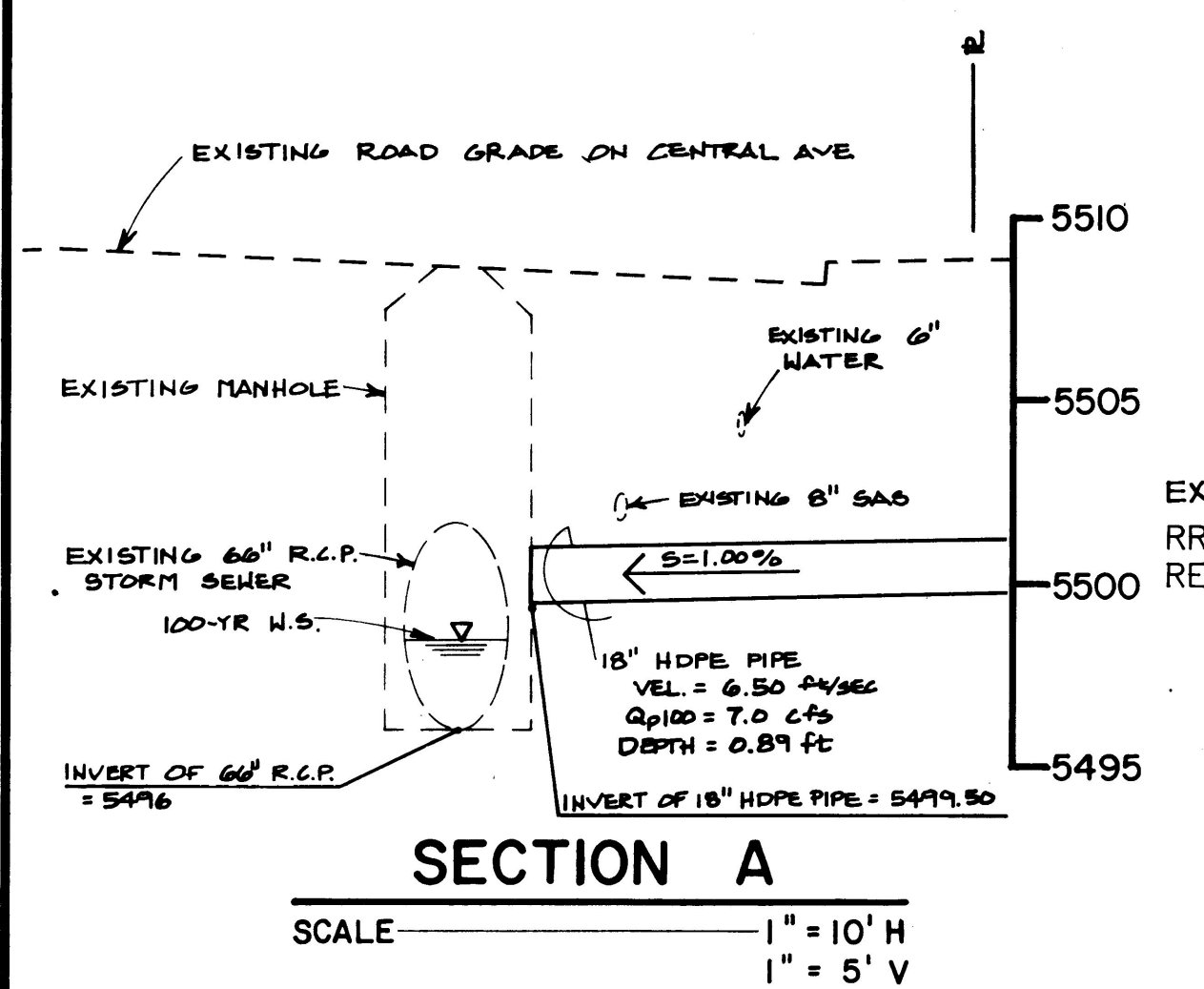
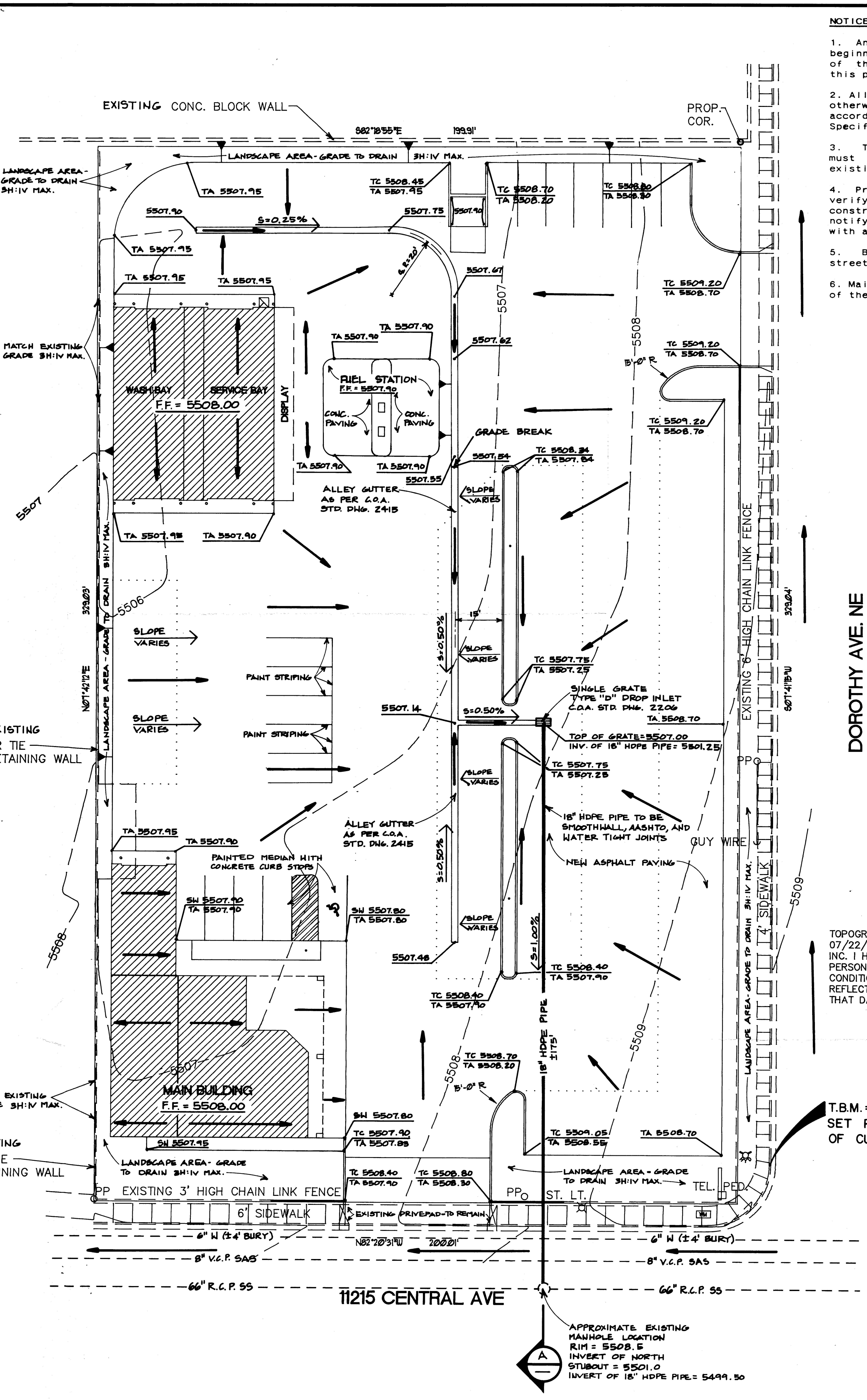


VICINITY MAP L-21 N.T.S.



SECTION A
SCALE 1" = 10' H
1" = 5' V

CONTROL POINT:
ACS BRASS CAP LOCATED ON THE MEDIAN STRIP
OF CENTRAL AVE AND JUAN TABO BLVD
MARKED "1" - L21 RESET 1974"
ELEVATION 5534.627



- NOTICE TO CONTRACTOR**
1. An excavation/construction permit will be required before beginning any work within City right-of-way. An approved copy of these plans must be submitted at the time of application for this permit.
 2. All work detailed on these plans to be performed, except as otherwise stated or provided hereon, shall be constructed in accordance with City of Albuquerque Interim Standard Specifications for Public Works Construction, 1985.
 3. Two working days prior to any excavation, contractor must contact New Mexico One Call, 260-1990, for location of existing utilities.
 4. Prior to construction, the contractor shall excavate and verify the horizontal and vertical locations of all constructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
 5. Backfill compaction shall be according to RESIDENTIAL street use.
 6. Maintenance of these facilities shall be the responsibility of the Owner of the property served.

SITE DESCRIPTION

Existing Condition: The property at 11215 CENTRAL AVE. N.E. is currently developed with a gravel ground cover and no structures exists on site. The Southeastern 1/8 portion of this property consists of a grass area with an existing 4 foot sidewalk. There is also a natural depression located along the west property line that currently ponds existing runoff. The site slopes from Southeast to the Northwest with approximately 3 foot of relief across the extent of the property.

Off-Site Flows: None

Future Condition: Future development will consist of removing the existing 4 foot sidewalk and grass area. There will be asphalt paving added with landscaped areas. The on-site flow will be intercepted by a 2 foot concrete alley gutter draining to a type "D" drop inlet and then through an 18 inch HDPE pipe into the existing 66 inch R.C.P. storm sewer along Central Ave. The pipe capacity of the 66 inch R.C.P. storm sewer along Central Ave. has been calculated using the flow rates from the "Final Developed Conditions Report, Restudy of Albuquerque Master Drainage Study Volume II, prepared by Bohannon-Huston, December, 1987" and there is no problem in discharging the minor additional 1.5 cfs runoff from this site under developed conditions. The Restudy reports that just east of this site, at Juan Tabo and Central, the 60 inch pipe is less than half full.

HYDROLOGY

Precipitation Zone 3 (DPM Figure A)
100-year, 6-hour rainfall depth: 2.60 inches

Use of the AHYMO (Ver. 3/92) computer program provided the necessary data to determine the future Q's and existing Q's for this site. The program revealed the following:

Existing Conditions	100-yr	10-yr
On-Site		
Qp :	5.51 cfs	3.22 cfs
runoff volume:	0.179 ac-ft	0.089 ac-ft

Future Conditions	100-Year	10-Year
On-Site		
Qp :	7.02 cfs	4.52 cfs
runoff volume:	0.272 ac-ft	0.168 ac-ft

HYDRAULICS FOR 18" HDPE PIPE

Input Parameters for the Proposed 18" Pipe:

Qp100 = 7.0 cfs
Slope = 0.010 ft/ft
Mannings' "n" = 0.013
Diameter = 18"

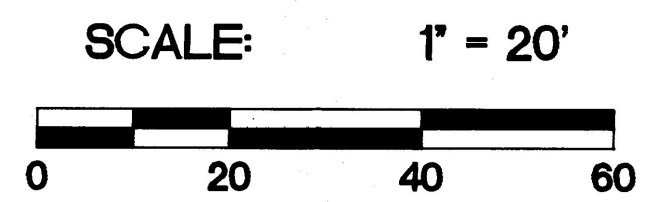
Results:

Depth = 0.89 ft
Velocity = 6.50 ft/sec
Max. Capacity = 10.5 cfs

TOPOGRAPHIC SURVEY PERFORMED
07/22/93 BY RESOURCE TECHNOLOGY,
INC. I HEREBY CERTIFY, BASED ON
PERSONAL INSPECTION, THAT SITE
CONDITIONS SHOWN ON THIS PLAN
REFLECT ACTUAL CONDITIONS AS OF
THAT DATE.

Donal Ship
8/24/93

T.B.M. = 5509.97
SET PAINTED "□" TOP
OF CURB RETURN

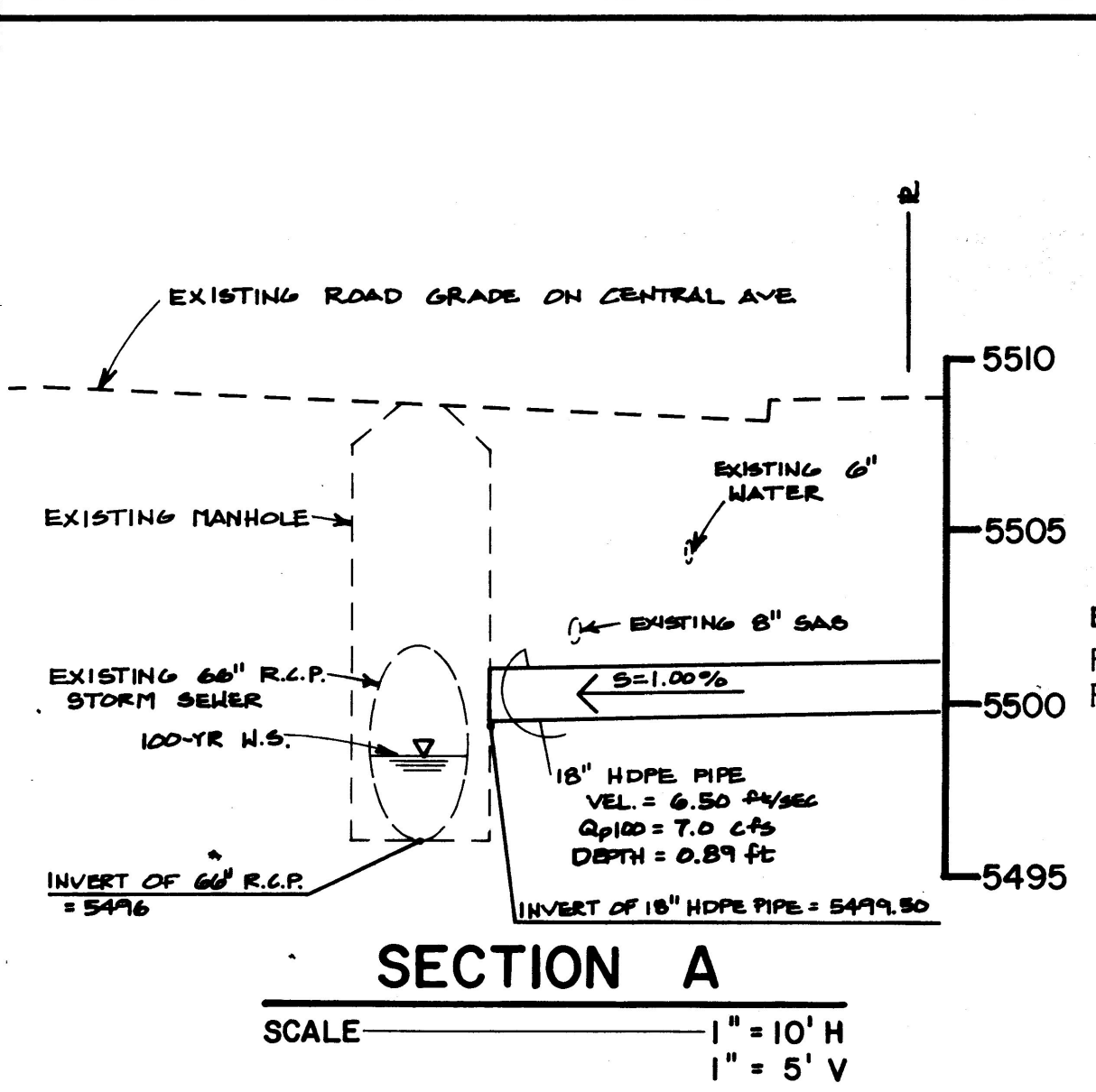
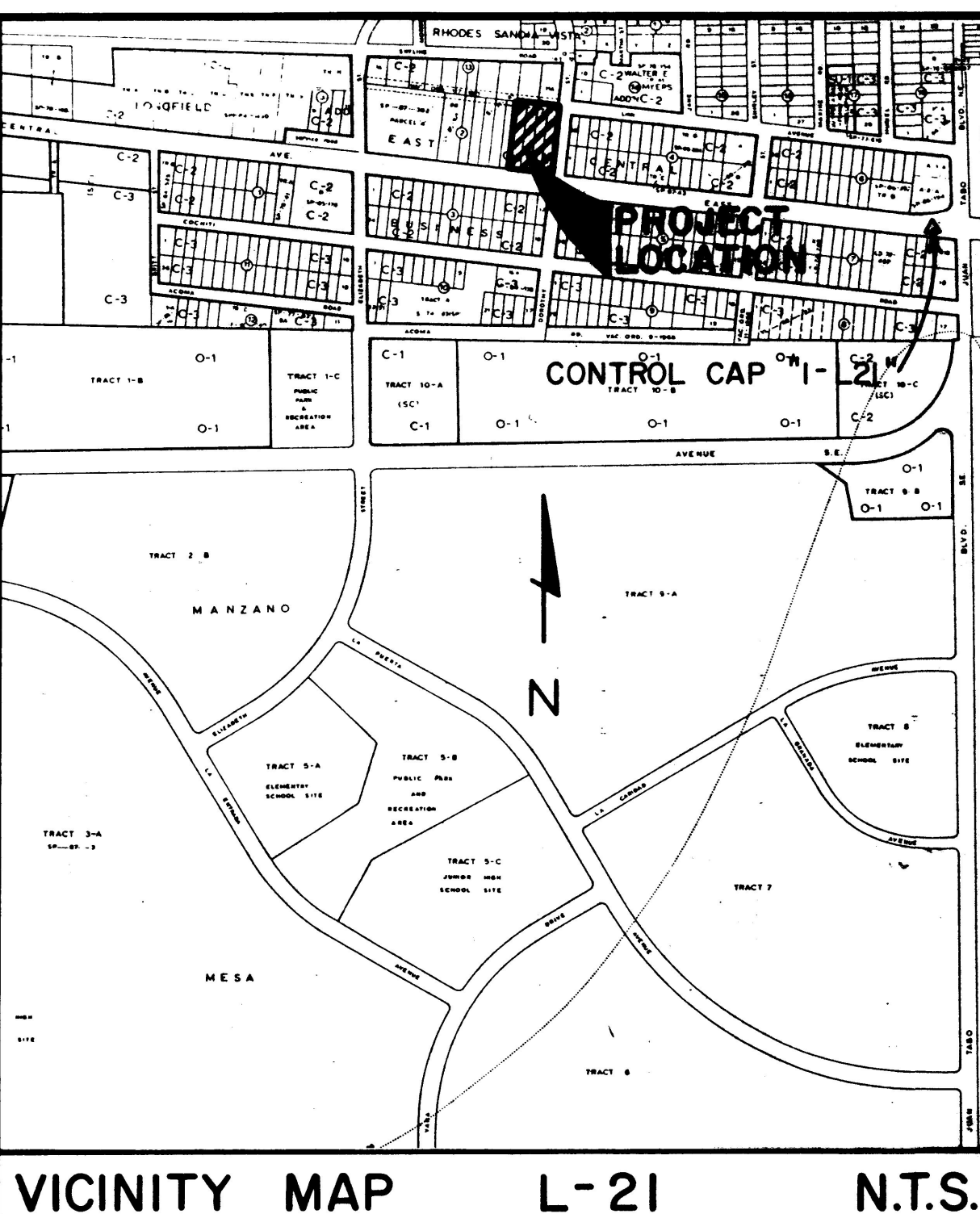


APPROVALS	NAME	DATE
A.C.E./DESIGN		
INSPECTOR		
A.C.E./FIELD		

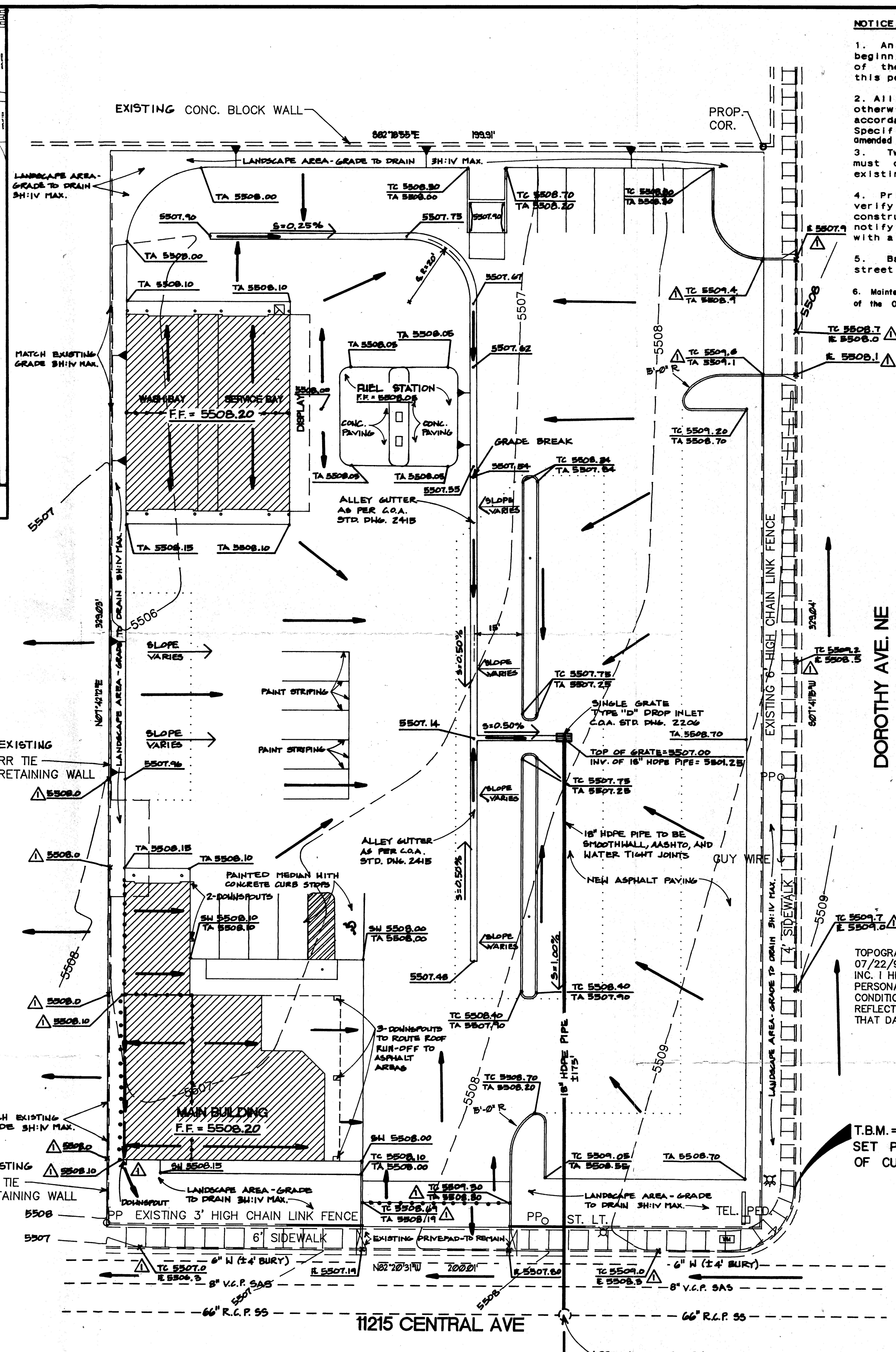
NO.	DATE	REVISIONS	BY	CHKD

EAST CENTRAL BUSINESS ADDITION BLK. 2, LOTS 15A, 16A, 17A, 18A ZUNI RENTAL GRADING and DRAINAGE PLAN	
DESIGNED BY: GC	DRAWN BY: GC
CHECKED BY: DD	DATE: AUG 1993

JOB NO. 93 - 240
SHEET NO. 1 of 1



CONTROL POINT:
ACS BRASS CAP LOCATED ON THE MEDIAN STRIP
OF CENTRAL AVE AND JUAN TABO BLVD
MARKED "1-L21 RESET 1974"
ELEVATION 5534.627



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 5. Backfill compaction shall be according to RESIDENTIAL street use.
 6. Maintenance of the Drop Inlet AND the 18" Storm Drain shall be the responsibility of the OWNER of the property served.

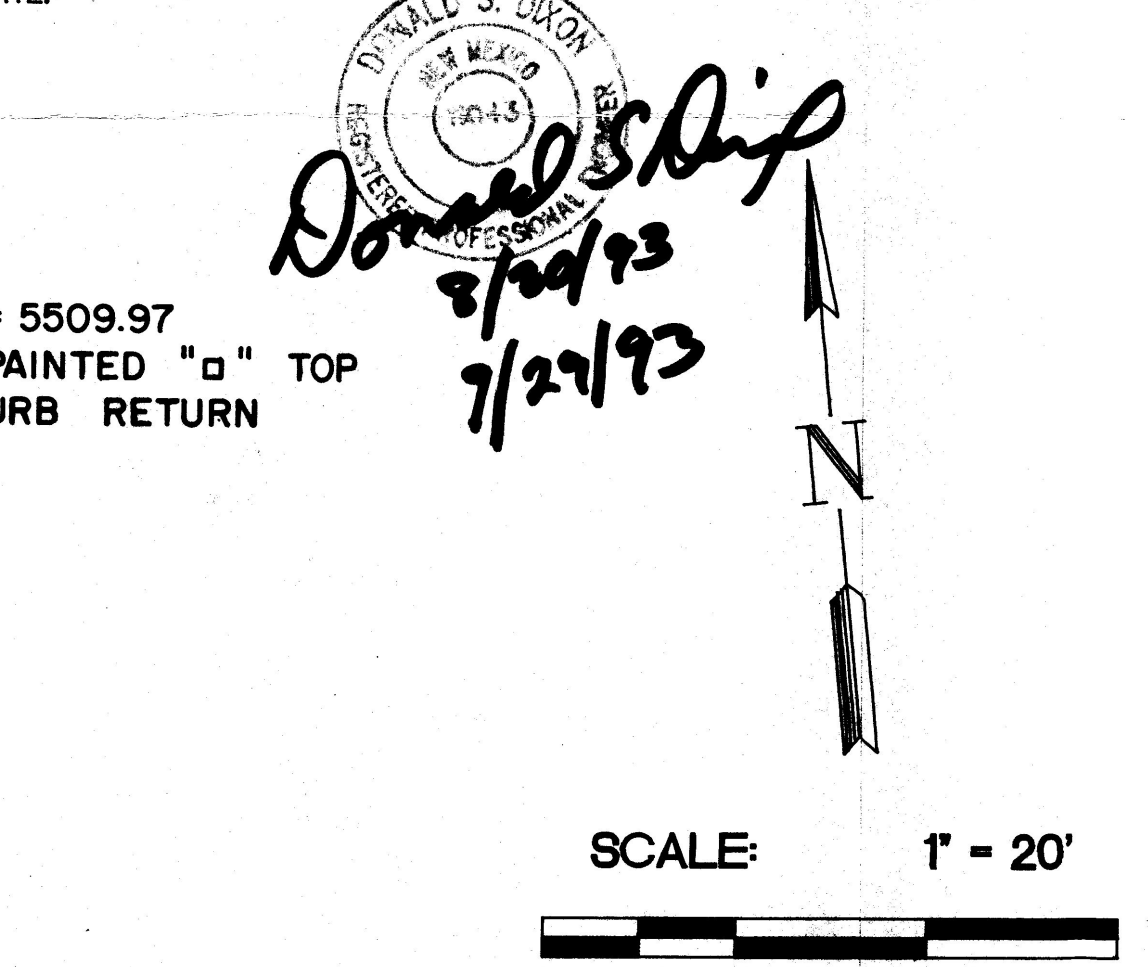
LEGEND

	PROPOSED ADDITION
	FLOW DIRECTION
	EXISTING ELEVATION
	PROPOSED ELEVATION
	PROPOSED CONTOURS
	EXISTING CONTOURS
	SLOPE INDICATOR
	DRAINAGE DIVIDE

TOPOGRAPHIC SURVEY PERFORMED
07/22/93 BY RESOURCE TECHNOLOGY,
INC. I HEREBY CERTIFY, BASED ON
PERSONAL INSPECTION, THAT SITE
CONDITIONS SHOWN ON THIS PLAN
REFLECT ACTUAL CONDITIONS AS OF
THAT DATE.

Donal Ship
8/24/93
7/27/93

T.B.M. = 5509.97
SET PAINTED "a" TOP
OF CURB RETURN



APPROVED FOR CONSTRUCTION

CITY ENGINEER _____ DATE _____

PROJECT NO. **4764.90**

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Diameter = 18"

Results:

Depth = 0.89 ft
Velocity = 6.50 ft/sec
Max. Capacity = 10.5 cfs

WEIR EQUATION FOR TYPE D INLET

USING FHWA DRAINAGE OF HIGHWAY PAVEMENT METHODS

Type D Inlet: Dimension: 2 1/2' x 6'

P = 17'
Max depth = 1.0'
Located in a sump

Using Weir Eqn: $Q = CLH^{1.5}$

$L = P$, assume only half is effective

$P = \frac{17}{2} = 8.5'$, $H = 1.0'$ (max)

$C = 2.5$ (very low coefficient)

$H = 1.0'$, $Q = 2.5 (8.5)^{1.5} = 21.25$ cfs

$H = .5'$, $Q = 2.5 (8.5)^{.5} = 7.5$ cfs

Therefore, for $Q = 7.02$ cfs, $H < .5'$

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRG CHAIRMAN			WATER		
TRANSPORTATION			WASTE WATER		
HYDROLOGY					

NO.	DATE	REVISIONS	BY	CHKD

EAST CENTRAL BUSINESS ADDITION
BLK. 2, LOTS 15A, 16A, 17A, 18A
ZUNI RENTAL
GRADING and DRAINAGE PLAN

DESIGNED BY: **QC** DRAWN BY: **QC** CHECKED BY: **DD** DATE: **AUG. 1993**

Resource Technology, Inc.
ENGINEERS & ENVIRONMENTAL SCIENTISTS
2129 OSUNA NE - SUITE 200, ALBUQUERQUE, NEW MEXICO 87113
TELEPHONE - (505) 345-3115

JOB NO. **93-240**
SHEET NO. **of**