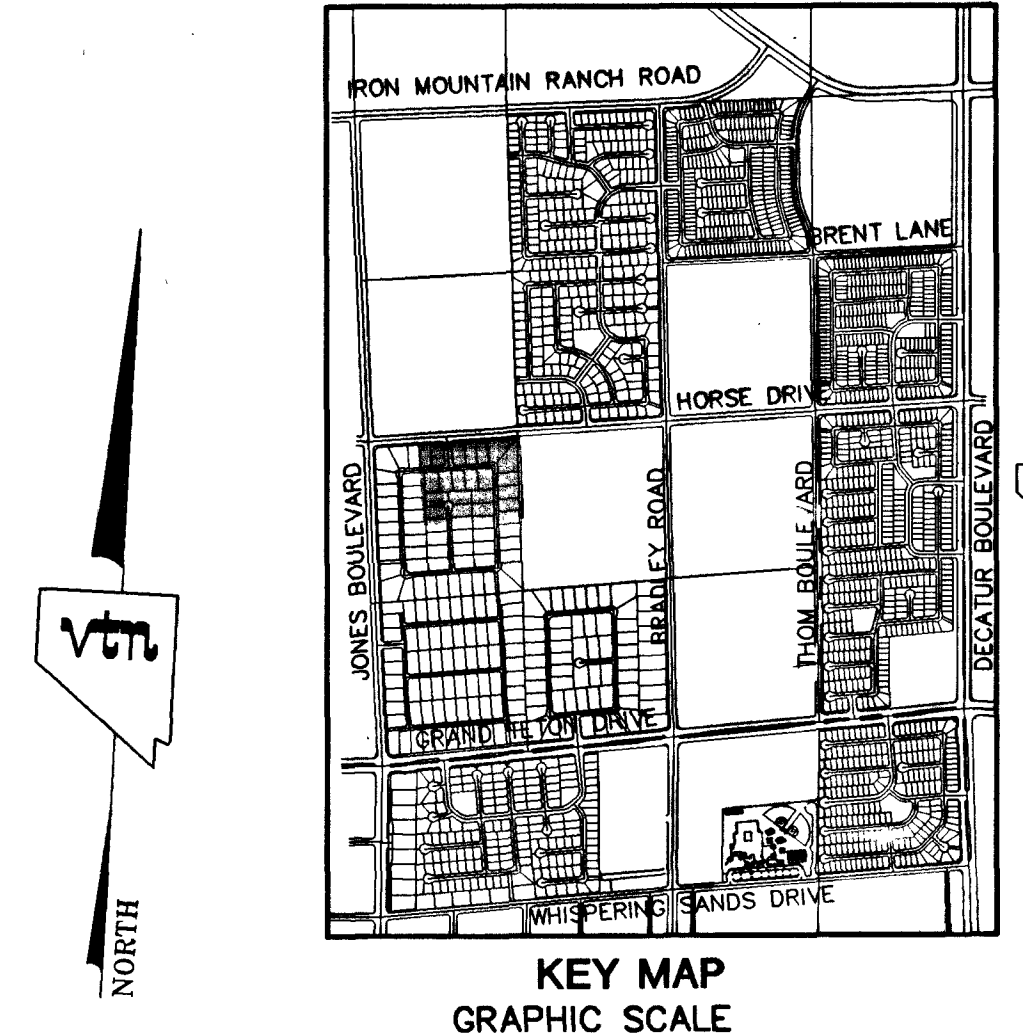
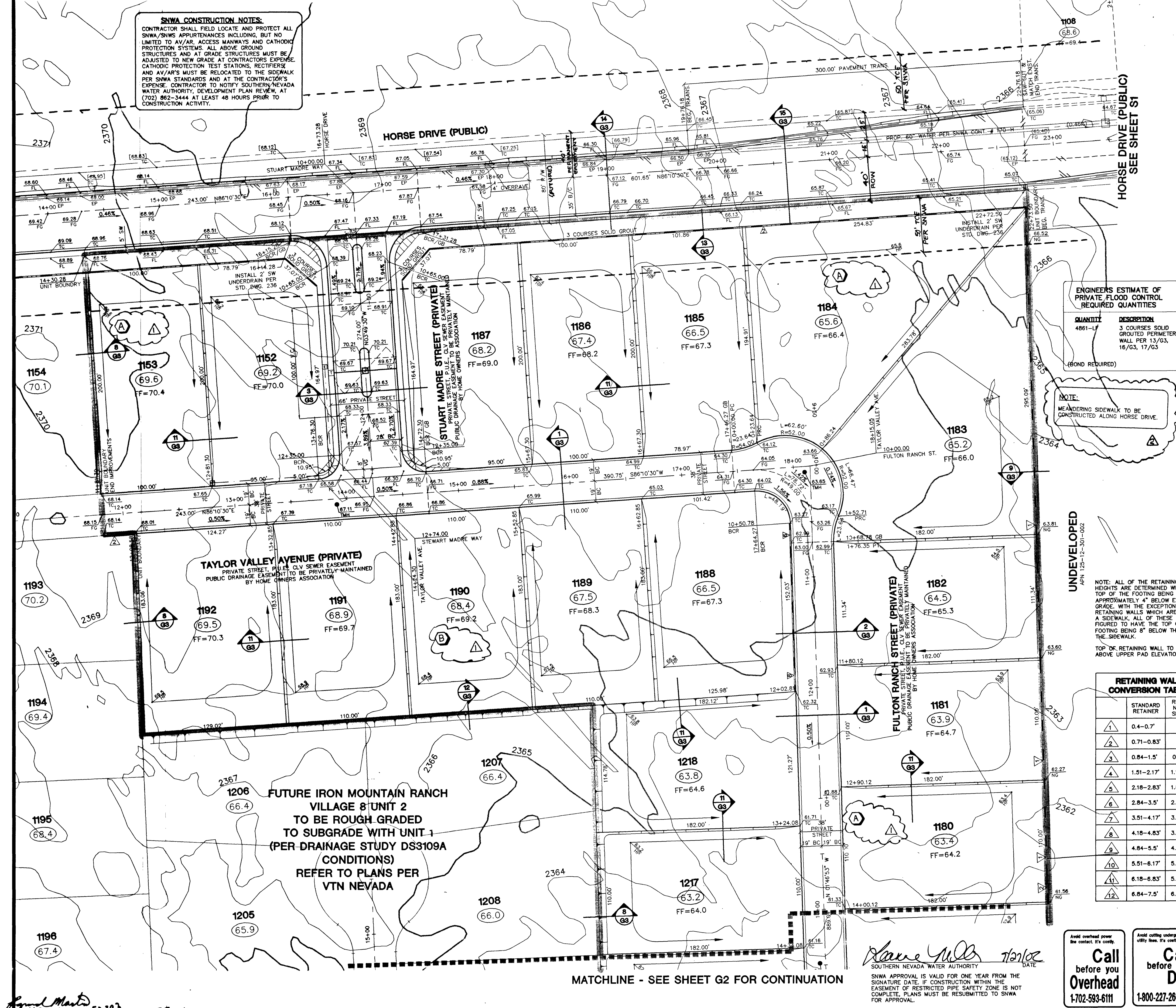


SNWA CONSTRUCTION NOTES:
CONTRACTOR SHALL FIELD LOCATE AND PROTECT ALL SNWA/SNWS APPURTENANCES INCLUDING, BUT NOT LIMITED TO AV/AR, ACCESS MAINWAYS AND CATHODIC PROTECTION SYSTEMS. ALL ABOVE GROUND STRUCTURES AND AT GRADE STRUCTURES MUST BE ADJUSTED TO NEW GRADE AT CONTRACTOR'S EXPENSE. CATHODIC PROTECTION 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.



LEGEND

FG	FINISH GRADE	EX	EX. CONTOUR(5' INTERVAL)
FL	FLOW LINE	EX	EX. CONTOUR(1' INTERVAL)
TC	TOP OF CURB	PC	PROPOSED CONTOUR
TRC	TOP OF ROLL CURB	PG	PROPOSED PAD GRADE
EAC	EDGE OF ASPHALT PAVEMENT	VG	VALLEY GUTTER
FUT	FUTURE	NG	NATURAL GROUND
EXIST	EXISTING (EX.)	H.P.	HIGH POINT
VG	VALLEY GUTTER	LP	LOW POINT
NG	NATURAL GROUND	C/L	CENTER LINE
H.P.	HIGH POINT	O/C	OFFSET CROWN
LP	LOW POINT	BC	BACK OF CURB
C/L	CENTER LINE	BCR	BEGIN CURB RETURN
O/C	OFFSET CROWN	TF	TOP OF FOOTING
BC	BACK OF CURB	GB	GRADE BREAK
BCR	BEGIN CURB RETURN	PT	POINT OF CURVATURE
TF	TOP OF FOOTING	PRC	POINT OF REVERSE CURVATURE
GB	GRADE BREAK	PC	POINT OF COMPOUND CURVATURE
PT	POINT OF CURVATURE	BVC	BEGIN VERTICAL CURVE
PRC	POINT OF REVERSE CURVATURE	MVC	MID-POINT OF VERTICAL CURVE
PC	POINT OF COMPOUND CURVATURE	EVC	END VERTICAL CURVE
BVC	BEGIN VERTICAL CURVE	PRVC	POINT OF REVERSE VERTICAL CURVE
MVC	MID-POINT OF VERTICAL CURVE	VPI	VERTICAL POINT OF INTERSECTION
EVC	END VERTICAL CURVE	TPW	TOP OF PLANTER WALL
PRVC	POINT OF REVERSE VERTICAL CURVE	TRW	TOP OF RETAINMENT WALL
VPI	VERTICAL POINT OF INTERSECTION	TOP	TOP OF CHANNELED/SCARP
TPW	TOP OF PLANTER WALL	TOE	TOE OF CHANNEL/SCARP
TRW	TOP OF RETAINMENT WALL	TOB	TOP OF BOX
TOP	TOP OF CHANNELED/SCARP	PP	POWER POLE
TOE	TOE OF CHANNEL/SCARP	TRANS	TRANSITION
TOB	TOP OF BOX	RET	RETAINMENT
PP	POWER POLE	INT	INTERSECTION
TRANS	TRANSITION	D.G.	DESIGN GRADE
RET	RETAINMENT	TSW	TOP OF SIDEWALK
INT	INTERSECTION	FF	FINISH FLOOR
D.G.	DESIGN GRADE	OFF	GARAGE FINISH FLOOR
TSW	TOP OF SIDEWALK	BFE	BASE FLOOD ELEVATION
FF	FINISH FLOOR	R/W	RIGHT-OF-WAY
OFF	GARAGE FINISH FLOOR	S/W	SIDEWALK
BFE	BASE FLOOD ELEVATION	SNWA	SOUTHERN NEVADA WATER AUTHORITY
R/W	RIGHT-OF-WAY		
S/W	SIDEWALK		
SNWA	SOUTHERN NEVADA WATER AUTHORITY		

ENGINEERS ESTIMATE OF PRIVATE FLOOD CONTROL REQUIRED QUANTITIES

QUANTITY	DESCRIPTION
4861-LF	3 COURSES SOLID GROUTED PERIMETER WALL PER 13/G3, 16/G3, 17/G3

(BOND REQUIRED)

NOTE:
MEANDERING SIDEWALK TO BE CONSTRUCTED ALONG HORSE DRIVE.

UNDEVELOPED
APN 125-12-301-002

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.

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'

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 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 SUBGRADE 0.1" +0.0" to -0.1" See Soils Report B. ENGINEERING FILL 0.1" to -0.1" See Soils Report C. OTHER FILL 0.1" to -0.1" See Soils Report

CONTRACTOR 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, BERM, ROAD SIGNS AND BARRICADES, ETC.

BENCHMARK
PROJECT DATUM: NAVD88
CITY OF LAS VEGAS BENCHMARK 11V08-13NES
NAVD88 ELEVATION: 710.9608 METERS (2332.54 FEET)
ONLY BM 413148, DECATUR BLVD & GRAND TETON DRIVE
100' SW OF SECTION CORNER, NEXT TO METAL POWER POLE

BASIS OF BEARINGS
THE BASIS OF BEARINGS FOR THIS PROJECT IS GRID NORTH AS DEFINED BY THE NAD83 COORDINATE SYSTEM OF 1983 (NAD83). (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 53.

KB HOME
750 PILOT ROAD, SUITE F
LAS VEGAS, NV 89119
(702) 676-2500

IRON MOUNTAIN RANCH VILLAGE 8 UNIT 1

GRADING PLAN

CITY OF LAS VEGAS

DESIGNED BY: RNS
CHECKED BY: KTN
PROJECT NO: 6027-01

SCALE: 1"=40'
HORIZ. VERT.

EXPIRES: 12-31-03
SHEET: G1
7 OF 20 SHEETS
DRAWING NO. 1074-4604-8-1

APPROVED: [Signature]
DATE: 12/10/02

Call before you Dig
1-800-227-2600

Call before you Overhead
1-702-593-6111

Professional Engineer
KENNETH F. NICHOLSON
CIVIL
NO. 10539
EXPIRES 12-31-03

ADDED MEAN SW NOTE
ADDED BLOCK NUMBER: 1074-4604-8-1
REASON: [Blank]

45134 52392 55242