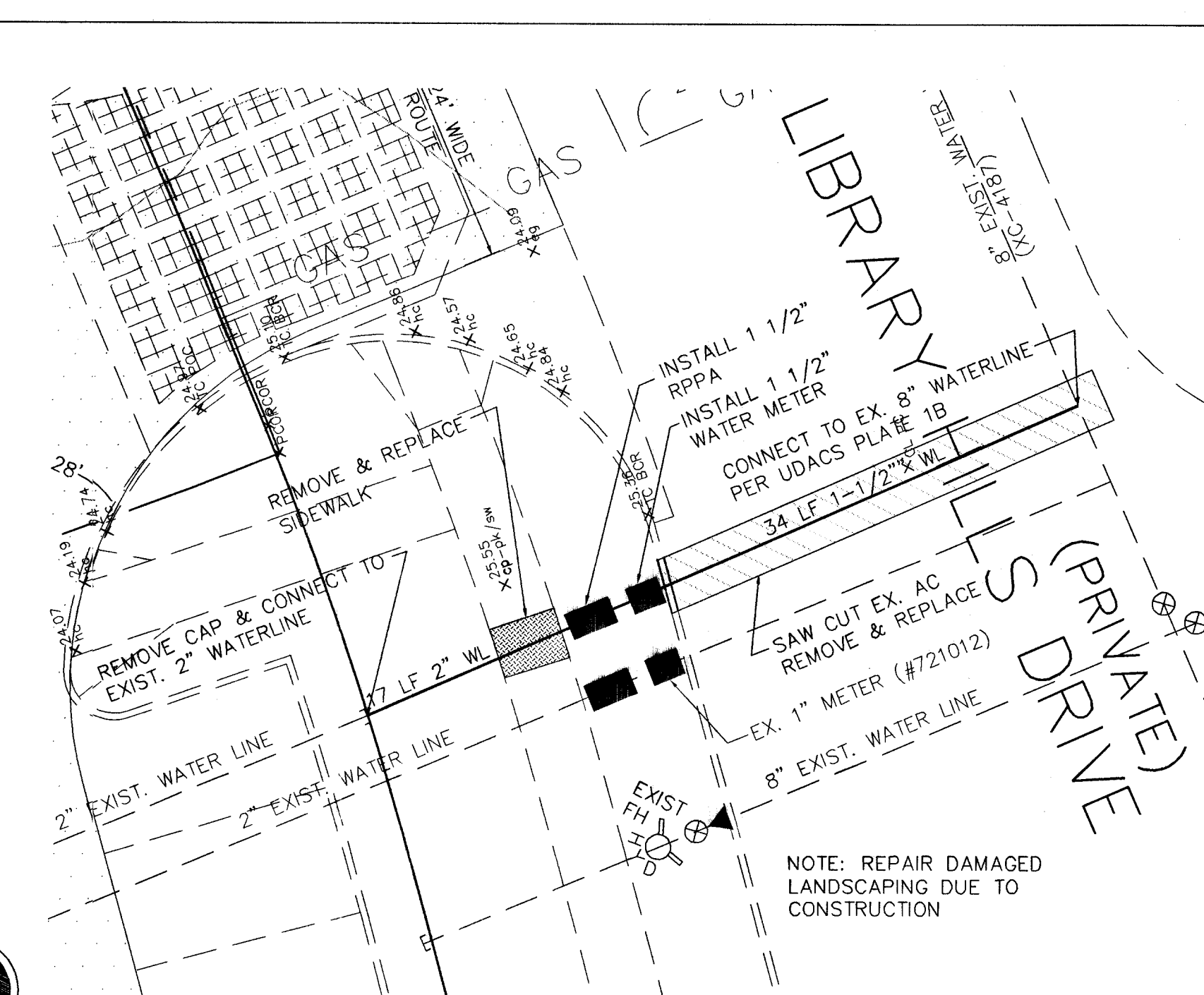
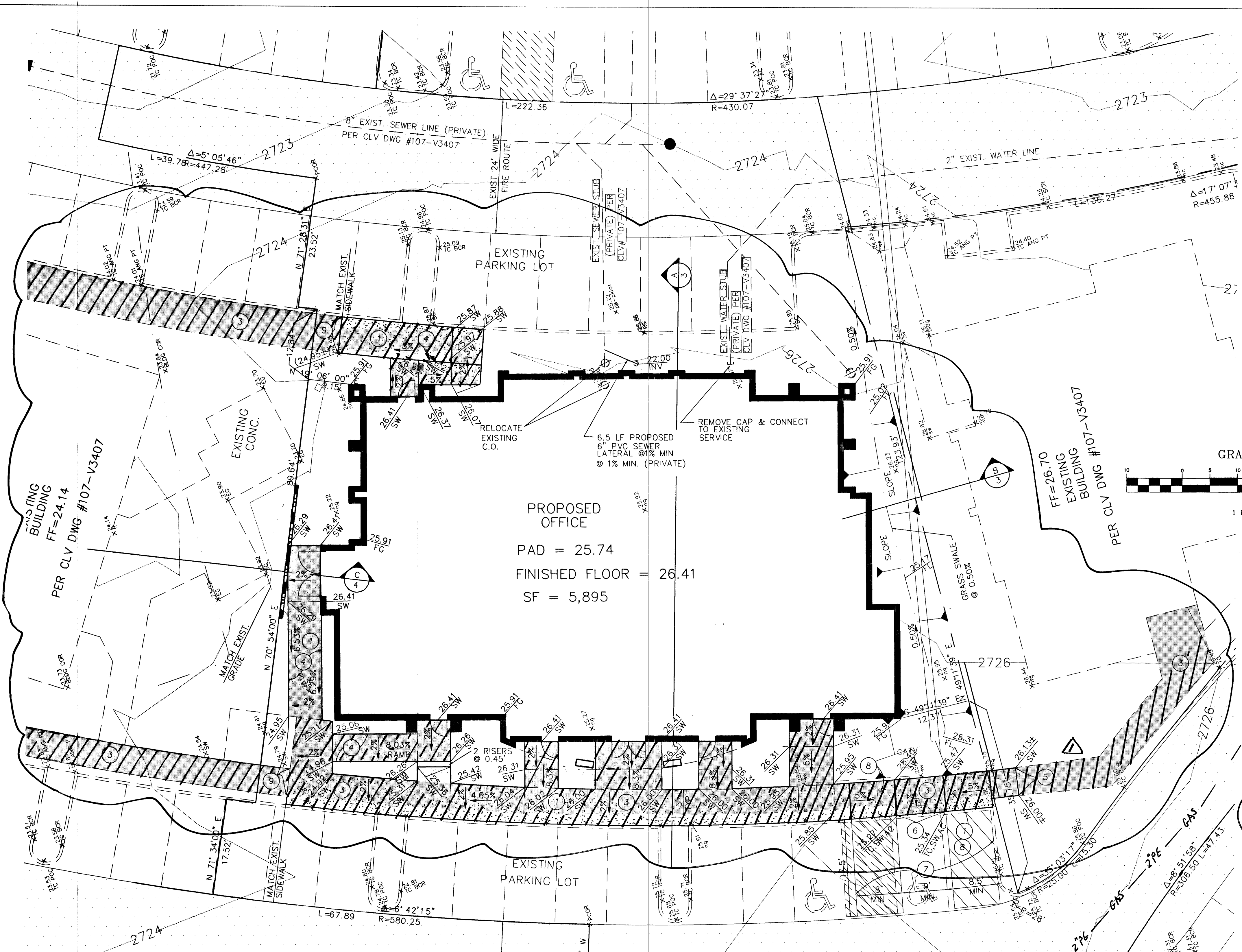
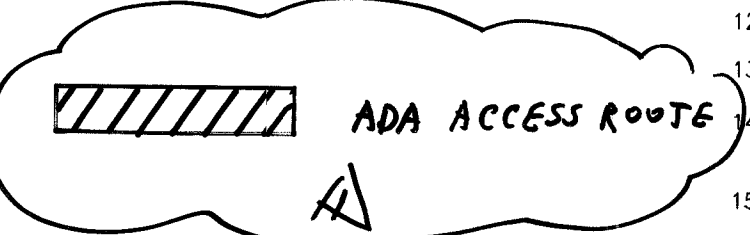


GENERAL GRADING AND DRAINAGE NOTES

1. ALL DESIGN ELEVATIONS ARE TO FINISH GRADE.
 2. ALL FINAL GRADE ELEVATIONS ON THE OUTSIDE OF BUILDINGS SHALL BE A MINIMUM OF 6" LOWER THAN THE ESTABLISHED FINISH FLOOR ELEVATION, EXCEPT AT THE ENTRANCE OF THE BUILDING.
 3. THE CONTRACTOR SHALL VERIFY ALL ASPECTS OF THESE PLANS AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO COMMENCEMENT OF ANY WORK.
 4. ANY QUANTITIES SHOWN HEREON ARE FOR ESTIMATING ONLY AND ARE NOT TO BE USED FOR BIDDING.
 5. THE CONTRACTOR SHALL FURNISH TO THE ENGINEER AS-BUILT DRAWINGS FOR UTILITY SERVICES FOR HOOK-UPS.
 6. REFER TO THE IMPROVEMENT PLANS FOR STREET SECTIONS, DETAILS AND NEW UTILITY LOCATIONS.
 7. ALL GRADING SHALL CONFORM TO THE SOILS REPORT.
 8. ALL FINISH FLOOR ELEVATIONS TO BE 8" (0.67') ABOVE PAD ELEVATIONS. (SEE TYPICAL LOT DRAINAGE DETAIL), UNLESS OTHERWISE NOTED.
 9. ALL WORK PERFORMED WITHIN THE PUBLIC RIGHT-OF-WAY AND OUTSIDE THE PROJECT BOUNDARY SHALL BE PERFORMED UNDER A SEPARATE ENCROACHMENT PERMIT ISSUED BY THE CONTROLLING AUTHORITY.
 10. ALL WORK PERFORMED OUTSIDE THE PROJECT BOUNDARY AND ON PRIVATE PROPERTY SHALL NOT BE PERFORMED UNTIL WRITTEN PERMISSION AND EASEMENT HAS BEEN OBTAINED FROM THE PROPERTY OWNER.
 11. ALL WORK AND MATERIALS NOT IN ACCORDANCE WITH THE LATEST "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, CLARK COUNTY AREA," IS SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
 12. A GRADING PERMIT IS REQUIRED.
 13. A SEPARATE PERMIT IS REQUIRED FOR ANY OFF-SITE CONSTRUCTION.
 14. A GRADING AND DRAINAGE PLAN SHALL BE ON THE JOB SITE AT ALL TIMES. DEVIATIONS FROM THE PLAN MUST BE PRECEDED BY AN APPROVED PLAN REVISION.
 15. AS-BUILT FINISH FLOOR ELEVATIONS SHALL BE CERTIFIED BY:
ENGINEER: SOUTHWEST ENGINEERING
ADDRESS: 3610 NORTH RANCHO DRIVE
TELEPHONE NUMBER: 648-9700
- *NATIVE MATERIAL MAY BE USED IN LIEU OF TYPE I, IF APPROVED BY THE SOILS ENGINEER & THE CL.V. & PROCESSED IN ACCORDANCE TO CL.V. STATEMENT OF POLICY *FOR USE OF NATIVE MATERIAL IN LIEU OF IMPORTED TYPE I BASE, DATED JULY 25, 1984.

CONSTRUCTION NOTES

1. CONSTRUCT SIDEWALK PER CC STD DWG 234
2. CONSTRUCT 4" PVC SIDEWALK UNDERDRAIN
3. HC ACCESSIBILITY ROUTE
4. HANDRAIL-SEE ARCHITECT'S PLANS FOR SPECIFICATIONS
5. SAWCUT EXISTING SIDEWALK
6. REMOVE EXISTING CURB AND REPLACE WITH "A" TYPE CURB PER STD DWG 216 W/ 0" CURB FACE
7. REMOVE EXISTING STRIPING & REPLACE WITH PROPOSED STRIPING SHOWN
8. REMOVE EXISTING SIDEWALK
9. MATCH EXISTING ELEVATIONS



REDUCED PRESSURE PRINCIPLE ASSEMBLY (1) 1-1/2"

APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED PER THE UDACS PLATE NO. 11A. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE REDUCED PRESSURE PRINCIPLE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY THE LVWD.

ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT(S) TO ALLOW THE DISTRICT DIRECT ACCESS FROM THE ADJACENT RIGHT-OF-WAY.

EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION

QUANTITY ESTIMATE

DESCRIPTION	PRIVATE
4" CONCRETE SIDEWALK	1375 SF±
2" WATER LINE	51 LF±

WATER ESTIMATE OF QUANTITIES

1-1/2" METER PER UDACS PLATE 1B	1 EA
1-1/2" RPPA PER UDACS PLATE 11A	1 EA

FIRE FLOW DATA

FIRE FLOW IS 2000 GPM AT 20 PSI RESIDUAL PRESSURE	
BASED ON	5,895 S.F.
SQUARE FOOTAGE	V-N
TYPE OF CONSTRUCTION	24"-06"
BUILDING HEIGHT	1
NUMBER OF STORIES	TYPE B
OCCUPANCY	NO
FULL AUTOMATIC FIRE SPRINKLERS:	

REVIEWED BY: See Sht. 1 DATE: _____

APPROVALS

Carmen Shukla 9-8-04 DATE
SUMMERLIN
Kenneth D. Padilla 9/2/04 DATE
CL.V. FIRE DEPARTMENT

L.V.W.D. PROJECT # H-106463 DATE: _____

SEWER CONTRIBUTION

AVERAGE FLOW	0.0045 MGD
PEAK FLOW	0.01527 MGD

BENCHMARK

CITY OF LAS VEGAS VERTICAL CONTROL RIVET AND PLATE IN TOP OF CURB @ TOWN CENTER & VILLAGE CENTER ON WEST EDGE OF ROUNDABOUT
STATION OLVO0 1954
ELEVATION= 831.6122 METERS (NAVD88) 2728.38 FEET

BASIS OF BEARING

NORTH 42°00'00" EAST BEING THE BEARING OF A PORTION OF THE CENTERLINE OF LIBRARY HILLS DRIVE AS SHOWN BY MAP IN THE OFFICE OF THE CLARK COUNTY, NEVADA RECORDER IN FILE 131 OF SURVEYS PAGE 51.

PROJECT NAME: HILLS CENTER BUSINESS PARK
PAD 1 SHTS. 1, 2, 3

This project water plan complies with the Las Vegas Valley Water District's technical requirements. However, this water plan is

NOT APPROVED FOR CONSTRUCTION

at this time and this signature does not provide or imply a water commitment.

Borg Lamp 9/3/04 DATE
LVWD ESN.052

DRAINAGE CERTIFICATION

I CERTIFY THIS GRADING PLAN IS IN CONFORMANCE WITH THE APPROVED DRAINAGE STUDY ON FILE WITH THE CITY OF LAS VEGAS FOR THIS PROJECT.

David E. Potter 9/19/04 DATE
P.E. NO. 0094 8880

NOTICE TO CONTRACTOR !
EXISTING UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATION.

AVOID CUTTING UNDERGROUND UTILITIES. IT'S COSTLY.
CALL before you Dig
1-800-227-2600
UNDERGROUND SERVICE (USA)

AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY.
CALL BEFORE YOU DIG
CALL 1-702-227-2929

REVISION DESCRIPTION
NO. DATE BY APPROVED
1 9/19/04 David E. Potter

STAMP DATE: 8/19/04

3610 North Rancho Drive
Las Vegas, Nevada 89130
Telephone: (702) 648-9700
Fax: (702) 648-1143

ENGINEERING
SOUTHWEST
LAND PLANNING • MAPPING • DEVELOPMENT

GRADING, UTILITY & HORIZ. CONTROL

HILLS CENTER BUSINESS PARK-PAD 1

LIST FAMILY HOLDINGS

TITLE

PROJECT

CITY OF LAS VEGAS

WORK ORDER NO. 031204

DESIGN BY:

DATE: 3/5/04

SCALE: 1"=10'

CADFILE: hc-gp.dwg

SHEET 3 OF 4 SHEETS

CLV DWG NO. 107V4107

2004 - 2:32pm

G:\vd_jpro\031204.dwg\vc-gp.dwg