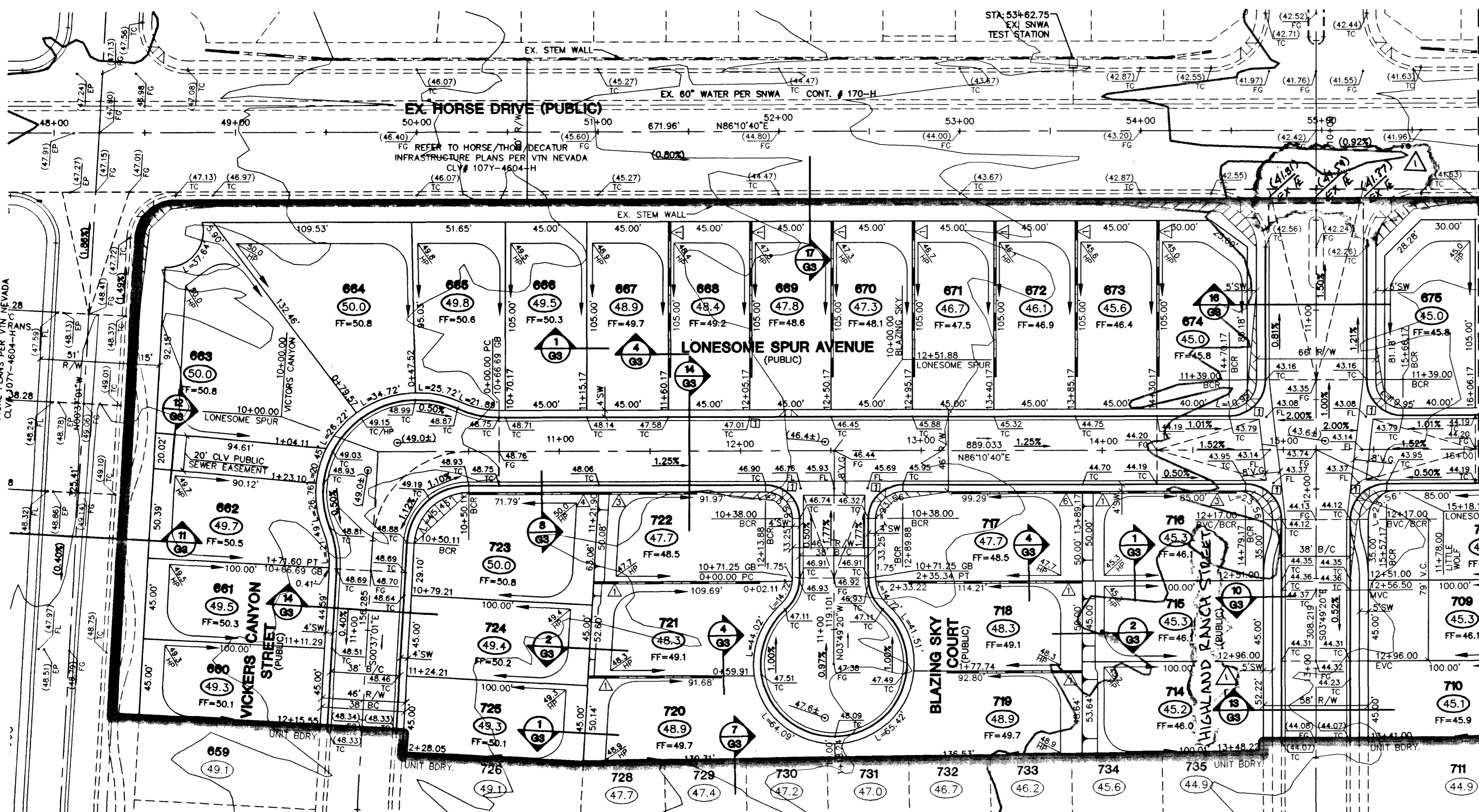


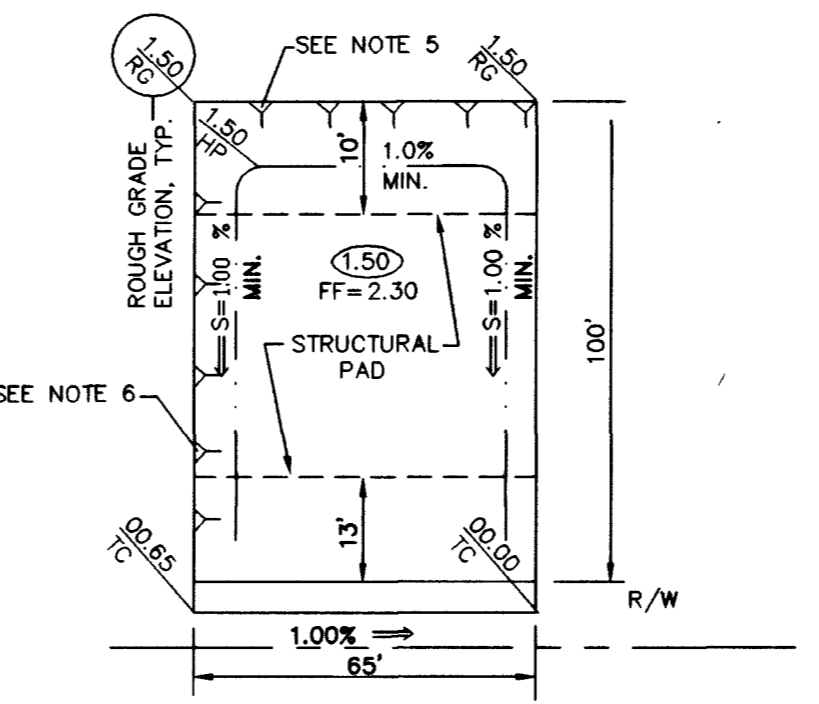
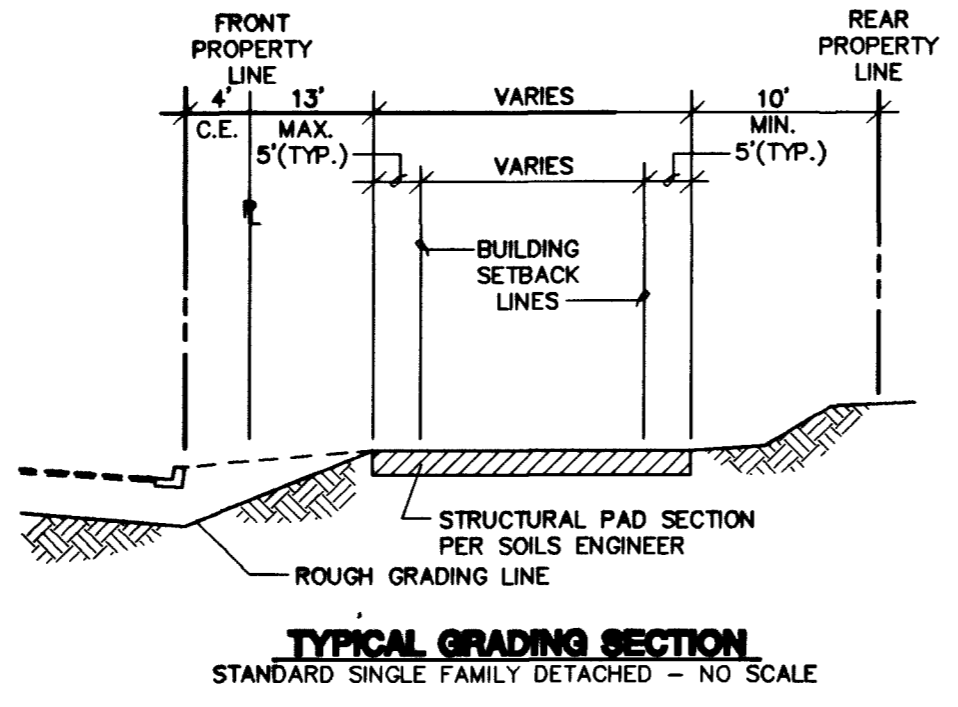
EXISTING IRON MOUNTAIN RANCH
VILLAGE 7 UNIT 1
REFER TO IMPROVEMENTS PLANS PER VTN NEVADA
CLV # 107Y-4604-7-1



EXISTING IRON MOUNTAIN RANCH
VILLAGE 5 - UNIT 2
REFER TO IMPROVEMENTS PLANS PER VTN NEVADA
CLV # 107Y-4604-5-2

SNWA CONSTRUCTION NOTES:
CONTRACTOR SHALL FIELD LOCATE AND PROTECT ALL SNWA/SNWS APPURTENANCES INCLUDING, BUT NOT LIMITED TO AV/AR, ACCESS MANWAYS AND CATHODIC PROTECTION SYSTEMS. ALL ABOVE GROUND STRUCTURES AND AT GRADE STRUCTURES MUST BE ADJUSTED TO NEW GRADE AT CONTRACTOR'S EXPENSE. CATHODIC PROTECTION TEST STATIONS, RECTIFIERS, AND AV/AR'S MUST BE RELOCATED TO THE SIDEWALK PER SNWA STANDARDS AND AT THE CONTRACTOR'S EXPENSE. CONTRACTOR TO NOTIFY SOUTHERN NEVADA WATER AUTHORITY, DEVELOPMENT PLAN REVIEW, AT (702) 862-3444 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION ACTIVITY.

Leanne Mills 12/21/02
SOUTHERN NEVADA WATER AUTHORITY DATE
SNWA APPROVAL IS VALID FOR ONE YEAR FROM THE SIGNATURE DATE. IF CONSTRUCTION WITHIN THE EASEMENT OF RESTRICTED PIPE SAFETY ZONE IS NOT COMPLETE, PLANS MUST BE RESUBMITTED TO SNWA FOR APPROVAL.



SIDEWALK RAMP TABLE
PER STD. DWG 235 CASE 1

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

RETAINING WALL CONVERSION TABLE

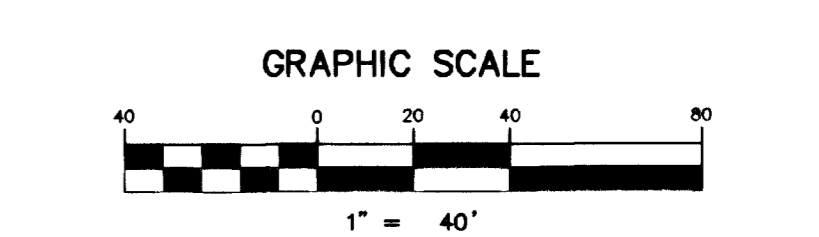
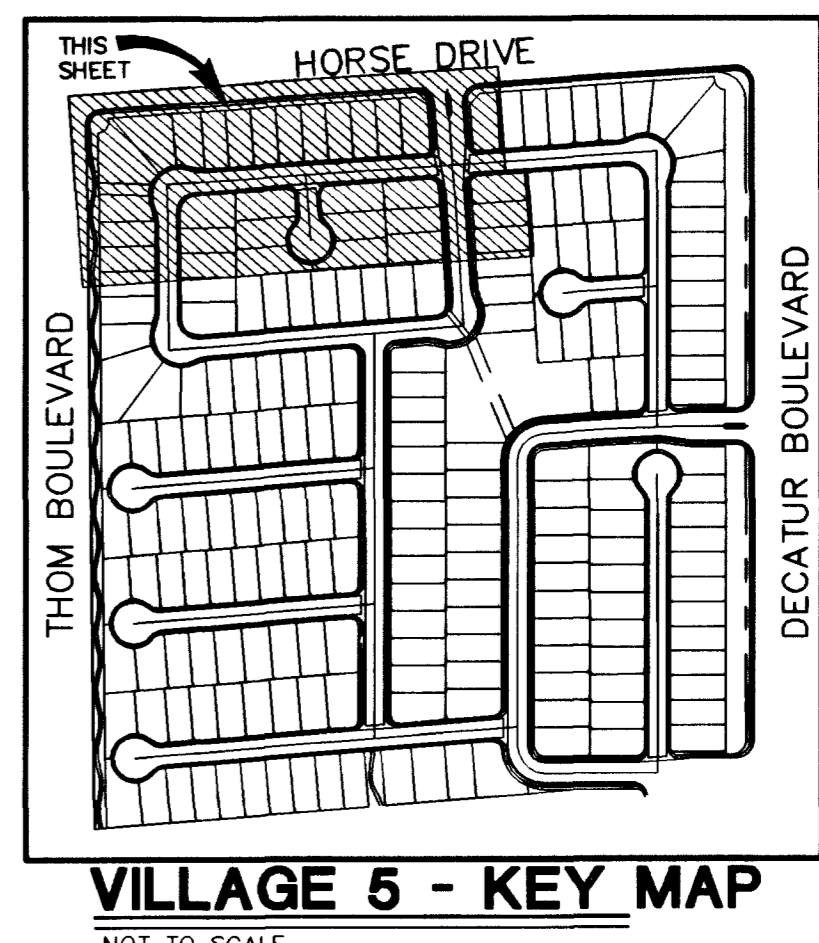
STANDARD RETAINER	RETAINER NEXT TO SIDEWALK
1	N/A
2	N/A
3	0.7-1.1'
4	1.1-1.8'
5	1.8-2.5'
6	2.5-3.1'
7	3.1-3.8'
8	3.8-4.5'
9	4.5-5.1'
10	5.1-5.8'
11	5.8-6.5'
12	6.5-7.1'

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 77 FEET SOUTH & 54 FEET WEST OF N.E. CORNER SEC. 13T19R60E TO 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 (770') DETERMINED BY CLARK COUNTY GIS CONTROL POINTS 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 53.

Avoid cutting underground utility lines. If you do, it's costly.
Call before you Dig
1-800-227-2600

Avoid overhead power lines. If you do, it's costly.
Call before you Overhead
1-702-593-6111



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

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.

- CITY OF LAS VEGAS GRADING NOTES**
- IN THE EVENT THAT ANY UNFORSEEN 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 WARNED THAT AN EARTHWORK BALANCE WAS NOT NECESSARILY THE INTENT OF THIS PROJECT. ANY ADDITIONAL MATERIAL REQUIRED OR LEFTOVER MATERIAL FOLLOWING EARTHWORK OPERATIONS BECOMES THE RESPONSIBILITY OF THE CONTRACTOR.
 - 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 GRADE 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 | 0.1" | +0.01 to -0.1" | See Soils Report |
| B. CONCERNING FINISH GRADES | +0.1" to -0.1" | See Soils Report | COMPACTING 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 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
 - 8 BLOCK NUMBER
 - EX. CONTOUR (5' INTERVAL)
 - EX. CONTOUR (1' INTERVAL)
 - PROPOSED CONTOUR
 - CONCRETE BLOCK WALL
 - RETAINING WALL
 - EXISTING WALL
 - PROPOSED PAD GRADE
 - EX./FUTURE PAD GRADE
 - SCARP AREA
 - SIDEWALK RAMP
 - PAD SLOPES
 - 0.8% DIRECTION & RATE OF SLOPE
 - VG VALLEY GUTTER
 - FG FINISH GRADE
 - FL FLOW LINE
 - TRC TOP OF CURB
 - BC BACK OF CURB
 - BCR BEGIN CURB RETURN
 - EXR EXISTING
 - GB GRADE BREAK
 - PC POINT OF CURVATURE
 - PRC POINT OF REVERSE CURVATURE
 - PCC POINT OF COMPOUND CURVATURE
 - BVC BEGIN VERTICAL CURVE
 - MVC MID-POINT OF VERTICAL CURVE
 - EVC END VERTICAL CURVE
 - 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
KEN NICHOLSON PE#10539
DATE 12.9.02

CITY OF LAS VEGAS
KB HOME
IRON MOUNTAIN RANCH VILLAGE 5 UNIT 3
GRADING PLAN
DRAWN BY: AUGUST '02
DESIGNED BY: AUGUST '02
CHECKED BY: AUGUST '02
PROJECT NO.: 5919-3
SCALE: 1"=40'
SHEET G1
7 OF 14 SHEETS
DRAWING NO. 1674-4604-5-3
15407 VILLAGES UNIT 3 5919 BGR03.DWG (ORT)
KENNETH NICHOLSON
PE#10539
CIVIL ENGINEER
EXPIRES 12-31-03