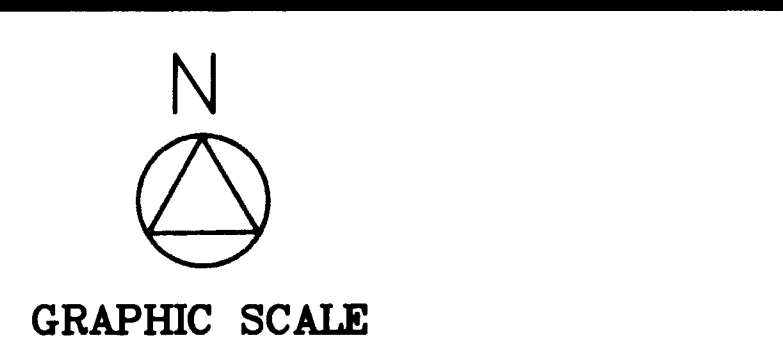
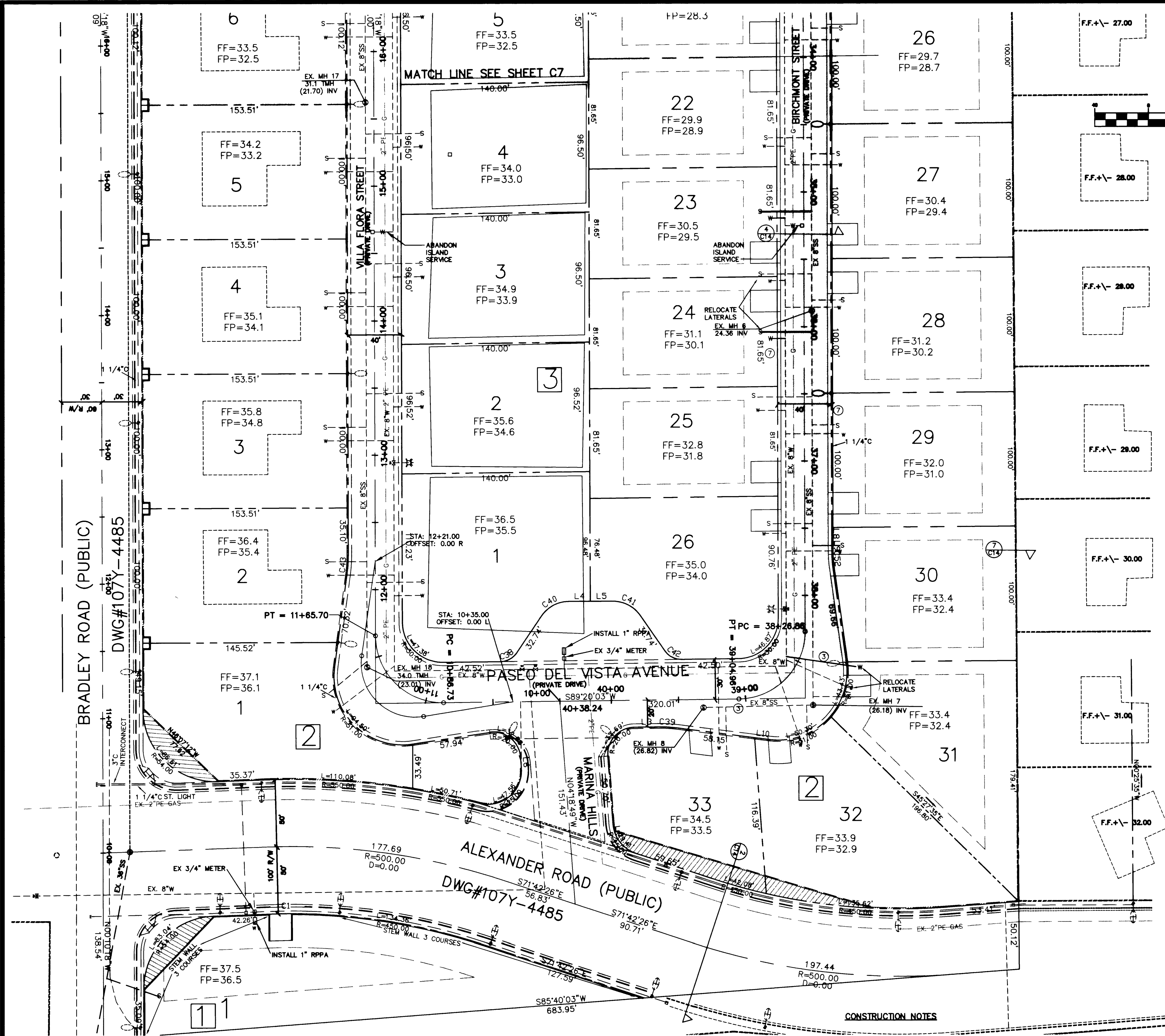




ESTIMATE OF PUBLIC QUANTITIES

8" W	853 LF
FH NEW COMPLETE UDACS 7	1 EA
FH RELOCATE COMPLETE UDACS 7	1 EA
NEW 3/4" WATER METER PER UDACS 18	11 EA
RELOCATE 3/4" WATER METER UDACS 18	12 EA
REMOVE/ABANDON 3/4" SERVICE LATERAL 7	EA
8" SS	1130 LF
MH<6"	2 EA
MH<6"	4 EA
NEW 4" SS LATERAL	18 EA
RELOCATE 4" SEWER LATERAL	4 EA
REMOVE/ABANDON 4" SEWER LATERAL	5 EA

PROJECT NAME: Willowdale Park Unit 1 & 2
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.
Greg Lange 03/23/09
LVVWD #52 DATE

SERVICE LATERALS FOR LOTS 31, BK 2 AND
LOTS 16, 17, 18, 23 AND 24 BK 3
AT THE LVVWD (702-258-3227) 48 HOURS PRIOR TO THE

- BK 2 LOTS 21, 31
- BK 3 LOTS 17, 18 AND 24
- ISLAND LATERALS, ADJACENT TO BK 3 LOT 3 AND 23

ABANDONMENT OF EXISTING SERVICE(S) - 2" AND SMALLER

THE CONTRACTOR SHALL NOTIFY THE INSPECTION DIVISION AT THE LVVWD (702-258-3227) 48 HOURS PRIOR TO THE REQUESTED REMOVAL TIME TO ALLOW THE DISTRICT TO TAKE THE FINAL METER READING OF THE METER. AFTER THE FINAL READING, THE EXISTING METER(S) SHALL BE REMOVED AND DELIVERED TO THE DISTRICT. THE CONTRACTOR MAY THEN BEGIN REMOVAL PROCEDURES FOR THE AFFECTED SERVICE AS FOLLOWS:
EXISTING SERVICE LATERALS THAT ARE TO BE ABANDONED FROM THE EXISTING WATER MAIN, SHALL HAVE THE CORPORATION STOP TURNED OFF AT THE MAIN, A MINIMUM OF 12" OF THE LATERAL, CUT OUT NEAR THE CORPORATION STOPS AND A BRASS CAP INSTALLED ON THE CORPORATION STOP. IF THE CORPORATION STOP IS DAMAGED BEYOND REPAIR OR PULLED FROM THE EXISTING WATER MAIN, THE MAIN SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE, IN A MANNER APPROVED BY THE LVVWD. IF THE CORPORATION STOP IS NOT WATER TIGHT, THE CONTRACTOR SHALL NOTIFY LVVWD COMMUNICATION SUPPORT CENTER (702-258-7171) FOR FURTHER DIRECTION.
THE CONTRACTOR SHALL REMOVE THE EXISTING SERVICE METER BOX AND APPURTENANCES, FILL AND GRADE ANY AND ALL RESULTING VOIDS AND REPLACE OR RESTORE TO ORIGINAL CONDITIONS OR BETTER. ALL LANDSCAPING, IRRIGATION SYSTEMS, CONCRETE, SIDEWALKS, ASPHALT, OR ANY OTHER ITEMS DAMAGED OR REMOVED DURING THE REMOVAL OF THE EXISTING SERVICE METER BOX.

THIS PROPERTY MAY HAVE STATIC WATER PRESSURE IN EXCESS OF 80 PSI. THE UNIFORM PLUMBING CODE REQUIRES THAT INDIVIDUAL, ON-SITE (PRIVATE) PRESSURE REDUCING VALVES BE INSTALLED WHENEVER THE PRESSURE EXCEEDS 80 PSI. PRVS ARE THE DEVELOPER'S RESPONSIBILITY AND WILL NOT BE INSPECTED OR INCLUDED IN THE ACCEPTANCE OF LVVWD FACILITIES. ESR-041

REDUCED PRESSURE PRINCIPLE ASSEMBLY 2-1"

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 LVVWD.

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

LAS VEGAS FIRE DEPARTMENT

FIRE FLOW IS: 1500 GPM AT 20 PSI RESIDUAL PRESSURE
BASED ON: 3500 SF
SQUARE FOOTAGE: 3500 SF
LARGE AREA BETWEEN 4-HR AREA 3500 SF
SEPARATION WALLS:
BUILDING HEIGHT 1-STORY
NUMBER OF STORIES: 1 FLOORS
OCCUPANCY: B-1
FULL AUTOMATIC FIRE SYSTEM: NO
CONSTRUCTION TYPE V-W
CITY OF LAS VEGAS FIRE DEPT. 3/26/09 DATE

BENCHMARK
CITY OF LAS VEGAS # 46, 1LV00 12N4, BEING A RIVET AND PLATE IN WATER METER PAD, 5401 W. ALEXANDER ROAD AT BRADLEY ROAD, N.A.Y.D. 88 DATUM ELEVATION 681.6670 METERS (2236.4358 FEET).

BASIS OF BEARINGS
NORTH 00°10'18" WEST BEING THE BEARING OF THE WEST LINE OF THE NORTHWEST QUARTER OF SECTION 1, TOWNSHIP 20S, RANGE 60E, M.D.M., WEST LINE ALSO BEING THE CENTERLINE OF BRADLEY ROAD AS SHOWN ON BOOK 79 PAGE 9 OF PLATS OFFICIAL RECORDS, CLARK COUNTY, NEVADA.

EXISTING	PROPOSED	EXISTING	PROPOSED
RIGHT-OF-WAY	RIGHT-OF-WAY	RETAINING WALL	RETAINING WALL
PROPERTY LINE	PROPERTY LINE	CHAIN LINK FENCE	CHAIN LINK FENCE
CENTERLINE	CENTERLINE	GRADE BREAK	GRADE BREAK
WATER LINE	WATER LINE	WIRE FENCE	WIRE FENCE
SANITARY SEWER LINE	SANITARY SEWER LINE	FINISH FLOOR	FINISH FLOOR
GAS LINE	GAS LINE	CLEANOUT INVERT ELEV.	CLEANOUT INVERT ELEV.
STORM DRAIN	STORM DRAIN	FLOW LINE	FLOW LINE
POWER LINE/POWER POLE	POWER LINE/POWER POLE	FINISH GRADE	FINISH GRADE
TELEPHONE LINE	TELEPHONE LINE	TOP OF CURB	TOP OF CURB
FIRE HYDRANT	FIRE HYDRANT	TOP OF WALL	TOP OF WALL
WATER VALVE	WATER VALVE	GATE	GATE
METERS/PULL BOXES	METERS/PULL BOXES	SKIN	SKIN
REDUCER	REDUCER		
MANHOLE	MANHOLE		
CLEANOUT	CLEANOUT		
CONTOUR	CONTOUR		
A.C. PAWING	A.C. PAWING		
TYPE "L" CURB & GUTTER	TYPE "L" CURB & GUTTER		
TYPE "A" CURB	TYPE "A" CURB		
CONCRETE	CONCRETE		

ESTIMATED SEWAGE CONTRIBUTION
15,250 GPD AVERAGE
53,375 GPD PEAK

NOTES

- EXISTING WILLOWDALE PARK IMPROVEMENTS PER DWG#107Y-44785
- SEE SHEET C4 FOR LINE AND CURVE TABLES.
- ALL PRIVATE DRIVES ARE P.U.E.'S, PUBLIC SEWER EASEMENTS, AND PUBLIC DRAINAGE EASEMENTS TO BE PRIVATELY MAINTAINED.

AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY.
Call before you Dig- 1-800-227-2600
UNDERGROUND SERVICE ALERT (U.S.A.)
AVOID OVERHEAD POWER LINE CONTACT
Call before you OVERHEAD 1-702-593-6111
NEVADA POWER ENVIRONMENT AND SAFETY SERVICES DEPARTMENT

DELTA ENGINEERING ASSUMES NO RESPONSIBILITY FOR EXISTING UTILITY LOCATIONS AND ELEVATIONS. THE UTILITIES SHOWN ON THIS DRAWING HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. IT IS, HOWEVER, THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR TO FIELD VERIFY ALL EXISTING SITE CONDITIONS PRIOR TO CONSTRUCTION. IF A CONFLICT EXISTS BETWEEN WHAT IS SHOWN ON THESE DRAWINGS AND WHAT EXISTS IN THE FIELD, THE CONTRACTOR IS TO NOTIFY THE ARCHITECT, OWNER'S REPRESENTATIVE OR ENGINEER IMMEDIATELY.

EMERALD DEVELOPMENT
1304 ALPINE DRIVE
BOULDER CITY, NEVADA 89005
(702) 293-1819

DELTA ENGINEERING
3131 MEADE AVENUE, SUITE D
LAS VEGAS, NV 89102
(702) 364-9777 FAX (702) 364-9333
E-MAIL: ENGRDELTA@AOL.COM

UTILITY PLAN
SHEET

WILLOWDALE PARK
UNIT 1 AND 2

DRAWN BY: ACAD

DESIGNED BY: JBS

CHECKED BY: PFB

PROJECT NO: 9862

SCALE: 1"=40'

SHEET C6

6 OF 14 SHEETS

DRAWING NO: 3074-4670

SEAL
PROFESSIONAL ENGINEER-STATE OF NEVADA
WILLIAM S. CROCKETT
No. 8777

12/28/99
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