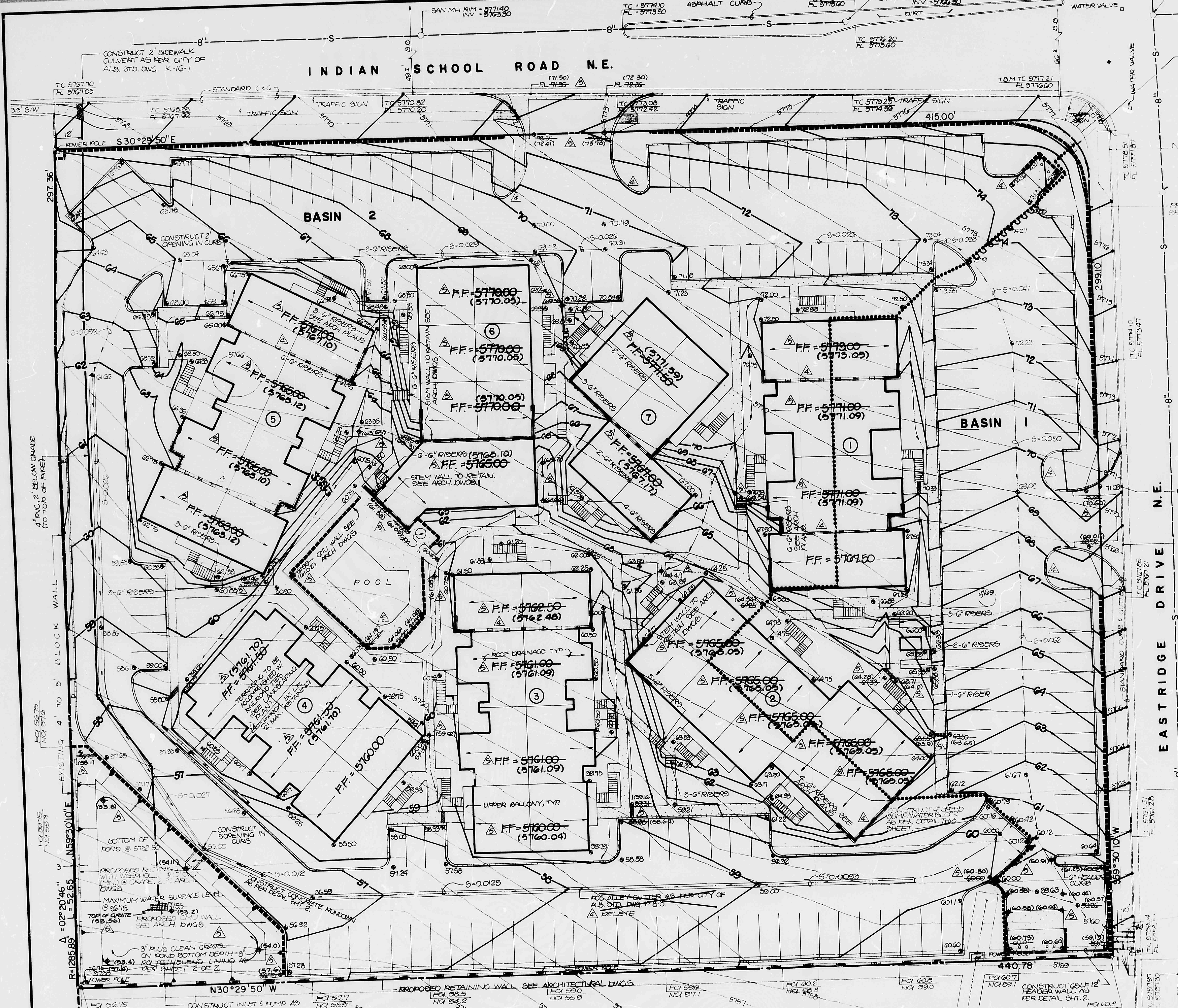
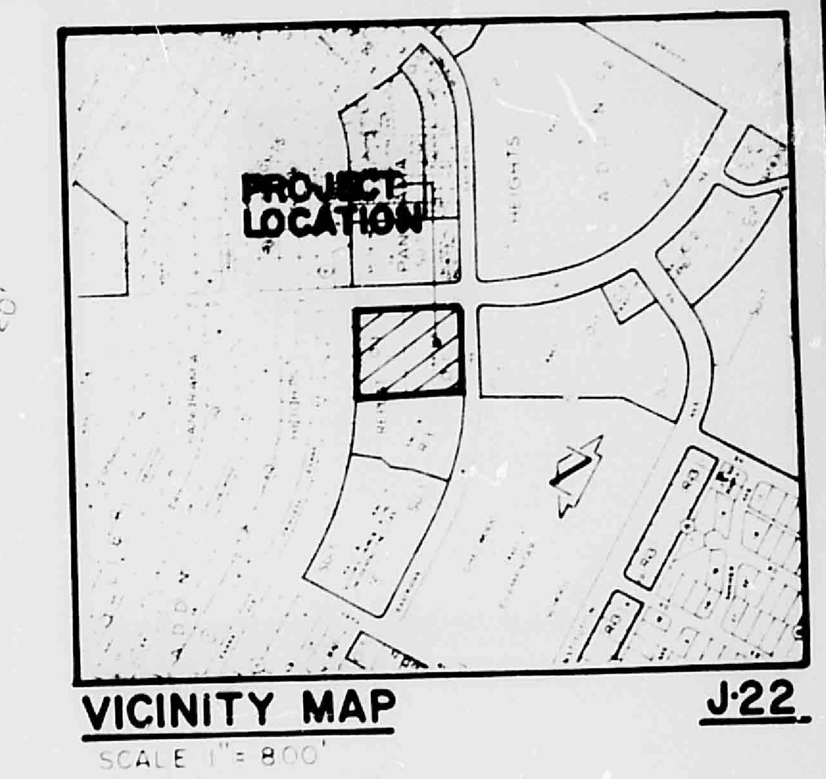




VICINITY MAP J-22

LEGEND

T.C. 5858.59	TOP OF CURB
FL. 5858.09	FLOW LINE
55	PROPOSED CONTOUR
5855	EXISTING CONTOUR
	PROPOSED CONCRETE
	PROPERTY LINE
	PROPOSED RETAINING WALL
	EXISTING BLOCK WALL
	PROPOSED FENCE
	PROPOSED SPOT ELEVATION
	EXISTING SPOT ELEVATION
	SIDEWALK CULVERT - SEE CITY OF ALBUQ STANDARD DRAWING K-16-1
	DRAINAGE BASIN BOUNDARY
	SWALE

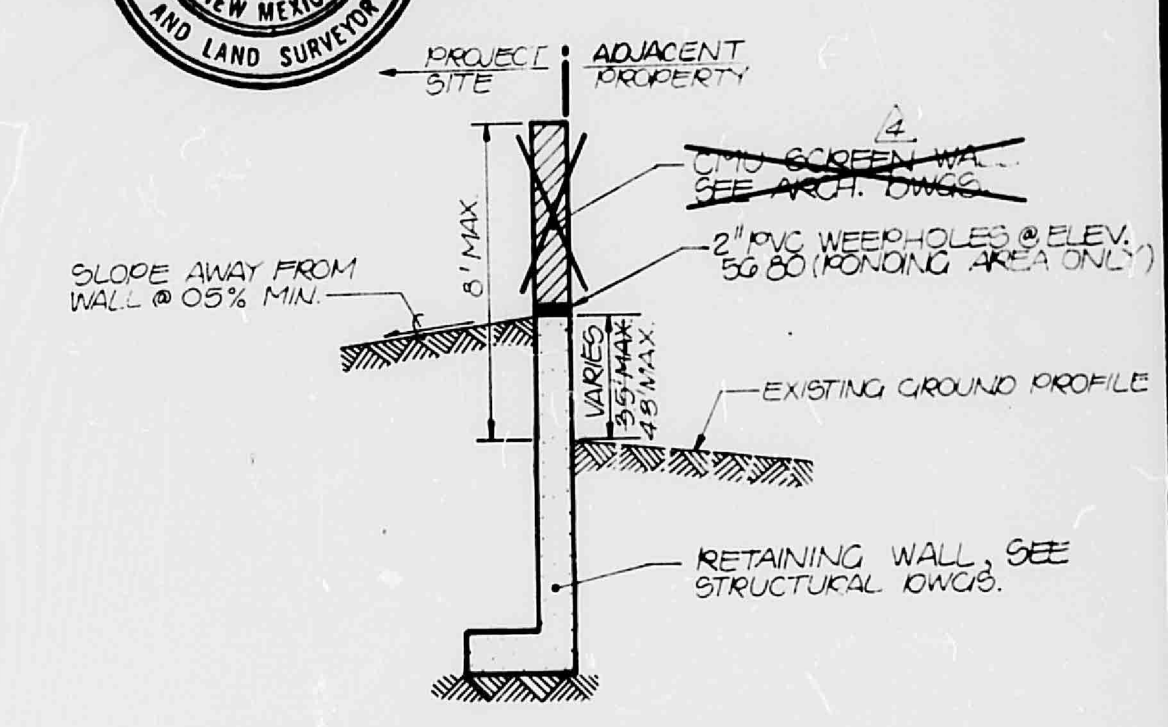
Drainage Certification

As shown by the "as-built" spot elevations (shown in parenthesis) the site was constructed in substantial compliance with the approved Grading and Drainage Plan.

Based upon the information presented herein, a certificate of occupancy is hereby requested.

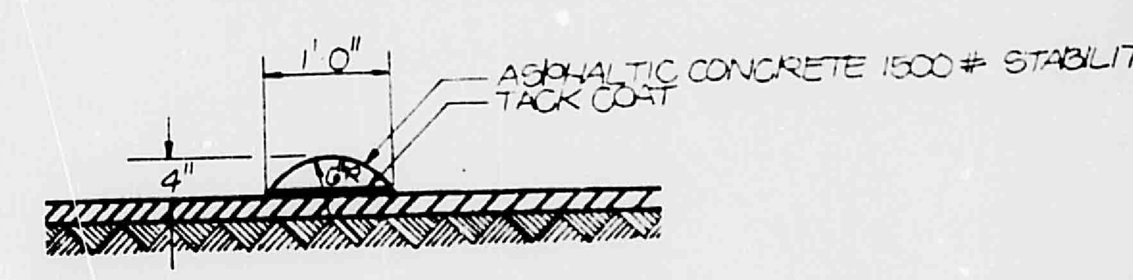
Thomas T. Mann, Jr., NMPE & LS No. 3792 — 9.11.86 Date

REGISTERED PROFESSIONAL ENGINEER AND LAND SURVEYOR — STATE OF NEW MEXICO — THOMAS T. MANN, JR. — 3792



RETAINING WALL DETAIL

SCALE 1" = 5'



SPEED BUMP / WATER BLOCK

NTS

11.6.85

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No.	Date	By	Revisions
5	9/12/86	SKS	"AS BUILT" REVISIONS
4	10/28/85	SKS	GENERAL
1	8/8	SKS	BUILDING SHIFT.
2	8/21/84	SKS	CHANGE STAIR LAYOUT, TRASH COMPACTORS; ADD MAILBOXES.
3	10/24/84	SKS	REVISE ENTRANCE GRADES AS PER TRAFFIC ENGINEER

DESIGNED BY S K S
DRAWN BY jmc
APPROVED T T M

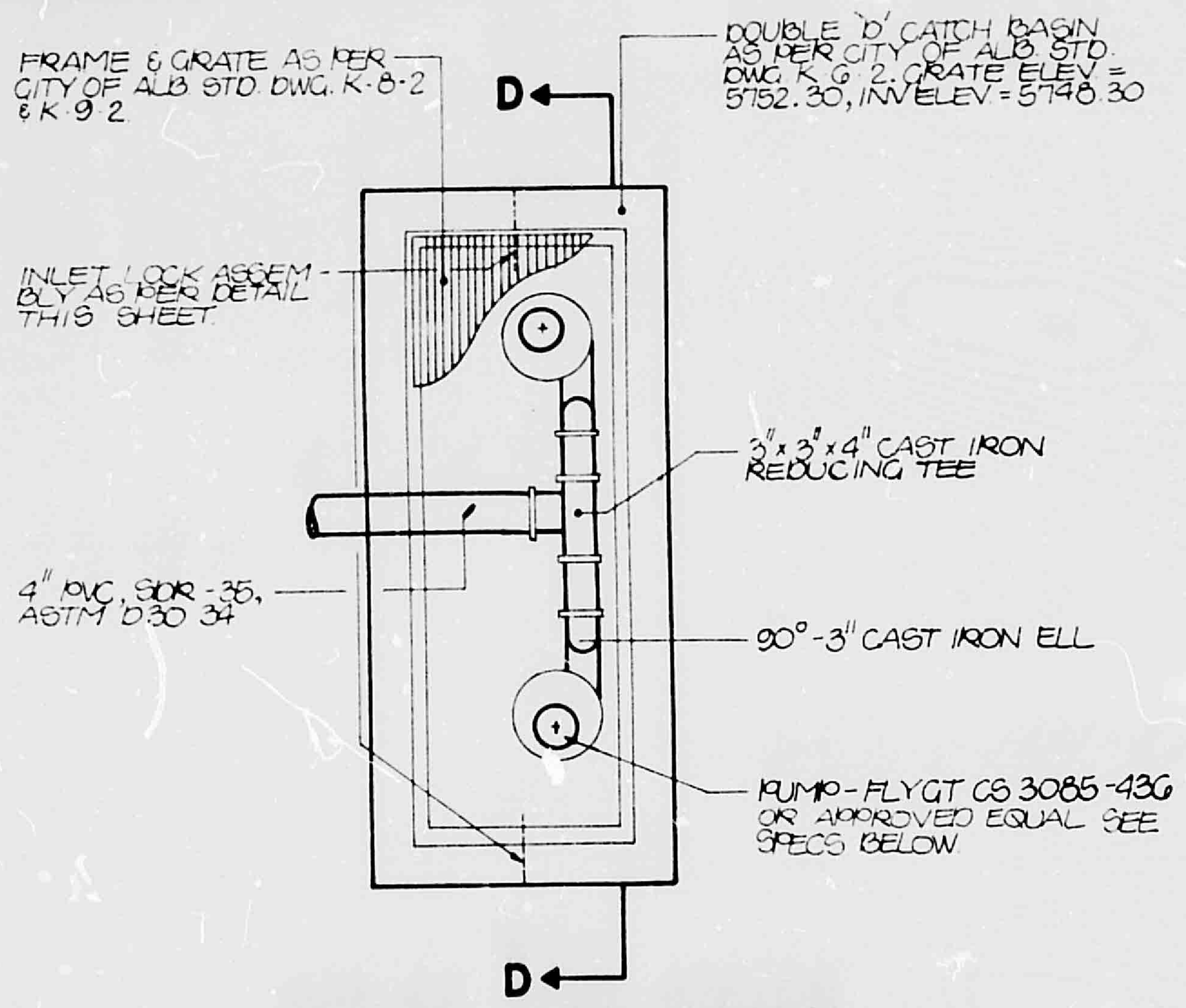
JOB NO. 40521
DATE 5·84

DRAINAGE CERTIFICATION

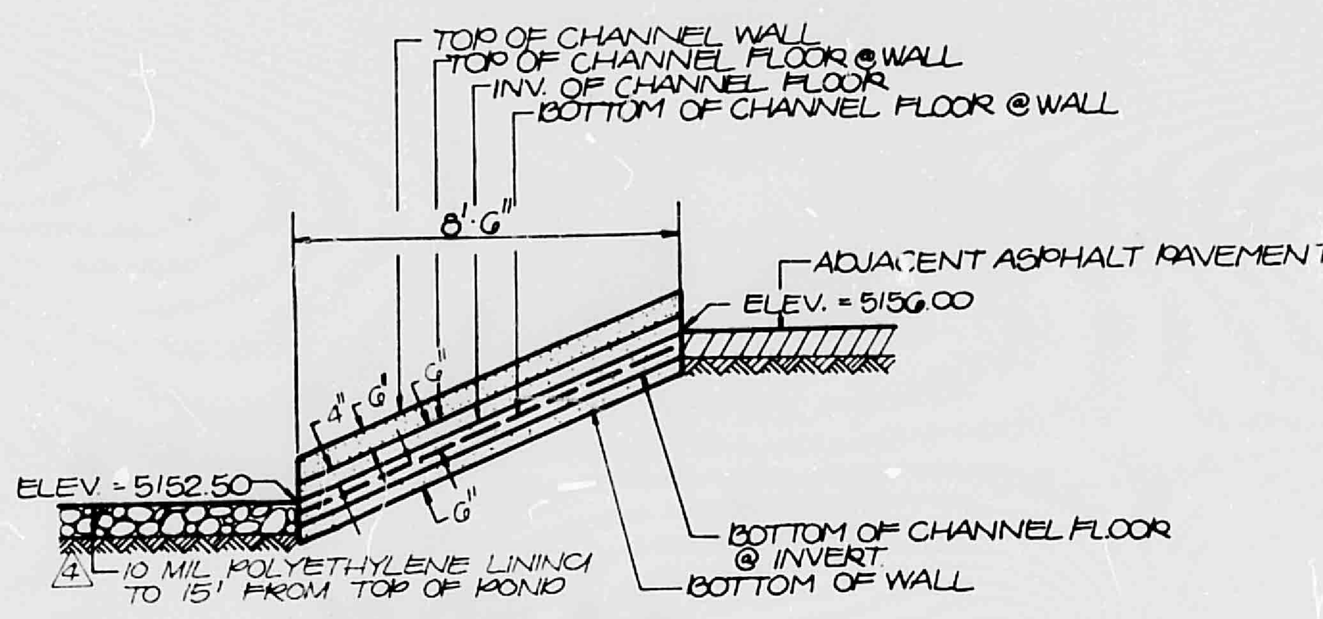
TRACT C & D M.P.E. - EASTRIDGE

J22/D35

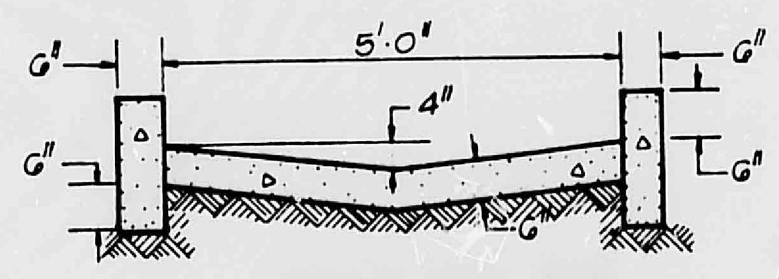
SHEET 1 OF 2



DUPLEX PUMP SYSTEM
NTS

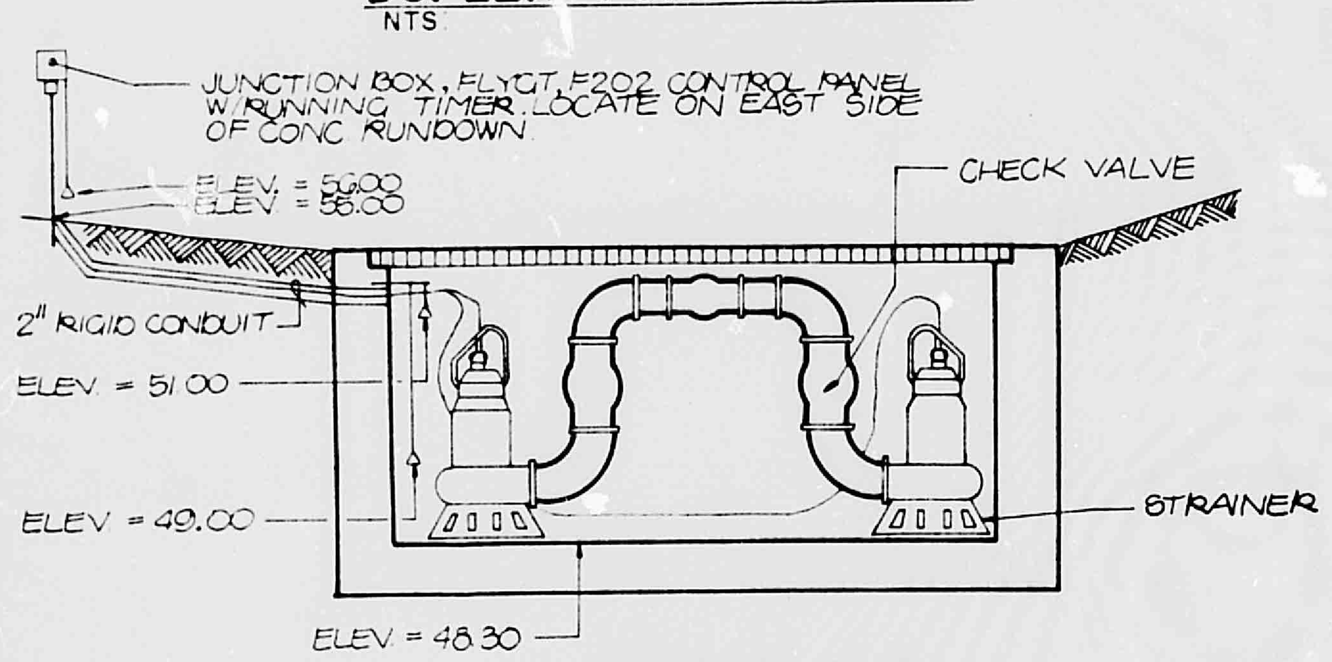


SECTION A-A
SCALE: 1" = 4'

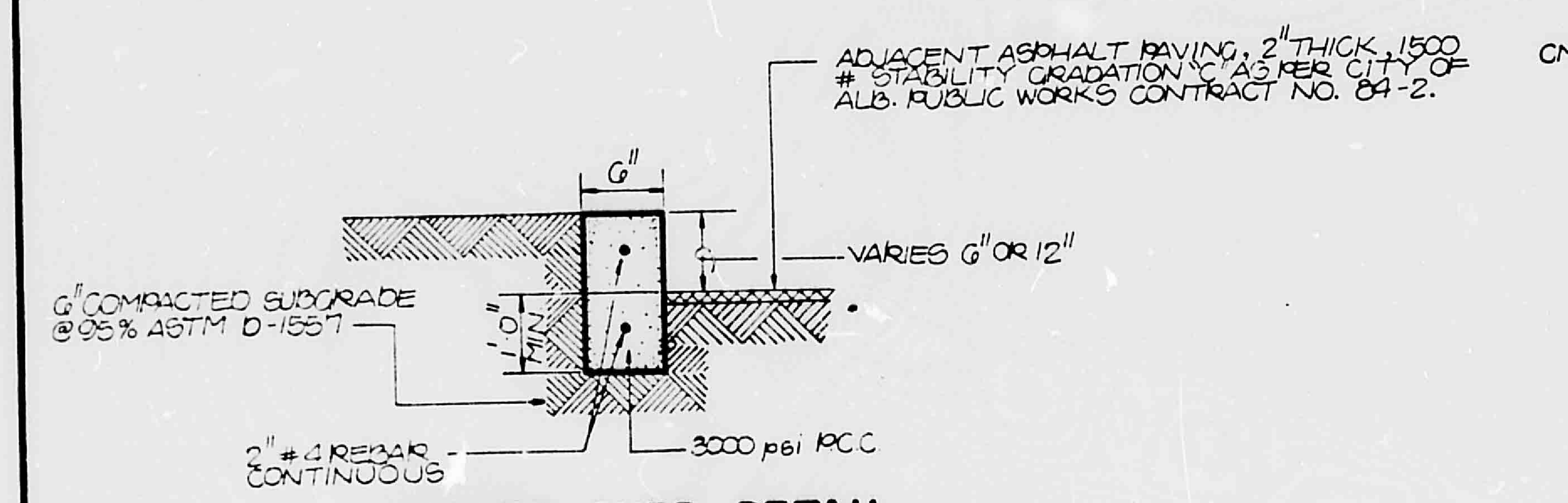


SECTION B-B
SCALE: 1" = 2'

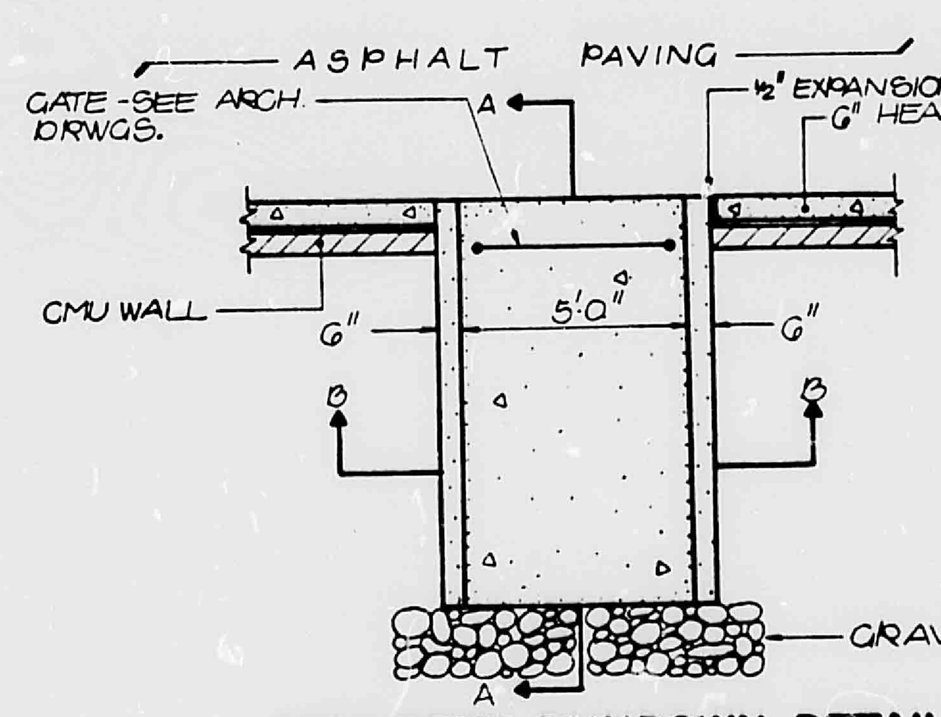
NOTE: FOR CONSTRUCTION SEE CITY OF ALB. STD. DWG. K10.2



SECTION D-D
NTS

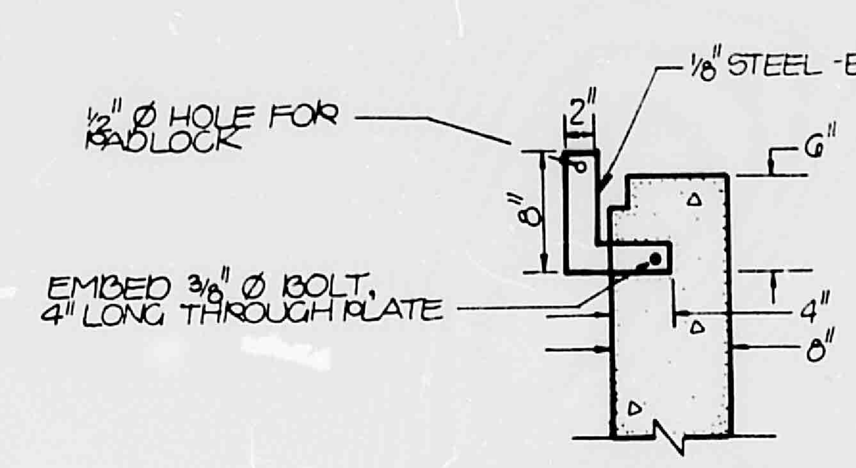


HEADER CURB DETAIL
SCALE: 1" = 1'

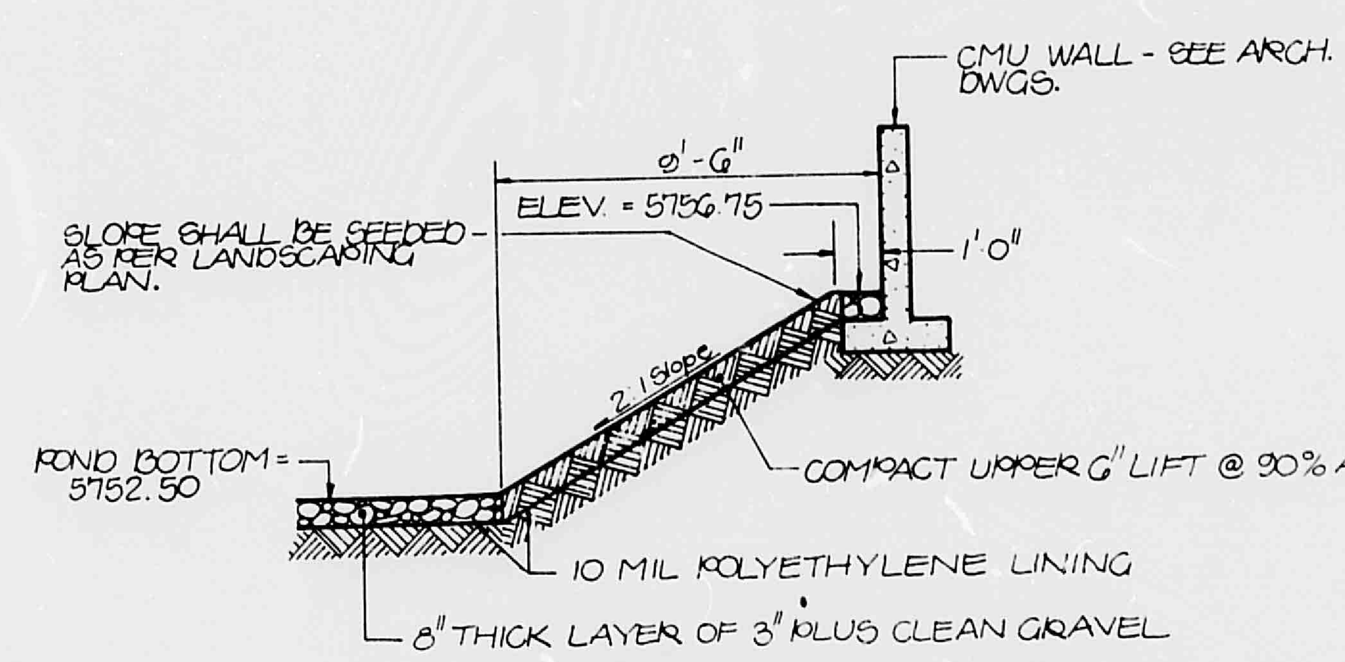


NOTES:
1. FOR CONSTRUCTION SEE CITY OF ALB. STD. DWG. K-10-2.

CONCRETE RUNDOWN DETAIL
SCALE: 1" = 4'



INLET LOCK ASSEMBLY
SCALE: 1" = 1'



TYPICAL POND SECTION
SCALE: 1" = 4'

CONSTRUCTION NOTES:

1. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE 765-1234, FOR LOCATION OF EXISTING UTILITIES.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
3. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
4. ALL CONSTRUCTION WITHIN PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.
5. MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARD DRAWING S-2-3. MANHOLES SHALL BE 4' DIAMETER TYPE 'E'.
6. CATCH BASINS SHALL BE SINGLE 'D' CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARD DRAWING K-6-2.
7. SIDEWALK CULVERTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARD DRAWING K-16-1.

EROSION CONTROL MEASURES

1. DURING CONSTRUCTION, THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AT THE PROPERTY LINES AND WETTING THE SOIL TO KEEP IT FROM BLOWING.
2. THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.

PROJECT BENCHMARK = TBM

ACS BRASS CAP STAMPED "1-J23, 1982" LOCATED AT THE TRAMWAY BOULEVARD/INDIAN SCHOOL ROAD INTERSECTION ON THE NOSE OF THE MEDIAN IN TRAMWAY, 182' NORTH OF INDIAN SCHOOL CENTERLINE.
ELEV. = 5840.70 FEET MSLD.

DRAINAGE PLAN

The following items concerning the Eastridge Apartment Complex Drainage Plan are contained hereon:

1. Vicinity Map
2. Grading Plan
3. Calculations

The proposed improvements, as shown by the Vicinity Map, are located at the northwest corner of Indian School Road and Eastridge Drive. At present, the site is undeveloped. The parcel to the north is currently developed with residential housing. The parcel to the west is currently undeveloped. As shown on the Flood Insurance Maps, this site does not lie in a Flood Hazard Zone. However, downstream flooding does occur in Lomas Boulevard, therefore, onsite ponding is being proposed. The site slopes from east to west and from south to north away from the improved streets, therefore, a pump is proposed to discharge runoff into Indian School Road. No offsite flows enter the site.

The proposed Grading Plan shows 1) existing and proposed grades indicated by spot elevations and contours at 1' 0" intervals, 2) continuity between existing and proposed elevations, and 3) the limit and character of the proposed improvements. As shown by this plan, the proposed improvements consist of construction of two-story apartment buildings with associated parking and entrance ways. Basin 1 will outlet through four 4-inch PVC pipes at the southwest corner of the site. Water will be ponded on the asphalt until discharge into Eastridge Drive occurs. Basin 2 will drain to the northwest corner of the site at which point a pond has been provided for storage of the 100-year runoff volume. The water will then be pumped through a 4-inch PVC pipe so that the pond drains within 24 hours.

The Calculations which appear below analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The Rational Method has been used for this analysis in accordance with the City of Albuquerque Development Process Manual, Volume II. As shown by these calculations, the proposed improvements will result in a decrease in the rate of runoff and an increase in the volume of runoff. The development of this site will help to alleviate flooding problems in Lomas Boulevard. The design of this site is consistent with the predesign conference recap which accompanies this submittal.

CALCULATIONS

Ground Cover Information
From SCS Bernalillo County Soil Survey, Plate 32:
Embudo Tijeras Complex
Hydrologic Soil Group B

Rational Method
Discharge: $Q = CiA$
where C varies
$i = P_6 (6.84) T_c^{-0.51} = 5.50$ in/hr
$P_6 = 2.6$ in (DPM Plate 22.2D-1)
$T_c = 10$ min (minimum)
A = area, acres

Volume: $V = CP_6A(1/12)$
where c varies
$P_6 = 2.6$ in (DPM Plate 22.2D-1)
A = area, sf

Existing Condition
$A_{total} = 153{,}750$ sf = 3.53 Ac
$A_{imp} = 0$ sf; % impervious = 0%
'C' = 0.34 (DPM Plate 22.2C-1)
$Q_{100} = CiA = 0.34 (5.50) 3.53 = 6.60$ cfs
$V_{100} = CP_6A = 0.34 (2.6/12) 153{,}750 = 11{,}325$ cf

Developed Condition
Basin 1
$A_{total} = 31{,}205$ sf = 0.72 Ac
$A_{imp} = 23{,}715$ sf; % impervious = 76
'C' = 0.74
$Q_{100} = CiA = 0.74 (5.50) 0.72 = 4.1$
$V_{100} = CP_6A = 0.74 (2.6/12) 31{,}205 = 5005$ cf

Basin 2
$A_{total} = 122.545$ sf = 2.81 Ac
$A_{imp} = 84{,}555$ sf; % imp = 69
'C' = 0.69
$Q_{100} = CiA = 0.69 \times (5.50) 2.81 = 10.7$ cfs
$V_{100} = 18{,}300$ cf

Pond Volume
Basin 1
$V_{required} = 465$ cf (by hydrograph analysis)
V_{pond}: $A_{60.15} = 1760$
> Vol = 610
$A_{59.65} = 676$
> Vol = 170
$A_{59.15} = 0$
ΣVol = 780 cf

Basin 2
$V_{required} = 18{,}300$ cf
V_{pond}: $A_{56.75} = 7125$ sf
> Vol = 4540 cf
$A_{56.00} = 4985$ sf
> Vol = 13975 cf
$A_{52.50} = 3000$ sf
ΣVol = 18515 cf

Discharge:
Basin 1
4-4" pipes
orifice equation: $Q = CA\sqrt{2gh}$
C = 0.7
A = 4 (0.0855) = 0.342 sf
g = 32.2 ft/sec^2
h = 10" = 0.83
$Q = 0.7 (0.342) \sqrt{2(322)0.83}$
= 1.75 cfs

Basin 2
pump to discharge @ 125 gpm = 0.27 cfs

Comparison
$\Delta Q_{100} = 6.6 - 1.75 - 0.22 = -4.63$ cfs
$\Delta V_{100} = 5005 + 18300 - 11325 = +11980$ cf

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REGISTERED PROFESSIONAL ENGINEER STATE OF NEW MEXICO THOMAS MANN 3792 AND LAND SURVEYOR
11-6-85
9-11-86

NO	DATE	BY	REVISIONS
4		SKS	SECTION A-A

DESIGNED BY SKS
DRAWN BY jmc
APPROVED TTM
JOB NO 40521
DATE 6-84

DRAINAGE CERTIFICATION
TRACT C & D M.P.E. - EASTRIDGE

J22 / D35

FILE NO
SHEET 2 OF 2