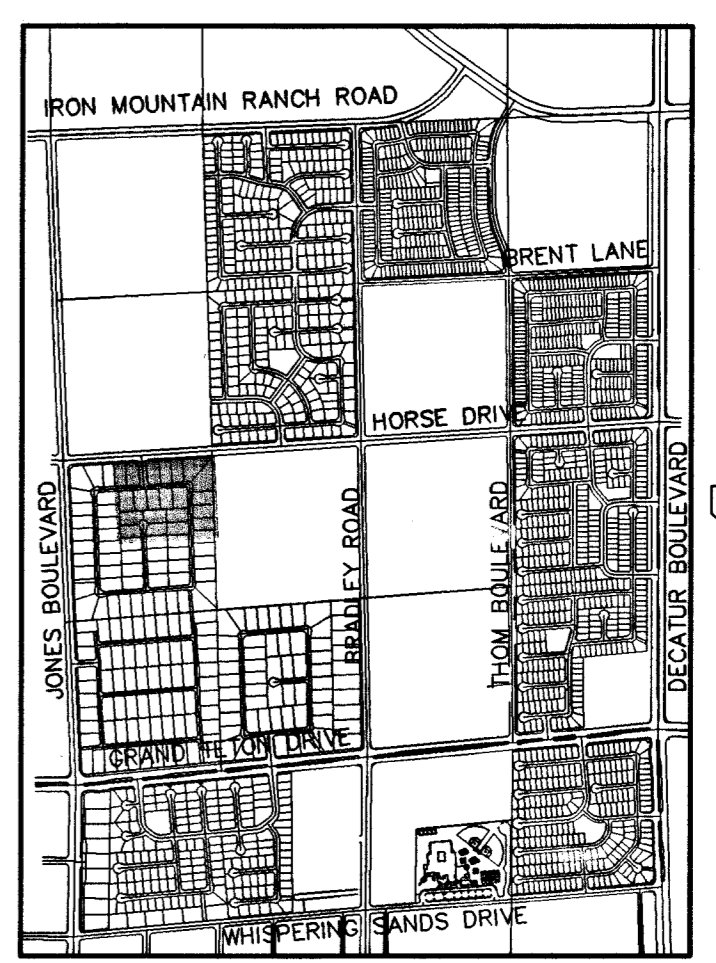
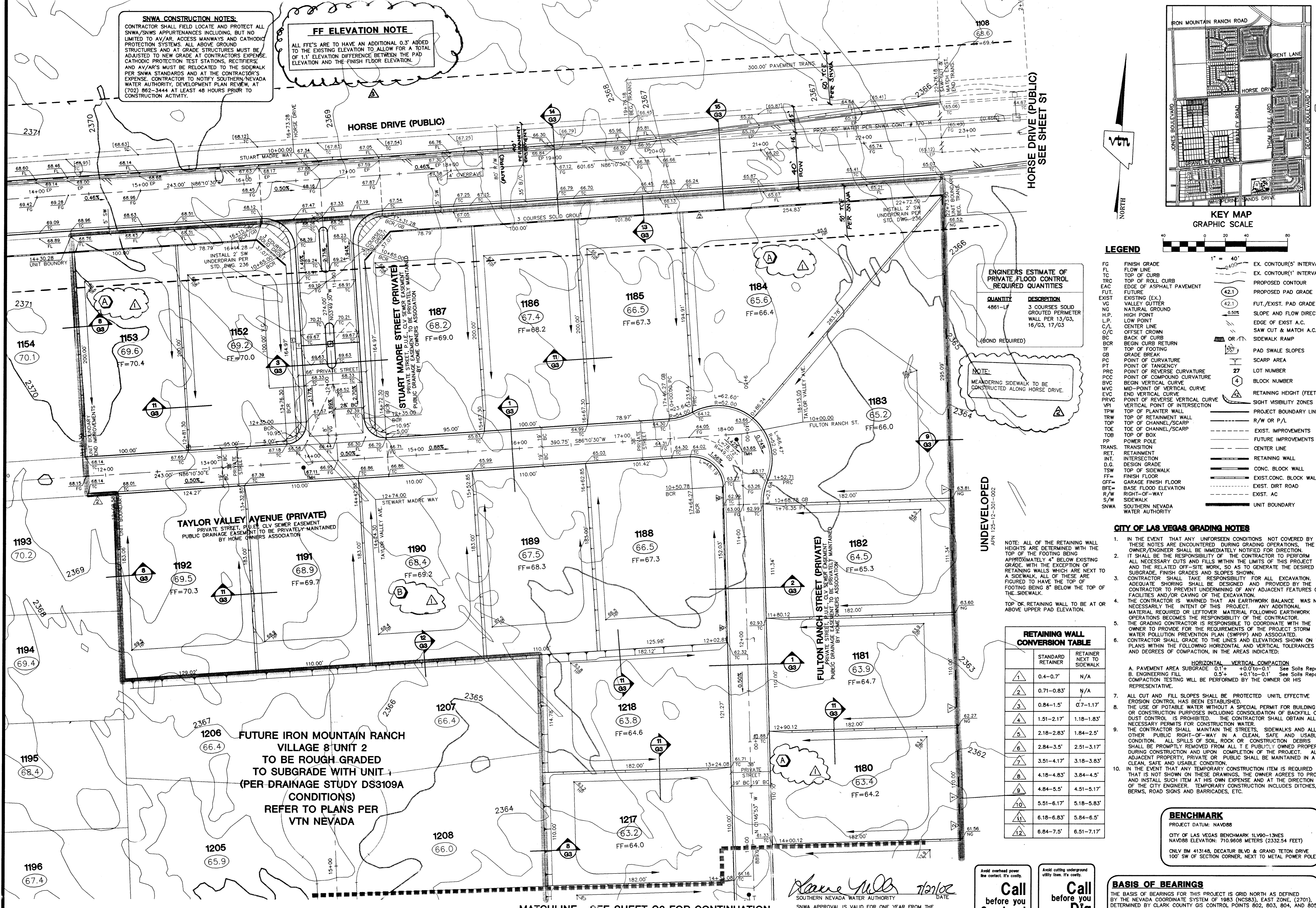


SNWA CONSTRUCTION NOTES:
 CONTRACTOR SHALL FIELD LOCATE AND PROTECT ALL SNWA/SNWS APPURTENANCES INCLUDING, BUT NOT LIMITED TO AV/AR, ACCESS MAINWAYS AND CATHODIC PROTECTION SYSTEMS. ALL ABOVE GROUND STRUCTURES AND AT GRADE STRUCTURES MUST BE ADJUSTED TO NEW GRADE AT CONTRACTOR'S EXPENSE. CONTRACTOR TO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

FF ELEVATION NOTE
 ALL FFE'S ARE TO HAVE AN ADDITIONAL 0.3' ADDED TO THE EXISTING ELEVATION TO ALLOW FOR A TOTAL OF 1.1' ELEVATION DIFFERENCE BETWEEN THE PAD ELEVATION AND THE FINISH FLOOR ELEVATION.



LEGEND

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	PROPOSED PAD GRADE
EAC	EDGE OF ASPHALT PAVEMENT	FUT./EXIST. PAD GRADE
FUT.	FUTURE	SLOPE AND FLOW DIRECTION
NG	NATURAL GROUND	EDGE OF EXIST. A.C.
H.P.	HIGH POINT	SAW CUT & MATCH A.C.
L.P.	LOW POINT	SIDWALK RAMP
C/L	CENTER LINE	PAD SWALE SLOPES
O/C	OFFSET CROWN	SCARP AREA
BC	BACK OF CURB	LOT NUMBER
BCR	BEHIND CURB RETURN	BLOCK NUMBER
TF	TOP OF FOOTING	RETAINING HEIGHT (FEET)
GB	GRADE BREAK	SIGHT VISIBILITY ZONES
PT	POINT OF CURVATURE	PROJECT BOUNDARY LINE
PT	POINT OF TANGENCY	R/W OR P/L
PRC	POINT OF REVERSE CURVATURE	EXIST. IMPROVEMENTS
PCC	POINT OF COMPOUND CURVATURE	FUTURE IMPROVEMENTS
BVC	BEHIND VERTICAL CURVE	CENTER LINE
MVC	MID-POINT OF VERTICAL CURVE	RETAINING WALL
EVC	END VERTICAL CURVE	CONC. BLOCK WALL
PRVC	POINT OF REVERSE VERTICAL CURVE	EXIST. CONC. BLOCK WALL
VPI	VERTICAL POINT OF INTERSECTION	EXIST. DIRT ROAD
TRW	TOP OF RETAINMENT WALL	EXIST. AC
TOP	TOP OF CHANNEL/SCARP	UNIT BOUNDARY
TOE	TOE OF CHANNEL/SCARP	
TOB	TOP OF BOX	
PP	POWER POLE	
TRANS.	TRANSITION	
RET	RETAINMENT	
INT.	INTERSECTION	
D.G.	DESIGN GRADE	
TSW	TOP OF SIDEWALK	
FF	FINISH FLOOR ELEVATION	
GFF	GARAGE FINISH FLOOR	
BFE	BASE FLOOR ELEVATION	
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
 APR 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.
 TOP OF RETAINING WALL TO BE AT OR ABOVE UPPER PAD ELEVATION.

RETAINING WALL CONVERSION TABLE

STANDARD RETAINER	VERTICAL COMPACT	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 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 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 SPILLS 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.

BENCHMARK
 PROJECT DATUM: NAVD88
 CITY OF LAS VEGAS BENCHMARK 11V90-13NE
 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.

Call before you Overhead
 1-702-593-6111

Call before you Dig
 1-800-227-2600

Shane Miller
 SOUTHERN NEVADA WATER AUTHORITY
 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.

CITY OF LAS VEGAS

KB HOME GRADING PLAN

IRON MOUNTAIN RANCH VILLAGE 8 UNIT 1

2277 SOUTH RAINBOW BOULEVARD LAS VEGAS, NEVADA 89146-5146
 PH: (702) 873-7950 FAX (702) 362-2597

DESIGNED BY: RMS
 CHECKED BY: KEN
 PROJECT NO: 6027-01

SCALE: 1"=40' HORZ. VERT. NA

EXPIRES 12-31-03

PROFESSIONAL ENGINEER
 CIVIL
 No. 10639 JOHN F. JOHNSON

SHEET 7 of 20 SHEETS
 DRAWING NO. 107-4604-B-1