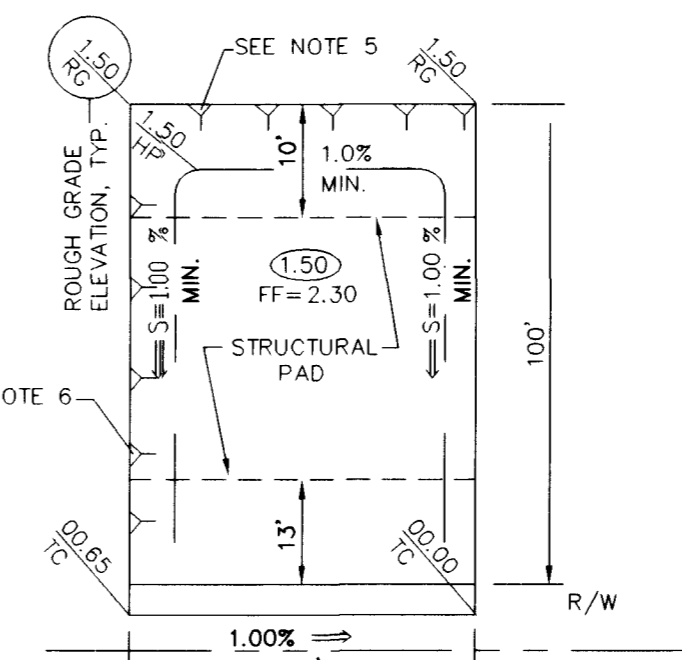


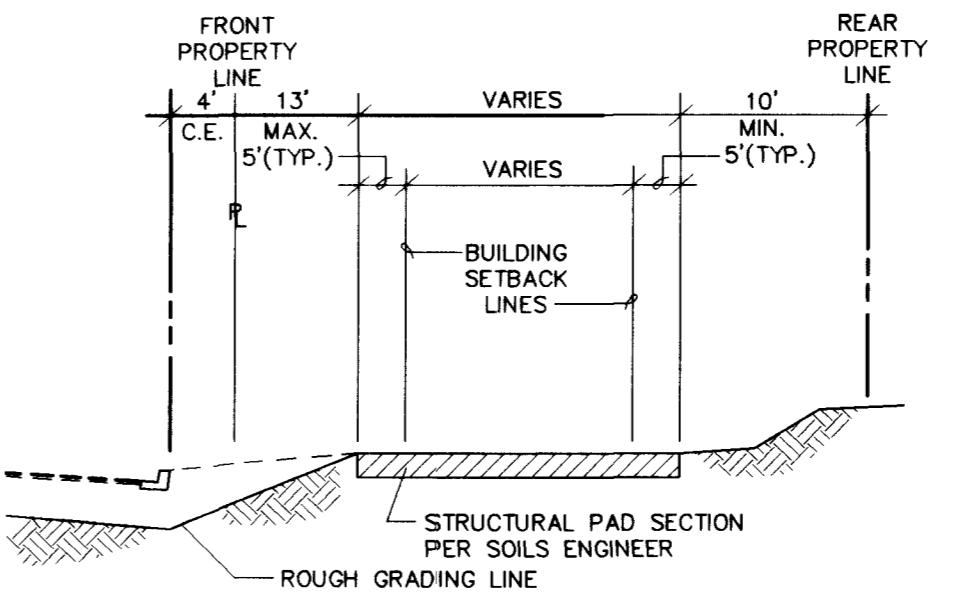
NOTES:
 1. STRUCTURAL PAD SHALL BE 5' BEYOND BLDG. SETBACK SEE TYPICAL GRADING SECTION.
 2. REFER TO GENERAL NOTE 1.
 3. REAR LOT CORNER GRADES ARE EQUAL TO ADJACENT LOTS UNLESS SHOWN OTHERWISE.
 4. MINIMUM SIDEYARD X-SLOPE SHALL BE 2%.
 5. MAXIMUM REAR YARD SLOPE IS 2:1 AS SHOWN, EXCEPT THAT WITHIN 15' OF THE HOUSE, THE MAXIMUM SLOPE IS 12:1.
 6. MAXIMUM SIDEYARD SLOPE IS 5:1 AS SHOWN EXCEPT THAT WITHIN 5' OF THE HOUSE, THE MAXIMUM SLOPE IS 12:1. MINIMUM 1% DRAINAGE AWAY FROM BUILDING PAD.

SIDEWALK RAMP TABLE
 PER STD. DWG. 235 CASE I

NO.	DIM "A"	DIM "B"	CASE
1	8.0'	8.0'	I
2	9.5'	4.5'	I



TYPICAL GRADING PLAN



TYPICAL GRADING SECTION
 STANDARD SINGLE FAMILY DETACHED - NO SCALE

NOTE: ALL OF THE RETAINING WALL HEIGHTS ARE DETERMINED WITH THE TOP OF THE FOOTING BEING APPROXIMATELY 4" BELOW EXISTING GRADE. WITH THE EXCEPTION OF RETAINING WALLS WHICH ARE NEXT TO A SIDEWALK, ALL OF THESE ARE FIGURED TO HAVE THE TOP OF FOOTING BEING 8" BELOW THE TOP OF THE SIDEWALK.
 TOP OF RETAINING WALL TO BE AT OR ABOVE UPPER PAD ELEVATION.

RETAINING WALL CONVERSION TABLE

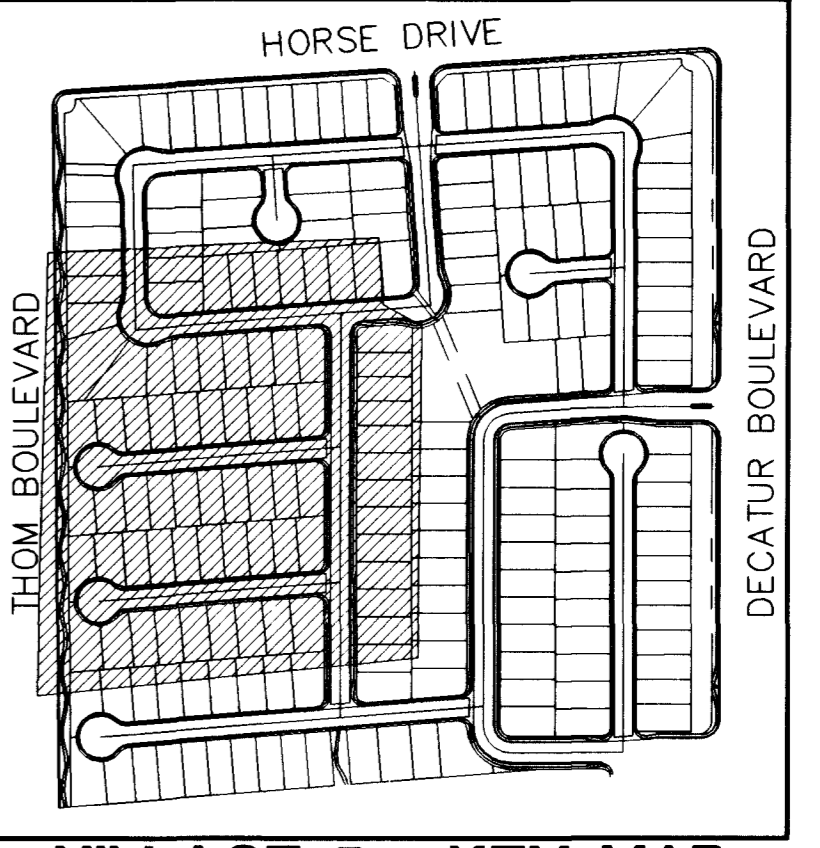
	STANDARD RETAINER	RETAINER NEXT TO SIDEWALK
1	0.4-0.7'	N/A
2	0.71-0.83'	N/A
3	0.84-1.5'	0.7-1.17'
4	1.51-2.17'	1.18-1.83'
5	2.18-2.83'	1.84-2.5'
6	2.84-3.5'	2.51-3.17'
7	3.51-4.17'	3.18-3.83'
8	4.18-4.83'	3.84-4.5'
9	4.84-5.5'	4.51-5.17'
10	5.51-6.17'	5.18-5.83'
11	6.18-6.83'	5.84-6.5'
12	6.84-7.5'	6.51-7.17'

PROJECT BENCHMARK
 PROJECT DATUM: NAVD88
 (OLD) CITY OF LAS VEGAS BENCHMARK 1LV90-13NES NAVD88 ELEVATION: 710.9608 METERS (2332.54 FEET) PROJECT DESIGNED USING OLD BENCHMARK
 (NEW) CITY OF LAS VEGAS BENCHMARK 1LV90-13NES NAVD88 ELEVATION: 710.9181 METERS (2332.40 FEET) (-0.14 FEET) TO GET NEW PUBLISHED DATUM
 ONLY BM 413148, NAVD 88 ELEV=710.953 METERS (2332.52 FEET) 1" DIAMETER CONCRETE MONUMENT SEC. 1311960E 10' EAST OF LARGE POWER POLE.

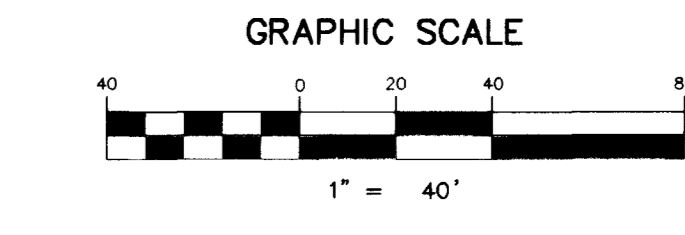
BASIS OF BEARINGS
 THE BASIS OF BEARINGS FOR THIS PROJECT IS GRID NORTH AS DEFINED BY THE NEVADA COORDINATE SYSTEM OF 1983 (NCS83), EAST ZONE (2701), DETERMINED BY CLARK COUNTY GIS CONTROL POINTS 802, 803, 804, AND 805, AS SHOWN ON A RECORD OF SURVEY ON FILE IN THE CLARK COUNTY, NEVADA, RECORDER'S OFFICE, IN BOOK 88 OF SURVEYS, AT PAGE 33.

Call before you Dig
 1-800-227-2600

Call before you Overhead
 1-702-593-6111



VILLAGE 5 - KEY MAP
 NOT TO SCALE



ENGINEERS ESTIMATE OF PRIVATE FLOOD CONTROL QUANTITIES

3 COURSES OF GROUT	91 LF
2 COURSES OF GROUT	770 LF

(BOND REQUIRED)

- CITY OF LAS VEGAS GRADING NOTES**
- IN THE EVENT THAT ANY UNFORESEEN CONDITIONS NOT COVERED BY THESE NOTES ARE ENCOUNTERED DURING GRADING OPERATIONS, THE OWNER/ENGINEER SHALL BE IMMEDIATELY NOTIFIED FOR DIRECTION.
 - IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL NECESSARY CUTS AND FILLS WITHIN THE LIMITS OF THIS PROJECT AND THE RELATED OFF-SITE WORK, SO AS TO GENERATE THE DESIRED SUBGRADE, FINISH GRADES AND SLOPES SHOWN.
 - CONTRACTOR SHALL TAKE RESPONSIBILITY FOR ALL EXCAVATION, ADEQUATE SHORING SHALL BE DESIGNED AND PROVIDED BY THE CONTRACTOR TO PREVENT UNDERMINING OF ANY ADJACENT FEATURES OR FACILITIES AND/OR CAVING OF THE EXCAVATION. THE CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH THE OWNER TO PREVENT UNDERMINING OF ANY ADJACENT FEATURES OR FACILITIES AND/OR CAVING OF THE EXCAVATION. THE CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH THE OWNER TO PREVENT UNDERMINING OF ANY ADJACENT FEATURES OR FACILITIES AND/OR CAVING OF THE EXCAVATION.
 - THE GRADING CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH THE OWNER TO PROVIDE FOR THE REQUIREMENTS OF THE PROJECT STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND ASSOCIATED. CONTRACTOR SHALL GRAD TO THE LINES AND ELEVATIONS SHOWN ON THE PLANS WITHIN THE FOLLOWING HORIZONTAL AND VERTICAL TOLERANCES AND DEGREES OF COMPACTION, IN THE AREAS INDICATED:
- | | HORIZONTAL | VERTICAL COMPACTION |
|---------------------------|------------|---------------------|
| A. PAVEMENT AREA SUBGRADE | 0.1+ " | +0.0 to -0.1' |
| B. ENGINEERED FILL | 0.5+ " | +0.1 to -0.1' |
- COMPACTATION TESTING WILL BE PERFORMED BY THE OWNER OR HIS REPRESENTATIVE.
- ALL CUT AND FILL SLOPES SHALL BE PROTECTED UNTIL EFFECTIVE EROSION CONTROL HAS BEEN ESTABLISHED.
 - THE USE OF POTABLE WATER WITHOUT A SPECIAL PERMIT FOR BUILDING OR CONSTRUCTION PURPOSES INCLUDING CONSOLIDATION OF BACKFILL OR DUST CONTROL IS PROHIBITED. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION WATER.
 - THE CONTRACTOR SHALL MAINTAIN THE STREETS, SIDEWALKS AND ALL OTHER PUBLIC RIGHT-OF-WAY IN A CLEAN, SAFE AND USABLE CONDITION. ALL SPILLS OF SOIL, ROCK OR CONSTRUCTION DEBRIS SHALL BE PROMPTLY REMOVED FROM ALL CITY PUBLICLY OWNED PROPERTY DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. ALL ADJACENT PROPERTY, PRIVATE OR PUBLIC SHALL BE MAINTAINED IN A CLEAN, SAFE AND USABLE CONDITION.
 - IN THE EVENT THAT ANY TEMPORARY CONSTRUCTION ITEM IS REQUIRED THAT IS NOT SHOWN ON THESE DRAWINGS, THE OWNER AGREES TO PROVIDE AND INSTALL SUCH ITEM AT HIS OWN EXPENSE AND AT THE DIRECTION OF THE CITY ENGINEER. TEMPORARY CONSTRUCTION INCLUDES DITCHES, BERMS, ROAD SIGNS AND BARRICADES, ETC.

LEGEND

8	LOT NUMBER	VG	VALLEY GUTTER
B	BLOCK NUMBER	FG	FINISH GRADE
EX. CONTOUR (5' INTERVAL)	FL	FLOW LINE	
EX. CONTOUR (1' INTERVAL)	TC	TOP OF CURB	
PROPOSED CONTOUR	TRC	TOP OF ROLL CURB	
CONCRETE BLOCK WALL	BC	BACK OF CURB	
RETAINING WALL	BCR	BEGIN CURB RETURN	
EXISTING WALL	GB	GRADE BREAK	
EXISTING WALL	PC	POINT OF CURVATURE	
PROPOSED PAD GRADE	PRC	POINT OF REVERSE CURVATURE	
EX./FUTURE PAD GRADE	PCC	POINT OF COMPOUND CURVATURE	
SCARP AREA	BVC	BEGIN VERTICAL CURVE	
SIDEWALK RAMP	MVC	MID-POINT OF VERTICAL CURVE	
PAD SLOPES	EVC	END VERTICAL CURVE	
DIRECTION & RATE OF SLOPE	PRVC	POINT OF REVERSE VERTICAL CURVE	
	PT	POINT OF TANGENCY	
	NG	NATURAL GROUND	
	TF	TOP OF FOOTING	

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

KEN NICHOLSON PE#10539

CITY OF LAS VEGAS

KB HOME
 7000 EAST ROAD, SUITE F
 LAS VEGAS, NEVADA 89119
 (702) 614-2500

IRON MOUNTAIN RANCH VILLAGE 5 UNIT 2

GRADING PLAN

APR '02
 APR '02
 APR '02

DESIGNED BY: RMS
 CHECKED BY: KEN

PROJECT NO: 5919-2
 SCALE: 1"=40' HORZ.
 N/A VERT.

PROFESSIONAL ENGINEER
 KENNETH NICHOLSON
 CIVIL ENGINEER
 NO. 10659 POTENTIAL
 11-7124
 EXPIRES 12-31-03

SHEET
G1
 7 OF 23 SHEETS
 DRAWING NO.
 1074-4604-5-2