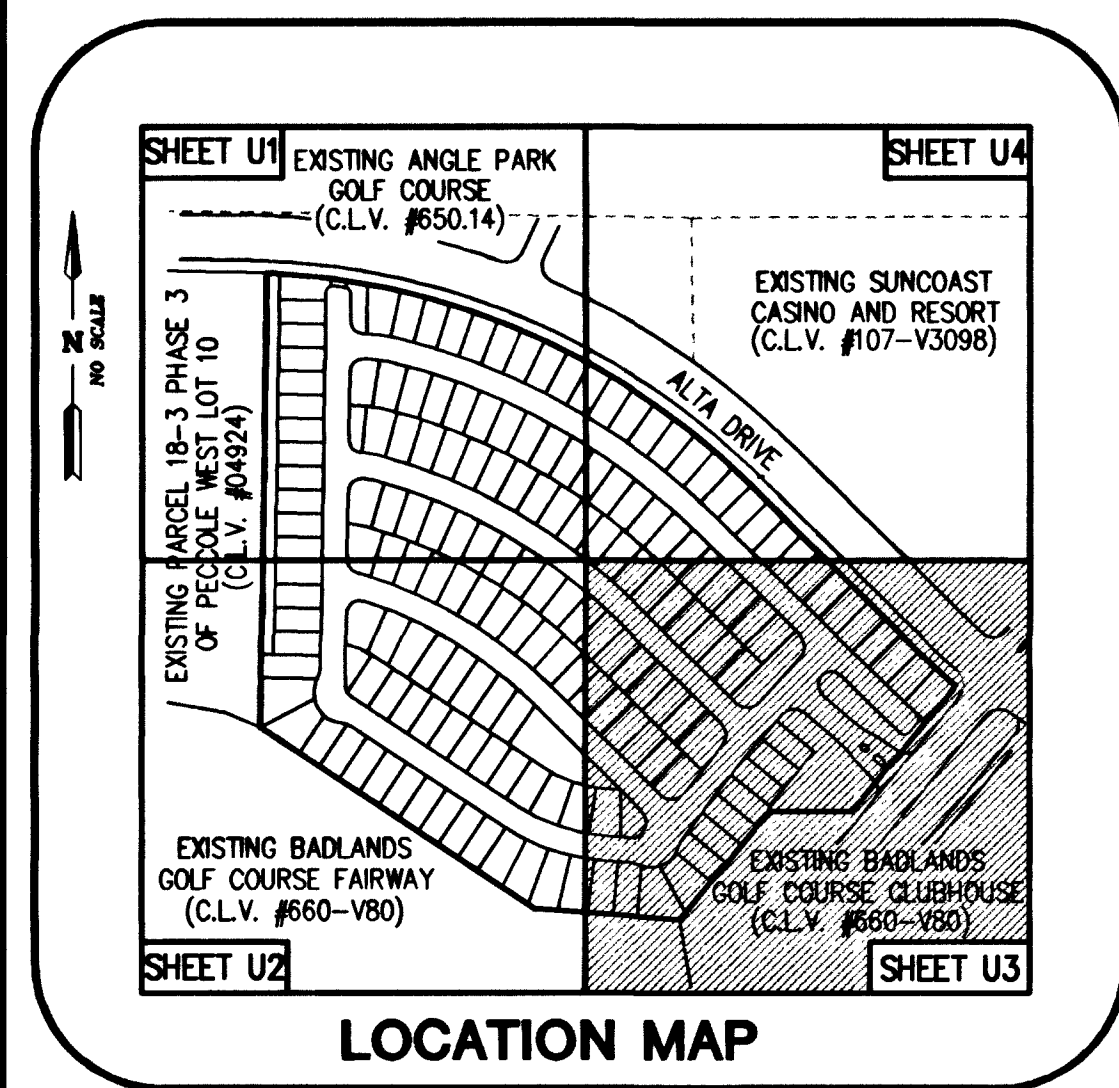




SEWER MANHOLE CONTROL TABLE

EXISTING M.H. NUMBER		EXISTING TOP OF M.H.	EXISTING INV. (IN)	EXISTING INV.(OUT)
#1		(2754.00)	(2744.22)	(2744.02)
#2		(2754.95)	(2742.40)	(2742.20)
#3		(2755.92)	-----	(2745.03)
M.H. NO.	DIA.	TOP OF M.H.	INV.(IN)	INV.(OUT)
#1	48"	2757.60	2747.80	2747.60
#2	48"	2760.42	2753.62	2753.42
#3	48"	2764.32	2757.52	2757.32
#4	48"	2768.55	2761.75	2761.55
#5	48"	2772.83	2766.03	2765.83
#6	48"	2773.54	2766.74	2766.54
#7	48"	2773.62	-----	2767.30
#8	48"	2772.62	2765.61	2765.41
#9	48"	2772.43	2765.13	2764.93
#10	48"	2769.32	2762.52	2762.32
#11	48"	2766.20	2759.40	2759.20
#12	48"	2762.22	2755.42	2755.22
#13	48"	2764.18	2757.38	2757.18
#14	48"	2768.24	2761.44	2761.24
#15	48"	2771.53	2764.15	2763.95
#16	48"	2771.70	2764.49	2764.29
#17	48"	2770.68	2763.37	2763.17
#18	48"	2767.53	2760.73	2760.53
#19	48"	2766.01	2759.21	2759.01
#20	48"	2764.76	2757.96	2757.76

LEGEND

- EX. 2"PE--- EXIST. GAS MAIN
- EX. 8"S--- EXIST. SEWER MAIN
- EX. 8"W--- EXIST. WATER MAIN
- 8"S--- PROP. SEWER MAIN
- 8"W--- PROP. WATER MAIN
- 1"--- PROP. 1" WATER SERVICE LATERAL (COPPER PIPE)
- 4"--- PROP. 4" SEWER SERVICE LATERAL (PVC PIPE)
- EX. SEWER MANHOLE
- PROP. SEWER MANHOLE
- EX. FIRE HYDRANT W/ASSEMBLY
- PROP. FIRE HYDRANT W/ASSEMBLY
- BWV--- BACK WATER VALVE REQUIRED
- PROP. STREET LIGHT
- EX. STREET LIGHT

BASIS OF BEARING

THE BASIS OF BEARING FOR THIS PROJECT IS THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 31, TOWNSHIP 20 SOUTH, RANGE 60 EAST, M.D.B.M. WHICH BEARS NORTH 89°40'03" EAST AS SHOWN ON FILE 91, PAGE 27 OF PARCEL MAPS RECORDED IN THE COUNTY RECORDERS OFFICE OF CLARK COUNTY, NEVADA.

UTILITY INFORMATION

SEWAGE GENERATED: AVG. FLOW = 0.042 MGD
PEAK FLOW = 0.145 MGD
WATER PRESSURE ZONE: 2975 PZ

FIRE FLOW DATA

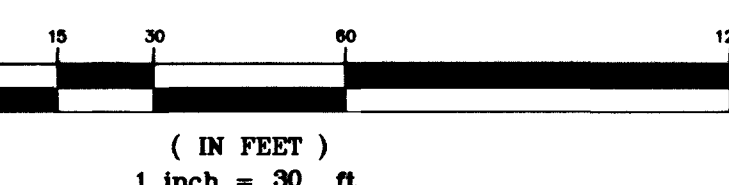
BUILDING HEIGHT (IN FEET) 28'-0"
OCCUPANCY CLASSIFICATION GROUP R
CONSTRUCTION CLASSIFICATION N/A
TOTAL FLOOR AREA OF ALL LEVELS 2,486 SQ.FT.
FLOOR AREA OF THREE LARGEST SUCCESSIVE FLOORS 2,486 SQ.FT.
ESTIMATED FIRE FLOW 1500

CONSTRUCTION NOTES

- INSTALL FIRE HYDRANT W/ASSEMBLY (PER UDS PLATE NO. 7)
- INSTALL 8"x8" TEE W/THRUST BLOCK (PER UDS PLATE NO. 5)
- INSTALL 8"x6" TEE W/THRUST BLOCK (PER UDS PLATE NO. 5)
- INSTALL 11 1/4" ELBOW W/THRUST BLOCK (PER UDS PLATE NO. 5)
- INSTALL 22 1/2" ELBOW W/THRUST BLOCK (PER UDS PLATE NO. 5)
- INSTALL 45" ELBOW W/THRUST BLOCK (PER UDS PLATE NO. 5)
- INSTALL 90" ELBOW W/THRUST BLOCK (PER UDS PLATE NO. 5)
- INSTALL 8" GATE VALVE (PER UDS PLATE NO. 3 & 8)
- INSTALL 5/8" METER (PER UDS PLATE NO. 18)
- INSTALL CAP W/2" BLOW-OFF ASSEMBLY (PER UDS PLATE NO. 4) AND UDAC SEC. 2.04.07
- INSTALL 5/8" IRRIGATION METER W/1" RPPA (PER UDS PLATE NO. 10 & 11A)

NOTE:
FOR TYPICAL WATER AND SEWER LATERAL LOCATIONS SEE SHEET 13 OF 30

GRAPHIC SCALE



BENCHMARK

CITY OF LAS VEGAS BENCHMARK #00100 32NW66
RIVET & PLATE IN TOP OF CURB @ NW CORNER OF ALTA & WEST EXIT TO SUNCOAST RESORT PARKING LOT.
METERS = 844.0507
U.S. SURVEY FEET = 2769.19
NAVD 88, DATUM

OWNER/DEVELOPER

CRESTDALE ASSOCIATES, LTD
1063 LAS PALMAS ENTRADA AVE.
HENDERSON, NEVADA 89012

NOTE:

INSTALL PIPELINE MARKER BALLS IN THE TRENCH ABOVE EACH HORIZONTAL ELBOW FITTING, PER UDACs PLATE NO. 27

EXISTING GOLF COURSE POND
EX. W.S.E. = 2750.0

NOTE:

ALL PRIVATE STREETS AND DRIVES ARE PUBLIC DRAINAGE EASEMENTS TO BE PRIVATELY MAINTAINED BY HOME OWNERS ASSOCIATION, CITY OF LAS VEGAS SEWER EASEMENTS, AND P.U.E.

FOR CONTINUATION SEE SHEET 13 OF 30



RELOCATION OF EXISTING SERVICE(S) - 2" AND SMALLER
2" MTR #294516 - ACCOUNT #601757
THE CONTRACTOR SHALL NOTIFY THE INSPECTION DIVISION AT THE LVWD (702-258-3227) 48 HOURS PRIOR TO THE REQUESTED RELOCATION TIME TO ALLOW THE DISTRICT TO TAKE THE METER READING. AFTER THE READING THE CONTRACTOR MAY THEN BEGIN RELOCATION PROCEDURES FOR THE AFFECTED SERVICE.
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.

REDUCED PRESSURE PRINCIPLE ASSEMBLY
(1) RELOCATED 2" RPPA - FEBCO MODEL 825YAR - SERIAL #A000500
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.

RELOCATION OF EXISTING SERVICE(S) - LARGER THAN 2"
8" DCA (MTR #312493 - ACCT. #601758)
FEBCO MODEL 876 - SERIAL #651211301
THE CONTRACTOR SHALL NOTIFY THE INSPECTION DIVISION AT THE LVWD (702-258-3227) 48 HOURS PRIOR TO THE REQUESTED RELOCATION TIME TO ALLOW THE DISTRICT TO TAKE THE METER READING. AFTER THE READING THE CONTRACTOR MAY THEN BEGIN RELOCATION PROCEDURES FOR THE AFFECTED SERVICE.

CUT AND CAP
THE LATERAL MUST BE CUT WITHIN THREE (3) FEET OF THE ABANDONED VALVE, OR AS SHOWN ON PLANS, AND CAPPED. THE CONTRACTOR SHALL CUT THE EXISTING PIPE WHERE SHOWN ON THE DRAWING, AND INSTALL A CAP COMPLETE WITH THRUST BLOCK WHERE A JOINT OR COUPLING IN THE EXISTING PIPE IS UNCOVERED AT THE CUT AND CAP LOCATIONS. THE INSTALLATION OF A PLUG MAY BE PERMITTED WITH DISTRICT APPROVAL. A CONCRETE THRUST BLOCK SHALL BE INSTALLED AT ALL CAP OR PLUG LOCATIONS, IN ACCORDANCE WITH THE PROVISIONS OF UDACs PLATE NO. 5.

DOUBLE CHECK DETECTOR ASSEMBLY (DCA)
(1) RELOCATED 8" DCA
THE DOUBLE CHECK DETECTOR ASSEMBLY(S) SHALL BE INSTALLED IN ACCORDANCE WITH UDACs PLATE NO. 11C. ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT(S), SO AS TO ALLOW THE DISTRICT DIRECT ACCESS FROM ADJACENT RIGHT-OF-WAY.

NOTE:
PROPER NOTIFICATION MUST BE GIVEN TO THE LVWD INSPECTION DIVISION AND THE AMERICAN GOLF CORPORATION/BADLANDS GOLF CLUB ENGINEERING/MAINTENANCE DEPARTMENT PRIOR TO ANY SHUT DOWN. PER UDACs SEC. 3.13.

APPROVAL

CITY ENGINEER MARSHAL
DATE 7.14.03

APPROVED FOR CONSTRUCTION

LAS VEGAS VALLEY WATER DISTRICT
DATE

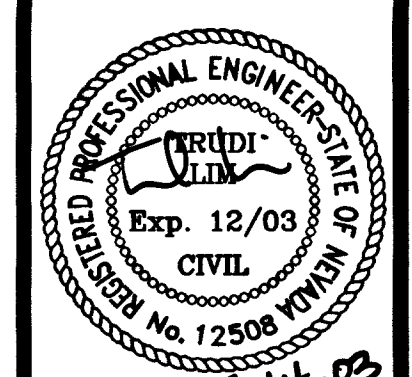
REVISION	DATE	BY

CRESTDALE ASSOCIATES, LTD
1063 LAS PALMAS ENTRADA AVE.
HENDERSON, NEVADA 89012

UTILITY PLAN (3)

WINDSOR AT QUEENSRIDGE

DRAWN BY:	02/03
DESIGNED BY:	02/03
CHECKED BY:	02/03
PROJECT NO.:	SCALE: 1"=30'
	038-EG80



SHEET
U3
12 OF 30 SHEETS
DRAWING NO.
10744763