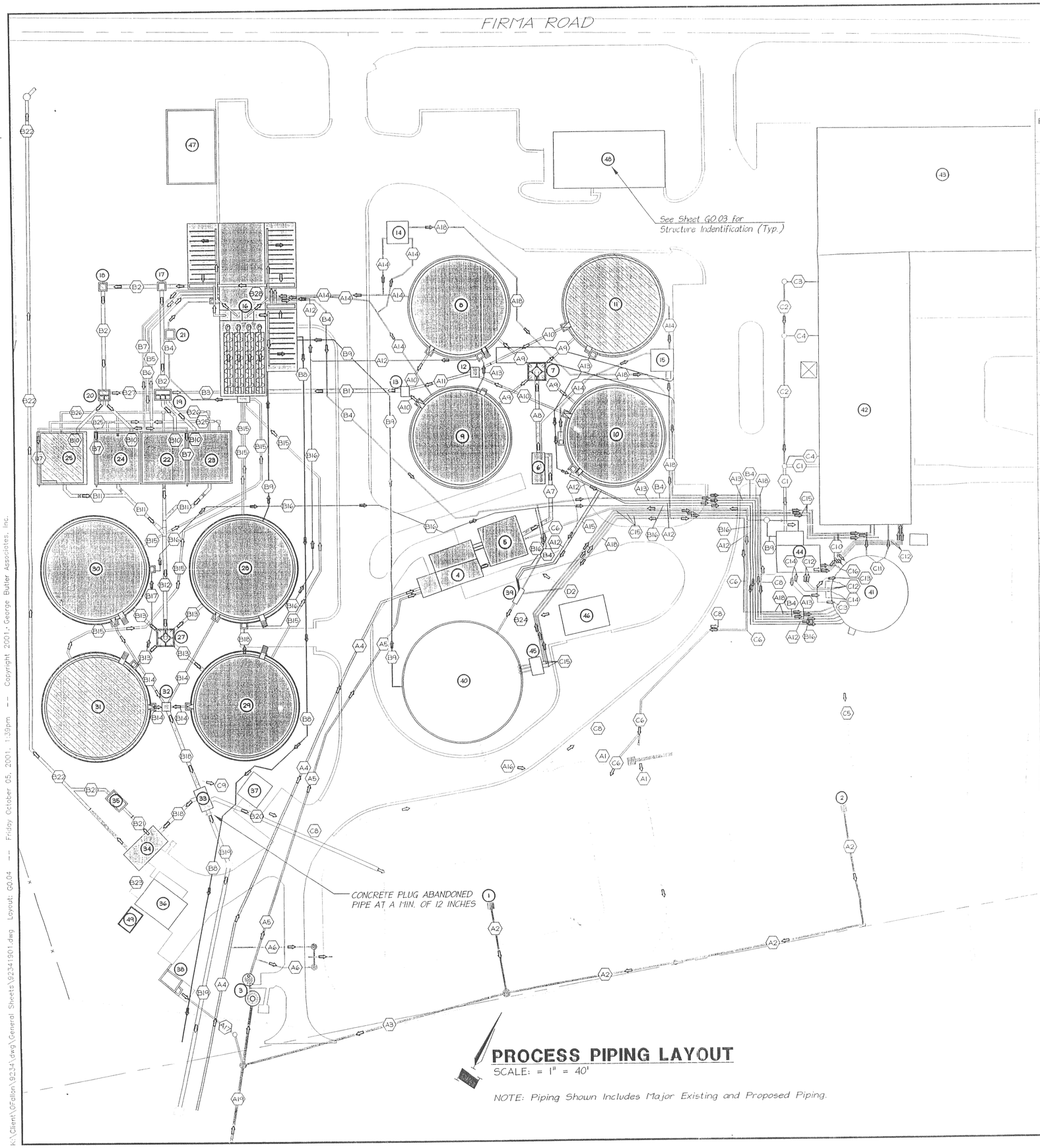

PIPING LEGEND

PIPE NO.	SIZE	TYPE	DESCRIPTION	FLOW	B.O.D. LBS./DAY	S.S. LBS./DAY	M.L.V.S.S.	SOLIDS LBS./DAY	CONC. (%SOLIDS)
A1	8	DIP	WAS GRAVITY EFFLUENT						
A2	16	DIP	FLOW EQUALIZATION BASIN DRAIN LINE						
A3	18	DIP	FLOW EQUALIZATION BASIN DRAIN LINE						
A4	20	DIP	INFLUENT FORCE MAIN						
A5	14	DIP	INFLUENT FORCE MAIN						
A6	12	DIP	FLOW EQUALIZATION INLET						
A7	36	DIP	HEADWORK/GRIT TANK EFFLUENT						
A8	36	DIP	DISTRIBUTION BOX NO. 1 INFLUENT						
A9	18	DIP	PRIMARY CLARIFIER INFLUENT	10.0 MGD	12,511	21,267			
A10	18	DIP	PRIMARY CLARIFIER EFFLUENT	10.0 MGD	8,132	10,633			
A11	24	DIP	JUNCTION BOX NO. 4 EFFLUENT						
A12	3	PVC	PRIMARY CLARIFIER SCUM DISCHARGE						
A13	3	PVC	PRIMARY CLARIFIER SCUM DISCHARGE						
A14	8	DIP	PRIMARY CLARIFIER SLUDGE WITHDRAW	17,822 GPD				4,459	3
A15	3	PVC	PRIMARY CLARIFIER SCUM DISCHARGE						
A16	18	CIP	WAS HOLDING TANK EFFLUENT						
A17	12	DIP	SEPTAGE RECIEVING STATION DISCHARGE						
A18	8	DIP	SLUDGE DISCHARGE FORCE MAIN						
A19	24	DIP	INFLUENT GRAVITY SEWER						
B1	36	DIP	BIOFILTER INFLUENT						
B2	36	DIP	BIOFILTER EFFLUENT	20.0 MGD	3,796	VARIES			
B3	18	DIP	BIOFILTER RECYCLE FLOW						
B4	8	DIP	WASTE SLUDGE DISCHARGE	62,973 GPD				5,252	1
B5	24	DIP	RECIRCULATED SLUDGE SUCTION						
B6	24	DIP	RECIRCULATED SLUDGE DISCHARGE						
B7	12	DIP	AERATION AIR						
B8	6	DIP	DIGESTED SLUDGE DISCHARGE (ABANDONED)						
B9	6	DIP	DIGESTED SLUDGE SUCTION (ABANDONED)						
B10	30	DIP	AERATION BASIN INFLUENT	5.0 MGD					
B11	30	DIP	AERATION BASIN EFFLUENT						
B12	36	DIP	AERATION BASIN EFFLUENT						
B13	30	DIP	FINAL CLARIFIER INFLUENT	20.0 MGD	VARIES		333,600		
B14	18	DIP	FINAL CLARIFIER EFFLUENT						
B15	16	DIP	RETURN ACTIVATED SLUDGE	1.33 MGD					1
B16	3	PVC	FINAL CLARIFIER SCUM DISCHARGE						
B17	3	PVC	FINAL CLARIFIER SCUM DISCHARGE						
B18	36	DIP	PLANT EFFLUENT	10.0 MGD	1,668	1,668			
~~B19~~	~~36~~	~~DIP~~	~~EMERGENCY OVERFLOW - PERUGUE CREEK~~	ABANDONED-IN-PLACE					
B20	36	DIP	PLANT EFFLUENT OVERFLOW						
B21	24	DIP	GRAVITY BYPASS						
B22	30	DIP	OUTFALL FORCE MAIN	10.0 MGD	1,668	1,668			
B23	1 1/2	PVC	CHLORINE SOLUTION LINE						
B24	10	DIP	AIR LINE						
B25	20	DIP	RECIRCULATED SLUDGE SUCTION						
B26	18	DIP	RECIRCULATED SLUDGE DISCHARGE						
B27	18	DIP	BIOFILTER EFFLUENT BYPASS						
B28	18	DIP	BIOFILTER EFFLUENT						
C1	24	DIP	PROCESS SEWERS						
C2	8	DIP	PROCESS SEWERS						
C3	6	DIP	PROCESS SEWERS						
C4	4	DIP	SEWERS						
C5	8	DIP	BLEND TANK OVERFLOW						
C6	12	DIP	FILTRATE RETURN						
C7	N/A	N/A	NOT USED						
C8	10	DIP	PROCESS WATER						
C9	16	DIP	PROCESS WATER						
C10	8	DIP	WAS THICKENER BYPASS						
C11	6	DIP	THICKENER SLUDGE						
C12	6	DIP	SLUDGE						
C13	8	DIP	SLUDGE						
C14	10	DIP	SLUDGE						
C15	8	DIP	WASTE ACTIVATED SLUDGE	102,010 GPD				8,507	1
C16	8	DIP	AIR						

LEGEND

EXISTING STRUCTURES AND PIPING IN MAIN FLOW PROCESS

PROPOSED STRUCTURES IN MAIN FLOW PROCESS

PROCESS PIPING LAYOUT

SCALE: = 1" = 40'

NOTE: Piping Shown Includes Major Existing and Proposed Piping.

GEORGE BUTLER ASSOCIATES, INC.
Engineers • Architects
Kansas • Missouri • Illinois

10/8/01

WASTEWATER TREATMENT PLANT EXPANSION
PROCESS PIPING LAYOUT
CITY OF O'FALLON, MISSOURI

JOB NO.: 9234
DATE: 10-08-2001

DESIGNED BY: TMS/RJR
DRAWN BY: DMH/ESK
CHECKED BY: RJR/TMS

SHEET NUMBER
G0.04