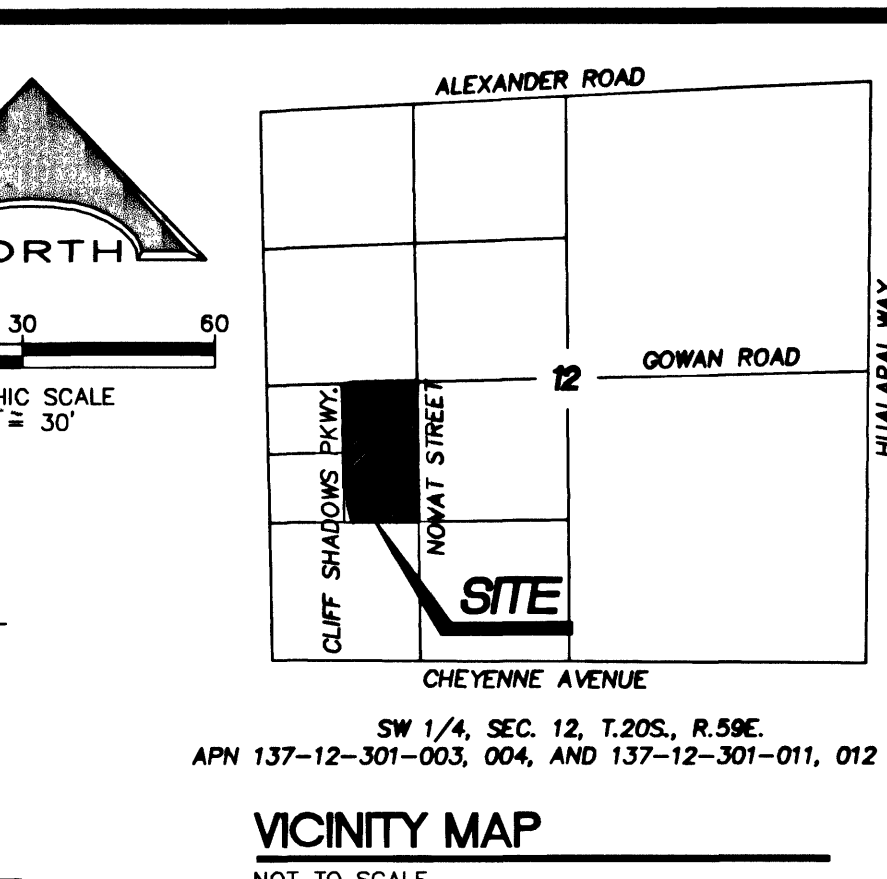
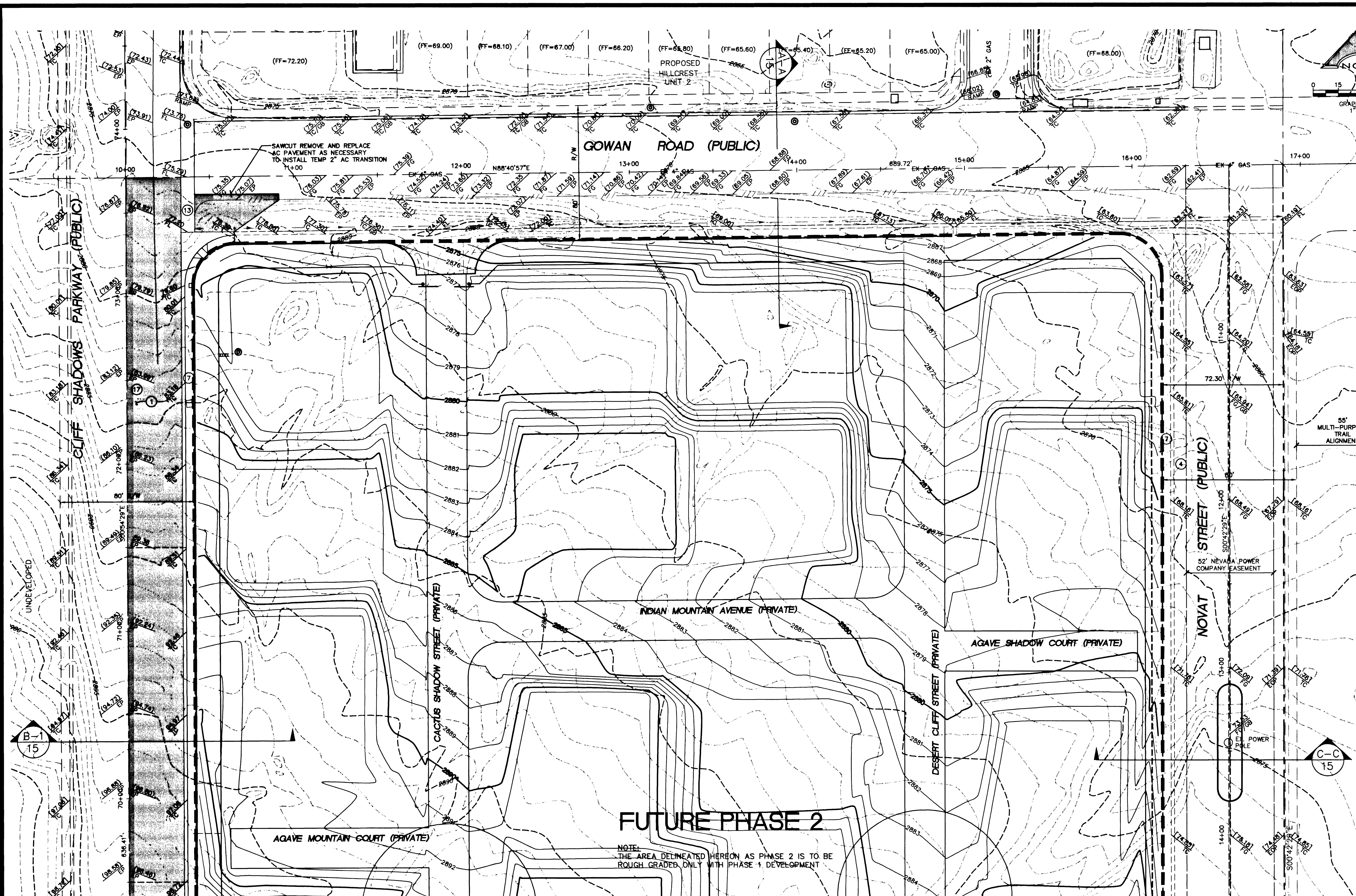




CONSTRUCTION NOTES

1. CONSTRUCT 4" ASPHALTIC CONCRETE PAVEMENT OVER 10" TYPE II AGGREGATE BASE.
2. CONSTRUCT 3" ASPHALTIC CONCRETE PAVEMENT OVER 10" TYPE II AGGREGATE BASE.
3. CONSTRUCT "A" TYPE ISLAND CURB PER USD NO. 219.
4. CONSTRUCT 24" "L" TYPE CURB & GUTTER PER USD STD NO. 216.
5. CONSTRUCT 8" WIDE CROSS GUTTER PER USD STD NO. 228.
6. CONSTRUCT 4" WIDE SIDEWALK (ONSITE).
7. CONSTRUCT 5" WIDE SIDEWALK PER USD STD NO. 234.
8. CONSTRUCT SIDEWALK RAMP PER USD STD NO. 235, CASE I, A=8.0', B=8.0'.
9. CONSTRUCT SIDEWALK RAMP BY DEPRESSING CURB, SLOPE NOT TO EXCEED 5% MAX.
10. CONSTRUCT RETAINING WALL HEIGHT VARIES.
11. CONSTRUCT SIDEWALK DRAIN PER USD NO. 236.
12. CONSTRUCT SIDEWALK DRAIN (ONSITE) PER DETAIL 8 SHT. 13.
13. CONSTRUCT HALF STREET CROSS GUTTER PER USD NO. 229.
14. INSTALL HANDRAILS PER ARCHITECTURAL PLANS.
15. CONSTRUCT 18" HIGH MONOLITHIC STEMWALL.
16. CONSTRUCT STEMWALL W/ CMU BLOCK, 2 COARSE ABOVE TOP OF CURB.
17. REMOVE AND REPLACE EXIST PAVEMENT.
18. INSTALL AREA DRAIN PER DETAIL 9 SHEET 15.
19. INSTALL 6" WIDE ENVIRO-SEAL OR APPROVED EQUAL UPON COMPLETION OF AC PAVING PER DETAIL 10 SHT. 13.

LEGEND

---	PROPERTY BOUNDARY
---	RIGHT-OF-WAY
---	BACK OF CURB
---	CENTERLINE
---	SETBACK
---	DRAINAGE SWALE
---	RETAINING WALL
---	1 FOOT CONTOUR
---	5 FOOT CONTOUR
---	PROPOSED GRADE
---	FUTURE ADJACENT GRADES (BY OTHERS)
---	EXISTING GRADES
---	ENVIRO-SEAL OR APPROVED EQUAL
---	ACCESSIBLE ROUTE (HC)

I CERTIFY THAT THIS GRADING CONFORMS TO THE APPROVED DRAINAGE STUDY FOR THIS SITE ON FILE AT THE CITY OF LAS VEGAS. PERMIT NO.
Gregory G. Radig 8-14-02
 GREGORY G. RADIG P.E. No. 7474 DATE

MATCH SHEET 9

COST ESTIMATE - ONSITE FLOOD PROTECTION

18" HIGH CONCRETE STEMWALL	1208 LF @ \$2.50 PER LF	\$3020.00
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ENGINEER'S OPINION OF CUT AND FILL QUANTITIES

TOTAL	CUT 19,423 CUBIC YARDS	FILL 63,054 CUBIC YARDS
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NOTE: THIS OPINION OF CUT & FILL QUANTITIES IS PROVIDED AS REQUIRED BY THE CLARK COUNTY BUILDING CODE AND SHOULD NOT BE USED FOR BIDDING PURPOSES. ALL CONTRACTORS ARE RESPONSIBLE FOR THEIR OWN QUANTITIES.

ALL GRADING SHALL CONFORM TO RECOMMENDATIONS OF THE SOILS ENGINEER AS CONTAINED IN THE GEOTECHNICAL EVALUATION PREPARED BY TESTING ENGINEERS-NEVADA INC. NO. 01-263.3, DATED: OCTOBER 4, 2001.

NOTE

PER CHAPTER 19A.10 OF THE LAS VEGAS ZONING CODE, CONCRETE WHEEL STOPS OR CURBING AT LEAST 6" HIGH AND 6" INCHES WIDE SHALL BE PROVIDED TO PREVENT VEHICLES OVERHANGING ADJUTING SIDEWALKS, PROPERTIES OR PUBLIC RIGHTS-OF-WAY, TO PROTECT LANDSCAPED AREAS AND TO PROTECT ADJACENT PROPERTIES. SUCH CURBING SHALL BE LOCATED AT LEAST THREE FEET FROM ANY ADJACENT WALL, FENCE, PROPERTY LINE, WALKWAY OR STRUCTURE WHERE PARKING AND OR DRIVE ISLES ARE LOCATED.

ABBREVIATIONS

AC ASPHALTIC CONCRETE	GB GRADE BREAK
BC BACK OF CURB	GV GATE VALVE
BCR BACK CURB RETURN	HORIZ HORIZONTAL
BM BENCHMARK	HP HIGHPOINT
BO BLOWOFF ASSEMBLY	INT INTERSECTION
BVC BEGIN VERTICAL CURVE	MAX. MAXIMUM
CL CENTERLINE	MIN. MINIMUM
CH CITY OF HENDERSON	PC POINT OF CURVATURE
CY CUBIC YARD	PVI POST INDICATOR VALVE
D OR Δ DELTA ANGLE	PVC POLY VINYL CHLORIDE
DWG DRAWING	PVI POINT OF VERTICAL INTERSECTION
EΔ EACH	R RADIUS OR RADIAL
ELEV ELEVATION	RCP REINFORCED CONCRETE PIPE
EVC END VERTICAL CURVE	SD STORM DRAIN
EX EXISTING	SSMH STORM DRAIN MANHOLE
FDC FIRE DEPARTMENT CONNECTION	SSMH SANITARY SEWER MANHOLE
FG FINISH GRADE	SS SANITARY SEWER
FH FIRE HYDRANT	STA STATION
FT FEET OR FOOT	TC TOP OF CURB
	VC VERTICAL CURVE

BENCHMARK

1LV00 4SES
 ELEVATION = 2342.02, 713.8497 METERS

RIVET & PLATE IN TOP OF CURB, NW RETURN OF ALEXANDER ROAD AND BUFFALO DRIVE.

BASIS OF BEARING

N88°40'57"E BEING THE NORTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 12, TOWNSHIP 20 SOUTH, RANGE 59 EAST, M.D.M., CLARK COUNTY, NEVADA AS SHOWN ON A SURVEY, FILE 88, PAGE 8, CLARK COUNTY NEVADA.

DISCLAIMER NOTE

UTILITY LOCATIONS SHOWN HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UNDERGROUND AND OVERHEAD 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.

CLIFF SHADOWS CONDOMINIUMS, LLC		CLIFF SHADOWS CONDOMINIUMS, LLC	
8375 W. FLAMINGO RD. #200 LAS VEGAS, NEVADA 89117 (702) 368-5826		L. R. NELSON CONSULTING ENGINEERS, INC. 3035 East Pollock Lane Suite 9 Las Vegas, Nevada 89120 (702) 798-7978 (702) 451-2286 FAX	
DRAWN BY: RCP 03/08/2002		DESIGNED BY: RCP 03/08/2002	
CHECKED BY: KEA 03/08/2002		PROJECT NO: 121-055-012	
SCALE: HORIZ. 1"=30'		SHEET 8 OF 16 SHEETS	
DRAWING NO. 107Y-4715-1		G1	