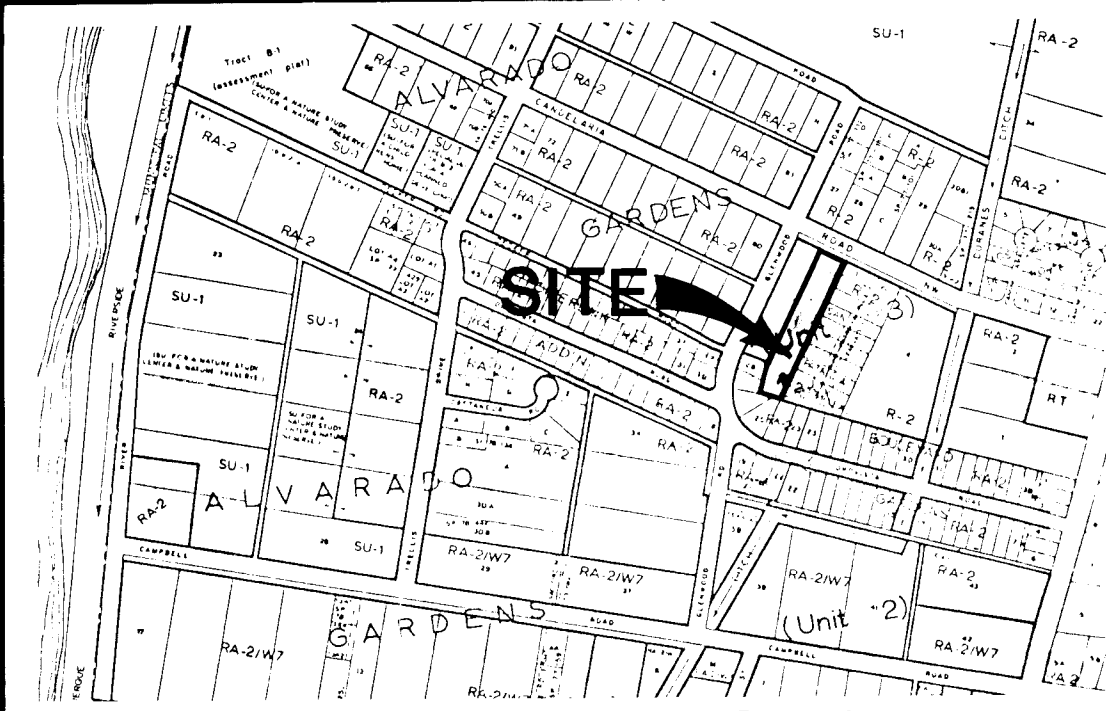


SOMBRA DEL RIO

SUBDIVISION



LOCATION MAP G-12

NOTICE TO CONTRACTORS

- 1) 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 New Mexico Standard Specifications for Public Works Construction - 1979 Edition (referred to herein as the Standard Specifications) and the Contract Documents for Public Works Contract 85-1.
- 2) Two (2) working days prior to any excavation, contractor must contact Line Locating Service, 765-1234, for location of existing utilities.
- 3) Prior to construction, the contractor shall excavate and verify the horizontal and vertical locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer or surveyor so that the conflict can be resolved with minimum amount of delay.

THE FOLLOWING NOTES APPLY WHEN CHECKED:


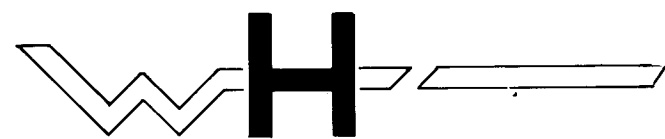
- ☒ All utilities and utility service lines shall be installed prior to paving.
- ☒ Backfill compaction shall be according to specified street use. **ART.-RES.**
- ☒ Tack coat requirements shall be determined by the City Engineer.
- ☐ Sidewalks and wheelchair ramps within the curb returns shall be constructed wherever a new curb return is constructed.
- ☒ If curb is depressed for a driveway or a handicap ramp, the driveway or ramp shall be constructed prior to acceptance of the curb and gutter.
- ☐ All storm drainage facilities shall be completed prior to final acceptance.

INDEX TO DRAWINGS

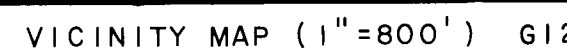
1. COVER
2. PLAT
3. GRADING/DRAINAGE PLAN
4. GRADING/DRAINAGE PLAN
5. UTILITY PLAN/PROFILE
6. UTILITY PLAN/PROFILE

1	2	3	4	5	6	7	8	9	10	11	12
2	6	2	4	0	9	0	1	8	6		

W. J. Myrman
4-22-86

REV.	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE
		 WEISS-HINES ENGINEERING, INC. 1100-B ALVARADO N.E. ALBUQUERQUE, NEW MEXICO 87110 (505) 266-3444		APPROVED FOR CONSTRUCTION			
				<i>C. L. Weiss</i> 3/2/85			
PROJECT NO.		2409		SHEET OF		1 6	

A.C.S. BRASS CAP
10-C-13



1. The bearing base for this plat is the San Patricio Complex, filed September 15, 1978 in Vol D8, Folio 195. To go to the State Plane Grid, rotate local bearings 00°33'25" clockwise.
2. Distances are ground distances.
3. Corners found or set as shown. Date of survey: July, 1984.
4. Gross subdivision acreage: 1,6033 acres, more or less. Private road, parking and drainage easement acreage: 0.51278 acres more or less. Zoning: R-2.
5. Total mileage of full width streets created: 0.000 mi.
6. (NET AREA) as shown on each lot equals the gross lot area minus the private road, parking, and drainage easement area.

State of New Mexico } SS
County of Bernalillo
This instrument was filed for record
on May 8 1985 C2
1150 AM
At 11:50 o'clock in Recorded in Vol
of records of said County Folio 39
John C. Hall Clerk & Recorder
Deputy Clerk

A REPEAT OF
A PORTION OF LOT #6
LVARADO GARDENS UNIT #3
7
MARCH 1985

DESCRIPTION

A certain tract of land located within the City Limits of Albuquerque, New Mexico; within Section 1, Township 10 North, Range 2 East, N.M.P.M., and is comprised of a portion of Lot 6 of Alvarado Gardens Unit #3 as shown on the plat filed in the Office of the County Clerk of Bernalillo County, New Mexico on May 20, 1937 in Volume D1, Folio 107; and being more particularly described as follows:

Beginning at the northeast corner of said tract from whence the ACS Brass Cap stamped "ACS/10/06/13" bears S 73°39'47" E a distance of 1120.87'; thence S 24°31'00" W a distance of 585.99'; thence N 74°56'00" W a distance of 109.62'; thence N 16°42'00" E a distance of 122.98'; thence N 26°16'54" E a distance of 482.38'; thence S 65°29'00" E a distance of 110.00' to the point of beginning and containing 1.6033 acres more or less.

DEDICATION
The undersigned owners of the land shown hereon do hereby consent to the subdivision of said land in the manner shown on this plat and do hereby dedicate all drainage way and utility easements including the right of ingress and egress and the right to trim interfering trees.

Don Krueger 3/7/85 Richard Hamby 3/1
Don Krueger Date Richard Hamby Date

ACKNOWLEDGEMENT

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) SS

The foregoing instrument was acknowledged before me this Sixteenth day of March, 1985.

Notary Public

[illegible]

EASEMENT DESCRIPTIONS

- [illegible]

APPROVALS:

CONTINUED AT RIGHT SIDE OF PAGE.

Wayne Hunsing 3-14-85
Mountain Cell Date

 Public Service Company of New Mexico Date 3-5-85

Paula Y. Mester 3-14-85

Gas Company of New Mexico Date
O. Val Valdez 3-5-85

Property Manager, City of Albuquerque Date 07/18/85

Chief City Surveyor, City of Albuquerque Date
Art J. J. J. 5-6-

Parks and Recreation, City of Albuquerque Date

Water Resources, City of Albuquerque Date 9-29-8

Traffic Engineer, City of Albuquerque 3-19-85
Date

 A. M. A. F. C. A. Date

Frank J. Capron 1-7-81

City Engineer, City of Albuquerque Date
RW. Dimes 5.0.85

Planning Director, City of Albuquerque Date
J-84-99 DRB 83-446.

CERTIFICATION

LEONARD T. Mann, Jr., a registered Land Surveyor under the laws of the State of New Mexico, do hereby certify that this plat was prepared by me or under my supervision; shows all easements noted in a title report prepared by RIO GRANDE TITLE COMPANY on JUNE 29, 1984; meets the minimum requirements of monumentation and surveys of the Albuquerque Subdivision Ordinance, and is true and correct to the best of my knowledge and belief.

Thomas T. Mann, Jr., P. MANN, JR. 379

ACKNOWLEDGEMENT

STATE OF NEW MEXICO

COUNTY OF BERNALILLO

The foregoing instrument was acknowledged before me on this

8th day of March, 1985

Notary Public

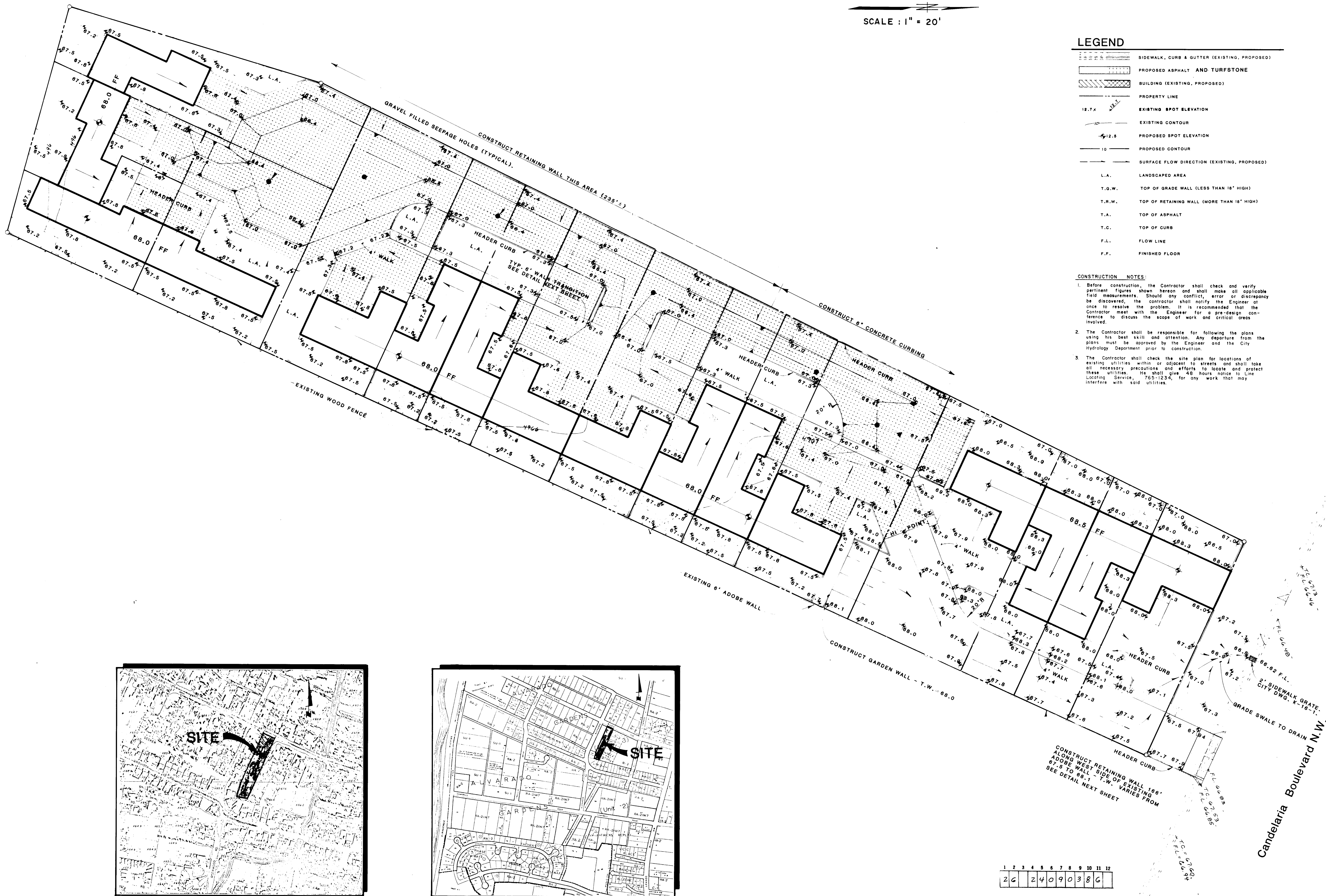
Diagram of a rectangular building with a central circular column. The building is 10' wide and 10' high. The column is 5' in diameter. The distance from the center of the column to the left and right walls is 5'. The distance from the center of the column to the top and bottom walls is 5'. The column is labeled 'FH'.

DETAIL B
FIRE HYDRANT EASEMENT

MAINTENANCE STATEMENT
The paved areas and access roads designated as "Private Road, Parking, Drainage and Utility Easement" on this plat shall be maintained by, and such maintenance shall be the responsibility of, the owners of lots 1-16 and of Sombra Del Rio Home Owners Association, Inc.

S.P. 85-202

	2	3	4	5	6	7	8	9	10	11
2	6		2	4	0	9	0	2	8	6



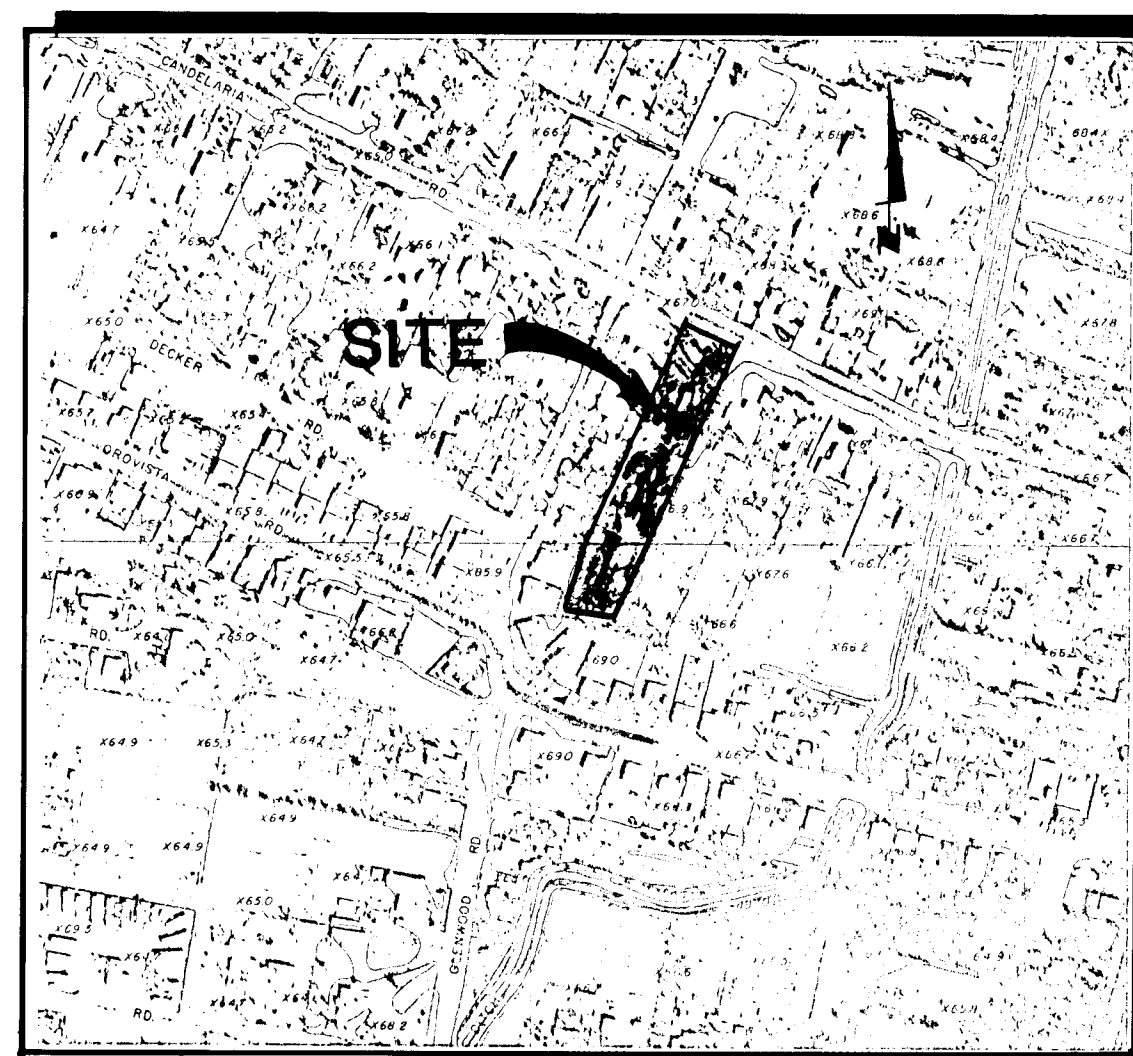
SCALE : 1" = 20'

LEGEND

- SIDEWALK, CURB & GUTTER (EXISTING, PROPOSED)
- PROPOSED ASPHALT AND TURFSTONE
- BUILDING (EXISTING, PROPOSED)
- PROPERTY LINE
- EXISTING SPOT ELEVATION
- EXISTING CONTOUR
- PROPOSED SPOT ELEVATION
- PROPOSED CONTOUR
- SURFACE FLOW DIRECTION (EXISTING, PROPOSED)
- LANDSCAPED AREA
-
-
- TOP OF ASPHALT
- TOP OF CURB
- FLOW LINE
- FINISHED FLOOR

CONSTRUCTION NOTES:

- Before construction, the Contractor shall check and verify pertinent figures shown herein and shall make all applicable field measurements. Should any conflict, error or discrepancy be discovered, the contractor shall notify the Engineer at once to resolve the problem. It is recommended that the Contractor meet with the Engineer for a pre-design conference to discuss the scope of work and critical areas involved.
- The Contractor shall be responsible for following the plans using his best skill and attention. Any departure from the plans must be approved by the Engineer and the City Hydrology Department prior to construction.
- The Contractor shall check the site plan for locations of existing utilities within or adjacent to streets and shall take all necessary precautions and efforts to locate and protect these utilities. He shall give 48 hours notice to Line Locating Service, TSS-1234, for any work that may interfere with said utilities.



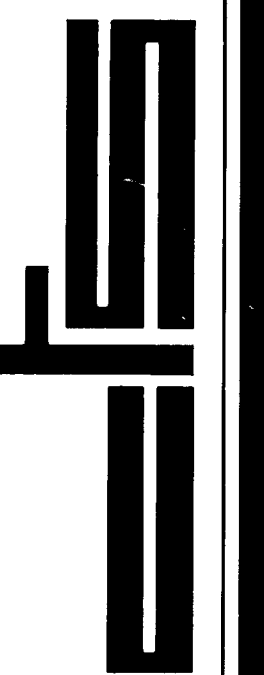
FLOOD HAZARD MAP



VICINITY MAP G-12

1	2	3	4	5	6	7	8	9	10	11	12
26	24	09	03	86							

DRAINAGE / GRADING PLAN
SOMBRA DEL RIO SUBDIVISION
CANDELARIA BOULEVARD N.W.



CTSI INC
ENGINEERING
 1100 ALVARADO N.E. SUITE A
 ALBUQUERQUE, NEW MEXICO 87110
 (505) 266-3444

DATE: _____
 DESIGNED: _____
 DRAWN: _____
 CHECKED: _____

GRADING / DRAINAGE NOTES

SCOPE:

The proposed improvements, comprised of 16 condominiums, private access roadway, parking, landscaping, and utilities are located on Candelaria Blvd. N.W. just east of Greenwood Road. The front (north) portion of the site will be drained to a catch basin located on the south side of Candelaria approximately 150' west of the site. From conversations with City Hydrology, it was determined that discharge to the pump station on the extreme west end of Candelaria (at Riverside drain) has adequate capacity to empty the Candelaria storm sewer without flood hazard to private property. All other site drainage will be retained by backyard infiltration or by "Turfstone" ponds located in the private access roadway. All roof tops and impervious surfaces will drain to the "Turfstone" pond area. The developer has elected to pond the back south portion of the site rather than drain to Candelaria because of the large amount of fill required (average of 3') and the need for extensive retaining wall construction.

The present site is undeveloped except for a small home and pump house on the north side (to be demolished.) The existing home site drains to Candelaria. The remainder of the site ponds and infiltrates locally.

The intent of this plan is to show:

- Grading relationships between the existing ground elevations and proposed finished elevations in order to facilitate positive drainage to designated discharge points.
- The extent of proposed site improvements, including buildings, walks and pavement.
- The flow rate/volume of rainfall runoff across or around these improvements and methods of handling these flows to meet City requirements for drainage management.
- The relationship of onsite improvements with existing neighboring property to insure an orderly transition between proposed and surrounding grades.

GENERAL NOTES:

LEGAL:
E/2 Lot G, Alvarado Gardens, Albuquerque, New Mexico, MRCD Map G-12.

SURVEYOR:
Steve Walker, R.L.S., June 22, 1984.

B.M.:
City of Albuquerque BM (8-G13), "C" at S. end of S.W. curb return on Rio Grande Blvd. and Candelaria Road. Elevation = 4968.09.

T.B.M.:
Vail in power pole at sidewalk near N.E. property corner, Elevation = 4968.78'.

SOILS:
Gila Clay Loam (Ge), Hydrologic Class B.

FLOOD HAZARD:
No flood hazard areas are located in the vicinity.

OFF-SITE DRAINAGE:
Site is not affected by off-site flows.

EROSION CONTROL:
Site is bordered by adobe and wood fences on east side which will prevent movement of eroded sediments during construction. Two-ft. high silt fences will be installed during site construction to prevent sediment from leaving site on the west and south sides. A 6"-high driveway berm will be placed across the entrance from Candelaria during construction to control sediments on the north side.

CALCULATIONS:
Based on a pre-design meeting with City of Albuquerque Hydrology, in 11-84, the following criteria was established.

- Allowable discharge from site to be determined by analysis of downstream capacity. On-site retention will be considered if no other solution exist.

Calculations are based on the City of Albuquerque D.P.M. Manual, Vol. II for the 100 year-6 hour storm, using the Rational Formula to compare the existing and proposed runoff rates.

RESUBMITTAL 3-12-85
NOTES ADDED TO POND VOLUME CALCULATIONS.
Walter G. Hines 3-13-85
WALT HINES DATE

Pond Volume Calculations (cont'd)

Three percolation tests run on Ge soils at the nearby Pawidol subdivision by Albuquerque Testing Labs indicate that the average infiltration rate was 0.05 cu.ft. per sq.ft. of pond surface area. Rate at Sombra del Rio will be much higher because turfstone pond is underlain by sand and gravel. Use 0.05 rate to be conservative. Calculation to show that pond will drain in 24 hours:

0.05 cu.ft./hr x 7500 sq.ft. (full pond) x 4 hrs = 1500 cu.ft.
0.05 cu.ft./hr x 3750 sq.ft. (half full) x 8 hrs = 1500 cu.ft.
0.05 cu.ft./hr x 2500 sq.ft. (third full) x 12 hrs = 1500 cu.ft.
Total = 4,500 > 4,200 o.k.

RATIONAL METHOD- Q = CIA

Area of site: 69,700 sq.ft. = 1.6 Ac. North = 0.4 Ac., South = 1.2 Ac.

Run-off Coefficient:

Existing site:

A imp. = .04 Ac
% imp. = 2 %
"C" = 0.36 (DPM 22.2 C-1)
North side "C" = 0.42
South side "C" = 0.34

Developed Site:

A imp. = 0.66 Ac
% imp. = 41 %
"C" = 0.52 (DPM 22.2 C-1)
North side "C" = 0.70
South side "C" = 0.44 (Use 0.50 to account for Turfstone)

Rainfall Intensity:

$I = P_g (6.84) T_c^{-0.51} = 4.65$ per hour
where $P_g = 2.2$ (DPM 22.2 D-1)
 $T_c = 10$ minutes

Existing Condition:

North Side
Q100 = $(0.42)(4.65)(.40) = 0.8$ cfs
V100 = $(0.8)(5 T_c)(60 \text{ sec/in})/2 = 1,200$ cu. ft.

South Side
Q100 = $(0.34)(4.65)(1.2) = 1.9$ cfs
V100 = $(1.9)(50)(60)/2 = 2,845$ cu. ft.

Total

Q100 = 2.7 cfs
V100 = 4,045 cu. ft.

Developed Condition:

North Side
Q100 = $(0.70)(4.65)(0.40) = 1.3$ cfs
V100 = $(1.3)(50)(60)/2 = 1,950$ cu. ft.

South Side
Q100 = $(.50)(4.65)(1.2) = 2.8$ cfs
V100 = $(2.8)(50)(60)/2 = 4,200$ cu. ft.

Total

Q100 = 4.1 cfs
V100 = 6,150 cu. ft.

SUMMARY:

$\Delta Q100 = (4.1) - (2.7) = 1.4$ cfs (increase)
 $\Delta V100 = (6,150) - (4,045) = 2,105$ cu. ft. (increase)

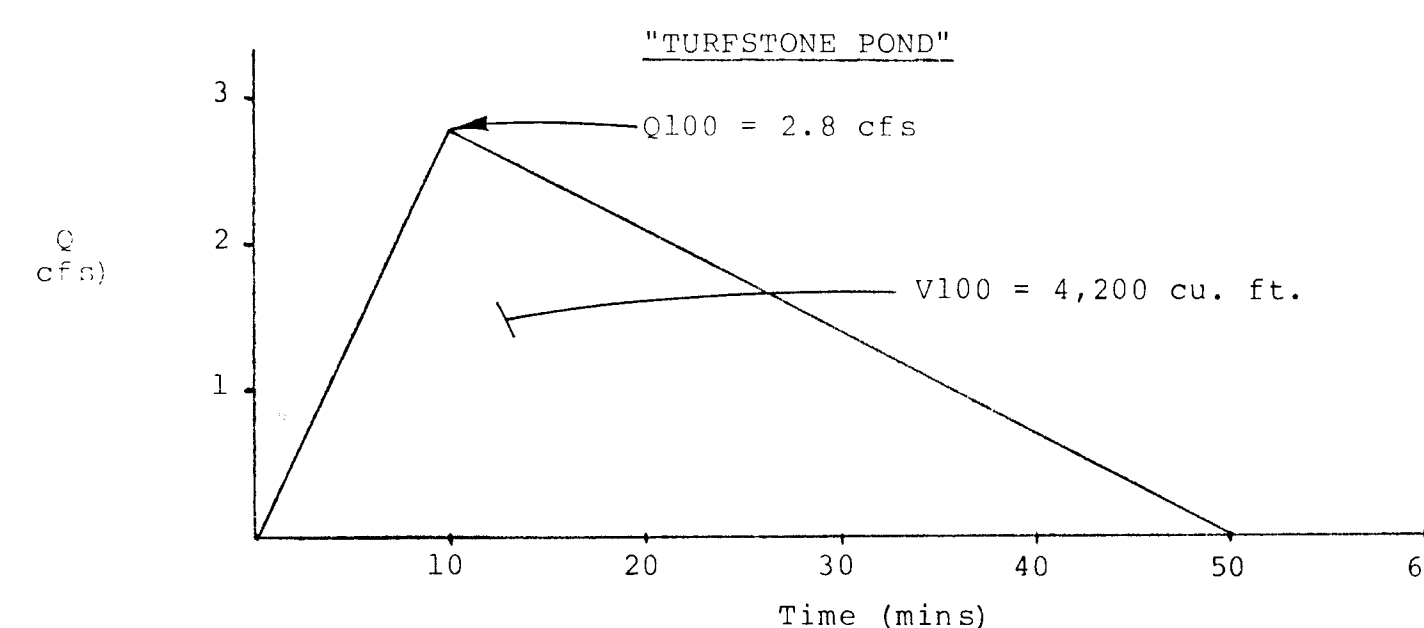
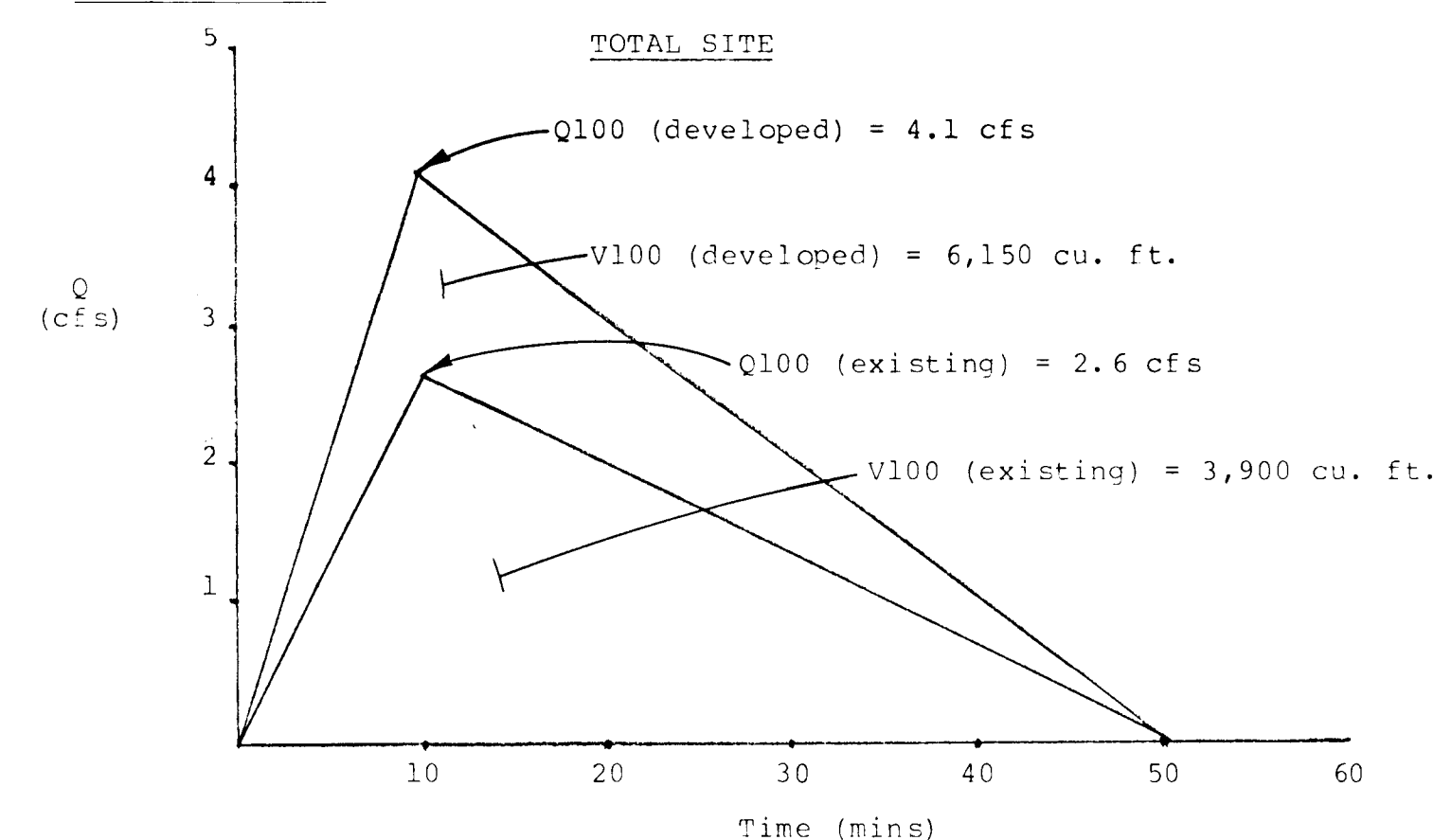
POND VOLUME CALCULATIONS

The drainage of the site is divided into 3 areas and will be handled as follows:

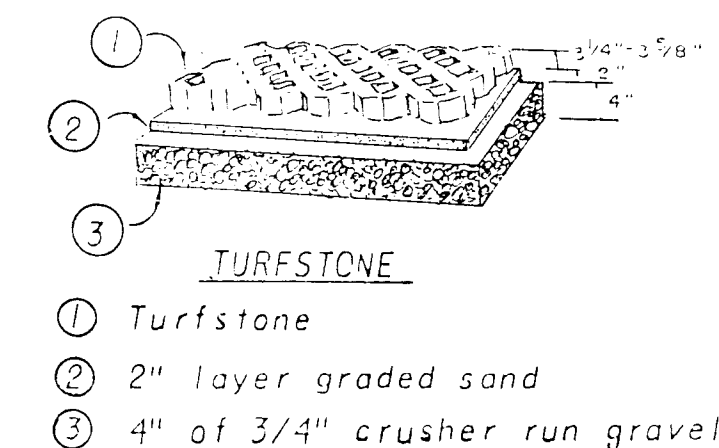
1) All backyard areas, throughout subdivision will infiltrate rainfall directly. 2) The North portion will drain (free discharge) to Candelaria Blvd. 3) Therefore, only buildings and front areas of the south portion of site must be ponded. Required V100 for complete retention of south-side flows is somewhat less than 4,200 cu. ft. calculated above. By planimeter and assuming a maximum depth of 0.6' for "Turfstone" pond at elevation = 67.0, available pond volume = 4,500 cu. ft. To improve infiltration capacity of "Turfstone" pond, a series of 7'-deep, 6" diameter gravel-filled holes will be constructed at locations shown on plan.

⚠ (Pond Volume Calculations continued in lower left corner of this sheet)

HYDROGRAPH



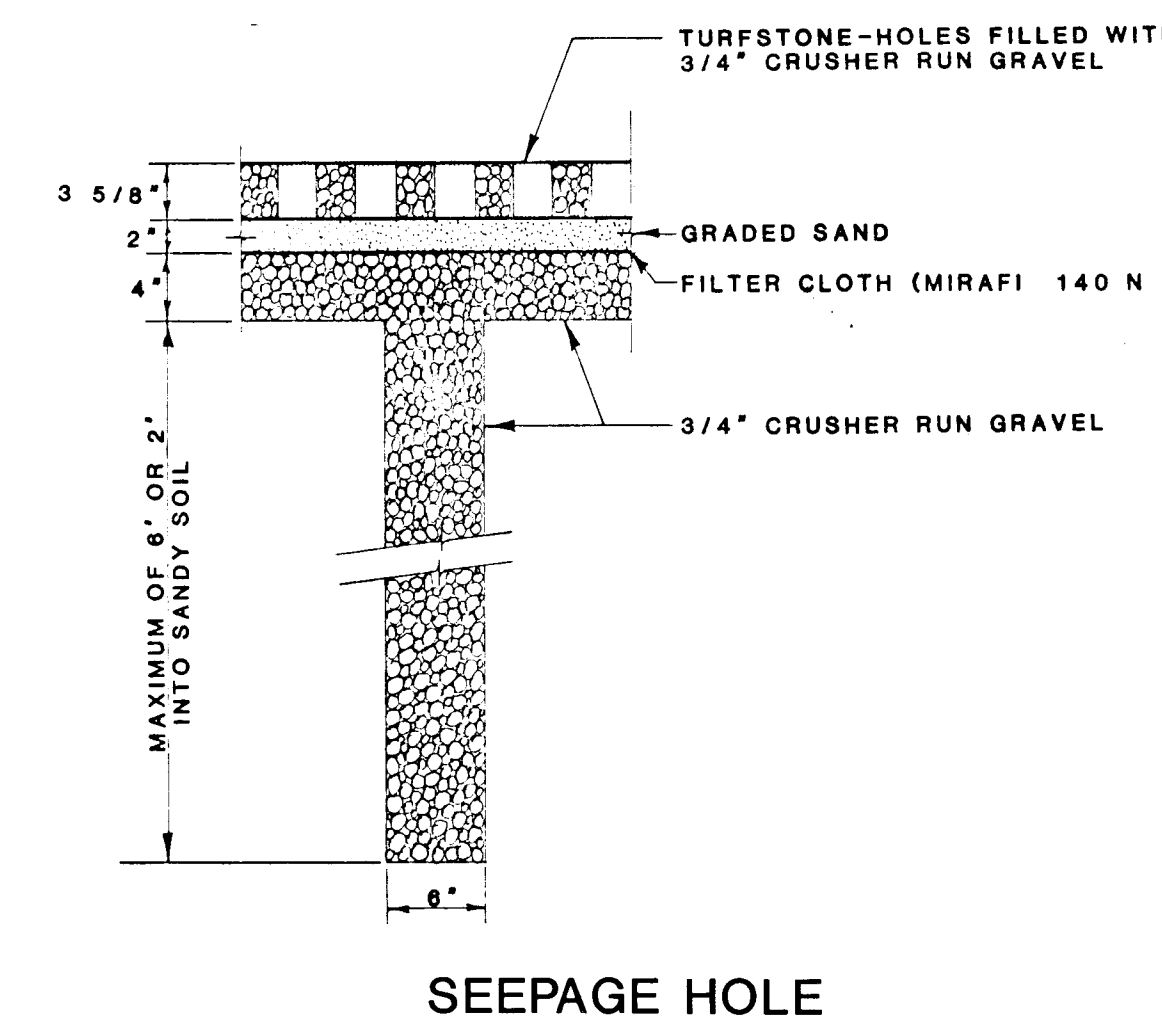
DETAILS



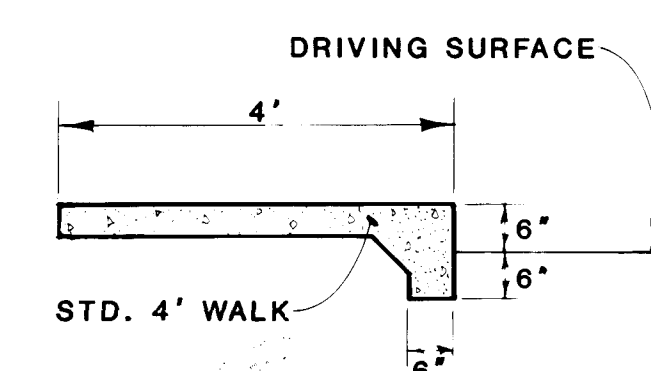
INSTALLATION NOTES -

- Overexcavate sub-soil 6" below finished grade and replace, compacted to 95% max. dry density (ASTM D-1557)
- Use 4" of 3/4" crusher run, which should be compacted with a vibrating compactor.
- Install the levelling bed of a 2" layer of graded sand, levelled. Do not compact.
- Install Turfstone over sand, leaving a space of 1/8" between each paver.
- Turfstone holes filled with 3/4" crusher run gravel.

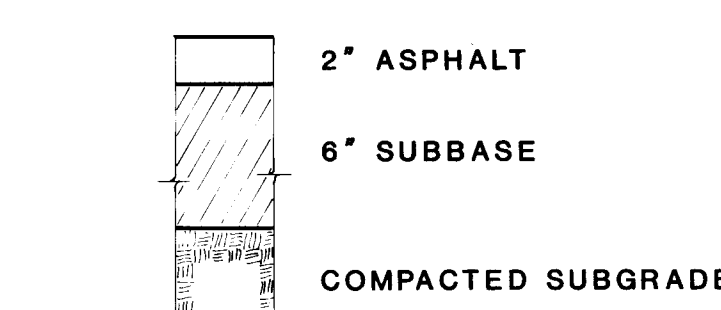
TURFSTONE INSTALLATION



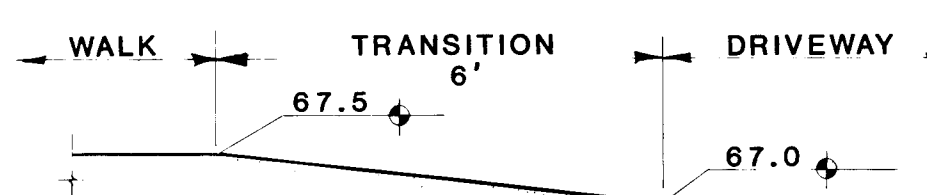
SEEPAGE HOLE



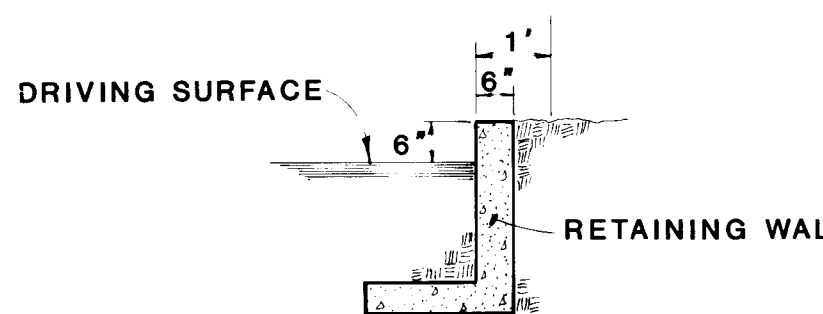
TURNED DOWN WALK



ON SITE PAVING SECTION



SIDEWALK TRANSITION



RETAINING WALL / CURB

1	2	3	4	5	6	7	8	9	10	11	12
2	6	2	4	0	9	0	4	8	6		

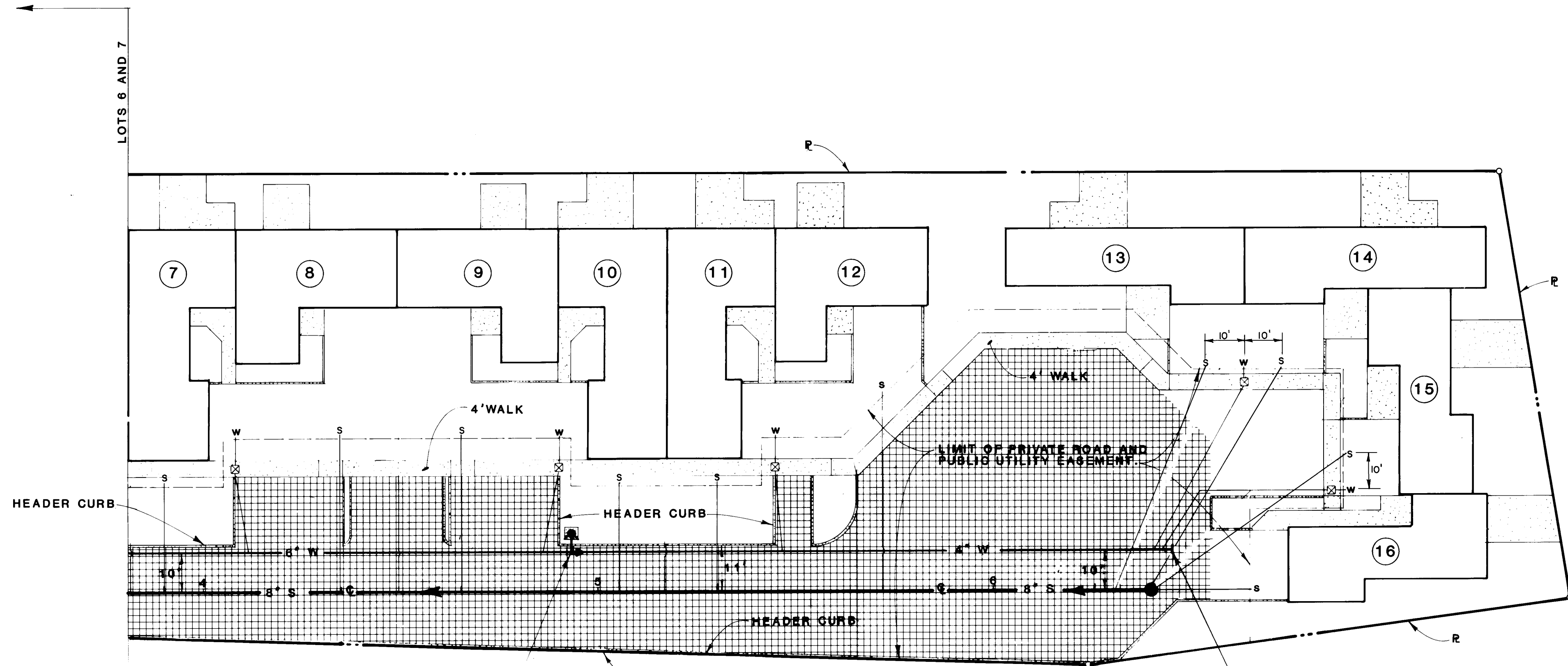
DRAINAGE / GRADING PLAN
SOMBRA DEL RIO SUBDIVISION
CANDELARIA BOULEVARD N.W.

Walter G. Hines
NEW MEXICO
7386

WALTER G. HINES
NEW MEXICO
7386
SHEET 2 OF 2

CTS INC.
ENGINEERING
1100 ALVARADO N.E. SUITE A
ALBUQUERQUE, NEW MEXICO 87110
(505) 266-3444

DATE
REVISIONS
DESIGNED
DRAWN
CHECKED

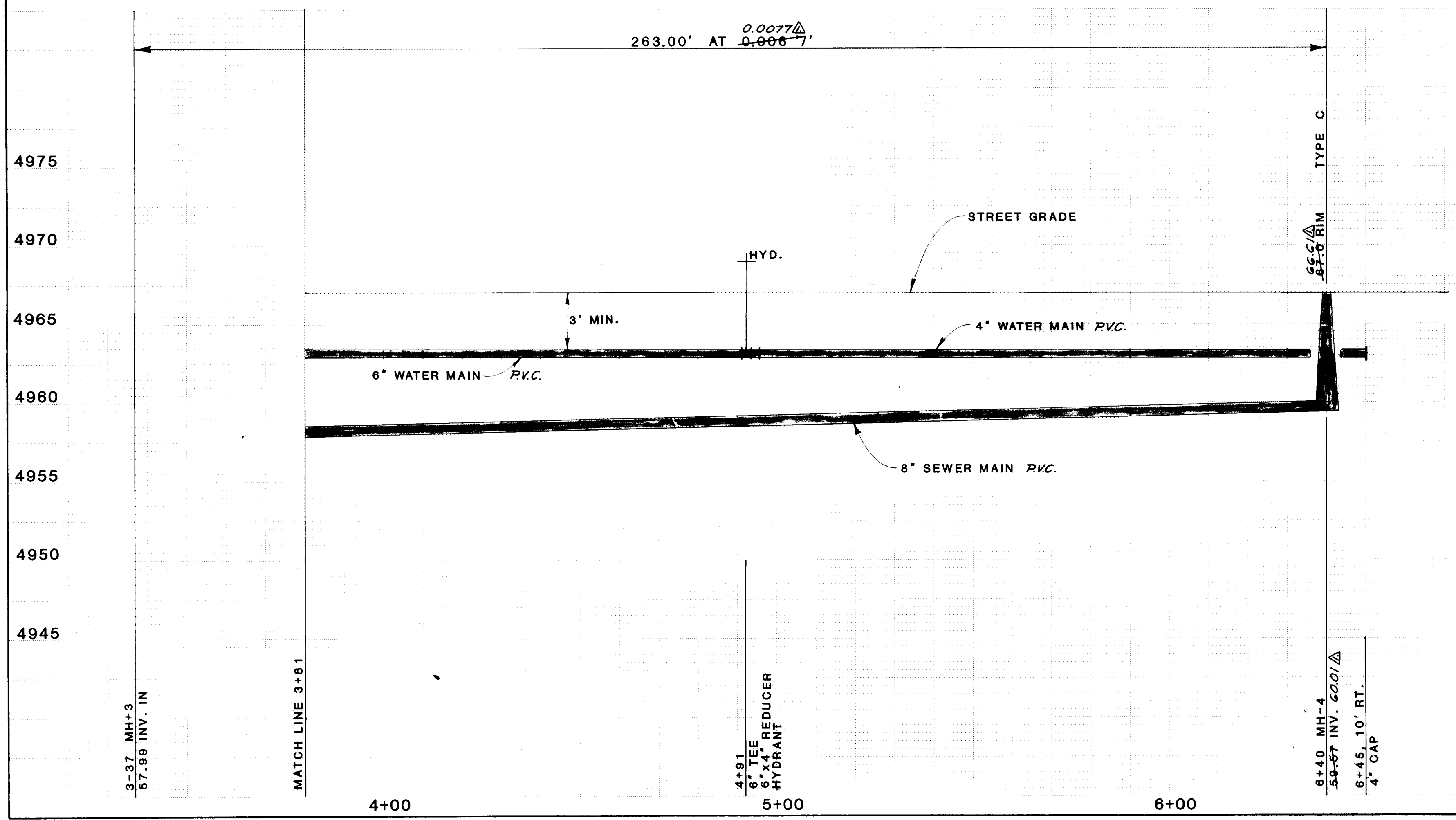


1" = 20'

MATCH LINE 3+81
SEE SHEET 5 OF 6

4+91
6" TEE, 10' RT.
6"x4" REDUCER
HYDRANT, 15' RT.
B.F. ELEV. 67.86
3'x3'x6" CONC. PAD
BLOCKING

6+45, 10' RT.
4" CAP
BLOCKING



Location of Service Connection to Mains

Water
Q STA
4 + 11
4 + 86
5 + 47
6 + 41
6 + 43
Elev. at Meter
65.0

All water taps are doubled
Stub service line to meter box

Sewer
Q STA
4 + 11
4 + 86
5 + 47
6 + 41
6 + 43
Elev. at Stub End
63.0

Stub to easement line.
Place EMP at stub end if hook-up is postponed.

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL		REVISIONS	
CONTRACTOR	DATE	10-813-A	4888.18	FIELD NOTES	BY			NO.	DATE
INSPECTOR'S NAME	DATE	A.C.S.B.C. FOUND AT THE N.E. CORNER OF							
FIELD CHECKED BY	DATE	RIO GRANDE BLVD. AND CANDELARIA N.W.							
VERIFICATION BY	DATE								
CORRECTED BY	DATE								
RECORDED BY	DATE								

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

TITLE: **SOMBRA DEL RIO SUBDIVISION**
SEWER AND WATER PLAN AND PROFILE

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	<i>William Doherty</i>	4/3/85	Liquid Waste	<i>William Doherty</i>	4/3/85
A.C.E. Design	<i>William Doherty</i>	4/3/85	Traffic	<i>William Doherty</i>	4/3/85
Hydrology	<i>William Doherty</i>	4/3/85	Water	<i>William Doherty</i>	4/3/85

DRAWING NO. **2409** MAP NO. **G-12** SHEET **6** OF **6**