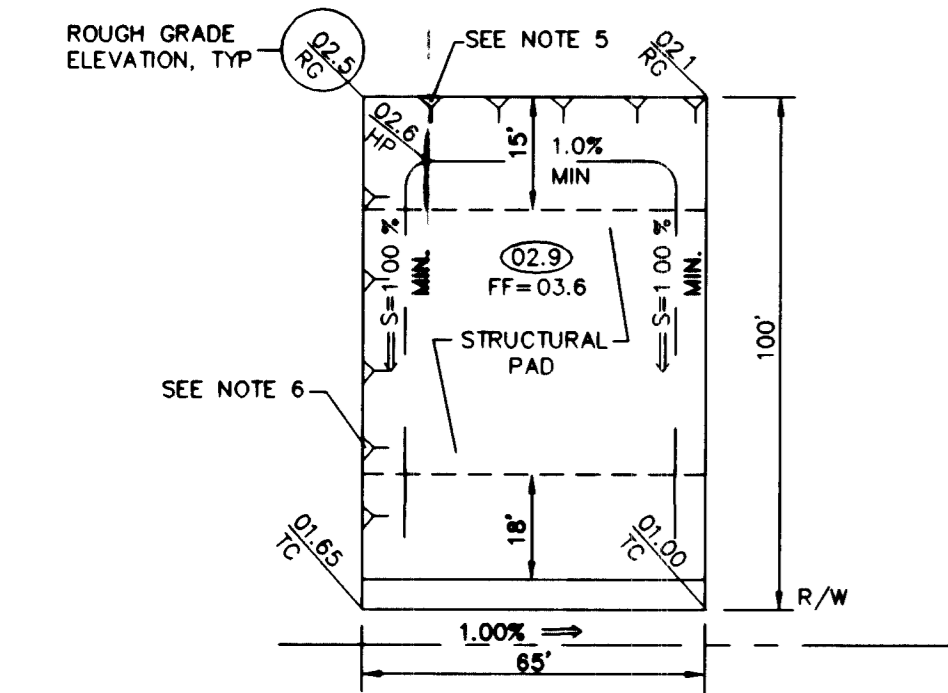


CITY OF LAS VEGAS GRADING NOTES

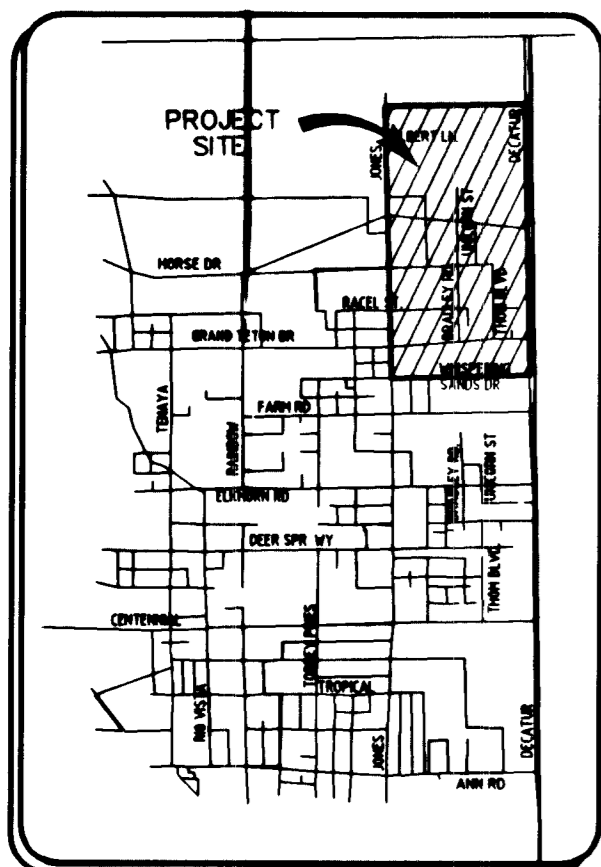
- IN THE EVENT THAT ANY UNFORSEEN CONDITIONS NOT COVERED BY THESE NOTES ARE ENCOUNTERED DURING GRADING OPERATIONS, THE OWNER/ENGINEER SHALL BE IMMEDIATELY NOTIFIED FOR DIRECTION.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL NECESSARY CUTS AND FILLS WITHIN THE LIMITS OF THIS PROJECT 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 TOLERANCE
 A. PAVEMENT AREA SUBGRADE 0.1' ± +0.0' to -0.1' See Soils Report
 B. ENGINEERING FILL 0.5' ± +0.1' to -0.1' See Soils Report
 COMPACTION 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 SPLITS OF SOIL, ROCK OR CONSTRUCTION DEBRIS SHALL BE PROMPTLY REMOVED FROM ALL T E 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.

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

KENNETH F. NICHOLSON, P.E. NO. 10539 DATE



TYPICAL GRADING PLAN

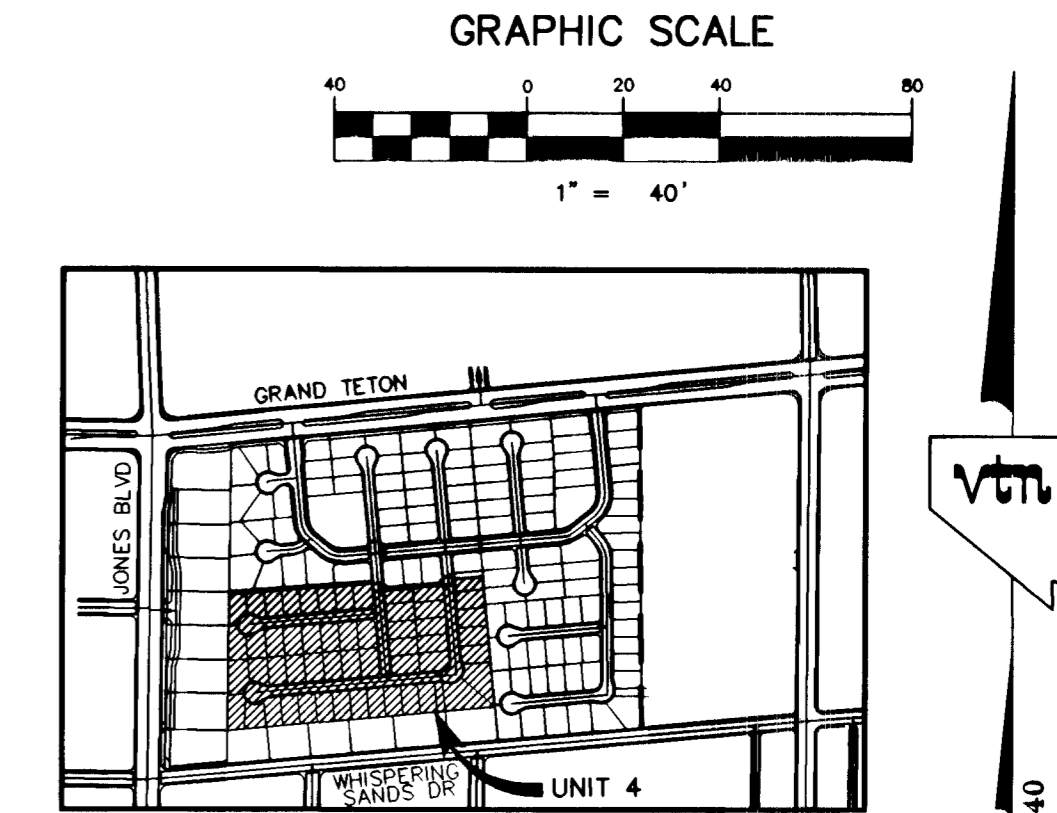
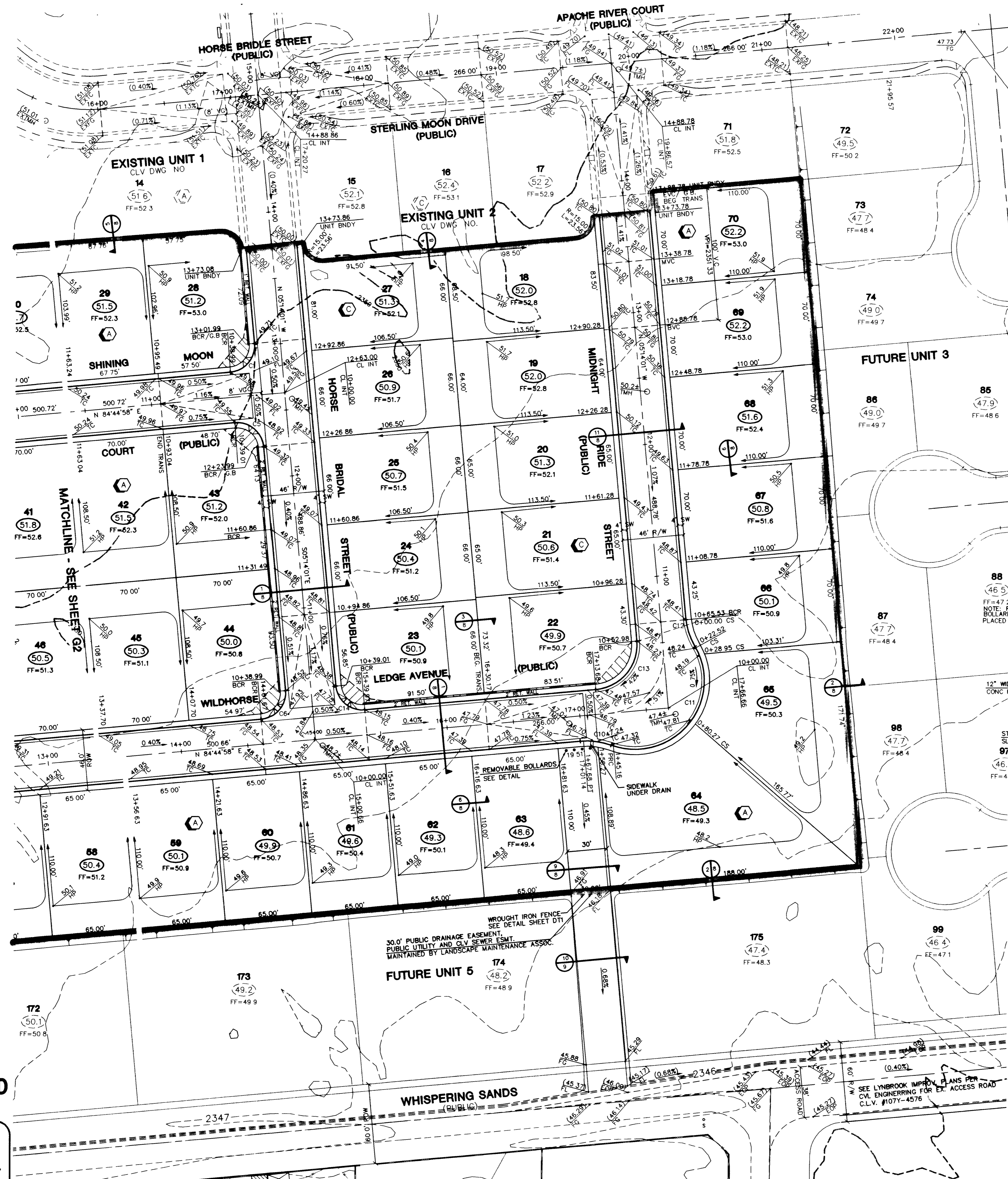


Call before you Dig
 1-800-227-2600

Call before you Overhead
 1-702-593-6111

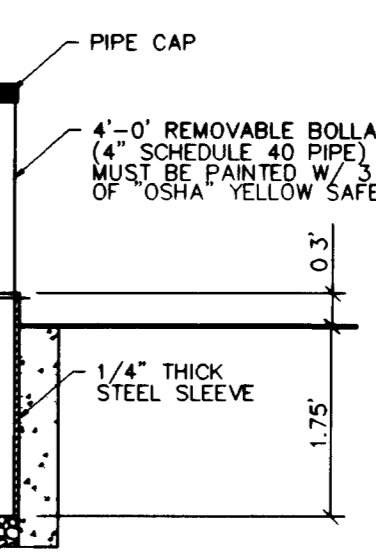
BENCHMARK
 PROJECT DATUM: NAVD88
 CITY OF LAS VEGAS BENCHMARK 11V90-13NES
 NAVD88 ELEVATION: 710.9608 METERS (2332.54 FEET)
 ONLY BM 413148, DECATUR BLVD & GRAND TETON DRIVE
 100' SW OF SECTION CORNER, NEXT TO METAL POWER POLE

BASIS OF BEARINGS
 THE BASIS OF BEARINGS FOR THIS PROJECT IS GRID NORTH AS DEFINED BY THE 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 53.



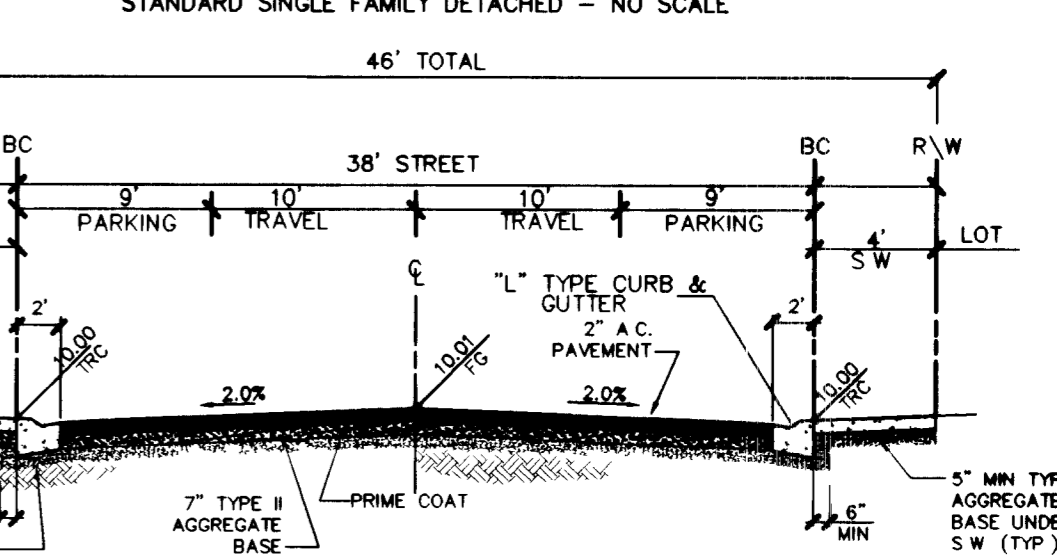
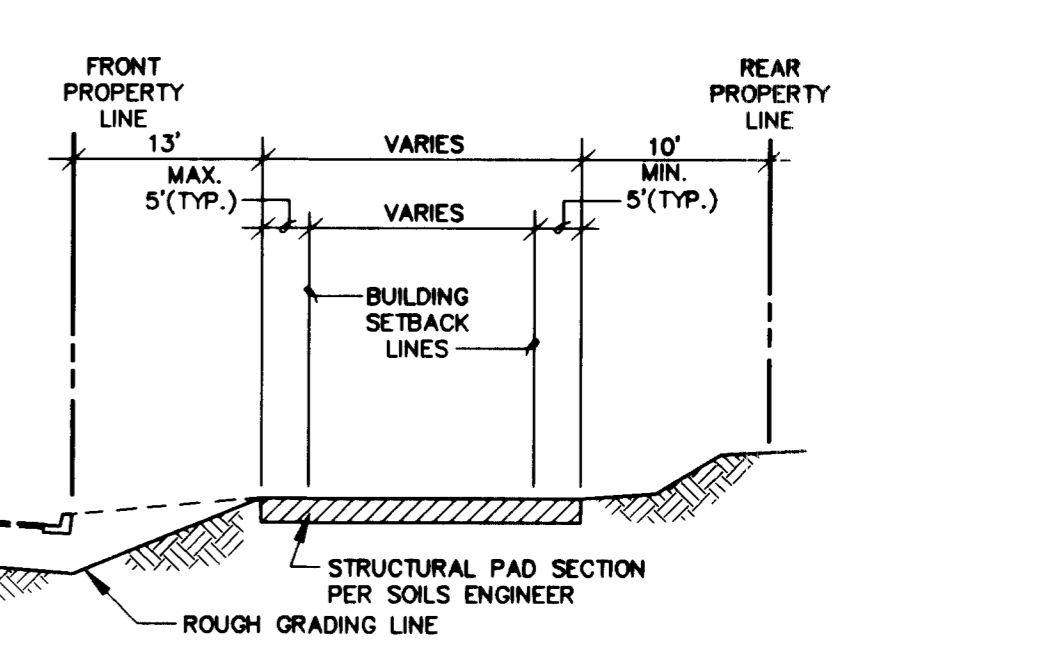
LEGEND

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



CURVE DATA TABLE

CURVE	LENGTH	RADIUS	TANGENT	DELTA
C1	23.56'	15.00'	15.00'	89°58'59"
C2	26.50'	34.00'	13.96'	44°39'01"
C3	190.36'	40.50'	41.00'	269°18'02"
C4	26.50'	34.00'	13.96'	44°39'01"
C5	29.85'	20.00'	19.01'	90°01'01"
C6	29.84'	20.00'	18.99'	89°58'59"
C7	26.50'	34.00'	13.96'	44°39'01"
C8	190.36'	40.50'	41.00'	269°18'02"
C9	26.50'	34.00'	13.96'	44°39'01"
C10	22.52'	54.00'	11.43'	23°53'44"
C11	122.64'	51.00'	132.09'	137°46'33"
C12	22.52'	54.00'	11.43'	23°53'50"
C13	53.40'	34.00'	33.99'	89°58'59"
C14	29.85'	20.00'	19.01'	90°01'01"



KB HOMES
 750 PILOT ROAD SW, F
 LAS VEGAS NV, 89119
 (702) 614-2500

GRADING PLAN
UNIT 4
IRON MOUNTAIN RANCH
VILLAGE 1

SHEET: MARCH '01
 DESIGNED BY: MARCH '01
 CHECKED BY: MARCH '01
 PROJECT NO.: 5823-4
 SCALE: 1:40
 HORIZ. VERT.

SEAL
KENNETH F. NICHOLSON
 PROFESSIONAL ENGINEER
 CIVIL
 NO. 10539
 EXPIRES 12/31/2007

SHEET **91**
 OF **14** SHEETS
 DRAWING NO. **107Y-4604-4**