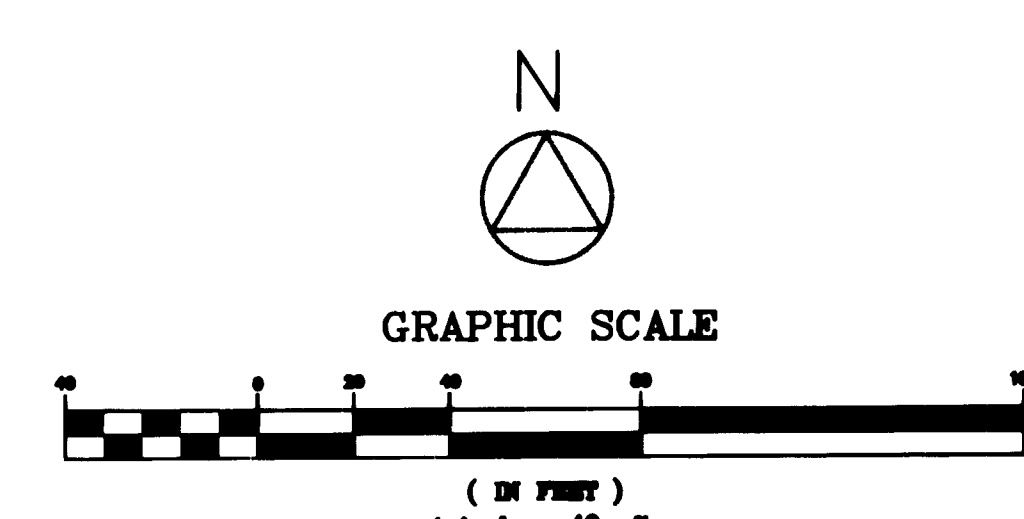
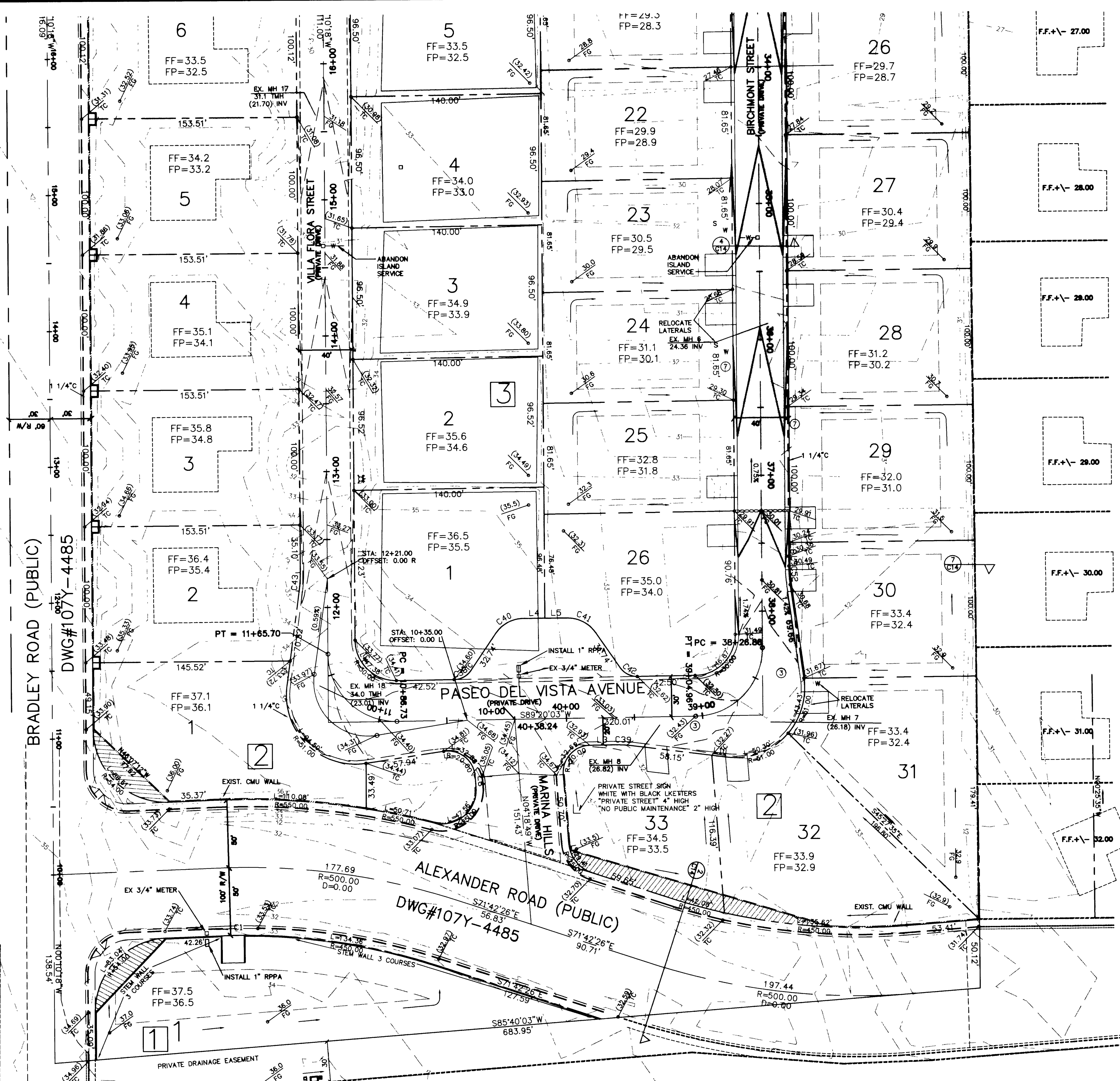




- NOTES**
1. EXISTING WILLOWDALE PARK IMPROVEMENTS PER DWG#107Y-44785
 2. SEE SHEET C4 FOR LINE AND CURVE TABLES.
 3. ALL PRIVATE DRIVES ARE P.U.E.'S, PUBLIC SEWER EASEMENTS, AND PUBLIC DRAINAGE EASEMENTS TO BE PRIVATELY MAINTAINED.

ESTIMATE OF PUBLIC QUANTITIES

3" AC PAVING	2856 SY
24" L C&G	983 LF
CONC. 5/W	6404 SF
CONC. VALLEY GUTTER	1216 SF
TYPE II SIDEWALK UNDERDRAIN	1 EA
HANDICAP RAMP	2 EA
DRAINAGE CHANNEL	1 EA

- NOTES**
- ① RELOCATE EXISTING POWER POLE - COORDINATE WITH NEVADA POWER COMPANY
 - ② INSTALL SIDEWALK RAMP PER STANDARD DRAWING NO. 235
 - ③ SAWCUT AND MATCH EXISTING FG
 - ④ INSTALL SIDEWALK PER STANDARD DRAWING NO. 234
 - ⑤ INSTALL 'L' CURB PER STANDARD DRAWING NO. 216
 - ⑥ INSTALL 8" VALLEY GUTTER PER STANDARD DRAWING NO. 228
 - ⑦ INSTALL 30" ROLL CURB PER STANDARD DRAWING NO. 217A

CONTRACTOR GRADING NOTES

1. SLOPES 4:1 OR STEEPER AND FINE-GRAINED MATERIALS THAT HAVE BEEN DISTURBED (SANDY AND SILTY MATERIALS) SHOULD BE PROTECTED WITH BURLAP OR OTHER EROSION CONTROL FABRIC/MATERIAL, UNLESS OTHERWISE SPECIFIED BY LANDSCAPE DRAWINGS AND SPECIFICATIONS OR THE SOILS REPORT.
2. CONTRACTOR SHALL DETERMINE HIS OWN FOOTING OR BASEMENT EXCAVATION QUANTITIES, EVEN THOUGH SHOWN ON ROUGH GRADING PLANS. ADDITIONALLY, STRUCTURE BACKFILL COSTS SHOULD BE INCLUDED IN THE COST OF THE STRUCTURE, UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS.
3. CONTRACTOR SHALL NOTIFY DELTA ENGINEERING WITHIN 24 HOURS OF OMISSIONS AND ERRORS DISCOVERED ON PLANS. DELTA ENGINEERING WILL NOT BE RESPONSIBLE FOR ANY "CORRECTIVE" WORK DONE BY OTHERS.
4. CONTRACTOR TO ENSURE POSITIVE DRAINAGE. NO PONDING ALLOWED.
5. CONTRACTOR TO FOLLOW RECOMMENDATIONS AS OUTLINED IN THE PROJECT GEOTECHNICAL REPORT, INCLUDING BUT NOT LIMITED TO EXCAVATION, GRADING AND COMPACTION. REFER TO THE REPORT PREPARED BY GEOTECH, INC. DATED FEBRUARY 19, 1999 WORK ORDER#1517-LV

LEGEND	
EXISTING	PROPOSED
RIGHT-OF-WAY	RIGHT-OF-WAY
PROPERTY LINE	PROPERTY LINE
CENTERLINE	CENTERLINE
WATER LINE	WATER LINE
SANITARY SEWER LINE	SANITARY SEWER LINE
GAS LINE	GAS LINE
STORM DRAIN	STORM DRAIN
POWER LINE/POWER POLE	POWER LINE/POWER POLE
TELEPHONE LINE	TELEPHONE LINE
FIRE HYDRANT	FIRE HYDRANT
WATER VALVE	WATER VALVE
METERS/PULL BOXES	METERS/PULL BOXES
REDUCER	REDUCER
MANHOLE	MANHOLE
CLEANOUT	CLEANOUT
CONTOUR	CONTOUR
A.C. PAVING	A.C. PAVING
TYPE 'L' CURB & GUTTER	TYPE 'L' CURB & GUTTER
TYPE 'A' CURB	TYPE 'A' CURB
CONCRETE	CONCRETE
RETAINING WALL	RETAINING WALL
CHAIN LINK FENCE	CHAIN LINK FENCE
GRADE BREAK	GRADE BREAK
WIRE FENCE	WIRE FENCE
FINISH FLOOR	FINISH FLOOR
C&G INV.	C&G INV.
C.O. INV.	C.O. INV.
CLEANOUT INVERT ELEV.	CLEANOUT INVERT ELEV.
FLOW LINE	FLOW LINE
FINISH GRADE	FINISH GRADE
TOP OF CURB	TOP OF CURB
TOP OF WALL	TOP OF WALL
GATE	GATE
SIGN	SIGN
STREET LIGHTS	STREET LIGHTS
100 W.H.P.S.	100 W.H.P.S.
150 W.H.P.S.	150 W.H.P.S.
200 W.H.P.S.	200 W.H.P.S.
250 W.H.P.S.	250 W.H.P.S.

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 1-800-227-2600
NEVADA POWER DEPARTMENT 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.

DRAINAGE STUDY CERTIFICATION
I CERTIFY THAT THIS GRADING PLAN CONFORMS TO THE APPROVED DRAINAGE STUDY FILED WITH THE CITY OF LAS VEGAS FLOOD CONTROL.
William S. Crockett, P.E. 6777
DATE: 3/26/01

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.V.D. 88 DATUM ELEVATION 881.6670 METERS (2236.4356 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, N.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.

EMERALD DEVELOPMENT 1304 ALPINE DRIVE BOULDER CITY, NEVADA 89005 (702) 293-1819		DELTA ENGINEERING 3133 MEADE AVENUE, SUITE D LAS VEGAS, NV 89102 (702) 364-9777 FAX (702) 364-9333 E-MAIL: ENGRDELTA@AOL.COM	
GRADING PLAN PHASE I SHEET		WILLOWDALE PARK UNIT I AND II	
DRAWN BY: ACAD	DESIGNED BY: MSC	CHECKED BY: PPB	PROJECT NO: 98052
SCALE: 1"=40'		SHEET C3 3 OF 14 SHEETS DRAWING NO. 107Y-4670	