEXICO

To: Richard Burton

From: Chuck Thompson

Fax: (505) 839-0610

Fax: 768-2765

Phone: (505) 839-9365

Phone: 768-2654

Pages: 5 including cover

Date: 1/25/2007

Re: Serna Road Drainage Project

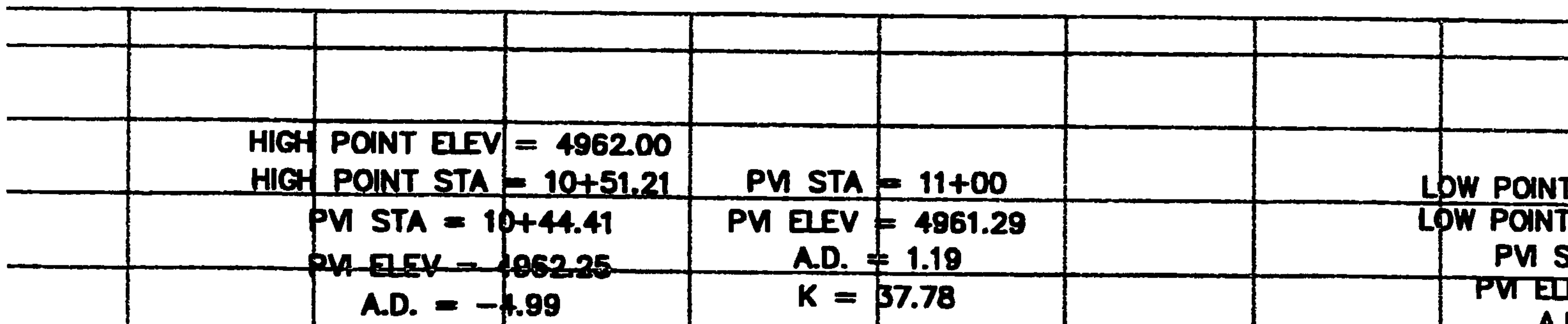
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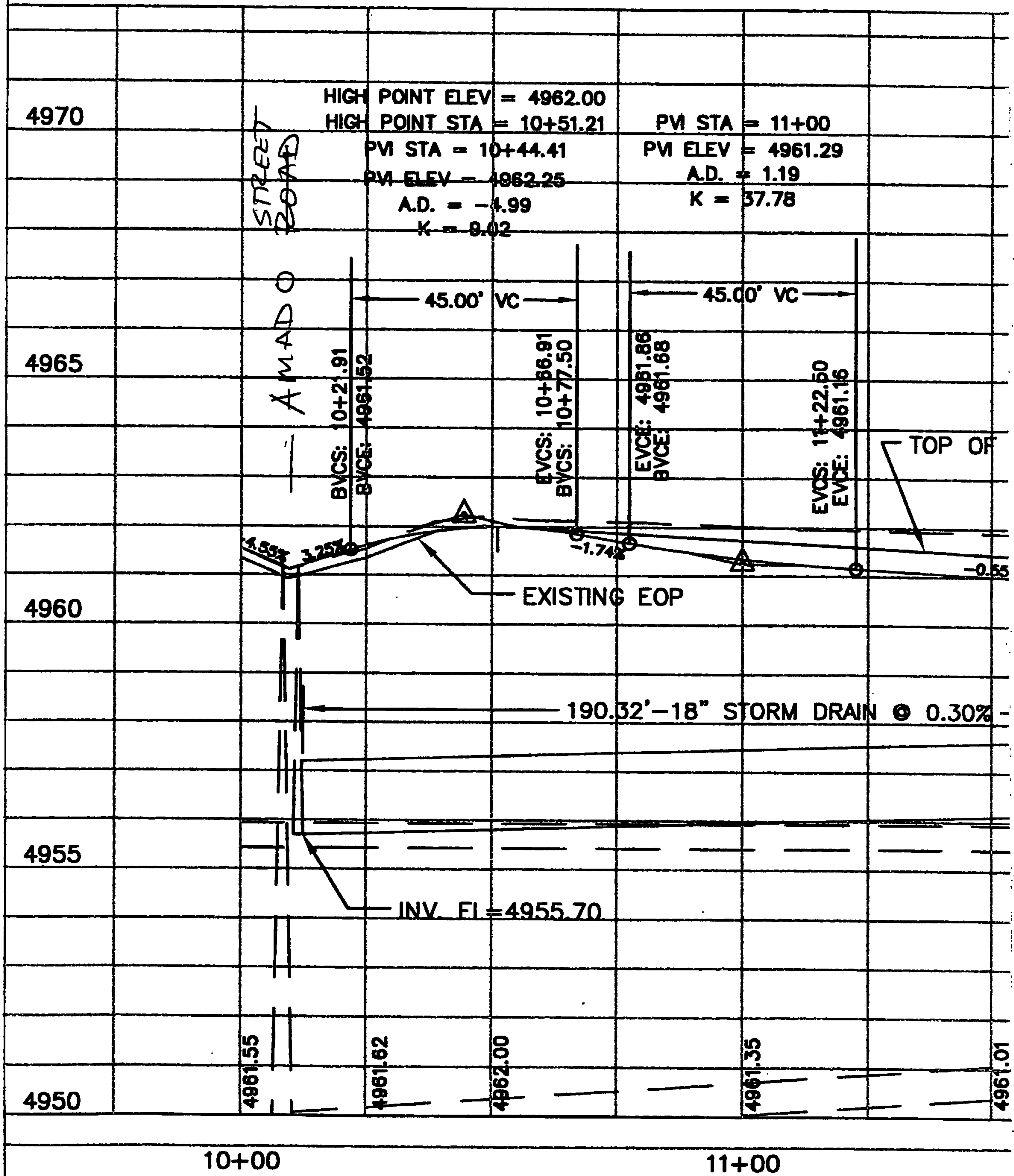
Serna Road P&P (in four pieces) showing new 190-foot long 18-inch SD in Serna.

cthompson@cabq.gov

PLAN $\frac{1}{2}$



PROFILE 1/2



PROFILE 2/2

SERNA ROAD NW

LOW POINT ELEV = 4960.78
LOW POINT STA = 12+06.72
PVI STA = 12+00
PVI ELEV = 4960.74
A.D. = 0.85
K = 53.16

